Oral sex behaviour as part of adolescents' psycho-social functioning: A self-regulation theory perspective

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Award date:
2015

Awarding institution:
University of Bath

Link to publication
ORAL SEX BEHAVIOUR AS PART OF ADOLESCENTS’ PSYCHO-SOCIAL FUNCTIONING: A SELF-REGULATION THEORY PERSPECTIVE

Volume 1 of 1

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A thesis submitted for the degree of Doctor of Philosophy

University of Bath
Department of Psychology

July 2015

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My greatest thanks are to my supervisors Bas Verplanken and Marjorie Weiss. Changing a lead supervisor midway through a PhD is certainly a challenging task. I consider myself to be very lucky to have Bas who picked me up at that difficult time and provided me with inspiration to finish this PhD. The support and encouragement that I had from Marjorie whilst conducting the focus groups on such sensitive topics as oral sex and my venture into qualitative research were amazing. I still can’t believe that I was blessed with two such positive and supportive individuals, working together as a team, but I certainly was.

Secondly thanks to the 1000+ university students from Bath, Bath Spa, Bristol and Plymouth universities who took part in my research over four years, especially to those of them who took their time and efforts to complete the longitudinal survey. I am particularly grateful to 30+ student girls from the University of Bath who were so amazingly brave to participate in my focus groups on their experiences of oral sex. Their courage and openness were invaluable in letting me carry on my research, and I hope that the findings from my research that were fed back to them were of interest and of help. I would like to say a special thanks to my student helper who assisted me with running the focus groups and transcribing these interviews. Thanks to Nicole for keeping me alternatively entertained, for her outrageous optimism at all times and for her hard work.

Thirdly thanks to my PhD student colleagues for their company and assistance over these four years. In particular, my life would be harder without Steve and Maria, both who have kept me intellectually on my toes.

And finally, thanks to my parents and my partner for supplying me with a second hand car and providing holidays, and to my daughter for the hours of supportive chats for the past four years.
Abstract

Oral sex behaviour is fast and widely transforming into an everyday practice of modern adolescents’ life. Although seemingly less risky than vaginal or anal sex, it is accompanied by a rise in STIs alongside depression and anxiety associated with oral sex experiences of some young females, thus putting at risk both current and future adolescents’ sexual and psychological health and well-being.

The four studies included in this thesis were designed to contribute to our understanding of adolescents’ oral sex behaviour as a part of their more complex psycho-social functioning. In particular, these studies aimed to test a proposed pathway of effects between self-control and successful or unsuccessful management of adolescents’ oral sex behaviour and associated with this behaviour psychological well-being through the application of self-regulation theory. Students’ oral sex behaviour and psychological well-being were tested at cross-sectional and longitudinal level, and analysed in detail through both quantitative and qualitative studies.

The findings indicated that high dispositional ability to restrain sexual behaviour, motivation to control sexual behaviour and compliance to normative rules had a restrictive effect on the likelihood of engagement in oral sex, although their combined effect was found to vary under power relation pressure and according to the type of ego depletion state. Accounting for gender differences, for female students, body image satisfaction, self-esteem, and negative body image thinking habits were found to influence the likelihood of engagement in oral sex behaviour under gender power pressures in relationship and in ego depletion states (i.e. physical tiredness, cognitive load, alcohol consumption, emotional rise). In terms of psychological well-being, self-confidence was reported to be the most important factor influencing both females’ engagement in oral sex and its re-appraisal.

The findings are in accordance with previous work on application of self-regulation theory in other areas of health-related behaviour; they indicate that self-control and motivation to control sexual behaviour can be promoted in modifications of risky sexual behaviour.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BIS</td>
<td>Body Image Satisfaction</td>
</tr>
<tr>
<td>CASP</td>
<td>Concern with Acting Sexually Preoccupied</td>
</tr>
<tr>
<td>DSC</td>
<td>Dispositional ability to restrain sexual behaviour</td>
</tr>
<tr>
<td>EM</td>
<td>Environmental Mastery (PWB domain)</td>
</tr>
<tr>
<td>FG</td>
<td>Focus Groups</td>
</tr>
<tr>
<td>HINT</td>
<td>Habitual Index of Negative Thinking</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papilloma Virus</td>
</tr>
<tr>
<td>NATSAL</td>
<td>National Survey of Sexual Attitudes and Lifestyles</td>
</tr>
<tr>
<td>PG</td>
<td>Personal Growth (PWB domain)</td>
</tr>
<tr>
<td>PL</td>
<td>Purpose in Life (PWB domain)</td>
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<tr>
<td>PR</td>
<td>Personal Relationship (PWB domain)</td>
</tr>
<tr>
<td>PWB</td>
<td>Psychological Well-Being</td>
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<tr>
<td>RFO</td>
<td>Regulatory Focus Orientation</td>
</tr>
<tr>
<td>RIM</td>
<td>Reflective-Impulsive Model</td>
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<tr>
<td>SA</td>
<td>Self-Acceptance (PWB domain)</td>
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<tr>
<td>SMSC</td>
<td>Student Motivation and Self-Control Survey</td>
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<td>SPSH</td>
<td>Student Psychological and Sexual Health Survey</td>
</tr>
<tr>
<td>SE</td>
<td>Self-Esteem</td>
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<tr>
<td>SEM</td>
<td>Structured Equation Modelling</td>
</tr>
<tr>
<td>SS</td>
<td>Sensation-Seeking</td>
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<tr>
<td>STIs</td>
<td>Sexually Transmitted Infections</td>
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<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
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<tr>
<td>TSC</td>
<td>Trait Self-Control</td>
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Risky sexual behaviour (i.e. early sexual debut, unprotected sex, casual sex and sex with multiple partners, sex under influence of alcohol or drugs) remains a significant issue affecting adolescent and young people health. The increase in the diagnoses of sexually transmitted infections has been reported in many European countries and USA, especially among teenagers 16-19 years old (Adler, 2006; Health Protection Agency, 2010; CDC, Atlanta, 2010). This increase is partly attributed to the declining age of first sexual intercourse and the reluctance of adolescents to use condoms as a protection against STIs. Condom use amongst young heterosexual adults was found to be relatively low if another form of contraception was used as a protection against unplanned pregnancy, which is appeared to be the issue of greater concern than STIs. Furthermore, it seems that many adolescents do not perceive themselves to be at risk of contracting STIs (Samkande-Zeb et al, 2011).

In terms of exposure to sexually transmitted infections (STIs) and HIV/AIDS, risky sexual behaviour is mostly associated with unprotected vaginal and anal sex, whereas oral sex behaviour is considered to be much ‘safer’ than vaginal and anal sex. Nowadays, the practice of oral sex appeared to be very common amongst heterosexual, bisexual and homosexual couples, especially in the early stages of a passionate, sexual relationship. The practice of oral sex has been reported to be more prevalent amongst modern teenagers and adolescents, regardless of whether they already have or have not engaged in penetrative vaginal sexual intercourse (Lindberg et al, 2008; Prinstein et al, 2003; Kaestle & Halpern, 2007; McKay, 2004).

The evidence from most surveys on adolescents’ sexual behaviour point out that a significant proportion of adolescents engage in oral sex prior to vaginal intercourse because they perceive oral sex as recreational activity which, in terms of health, social and emotional consequences, provides them with an opportunity for risk-free sexual intimacy, and thereby allows them to delay a penetrative vaginal intercourse and ‘technically preserve’ their virginity (Uecker et al, 2008). The data from the UK and Australia surveys suggest that the age at the onset of oral sex practices has reduced,
whereas the prevalence has increased over time (e.g. Johnson et al, 1994, 2000; Rissel et al, 2003). American researchers found that the rates of oral sex among adolescents (15-21 years old) vary by ethnicity, socioeconomic status and the level of education (e.g. Brewster & Tillman, 2008). Recent studies on casual sex among American college students (18-19 years old) revealed that during their first semester of college, 33% of them reported having engaged in oral sex activity (Fielder & Carey, 2010). The existing literature demonstrates a very low level of condom use during oral sex (from 8 to 18%) (e.g. Stone et al, 2006; Bruckner & Bearman, 2006; Prinstein et al, 2003; Schuster et al, 1996).

Although perceived by many people as a relatively low-risk type of recreational sexual activity, practicing oral sex has proven to be an efficient mode of transmission for many Sexually Transmitted Infections (STIs), such as candida, chlamydia, gonorrhea, syphilis, herpes, hepatitis B, HIV and HPV (Edwards & Carne, 1998; Hawkins, 2001). Recently, HPV infection, aquired from practising oral sex, was found significantly associated with a development of oropharyngeal cancer amongst a younger generation of cancer patients (Gillison, 2008).

Research on STIs transmission amongst European adolescents has revealed the lowest proportions of awareness and knowledge reported for HPV, with awareness ranging from 5.4% to 66% (Hoglund et al, 2009; Pelucchi at al, 2010). Whilst infection with HPV is one of the most common sexually transmitted infection, only about 1 in 8 of European respondents of 13-20 years old were reported to know that HPV is an STI, even in studies conducted after the introduction of the HPV vaccination (Gottval et al, 2009). Amongst young men and women in USA and UK, from 13% to 38% of participants had heard of HPV, and from 13% to 53% had known the association between HPV and cervical cancer (Klug et al, 2008). Generally, female respondents reported better awareness and knowledge on HPV transmission than male respondents, reflecting the fact that HPV awareness campaigns have been targeted more at females than at males.

The results of these studies indicated that adolescent and young adults’ knowledge about HPV infection requires considerable improvement. In addition to HPV testing into cervical cancer screening in many countries and introducing HPV vaccination in Europe, UK and USA, it is important that female and male adolescents have had a better
understanding of the implications of HPV infection transmitted by engagement in sexual behaviour. The evidence from research point out that acceptance of HPV vaccination has increased when parents or young women were well informed about the risks and benefits of vaccination (Kahn et al, 2003; Davis et al, 2004; Dempsey et al, 2006). As oral sex is considered to be a possible, although less likely route for transmitting HPV infection, and males have demonstrated less knowledge about HPV than females but arguably have the higher chance of acquiring the HPV-related oropharyngeal cancer (Heck et al, 2010), the efforts should be made to provide adolescents with more knowledge on this issue by schools, educators, media and health professionals. Better understanding of risks associated with unprotected oral sex behaviour could help adolescents to make informed choices about engagement in this behaviour and significantly improve their chances to protect themselves during oral sex.

At the same time, there is a need to emphasise that engagement in oral sex is a common behaviour and a normative part of sexual development during adolescence. Within psychology research, studies examining adolescents’ sexual behaviour are usually adopt a risk-behavioural framework and mainly focused on unprotected sex (e.g. Pharo et al, 2011), casual sex with multiple partners (e.g. Patrick et al, 2011), sexual coercion (e.g. Howard et al, 2008) and sex under influence of alcohol (e.g. Kiene et al, 2009). The development of normative sexual behaviour during emerging adulthood remains relatively unexplored. One of the aspects of these neglected but normative parts of sexual development among adolescence is oral sex behaviour. Despite being a common and prevalent behaviour amongst adolescents, there are several gaps in our understanding of characteristics of their oral sex behaviour and their oral sex experiences. Among them are uncertainties about sexual context of oral sex behaviour and the ways in which oral sex is incorporated into adolescent sexual and social culture.

Difficulties to explore adolescent sexual behaviour are mainly related to general methodological challenges in studying sexual behaviour. As biological markers of sexual behaviour (e.g., pregnancy rates or incidence of STIs) held little information about the frequency of this behaviour among adolescents, number of their sexual partners, co-existence of their sexual behavior with use of alcohol or drugs, and there is no other objective indicators of this behaviour are available, researchers have to rely on self-reported accounts of sexual behaviour. Obtaining detailed and accurate self-reports of sexual behaviour is becoming the matter of crucial importance since sexual behaviour
is not possible to measure through direct observation due to ethical considerations. In addition to this, measurement of sexual behaviour is accompanied by ‘concerns about privacy, cultural taboos, and stigmatizing behaviours’ (Scott-Sheldon et al, 2010, p. 59), necessity to account for the dyadic nature of sexual behaviour and, consequently, should include multiple types of assessment measures and methodology.

Research on adolescent oral sex behaviour found that their oral sex experiences were related to both positive and negative emotions (Chambers, 2007; Malacad & Hess, 2010). On the one hand, it was associated with anxiety and depressive symptoms in young females (Cooper et al, 1998), but on the other hand, it appeared to hold the hedonistic and positive emotional values for both young males and females (Hyde, 2005; Meston & Buss, 2007). Furthermore, oral sex behaviour was linked to individual self-esteem (Lewis et al, 2011) and was found to have different meanings for young males and females (Boyce at al, 2006; Ott et al, 2006; Patrick & Lee, 2008). This indicates that oral sex practice can potentially be greater influenced by gender and personality characteristics, by social and cultural rules and attached to them gender power pressures. As a result, oral sex can require enhanced and more complicated levels of behavioural regulation.

Scarce research investigating the social and emotional consequences of practicing oral sex among adolescents found that, for many teenagers and adolescents, engagement in oral sex was associated with feeling guilty, used and undervalued in their relationship (e.g. Brady & Halpern-Felsher, 2007). In comparison with males, female college students reported greater feelings of guilt and anxiety from casual sexual trysts that potentially lead to negative mental health outcomes (Grello et al, 2006; Owen et al, 2010). The most recent studies on young women’s adolescent experience of oral sex and psychological functioning suggest distinguishing between cunnilingus and fellatio, while considering negative or positive consequences of oral sex experiences for female adolescents (e.g. Fava & Bay-Cheng, 2012). Contrary to cunnilingus experience, early experiences of fellatio amongst adolescent girls were found to increase their vulnerability in other behavioural domains (e.g., psychological functioning, sexual relationships; e.g. McGue & Lacono, 2005). Finally, it was proposed that earlier initiations of fellatio and interpersonal sensitivity may be correlated through other mediating factors. The search for these possible factors turned my attention to the literature on the correlates and determinants of adolescent risky sexual behaviour.
The existing literature on determinants or predictors of adolescents’ risky sexual behaviour is mainly concerned with identifying the possible relationships between them. Many health-behavioural models that have been applied in order to predict and explain adolescents’ sexual behaviour are struggling to account for all the complexity and dynamics of this behaviour. As recent research suggested that many determinants of risky sexual behaviour (e.g. alcohol misuse, sensation-seeking, impulsivity) may be mediated by individual differences in self-regulation skills (e.g. Quinne & Fromme, 2010; Rafaelli & Crockett, 2003), in this PhD thesis I attempted to capture the complexity and dynamics of adolescent oral sex behaviour by applying the self-regulation theory to this behaviour.

Self-regulation refers to the ability to regulate thoughts, feelings and behaviour in accordance to standards and include a wide range of cognitive and motivational operations that help individuals to guide themselves towards important goal states (e.g. Baumeister & Vohs, 2004; Baumeister, 1998). Many behavioural and psychological problems in health-related domains (such as overeating, aggression, addiction etc.) can be traced back to failure to self-regulate.

In modern psychological research, self-regulation is considered as a complex and dynamic construct which allows us to account for many variables traditionally studied within the framework of explaining and predicting health-related behaviour (e.g. attitudes, subjective norms and beliefs), for numerous demographic and personality characteristics (e.g. gender, self-esteem, trait self-control, attachment style, regulatory focus orientation, body image consciousness) and non-traditional variables that attracted researchers’ attentions in recent years, such as situational characteristics of behaviour (e.g. alcohol use, dispositional ability to restrain sexual behaviour, physiological and cognitive states).

The dynamic nature of self-regulation theory applied to sexual behaviour allowed me to paint a more comprehensive picture of possible mechanisms involved in managing oral sex behaviour. Within this picture, it was possible to account for the role of self-regulation processes, individual characteristics, intentional and situational characteristics of behaviour. In addition, application of self-regulation theory provided me with an opportunity to consider oral sex behaviour in wider cultural and social
contexts, as subject to cultural and social norms, standards and regulations. It also allowed space for investigating processes involved in the negotiation of oral sex behaviour within gender power and relationship pressures.

Based on self-regulatory research on cognitive, physiological and interpersonal dimensions of self-regulation (e.g. Higgins & Spiegel, 2004; Vohs et al, 2003 etc.), in this PhD thesis, I considered adolescent sexual behaviour as a part of their complex and dynamic psycho-social self-regulatory functioning and as an activity that is relevant and consistent with their goals and priorities, alongside their personal and situational characteristics. On the example of oral sex behaviour, I aimed to explore the relationships between oral sex behaviour, its correlates and its psycho-social consequences mediated through the constructs of self-control and motivation, proposed by self-regulation theory. On the basis of existing bodies of literature on mental health outcomes related to practice of oral sex amongst university students (e.g. Paul et al, 2000; Owen & Fincham, 2011 etc.), I suggested that differences in self-control skills and motivation to control sexual behaviour can shape the patterns of oral sex behaviour that will potentially influence students’ psychological well-being in terms of resulting health-related outcomes.

This PhD thesis consists of a Literature Review on oral sex among adolescents, Theory and Methodology chapters, and four main research studies, conducted in sequence. The application of self-regulation theory into each of the studies provided opportunity for the detailed analysis of mechanisms involved in the regulation of oral sex behaviour on a theoretical level.

As the majority of research on adolescents’ oral sex behaviour has been done in the USA, Study 1 was conducted to gain a better understanding of oral sex practice amongst British adolescents and young adults. This study represents a secondary data analysis of British National Survey of Sexual Attitudes and Lifestyles (NATSAL II, 1999-2002). During this study the possible predictors and determinants of engagement in oral sex behaviour known from the research literature were tested on the nationally representative sample of British adolescents and young adults.

Study 2, The Students’ Psychological and Sexual Health (SPSH) Survey, was set up to describe and compare first year students’ beliefs and understandings about oral sex,
considered from self-regulation perspective, and to explore the potential effects of oral sex practice on their psychological well-being. In this study I aimed to investigate the role of self-control processes in engagement of oral sex and to discover the possible relationship between self-control and other determinants of engagement in risky sexual behaviour (i.e. sensation-seeking, alcohol consumption, reasons for engagement in oral sex, attachment styles, and regulatory focus orientation). The role of trait self-control and dispositional ability to restrain sexual behaviour was investigated at both cross-sectional and longitudinal level, then it was further explored in Study 3 (The Students’ Motivation ans Self-Control (SMSC) Survey) in conjunction of motivation to control sexual behaviour and with accompanied effects of body image satisfaction, self-esteem and negative body image thinking habits. Application of dual-system Reflective-Impulsive Model (RIM) allowed me to account for situational and relationship context characteristics of oral sex behaviour and clarified the role of motivation within the process of applying self-control to engagement in oral sex.

As females demonstrate different patterns of psychological well-being related to engagement in oral sex, and these patterns were found to be influenced by wider array of factors (i.e. number of their oral sex partners, their reasons for engagement in oral sex, their RFO orientation and their alcohol consumption), female only students were chosen to be the main focus of research on self-control and motivation in Study 3. In order to explore the more complex aspects of self-regulation in shaping females’ oral sex behaviour, two additional factors were added to the list of variables that could have a potential effect on oral sex behaviour, namely, ego depletion states (e.g. alcohol, cognitive load, physical tiredness, emotional rise) and power imbalances in relationships. As the primary subject of research were females, some additional personal characteristics variables, such as body image satisfaction, negative body image thinking habits and self-esteem, were incorporated in analysis of their oral sex behaviour.

To assist in gaining an understanding of the interactive, negotiation component of oral sex behaviour (e.g. Holland et al, 1990), I used a qualitative approach. This method allowed me to further examine the outcomes of application of self-regulation to oral sex behaviour by exploring the relations between personal characteristics and attitudes to oral sex, cultural and social influences and female perceived experiences of oral sex.
Qualitative Focus group study on females’ perception of their oral sex experiences (Study 4) was added to the research described in this PhD thesis in order to gain deeper understanding of positive and negative aspects of females’ experiences of oral sex and to describe their perception of social, cultural and relationship pressures that could lead to some distress to their mental and physical health. Qualitative study on females’ perception of their oral sex experiences provided examples of reasoning and cognitive elaborative strategies supporting choices to control engagement in oral sex behaviour or fail to control it. As thinking patterns, particularly in situations of difficult choice related to risky sexual behaviour, can be impulse-driven and automatic (i.e. initiated without conscious awareness and difficult to control (Verplanken et al., 2007), the findings from the qualitative part of this PhD thesis were also assessed through the concept of self-control.

The emphasis in this PhD thesis, therefore, is not simply in revealing the role of self-control and motivation to control sexual behaviour in engagement in oral sex and related to these patterns of psychological well-being consequences. The emphasis is also on exploring females’ reasoning behind engagement/non-engagement in oral sex. This included the investigation of self-regulation processes in elaboration of females’ cognitive appraisal strategies that could support their behavioural choices and to influence the quality of their oral sex experiences by facilitating any discrepancies between actual and ideal behavioural choices. These cognitive appraisal or re-appraisal processes are extremely important in helping young females to cope with the range of possible psychological and health-related consequences of being engaged in oral sex.

The mixed method design was used to integrate the data from all studies together with a purpose to gain a comprehensive understanding of how these aspects of self-regulation of sexual behaviour may be related to perception of oral sex and its consequences for psychological well-being. Integration of qualitative and quantitative data has provided this PhD thesis with several advantages. The qualitative data from the second part of SPSH Survey and Focus group study on perception of engagement in oral sex was used to assess the validity of quantitative findings from both students’ surveys (SPSH, part 1, and SMSC) on the role of self-control and motivation in engagement in oral sex behaviour. At the same time, quantitative data from these surveys was supported and supplemented by qualitative data accounts, and then was used to assist in developing a protocol and define a sample for qualitative Focus group study. Finally, qualitative data
from the second part of SPSH Survey was used to generate hypotheses for quantitative SMSC Survey on self-control and motivation.

Findings from this PhD thesis can contribute to existing knowledge by presenting a more explicit understanding of the conscious and none-conscious processes of decision-making underpinning adolescents’ engagement in risky sexual behaviour. They can also provide a valuable insight into the psychological mechanisms of self-regulation involved in shaping adolescents’ risky sexual behaviour. As a result, findings from the research described in this PhD thesis would be helpful in improving our understanding of cognitive, social and emotional processes behind the ‘sex and gender’ youth culture of contemporary society. Application of multi-faced and complex self-regulation system holds potential for identifying the possible links between personal and contextual factors affecting risky oral sex behaviour, and accounting for personal communication and social interaction processes that support adolescents’ engagement in oral sex.

Beyond a direct contribution to the discipline of psychology and behaviour change, this research, if successfully developed beyond this PhD thesis, could provide a platform for more widespread access to evidence based modification of risky sexual behaviour and associated with this behaviour risks and implications to physical and emotional well-being, by tailoring them to different personality types and to different situations. For public health, it could result in providing a guidance to practice: a) for practitioners delivering health, social and educational services; b) for young people at most risk of exposure to HPV-related STIs and c) for adolescent girls with existing mental health problems related to being involved in risky sexual behaviour.
LITERATURE REVIEW
ON ADOLESCENT ORAL SEX BEHAVIOUR:
UNDERSTANDINGS, REASONS AND CONSEQUENCES

2.1 Adolescents’ involvement in oral sex practices

Data from most surveys on adolescent sexual behaviour indicate that the prevalence of oral sex amongst teenagers and adolescents is relatively high, and a significant proportion of adolescents engage in oral sex prior to vaginal intercourse because they perceive oral sex a sexual activity that provides them with risk-free sexual intimacy. The National Survey of Adolescent Males and the National Survey of Family Growth (NSFG) in the USA showed the increasing trends in both males and females who reported having ever had oral sex (Gates & Sonenstein, 2000; Leichliter et al, 2007).

Research on adolescent sexual behaviour in the USA revealed that by the end of ninth grade at least 20% of adolescents have had oral sex and 14% have had vaginal sex; nearly half of them have had oral sex prior to vaginal sex and very few of them used any protection with oral sex (Schuster et al, 1996; Halpern-Felsher et al, 2005; Boekeloo & Howard, 2002 etc.). Schwartz (1999) found that amongst college students, 70% of males and 58% of females have ever been engaged in cunnilingus at least once before having penetrative sex; 57% of them have had experience of fellatio. Gates & Sonenstein (2000) analysis of sexual activity amongst heterosexual adolescent males revealed that among 15-19 years old male group 55% reported to be ever engaged in vaginal sexual intercourse, 49% reported that they had received oral sex and 39% reported that they had given oral sex. In the Lindberg et al (2008) study, 55% of the 15-19 years old respondents were found to practise oral sex. Females were found more likely to give oral sex, whereas both males and females have reported to receive more oral sex than to give oral sex. Brewster & Tillman (2008) study of oral sexual experiences amongst youths (15-21 years old) has revealed very similar results.

According to Australian researchers, more than 50% of university students (17-25 years old) reported ever having oral sex; 13% of them said that they had engaged in oral sex but not in vaginal or anal intercourse (Kippax, 1996).
Analysing stability and changes in sexual practices amongst first year university students in Australia, the Grunseit et al (2005) study found that over a 10-year period (1990-1999), 50% of males and 48.3% of females reported engagement in fellatio with a regular partner, whereas 36% of males and 18.6% of females reported fellatio with a casual partner. The patterns of being involved in cunnilingus looked very similar: 50.7% of males and 47.8% of females engaged in cunnilingus with a regular partner, whereas 32.8% of males and 18.2% of females reported cunnilingus with a casual partner. The odds for performing experience of fellatio and cunnilingus with a regular or with a casual partner were found to rise by 5% each year. Whilst there was no significant change in the same practices amongst young men, for young women the odds of reporting fellatio and cunnilingus with a regular or with a casual partner increased by 7% to 8% per year. This increase in probability of young females to experience almost all the same practices as males, was reported as the most interesting finding by the researchers. Overall, in Australia, the engagement in oral sex over a decade (between 1990 and 1999) has increased by 17% (in comparison with 7.3% increase in vaginal sex over the same period of time).

The data from 1990 UK National Survey of Sexual Attitudes and Lifestyles (NATSAL I) showed that 47% of young males and 46% of young females aged 16-19 had ever been involved in cunnilingus; and 47% and 44%, respectively, had ever been involved in fellatio. Survey among students (aged 16-21) in the UK indicated that 56% of all respondents had experienced fellatio or cunnilingus. Amongst virgins, about 22% have had experience of oral sex. Amongst non-virgins, 70% reported to have had oral sex prior to their first experience of vaginal sexual intercourse (Stone et al, 2006).

An increase in oral sex has been observed among adolescents who have made a pledge to remain sexually abstinent until marriage in the USA (Bruckner & Bearman, 2005).The Bersamin at al (2005) study revealed inverse patterns associated with initiating oral sex amongst American adolescents who made a private non-formal pledge to wait to have sexual intercourse until after marriage, with the perception that their peers have a disapproving attitudes towards oral sex and who expected a negative health and psycho-social expectancies from practicing oral sex. Adolescents who had engaged in oral sex were found more likely to be older, reported heavier episodic drinking in the past month, a lower level of bonding to school and a lower level of
religiosity (Bersamin et al, 2006). Females and older adolescents were found more likely to engage in oral sex than males and younger adolescents. Overall, from the sample of 12-16 year old, 10.9% reported engagement in oral sex while 8% reported having engaged in vaginal intercourse.

These findings were in accordance with findings from the Schuster et al (1996) study that investigated the sexual practices of high school virgins in the USA. They found that 9% of high school virgins had experienced fellatio with ejaculation, and 10% had been involved in heterosexual cunnilingus. Of those who had engaged in fellatio with ejaculation, only 4% stated that they used a condom and 8% stated that they used condom sporadically.

In Chambers’ (2007) study (of 18+ years old university students), 62% of students indicated that they have ever had vaginal intercourse, whereas 38.8% considered themselves virgins. 86% of the sample had reported having two or fewer partners over the past year. Of all virgins, 39% indicated that they had given oral sex to someone in their lifetime and 41.7% indicated that they received oral sex from someone in their lifetime; almost everyone who had vaginal intercourse were reported to have previously engaged in oral sex.

Gindi’s et al (2008) examination of reports on receptive oral or anal sex among public clinic patients aged 12-25 in Baltimore (Maryland, USA) found that the prevalence of receptive oral sexual exposure in young people who reported exclusively heterosexual contact increased from 16% in 1994 to 37% in 2004. Females had three times the odds of reporting receptive oral sex in 2004 than in 1994, whereas males had twice the odds. As the data was obtained exclusively from patients attending STD clinic, this may not be representative of the general population. In addition, researchers suggested that these results may indicate changes in norms among young people rather than a real shift in the sexual behaviours themselves.

Findings from the Young Risk Behaviour Survey indicated that the proportion of USA high school students who had vaginal intercourse decreased by 13% and those who had multiple partners declined by 24%, from 1991 to 2005 (MMWR, 2006). Interestingly, according to four national USA surveys on sexual behaviour, the proportion of males
and females (18-44 years old) who reported practising oral sex did not change from 1991 to 2002 (Mosher et al, 2002).

The trends for the UK and Australia appeared to be different. The data from the UK surveys suggest that the age at onset of oral sex practices amongst adolescents has reduced, whereas the prevalence of oral sex amongst them has increased over time (Johnson et al, 1994, 2001). A population-based study in Australia (2001-2002) demonstrated that the age at onset of oral sex has decreased in the cohort born from 1981 to 1986 in comparison with those born from 1941 to 1950 (Rissel et al, 2003).

2.2 Oral sex practices by demographic characteristics, including gender and race

Overall, males reported to initiate sexual intercourse at an earlier age than females (Centre for Disease Control and Prevention, 1998; NATSAL, 1994, 2000 etc). Black adolescents were found to have an almost three to four-fold increased risk for earlier sexual debut and a four-fold increased risk for having three or more sexual partners (Paul et al, 2000; Santelli et al, 2000; Singh & Darroch, 1999). Hispanic adolescents, attending sixth-grade in California, were more likely to have an older boyfriend or girlfriend and three or more sexual partners as compared to White, Black, Asian and American Indians (Marin et al, 2000).

Having an older sex partner has been identified to correlate with more risky sexual behaviour: adolescent girls with an older partner were more likely to engage in sex than girls with a partner of their own age, less likely to use condoms (DiClemente et al, 1996; Sturdevant et al, 2001), more likely to engage in vaginal sex at a younger age (Miller et al, 1992), and have a sexual partner who has multiple sex partners, have STIs and be HIV infected (Kelly et al, 2003; Begley et al, 2003).

Kaestle & Halpern’s (2007) study revealed that, compared with their counterparts, Black and Hispanic respondents demonstrated lower level of engagement in oral sex. Researchers attributed racial and ethnic differences in sexual practices to educational differences and cultural norms. Further research by Ompad et al (2006) indicated that white females perform oral sex earlier than black females (overall, 78% of their sample, aged 18-24, reported receiving oral sex and 57% reported performing oral sex). Among
males, Blacks were more likely to report having vaginal intercourse at an early age than white males. Conversely, white males were significantly more likely to report both receiving oral sex and performing oral sex as compared to Black males.

Brewster et al study (2008) also found that white females and white males were more likely than Black and Hispanic females and males to be virgins and to have experienced oral sex but not vaginal sex. They reported that youth from intact families were more likely to be virgins, and they were more likely to have experienced oral sex but not vaginal sex. Young females whose mothers had college/professional degrees were more likely to have oral sex than those whose mothers had only completed high school. For females, no religious affiliation during their upbringing was associated with a lower likelihood of being virgin and not having oral sex experiences. For males, not attending religious services at age 14 was associated with a lower likelihood of being a virgin and not having oral sex experiences. Females living in the cities were more likely to be virgins than females living in suburbs and rural areas; but they did not differ according to their oral sex and vaginal sex experiences. Males living in the cities were no more likely to be virgins than those who lived in suburbs and rural areas, but they were more likely to have the experience oral sex but not vaginal sex. Greater rates of oral sex were associated with higher socioeconomic status.

2.3 Attitudes to oral sex among adolescents, their reasons for having oral sex and their views on the risk associated with being involved in oral sex

In general, research has demonstrated that many adolescents do not consider oral sex to be actual sex (Remez, 2000; Sanders & Reinisch, 1999), and they believe that by engaging in oral sex they can maintain or preserve their virginity or ‘technically’ remain virgins while still gaining intimacy and sexual pleasure (Uecker et al, 2008; Bruckner & Bearman, 2005; Mosher et al, 2005; Fortenberry et al, 2005 etc.).

The Bersamin et al (2005) study on defining virginity and abstinence found that 70.6% of adolescents (aged 16) believe that they retained their virginity if they only participate in oral sex. Females were more likely than males to view those who performed oral sex on another person as virgins; adolescents with prior experience of oral sex were found more likely to think that those who engaged in oral sex were abstinent.
Singh-Berrett’s (2005) examination of the sexual behaviour among USA adolescents demonstrated very similar results: 60% of adolescents (14-18 years old) did not believe that oral sex was actually sex, and 65% of them consider a person as a virgin if they had only participated in oral sex. Among the total sample, 35% of adolescents reported to have engaged in vaginal sex and 43% reported to have engaged in oral sex in the past year. In contrast, NBC Now/People’s (2005) Survey indicated that as many as 77% of national younger sample of participants (13-16 years old) endorsed oral sex as actually ‘sex’.

Overall, adolescents had perceived oral sex as less risky, more beneficial, more prevalent and more acceptable among their peer group than vaginal sex (Halpern-Felsher et al, 2005; Kingsman et al, 1998).

The Lindberg et al (2008) study revealed some facts about patterns of oral sex among adolescents, in terms of susceptibility to STIs. It was found that among adolescent virgins with experience of oral sex and amongst those who have had vaginal sex but not oral sex, approximately 25% have reported having 2-3 sexual partners and 8% have had 4 or more sexual partners. In contrast, among adolescents who had engaged in both oral and vaginal sex, 38% reported to have multiple partners (4 or more), 31.3% reported that they have had 2-3 oral sex partners and around the same number have had only one lifetime sexual partner.

Research indicates that the most common reasons for having oral sex among adolescents were: pleasure (35%), perceived improvement in relationships (29.9%), social factors like enhanced popularity among peers and concerns about reputation (24.9%), curiosity/experience (16%) and also reduction of risks associated with vaginal sex (15.8%) (Cornell & Halpern-Felsher, 2006).

There were clear gender differences in the reasons for engaging in oral sex. Notably, the most highly rated reason for having oral sex among female adolescents was their perceived improvement in intimate relationships (24% for females and 5.5% for males), followed by popularity/reputation concerns (17.4% vs. 7.9%, respectively) and by personal benefits (curiosity/get experience; 12.4% vs. 3.8%, respectively). For male adolescents, two more weighted reasons for having oral sex were pleasure (19% vs.
16.2%) and their perception of oral sex being less risky than vaginal sex (9.8% vs. 6.2%). The two most salient beliefs influencing adolescents’ oral sex behaviour were found to be associated with peer popularity and their perception of best friends’ sexual behaviour (Remez, 2000; Halpern-Felsher et al, 2005). In Prinstein et al (2003) study, for example, 56.5% of adolescents, who reported engagement in oral sex, also reported that their best friends had engaged in oral sex in the past year. There was a significant correlation between the numbers of oral sex partners reported by adolescents and their perception of their best friends’ number of oral sex partners. Adolescents who reported engagement in oral sex, appeared to be rated by their peers as more popular than adolescents who did not engage in oral sex. Adolescents, who reported engagement in oral sex (in contrast with vaginal sexual intercourse) with multiple oral sex partners, were found to have higher social reputations but, overall, a lower level of ‘likability’ among their peers (Prinstein et al, 2003).

Slightly different reasons for having oral sex were found in Chambers (2007) study. Again, pleasure for the receiver was the most popular reason for giving oral sex and for receiving oral sex (78.3%). The next two more popular reasons appeared to be mutual pleasure and reciprocity. The similar percentage of virgins/non-virgins said that the most typical reason for giving/receiving oral sex was to ‘avoid sexual intercourse’ (16.4% and 14.7%’ respectively, for virgins; and 12.4% and 8.4%, respectively, for non-virgins). Females were significantly more likely than males to use oral sex as a means of avoiding vaginal intercourse. For both genders, pleasure for the receiver was the most popular endorsed option for giving oral sex; although males appeared to get significantly more pleasure out of both giving and receiving oral sex. Significantly more males than females reported ‘power’ as a reason for receiving oral sex.

In Chambers (2007) study, 53.5% of students perceived oral sex as an intimate act, and reported feeling comfortable giving oral sex in committed relationships (61.3%), in marriage (30.4%), and in ‘depends’ situation (27.4%). Similar percentages (12%) were happy to perform oral sex in non-committed relationships and ‘primary sexually based’ relationships but they were more likely to do so if they were receiving oral sex rather than giving. Markedly, female students were more varied in their ratings of the intimacy of oral sex than men. 22% of women perceived oral sex as not intimate, 23.9% were neutral and only 54% regarded oral sex as intimate. For males, 15.9% perceived oral sex as not intimate, 31.6% were neutral and only 52.5% perceived oral sex as intimate.
Thus, overall, males were significantly more inclined to be neutral in perceiving oral sex whereas women were significantly more inclined to perceive oral sex as not intimate (in contrast, vaginal intercourse was overwhelming endorsed as intimate).

Although few researchers have attempted to study the patterns and gender differences in giving/receiving oral sex by adolescents, the findings from these studies appear to be contradictory. Schwartz (1999) as well as Boekeloo & Howard (2002) have not found significant differences in performing fellatio or cunnilingus by adolescents. A study by Newcomer and Udry (1985) revealed in their sample that girls were more likely to have received oral sex than to have given it, and that fellatio was less common than vaginal sex or cunnilingus. However, the Chambers’ (2007) study found significant sex differences amongst adolescents’ ‘perception of the frequency’ of giving and receiving oral sex. Females reported their perception of giving oral sex to males more often than receiving it from males; accordingly, males indicated that they receive more oral sex than they gave it.

In order to understand the correlation between performing oral sex and initiating vaginal sex amongst adolescents (whether oral sex precedes or coincides with vaginal sex; whether oral sex results in a delaying the progression to vaginal sex; whether being involved in any forms of such sexual behaviour primes adolescents to be more likely involved in other), researchers from the USA presented a few studies drawn on the use of data from NSFG (National Survey of Adolescent Males and the National Survey of Family Growth).

Lindberg et al (2008) found that adolescents who have already experienced vaginal sex were more likely to have had oral sex, and oral sex practices were more likely among those who initiate vaginal sex earlier. These findings gave support to the conclusion that there is a close occurrence between the onset of vaginal sex and oral sex. In contrast, the Brewster & Tillman (2008) study, based on the same NSFG data, produced completely opposite findings. They showed that virgins who had experience of oral sex were less likely to have vaginal sex, which, subsequently, supported their conclusion that engagement in the practice of oral sex appears to delay the onset of vaginal sexual intercourse, thereby preserving virginity. Both of these studies suffered from important methodological limitations: cross-sectional design, choice of measures to assess sexual behaviour (although the age of vaginal sex initiation was assessed, the time of oral sex
initiation was not measured) which could be addressed by conducting prospective longitudinal studies on sexual behaviour of adolescents.

Research on the practice of oral sex among British adolescents revealed that, although they apparently do realise that STIs (such as herpes, hepatitis, gonorrhoea, syphilis, chlamydia, HIV and HPV) can be spread through practising oral sex, they still failed to protect themselves by using a condom during oral sex.

Stone et al (2006) study demonstrated that 74% of respondents knew that STIs can be transmitted via oral sex (in comparison with 98% who knew that STIs can be transmitted via vaginal sex), and the proportion of males who knew this information was greater than the proportion of females (for fellatio: 30% vs. 20%, respectively; for cunnilingus: 30% vs. 21%, respectively). Nevertheless, only 23% of respondents agreed that it was important to use a condom during fellatio, and the difference between genders was significant (14% of males in contrast with 29% of females). Furthermore, of all the young people who reported giving or receiving fellatio, only 20% had ever used a condom (23% vs.17% of females and males, respectively). Amongst those who had experienced fellatio on only one occasion, 13% of males and 21% of females have ever used a condom; of those who had experienced fellatio on more than one occasion, 83% of males and 78% of females had never used a condom; and fewer than 2% of each gender reported that they had always used a condom. An interesting and very salient finding from this study was that 82% of respondents, who had experienced fellatio without a condom, reported that STIs can be transmitted during fellatio. An important limitation of this study was the relatively small sample of young people residing in the UK and the fact that the final sample was not truly representative of all young population aged 16-21 of the UK.

A study on oral sex experience and risk perception amongst adolescents in the USA by Boekeloo & Howard (2002), revealed very similar patterns of knowledge on the sexual route of HIV transmission (e.g. the exchange of body fluid): 68% of teenagers and adolescents (12-15 years old) who participated in this study acknowledged the risk of HIV transmission through oral sex, whereas 96% and 81% knew about HIV transmission through vaginal and oral sex, respectively. The obvious limitation of this study was its singular focus on the transmission of HIV and not on any other risks, such as the transmission of other STIs or associated with practising oral sex risk perception,
which include social and emotional consequences of being involved in this particular type of sexual behaviour.

The study by Halpern-Felsher et al (2005) revealed that around 14% of high school adolescents had believed that they have no chance of contracting chlamydia and HIV from oral sex. As far as the issue of protection during oral sex was concerned, in this study females demonstrated less knowledge than males on how to protect themselves during oral sex. On average, about 20% of all high school adolescents who have had experiences of unprotected oral sex appeared to be unsure about the health risks involved in practising oral sex; and about 70% of them did not know how to protect themselves during oral sex.

Existing USA literature also demonstrated a very low level of condom use during oral sex. Schuster et al (1996) found that among high school students who had engaged in fellatio, 86% had never used a condom and 8% used a condom from time to time. Bruckner & Bearman (2006), who analysed the data from the third wave of the National Longitudinal Study of Adolescents Health, reported that only 4% of young people who had ever had oral sex used a condom the first time. A study by Prinstein et al (2003) found that 70% of adolescents never used a condom during oral sex (68% of girls and 72% of boys 15-17 years old), 12% of them (15% vs. 9%, respectively) reported sporadic use of protection, and 17.4% used condoms regularly (17% vs. 18%, respectively).

2.4 Social and emotional sequelae of practising oral sex for adolescents

Until recently, there was a scarce amount of research investigating the important social and emotional costs of practising oral sex amongst adolescents. Amongst them, the Brady & Halpern-Felsher (2007) study found that, compared with those involved in vaginal sex, adolescents practising only oral sex often felt as being used by their sexual partners. They also reported less pleasure and less satisfaction with their current relationship, lower sexual self-esteem and feelings of being guilty for their sexual behaviour. Nearly a third of them in this study (Brady & Halpern-Felsher, 2007) reported multiple negative consequences of engaging in oral sexual behaviour.
The motives behind an individual’s engagement in sexual activity have been linked to various emotional, behavioural and relational outcomes. Previous research has found approach motives and intrinsic motivation (e.g., seeking physical pleasure, enhanced relationship intimacy, and shared pleasure) to be associated with more positive outcomes, while avoidance motives and extrinsic motivation (e.g., preventing relationship conflict or partner disappointment, coping with negative emotions, responding to external pressures) to be associated with more negative outcomes (Impett et al., 2005; Jenkins, 2004). Research also suggests that intrinsic motives are related to greater well-being, higher self-esteem, sexual life and relationship satisfaction, as well as lower reports of depression and poor physical health (Jenkins, 2004). On the other hand, extrinsic motives, such as peer pressure (Crockett et al., 2003; Prinstein et al., 2003), have been found to relate to poor mental and sexual health, substance use (Jenkins, 2004), and risky sexual behaviours (Cooper et al., 1998).

A recent increase in research on adolescents’ oral sex practices has added slightly different dimensions to the investigation of risky sexual behaviour. In the context of adolescents’ oral sex, both negative and positive psychological health outcomes of this behaviour started to be investigated in relation to gender. As adolescent girls were found to be more influenced by social and relational pressure regarding their engagement in sex, the association between extrinsic motives and adolescents’ sexual behaviour proposed to be especially significant for them (Schatzel-Murphy et al., 2009; Tolman, 1994; Tolman et al., 2003). As part of their gender socialization, adolescent girls are taught to be passive and to refrain from exhibition of their own sexual desire (Tolman, 2012). Additionally, girls must manage social pressure from their peer group regarding their sexuality. On the top of this, it was also suggested that sexual motives may be multidimensional. Results from a recent investigation (Sanchez et al., 2011) of relational motives suggest that females’ engagement in sex with the purpose to improve intimacy with their partners was associated with experiences of getting more sexual satisfaction and autonomy. However, females’ engagement in sex with the purpose to earn their partner’s approval was associated with sexual dissatisfaction and inhibition.

Brady & Halpern-Felsher (2007) study found that, in general, young females were more likely than young males to report ‘negative social and emotional consequences’ of being involved in any type of sex. Female adolescents among this sample (14 years old on the entrance to study) were more likely to report feelings of self-worthlessness and being
used in their current relationship as result of having sex, whereas male adolescents reported being more satisfied with themselves as result of having sex, as this involvement gained them popularity among their peers. The researchers linked this finding to the influence of the existing double sexual standard which still remains a powerful force in modern culture, where boys are encouraged to become sexually experienced, whereas girls are encouraged to restrict their sexual behaviour (Aubrey, 2004; Tolman, 1994). This finding may also indicate that although, statistically, there is a little difference to be found between the sexual behaviour of boys and girls across many countries, social and cultural norms still have the power to influence them, socially and emotionally, resulting in a psychosexual impact on their self-perception and self-esteem if not their actual sexual behaviour.

Researchers also pointed out some possible complications which can affect the psychological plausibility of their results. Considering the fact that assessment was based on adolescents’ self-reports, they accepted the possibility that female adolescents could be more willing to admit experiencing the negative, emotional and social consequences of their sexual activities rather than physical ones, whereas male adolescents could be more willing to admit experiencing a negative physical health consequences than female adolescents but not prepared to admit any distress from negative emotional and social consequences.

Another finding from the Halpern-Felsher et al (2005) study was that adolescents did not perceive any differences in social or emotional benefits between having oral sex or vaginal sex. Furthermore, they have similar attitudes towards having oral sex and vaginal sex with someone with whom they believe they are in love. The Kaestle & Halpern (2007) study revealed that 85% of 18-26 years old respondents have reported having vaginal intercourse (45%) as well as being engaged in cunnilingus (39%) and fellatio (39%). When compared with their peers (who did not report much love for each other within relationships), both male adolescents and females adolescents who reported being in mutually loving relationships, demonstrated significantly higher odds of giving and receiving oral sex. Males in loving sexual relationships had nearly twice as high odds of having received fellatio compared to males in casual sexual relationships; the similar patterns were found for females receiving cunnilingus in loving sexual relationships.
Researchers interpreted this finding as reflecting the willingness of young adults to give pleasure to their partners with whom they believe to be in love, based primarily on how much love they feel towards the partner. For females, the elevated odds of reporting cunnilingus may reflect their perception of such practice as a loving or caring act. This finding is consistent with the concept of social exchange where more equitable feelings and sexual behaviours may lead to an enhanced quality of personal relationship in terms of satisfaction, love and commitment. More importantly, it implies that in loving relationships oral sex is closely associated with positive emotional outcomes for both males and females. In contrast, practicing oral sex in casual, non-committed relationships tend to produce a completely different spectre of emotional outcomes, which would differ by gender.

The negative mental health outcomes from practicing oral sex have been investigated in a separate block of literature devoted to a ‘hooking up’ culture of college campus in the USA (Lambert et al, 2003; Owen et al, 2010; Paul et al, 2000; Owen & Fincham, 2011). ‘Hooking up’ can be identified as a ‘sexual encounter ranging from kissing to intercourse that occurs on one occasion and where the partners do not necessary expect future physical encounters or a committed relationship’ (Owen & Fincham, 2011). Although there is no consistency or clarity on the findings of recent research on ‘hook-up encounters’, the major mental health consequences from casual sex (both oral and vaginal) amongst college students were greater feelings of guilt and anxiety among females, which may lead to ‘short-time psychological distress’ for females (Grello et al, 2006). In contrast, male college students who had engaged in such casual sexual encounters (both oral and vaginal sex) reported a lower level of distress than virgins or males who had engaged in sex with a romantic partner. An increasing level of distress was also found in female students, but not for male students, as their number of sexual partners increased. In a study by Owen et al (2011), female students were more likely than male students to report a negative reaction to ‘hook-ups’, and less likely than males to report a positive reaction.

The Eshbaugh & Gute (2008) study which examined ‘hook-ups’ and sexual regrets among college women (with a mean age of 20 years old) revealed that 74% of them reported either few or some regrets related to lower self-rated life satisfaction. With regard to all female students, around 9% indicated that they did not have any partner for sexual intercourse in the last year; 46.7% reported to have had one partner; 20.4%
reported to have two partners and 12.5% - five of more partners in the last year. This study also found that female college students experienced less regret from a ‘hook-up’ which involved oral sex than from a ‘hook-up’ which involve vaginal sexual intercourse. This finding may be attributed to these female students underestimating the health risks associated with oral sex (Remez, 2000).

The only study which examined self-esteem in relation to ‘hook-up’ (Paul et al, 2000) found that both male and female students, who had ever ‘hooked-up’, reported lower self-esteem than those students who did not. Fielder & Carey’s (2010) study on prediction and consequences of sexual ‘hook-ups’ (18-19 years olds) revealed that during their first semester of college, 33% of them reported having engaged in oral sex ‘hook-ups’. More interestingly, parental discouragement of relationships emerged as an important predictor for oral sex ‘hook-ups’ and also as an important predictor of the number of oral sex partners amongst college students: the stronger was students’ perception of parental discouragement of relationships, the greater the number of oral sex partners they reported. This study confirmed findings from previous studies that coital ‘hook-ups’ may lead to an increase in distress and lower self-esteem for females. Male students who were not involved in coital ‘hook-ups’ reported a higher level of distress than those who were ‘hooking-up’ and, consequently, had a lower self-esteem than their ‘lucky’ counterparts. Some important limitations of Fielder & Carey’s (2010) study was the relatively small pool of participants (140) which consisted primarily of females and Caucasian college students, cross-sectional design and a very short follow-up interval (10 weeks). More importantly, they measured only two mental health outcomes: distress and self-esteem, and, while considering these outcomes, they sometimes did not draw a clear distinction between consequences which related specifically to oral or alternatively to vaginal sex. However, the findings from this study corresponded with the Brady & Halpern-Felsher (2007) study which found that female students seemed to be at risk of experiencing negative social and emotional consequences of having any type of sex (oral sex or vaginal sex).

The correlation between oral sex and depressive symptoms in adolescents was further explored in the Waldenstrom (2009) study. Results indicated that girls from this sample (24 girls aged 14-16) appeared to be more engaged in fellatio than in any other form of sexual activity, such as cunnilingus and vaginal intercourse. This study found positive
relationships between girls’ fellatio experiences and depressive symptoms (measured with Beck Depression Inventory).

The most recent block of studies on young women’s adolescent experience of oral sex and psychological functioning suggested distinguishing between cunnilingus and fellatio when considering the negative or positive consequences of oral sex experiences among female adolescents. These studies (e.g. Fava & Bay-Cheng, 2012; Bay-Cheng et al, 2009) found a relation between initiation of cunnilingus and sexual motives; with those who initiated cunnilingus at younger ages demonstrating higher levels of engaging in sexual intercourse for personal gratification and in order to feel assertive, agentic, and skilful. Among young women with cunnilingus experience, Bay-Cheng & Fava (2011) it was found that more sexually assertive young women (i.e, more able to advocate for their own sexual interests) also had more lifetime cunnilingus partners.

Unlike cunnilingus, the age of fellatio initiation was unrelated to sexual motives, positive, neutral, or negative. Contrary to cunnilingus experience, early experiences of fellatio amongst adolescent girls were linked to behaviours that increased their vulnerability in other domains (e.g., psychological functioning, sexual relationships). Research on early sexual activity as related to poor mental health in adolescent girls suggested that higher levels of interpersonal sensitivity in adolescence (i.e. feelings of personal inadequacy and devalued self-worth) were related to initiating fellatio at younger ages (e.g., Bingham & Crockett, 1996; Kaltiala-Heino et al., 2003; Meier, 2007).

According to this stream of research, it is possible that earlier fellatio initiation could compromise psychological functioning in young women. Yet it is also possible that feelings of personal inadequacy lead them to engage in fellatio sooner, perhaps as an attempt to gain favour or attention from peers or partners or because of their lack in confidence and lack of power to refrain from performing oral sex.
2.5 Physical health consequences of practising oral sex for adolescents

Although perceived by many people as a relatively low-risk type of recreational sexual activity, oral sex can actually be responsible for the transmission of oral, respiratory, and genital infections. Various channels in the oropharynx can serve as portals, for pathological infections of the oral cavity to enter the blood stream. Any open sores, for example, bites, cuts, aphthous ulcers, piercing or dental abrasions in the mouth exacerbated by bleeding gum disease (gingivitis, periodontitis) could provide a pathway through which a multitude of viruses, bacteria and fungi can enter into the systemic circulation. Because saliva, pre-cum, semen, vaginal secretions, and menstrual blood can get into the mouth during performing oral sex, this recreational sexual activity has proved to be an efficient mode of transmission for many STIs, such as candida, chlamydia, gonorrhoea, syphilis, herpes, hepatitis B, HIV and HPV (Edwards & Carne, 1998; Hawkins, 2001). Recently, HPV infections obtained through practising oral sex have been linked to development of oropharyngeal cancer amongst a younger generation of cancer patients (Gillison, 2008).

Oropharyngeal cancer is a generic term that includes cancers of the pharyngeal wall (pharynx), soft palate, tonsillar region and the base of the tongue (Barns et al, 2005). 95% of these tumours include carcinomas with lymphomas of Waldeyers’ ring (lymphoid tissues that forms a ring around the opening of the throat)\(^1\). The most common sites for cancer in the oral cavity are: the tongue (accounts for about 25% of cases), the tonsils (10-15%), the lips (from 10 to 15%), minor salivary glands (10-15%), the remainder occur in the gums and the floor of the mouth. Two risk factors, tobacco use and alcohol consumption, are normally thought to account for approximately 75% of throat cancer incidents. Each year it is estimated 66,650 new oral cancer cases are diagnosed in the countries of the European Union (Cancer Research UK); between 12,000 and 15,000 - in the USA and about 3,000 in Canada (Campisi & Giovanelli, 2009).

Recent studies in the USA, which analysed population-based cancer registries since 1973 up to date, have demonstrated a significant increase in the incidence of oropharyngeal cancers (i.e. tonsillar cancers and base-of-the-tongue carcinomas)

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\(^1\) Waldeyers’ ring tumours exhibit among the highest prevalence of HPV infection.
(Shiboski et al, 2005; Chaturvedi et al, 2011), especially among Caucasian males under the age of 65 years old (Frisch et al, 2000) which cannot be attributed to population fluctuations in use of tobacco and alcohol since the use of tobacco and alcohol in the USA has largely declined since 1964 (Sturgis & Cinciripini, 2007). Similarly, in Sweden, from 1960 to 2003, the incidence rates of tonsillar cancers increased by 1.1% in females and 2.6% in males (Hammarstedt et al, 2007).

Studies from the USA, England, Wales, Scotland, Switzerland, Scandinavia and Slovakia reported that an increase in oropharyngeal carcinomas appears to be particularly noticeable in young patients between the ages of 20 and 39 (Llewellyn et al, 2004; Annertz et al, 2002; Macfarlane et al, 1992; Karim-Kos et al, 2008).

The absence of parallel increase in non-oropharyngeal carcinomas, and the observed rise in oropharyngeal cancer incidents in these Western countries, have allowed medical researchers to suggest a role for alternative risk factors (different from tobacco, alcohol, nutrition diet and oral hygiene) contributing to the recently recorded rise in oral cancers. One of such risk factor was identified as infection with HPV, particularly type 16 (HPV16-positive) (Kreimer at al, 2005; Syrjanen, 2005; IARC Press, 2007).

Research data indicates that the risk factors for HPV16-positive and HPV16-negative oral carcinomas are markedly different. Several measures of sexual behaviour (including an increasing number of oral sex partners), HPV exposure and oral HPV infections were found to be associated with HPV16-positive cancers, whereas tobacco and alcohol use and poor oral hygiene were found to be associated with HPV16-negative cancers (D'Souza et al, 2007; Gillison et al, 2008). Compared with those who never smoked tobacco or drank alcohol, those with a heavy use of tobacco (more than 20 pack-years) and alcohol were found to have an increased risk of HPV16-negative cancer but not HPV16-positive cancer.

Clinical observations supported the conclusion that a significant proportion of oropharyngeal cancers occur in patients without a history of tobacco/alcohol exposure, especially among young patients (10-30% of non-smokers and non-drinkers) (Llewellyn et al, 2001; Gillison, 2004). Among 16-20 year olds, the prevalence of oral HPV infection was estimated to be approximately 3% (Smith et al, 2004). Research demonstrated that tonsillar cancers and base of tongue cancers have the highest rates of
HPV-positivity within the oropharynx. Overall, the presence of detectable oral high-risk HPV infection in the adult population varies from approximately 1.5 to 14% (D’Souza et al, 2007; Kreimer et al, 2006; Fakhry et al, 2006) although the percentage of HPV-positive oropharyngeal cancers varies between 12-63% among different reports between countries (Kreimer et al, 2005). Factors increasing the risk of oral HPV infection in adults currently include, besides age and male gender, HPV infection, presence of a cervical HPV infection (in partner, as well), history of STIs and the number of oral sex partners.

Epidemiological studies demonstrate that a history of significant tobacco and alcohol consumption is strongly associated with HPV-negative oropharyngeal cancers whereas HPV-positive oropharyngeal cancer patients are reporting a significantly higher number of lifetime genital sex and oral sex partners. This finding suggests that the changes in sexual behaviour could have a causal role for the increase in HPV associated oropharyngeal cancers in developed countries.

A high number of lifetime sexual partners have already been established as one of the leading risk factors for HPV acquisition (Baseman & Koutsky, 2005). Pooled analysis of four population-based and four hospital-based case-control studies from the International Head and Neck Cancer Epidemiology (INHANCE) consortium with participants from Argentina, Australia, Brazil, Canada, Cuba, India, Italy, Spain, Poland, Puerto-Rico, Russia and the USA found that having four or more lifetime oral sex partners was associated with a three-fold increase in risk for tonsillar cancer, and, amongst men, this risk was associated with ever having oral sex and with earlier age at the sexual debut. Age of sexual debut under 18 years old was associated with two-fold risk of tonsil cancer among men. Cancer of the oropharynx was associated with having a history of six or more lifetime sexual partners and four or more lifetime oral sex partners. With cancer of the base of the tongue, elevated point estimates were seen with having two lifetime sexual partners, in comparison with only one; with ever having oral sex among women and, among men, with a history of same sex sexual contact. These results were in accordance with findings from previous studies (e.g. Heck et al, 2010).

Studies from the USA, Australia, Russia and Brazil pointed to generational changes in sexual behaviour: cohort individuals who come of age in recent years have an early age of sexual debut, a greater number of sexual partners and a higher likelihood of engaging
in oral sex in comparison with the cohorts who came of age in earlier times (e.g. Amirkhanian et al, 2001; Parkin & Bray, 2006).

Several recent studies and meta-analyses have revealed that patients with HPV-positive oropharyngeal carcinomas as opposed to patients with HPV-negative oropharyngeal carcinomas showed improved overall and disease free survival rates after chemotherapy (Kumar et al, 2007), radiation therapy (e.g. Lassen et al, 2010) and surgery (Licitra et al, 2006). The reasons for improved survival rates of HPV-positive oropharyngeal cancers are currently not fully understood. They have been attributed to several factors which include a better immunologic response to HPV; younger patients’ age at diagnosis; lower risk of second primary carcinomas; less extensive tobacco and alcohol exposure and enhanced radiation sensitivity.

These findings from research have several implications for long-term consequences of practicing oral sex. As far as social care and social services provision are concerned, HPV-positive oropharyngeal cancer appears to be a disease of younger, white, educated people, mainly males, who are generally healthy; these patients have a better prognosis as this type of cancer is more responsive to chemotherapy and radiotherapy than HPV-negative cancer (El-Mofty, 2007). Consequently, as they have to live with the functional and psychological sequelae of their treatment, they will need long-standing support from social, health and counselling services (Mehanna et al, 2010).

As far as public health is concerned, although the use of condoms prove to be effective against other STIs, the effectiveness of using condoms for prevention against HPV infection during oral sex is not clear (Manhart & Koutsky, 2002). The alternative route for prevention of HPV-related infection is prophylactic vaccination by type-specific vaccines. Presently, two vaccines have been developed and are available for primary vaccination against HPV: a bivalent vaccine against HPV16 and HPV18 (Cervarix, produced by GlaxoSmithKline) and a quadrivalent vaccine against HPV16, HPV18, HPV6 and HPV11 (Gardasil, produced by Merck and distributed in Europe by Sanofi Pasteur MSD). These HPV vaccines, which are reported to offer an impressive range of protection from 86% to 100% against anogenital HPV infection in women (e.g. Garland et al, 2007), have the potential of broader implications for other HPV-related cancers in both men and women, thereby preventing oral as well as ano-genital infections.
However, to have the greatest benefit for vaccination against oncogenic HPV infection, administration of any prophylactic vaccination should occur prior to the onset of sexual behaviour. The current surveys of adolescents’ sexual behaviour revealed that a significant proportion of adolescents engaged in oral sex even prior to engagement in vaginal intercourse as they consider oral sex to be less risky than vaginal or anal sex. Because the risk of acquiring oral HPV infection in teenagers and adolescents may precede risk of acquiring anogenital HPV infection, their oral sexual behaviour need to be taken into consideration while making decisions on what age is appropriate for the administration of currently available HPV vaccines.

The second factor that needs to be considered by policymakers is that males have twice as high incidence rates of acquiring oral cancer compared to females. A meta-analysis of sexual behaviour studies indicated that males also initiate most sexual behaviours earlier than females (Oliver & Hyde, 1993), and both the young age of oral sex initiation and the prevalence of oral sex among Caucasian males are higher than among males of other races and ethnicities (Ompad et al, 2006). Therefore, white adolescent males seem to be at greater risk of acquiring oral HPV infection, and at an earlier age than white female adolescents. Early onset of oral sex in adolescents has been associated with social co-factors (e.g. history of sexual abuse, marijuana use, and same-gender sex). All these findings from adolescents’ sexual behaviour research are vitally important because orally acquired HPV infections might also be transmitted to the genital tract (Gillison et al, 2008). These considerations have prompted many medical researchers to advocate vaccinating boys as well as girls, with the bivalent vaccine to prevent orally acquired HPV-related cancers and with tetravalent vaccine to additionally prevent oral condilomatosis (Campisi & Giovarelly, 2009). In October 2011 Advisory Committee on Immunization Practices (ACIP, Centre for Disease Control and Prevention, USA) has recommended routine HPV vaccination for males aged 11-12 in the USA, noting that the vaccination series can be started from 9 years old (www.cdc.gov/vaccines/recs/acip/downloads/mtg-slides-oct11/05-HPV-Dunne.pdf)

Currently in the UK, even after the recent change from Cervarix to Gardasil vaccine for government funded programme of HPV vaccination (November 2011), only teenage girls aged 11-12 are currently offered HPV vaccination, teenage boys are still not included in this preventative medicine programme.
2.6 Summary

To summarise, as it follows from the research literature, oral sex behaviour appears to be a very popular behaviour that constitutes a normative part of sexual development during emerging adulthood. The evidence from this review indicates that the consequences of oral sex behaviour could include potential threats to the physical and psychological health of younger generations, and that oral sex behaviour amongst adolescents requires more detailed investigation from a health psychology perspective as it is becoming a matter of importance to public health.
This PhD thesis is based on the Theory of Planned Behaviour (TPB) and Self-Regulation Theory.

I used the Theory of Planned Behaviour (TPB) (Ajzen, 1985; 1991) to explore intentional, reasoned, conscious and driven by perceived personal or social consequences components of oral sex behaviour and related to them psychological well-being consequences.

In order to cover the behaviour-intentional discrepancies in relation to oral sex behaviour I applied the dual-system (Reflective-Impulsive) Model of attitude-behaviour relations. The Resource Model of Self-Control was employed to investigate the role of sufficient level of self-control in regulating oral sex behaviour. The General Model of Preventive and Interventive Self-Control (PI-Model) was used to distinguish self-control from motivational processes and to explain cognitive strategies supporting self-control and motivational failures.

3.1. Theory of Planned Behaviour: strengths and limitations

3.1.1. The main components of behavioural regulation within TPB framework

According to the Theory of Planned Behaviour (Ajzen, 1985; 1991), human behaviour is led by three kinds of considerations: beliefs about the likely consequences of the behaviour (behavioural beliefs), beliefs about the expectations of others (normative beliefs), and beliefs about the existence of personal factors that may aid or obstruct performance of the behaviour (control beliefs). Collectively, behavioural beliefs produce positive or negative attitudes toward the behaviour. Normative beliefs represent a perceived social pressure (e.g. subjective norm); whereas control beliefs relate to the individual’s ability to have control over particular behaviour. The combination of attitude toward the behaviour, subjective norms and perceived behavioural control form the behavioural intentions. Generally, positive attitudes towards particular type of behaviour and subjective norms, and high perceived control over this behaviour should
result in strong individual’s intention to perform this behaviour. When the individuals have the opportunity to perform this behaviour, they also require a sufficient degree of actual control over behaviour in order to carry out their intentions. Therefore, TPB assumes intentions to be the immediate antecedent of behaviour.

Nevertheless, because many types of behaviour are difficult to execute and volitional control resources can be limited, the theorists of TPB consider perceived behavioural control to influence the actual behaviour in addition to intentions. The concept of perceived behavioural control was closely related to the notion of self-efficacy (Bandura, 1977) but proved to be a distinctive construct (Terry & O’Leary, 1995). From a TPB perspective, perceived behavioural control to some extent can serve as a substitute for actual control and, therefore, contribute to the prediction of the behaviour. The construct of intention, therefore, as stated by Ajzen: “assumed to capture the motivational factors that influence behaviour; they are indicators of how hard people are willing to try, of how much effort they are planning to exert, in order to perform the behaviour” (Ajzen, 1991, p. 181). A schematic representation of the TPB theory is showed in Figure 3.1.

![Figure 3.1 Schematic representation of the TPB (Ajzen, 1991)](image)

Behavioural intentions were presumed to mediate the effect of variables extraneous to the models such as demographic characteristics as well as attitudes and subjective norms but not perceived behavioural control. This concept of perceived behavioural
control added a dynamic element to TPB theory as it extended the understanding of intentions as optimisation of motivation, how hard people want to control/manage their behaviour.

Within the TPB framework, health behaviour is considered to be the result of cognitive appraisal processes; therefore, it is intentional, reasoned, conscious and driven by individuals’ skills and abilities and perceived personal or social consequences. While very few early HIV-prevention interventions were found to be effective (e.g. Fisher & Fisher, 1998; Oakley et al, 1995), interventions based on social cognitive models have shown to effectively promote safer sexual behaviour and reduce sexual risk behaviour (e.g. Kalichman et al, 1996; Albarracin et al, 2006).

However, meta-analysis of condom use only partially supported the theoretical assumption that intentions directly lead to the behaviour (or serve as a good proxy measure of behaviour), (e.g. Sheeran & Orbell, 1999). This indicates that although intentions are certainly a major determinant in whether someone engages in a particular behaviour, further research needs to address factors that may affect strength of the intention-behaviour relationship, and this further exploration of intention-behaviour discrepancies can be important to understanding intentions in the context of health-promotion interventions (Abraham et al, 1994). Although the variables, such as normative influences or perceived costs and benefits, included in social cognitive models, may play a role in risky sexual behaviour, these models suggests a degree of reflection, planning and intentional control over individuals’ behaviour. As sexual behaviour could be influenced by situational characteristics and it is more impulse-driven, these models have difficulties in explaining or predicting sexual behaviour. Besides, intention-behavioural discrepancies in sexual behaviour may be subjects to personal and psycho-social differences and also need to be considered in social context and within gender-power relations.

Because the empirical literature on these topics is extensive, the following sub-sections were included to illustrate key points that allowed a better understanding of dynamic forces involved in management of risky sexual behaviour.
3.1.2 The components outside the TPB that influence management of risky sexual behaviour. Dynamic nature of risky sexual behaviour regulation

3.1.2.1 Intention-related variables: situational characteristics of risky sexual behaviour

Studies on intention-related variables of sexual behaviour aim to discriminate between those who intended to engage in safer sex behaviour and did so and those who intended to engage in safer sex behaviour and did not. This trend of research has drawn researchers’ attention to situational characteristics of risky sexual behaviour.

Investigation of heavy drinking and alcohol use, as important situational variables of behavioural risks revealed that while heavy drinking behaviour was strongly associated with an increase in aggressiveness, there was conflicting evidence for the role of alcohol use in risky sexual behaviour. Whereas some studies have found event level associations between use of alcohol and unprotected sex (Neal & Fromme, 2007), others have found no such relations (Cooper, 2002). The evidence from event-level studies suggest that event-level alcohol use appears to strongly increase the likelihood of unprotected sex with casual than with regular partners or early rather than later in stable relationships (e.g. Leigh, 2002; Corbin & Fromme, 2002; Brown & Vanable, 2007; Goldstein et al, 2007). Mental health problems, developmental factors, disposition to risk taking and sensation seeking, familial influences and general tolerance for deviance have all been reported as possible mediating variables (e.g. Jessor et al, 1985; Tschann et al, 1994). Recently, Quinne & Fromme (2010) suggested that the association between alcohol use and unprotected sex may be moderated by individual differences in self-regulatory skills, with those low in self-regulation at greater risk of unprotected sex after consuming alcohol.

A number of studies on low self-regulatory control as related to greater level of risk-taking behaviour and sensation-seeking (e.g. Leith & Baumeister, 1996; Magar et al, 2008), including sexual behaviour (e.g. Raffaelli & Crockett, 2003), pointed out the possible relationship between sexual risk-taking behaviour and self-regulation. Recent research examined a number of situational characteristics that may decrease self-regulation and lead individuals to act in a manner inconsistent with their intentions (i.e.,
not using condoms due to alcohol/drug intoxication or higher sexual arousal). It also identified sets of variables showing relationships with sexual risk-taking behaviour which can be possible contributors to lowered self-regulation, such as the lack of preparation in condom use (e.g. Abraham & Sheeran, 1994; Bryan, Fisher & Fisher, 2002); the mood (e.g. Bartz et al, 2007); greater sexual arousal (e.g. Boldero et al, 1992; Janssen et al, 2000); substance use (e.g. Cooper, 2002; Turchik et al, 2010); greater perceived partner attractiveness (e.g. Kruse & Fromme, 2005).

3.1.2.2 Risky sexual behaviour in social context and within gender power relations

Research indicates that risky sexual behaviour also needs to be considered in a wider social context and within gender power relations (e.g. Holland et al, 1990).

According to Sexual Script Theory (Simon & Gagnon, 1984, 2003), gender differs in passive/initiator sexual roles within relationships, with females traditionally expected to be more submissive and have less power whereas males are expected to be more dominant and powerful in sexual roles and other relationship contexts (Baumeister, 1988).

Decision-making and control have been found to be particularly salient components of power in sexual relationship (e.g. Harvey & Bird, 2004; Miller & Cummins, 1992; Pulerwitz et al, 2000, 2002). Furthermore, research in the area of women-focused HIV prevention indicates that seemingly identical contexts of sexual behaviour can have unique effects on women and men (e.g.Yoder & Kahn, 2003), and the understanding of women’s HIV/STD risk via heterosexual transmission should consider the type of partner and the role of relationship power (e.g. Amaro & Raj, 2000; Sanders-Philips, 2002). Because women are often seen to be the less powerful partner in relationships, it has been argued that they are less likely to participate in decisions about condom use and they also could experience increased difficulty when they desire to use condoms (Bowleg et al, 2000; Harvey et al, 2004).

Wingood & DiClemente’s (2000) extended version of the Theory of Gender and Power (TGP) suggests that when a woman lacks the power to act or change a sexual situation, this imbalance increasingly favours her male partner, self-efficacy for safe sexual negotiation is diminished and unsafe sexual behaviour is more likely to occur. These
dynamics are thought to be further amplified in relationships that are perceived by women as long-term or serious relationships (e.g. Hobfoll, 1998; Impett & Peplau, 2003).

Association between safer sex and sexual factors (e.g. Fisher, 1984; Boldero et al, 1992) led HIV-prevention researchers to begin to recognise the need to address the sexual and relational concept of HIV risk in prevention efforts (e.g. Carovano, 1991; Kalishman, 1998). However, the problem with present research on power issues in negotiating sexual behaviour is that different studies are difficult to compare due to a variety of theoretical methods. Whilst only few studies attempted to incorporate theory (e.g. Gutierrez et al, 2000; Pulerwitz et al, 2000, 2002; Wingood & DiClemente, 2000), the majority of them seem to make predictions relying on other research. Modern individual-level theories which traditionally used to explain sexual risk behaviour do not include power relations as a valuable construct, as there is the lack of theory-based research on power in sexual negotiations. In addition, the research on power relations is based on interviews, questionnaires, and surveys with very few studies using experimental manipulation. Although qualitative and correlational research is a convenient way of conducting research with sensitive subject matter, testing causal relationships among variables require experimental research.

3.1.2.3 Personality and individual differences in ability to manage behaviour in context of risky sexual behaviour

Research on the impact of individual differences on risky sexual behaviour demonstrated the importance of demographic and more stable personal characteristics, such as the ‘big five’ personality traits (e.g. Costa & McCrae, 1994), and the links between them and health outcomes (e.g. Marshall et al, 1994), psychological well-being, coping and health-related behaviour (e.g. Booth-Kewley & Vickers, 1994).

Recent extended studies of personality characteristics investigated the relations between sexual attitudes and behaviour, individual’s self-esteem, individual’s attachment style (e.g. Feeney et al, 1993; Brennan & Shaver, 1995; Hasan et al, 1994), individual’s religiosity and spirituality (e.g. Murray-Swank & Pargament, 2005; Saucier and Skrzypinska, 2006), individual’s regulatory focus orientation (e.g. Higgins et al, 1994) and individual’s body image consciousness (e.g. Wiederman, 2000; Gillen at al, 2006).
Personality traits and individual differences have been found to be particular relevant to the exertion of self-control in health-related behaviour (e.g. conscientiousness-related traits (e.g. Bogg & Roberts, 2004); trait self-control (e.g. Tangney et al, 2004); impulsivity (e.g., Grano et al, 2004; Verdejo-Garcia et al, 2008).

Research on personality differences suggests that individuals not only differ in their dispositional ability to exert self-control (e.g. trait self-control) but also in their current available resources for exerting self-control (current state self-control). The fluctuations in these states of self-control depend on the momentarily availability of self-control resources. Research demonstrates that some individuals have a strong ability to self-regulate consistently from early childhood through adulthood, while others appeared to be consistently less successful at self-regulating (e.g. Shoda et al, 1990). High trait self-control was found to be a universal tool that allows individuals to successfully regulate a broad range of behaviour, such as proper eating, coping with stress, academic performance, developing and maintaining interpersonal popularity and healthy relationships etc (e.g. Tangney et al, 2004).

It has been suggested that individuals who are good in self-control in non-sexual ways (i.e. high in trait self-control) will also be good in controlling their sexual behaviour, and that nonsexual deficiencies in self-control may contribute to inappropriate or objectionable sexual behaviour. Several patterns of research findings provide evidence of indirect links between general self-control and self-control related to sexual behaviour. The clinical conditions of lacking self-control in sexual behaviour (i.e. sexual control disorders) is very well documented and studied in the psychiatric and mental health literature (American Psychiatric Association, 1994). Certain correlates of risky sexual behaviour, such as drug/alcohol misuse, have been proven to be associated with an individual’s ability to successfully control their behaviour (e.g. Neal & Fromme, 2007; Quinne & Fromme, 2010). Measuring trait self-control in order to predict other types of behaviours indirectly related to sex, such as condom use or use of birth control (e.g. Wills et al, 2003), and failures of taking precautions in these behaviours, also pointed to the possible indicative link between low self-regulation and less restricted sexual behaviour.

To summarise, the complex nature of components that could contribute to the explanation of intention-behavioural discrepancies in risky sexual behaviour indicates
the necessity to extend the traditional TPB approach to explain and prevent this
behaviour with more multifaceted theories with capacities to account for these
complexities and dynamics.

3.1.3 The complex theories that have been applied in order to explain and predict
adolescents’ risky sexual behaviour

3.1.3.1 Multi-systemic perspective (Kotchick et al, 2001): an attempt to provide a
comprehensive understanding of adolescent risky sexual behaviour

Multitudes of studies on psycho-social determinants of risky sexual behaviour in
adolescents and amongst the young population, as a relative but somehow distinctive
area of research on risky sexual behaviour, can be summarised in the example of multi-
systemic perspective on adolescents’ sexual behaviour, guided by Bronfenbrenner’s

According to this perspective (Kotchick et al, 2001), a comprehensive understanding of
adolescents’ risky sexual behaviour (e.g. early sexual debut, sex without condoms, sex
with multiple partners, and sex under influence of drugs of alcohol) must include some
knowledge of both the personal and environmental factors which may contribute to their
decisions to engage in risk-promoting or risk-reducing sexual behaviour. This
perspective presents one of the best summaries of the correlates/factors associated with
adolescents’ risky sexual behaviour, classified as within the self, familial and extra-
familial systems (Figure 3.2).

**Self-system factors** that found to influence adolescents’ sexual behaviour are briefly
divided into *biological, psychological* and *behavioural* correlates of sexual risk
practices.

*Biological factors* include age, pubertal development, gender and race (e.g. Romer et al,
1994; Roosa et al, 1997). *Psychological factors* relate to cognitive competence, as
measured by academic performance (e.g. Hardy at al, 1998); self-efficacy and self-
esteeem (e.g. Overby & Kegeles, 1994); level of psychological distress (e.g. suicidal
ideation, history of victimisation or sexual coercion) (e.g. Fiscella et al, 1998);
religiosity (e.g. Bingham & Crockett, 1996); knowledge about negative health outcomes
of sexual risk-taking (e.g. Holtzman et al, 1994); perception of personal risk (e.g. Miller et al, 1999) or attitudes towards sex in general (DiClemente et al, 1996). Behavioural factors include delinquency, substance use and other indices of sexual activity in general (e.g. Brown & Vanable, 2007; Cooper et al, 2002).

Figure 3.2 Multisystemic Perspective on Adolescent Sexual Risk Behaviour (adopted from Kotchick et al, 2001)

The relationship between adolescents’ sexual risk-taking behaviour and other risk-taking behaviour is suggested partly to be explained by personality characteristics, including sensation-seeking (e.g. Neumark-Sztainer et al, 1997) and impulsivity/little behavioural control (e.g. Millstein & Moscicki, 1995).

Sensation-seeking (defined as a tendency to seek and enjoy novelty and excitement) was found to be the strongest trait-level predictor of risky sexual behaviour (Hoyle et al, 2000) and was associated with multiple indices of risks, including number of partners and frequency of high-risk sexual encounters and unprotected sex (Quinne & Fromme, 2010).

Impulsivity (sometimes referred to as behavioural undercontrol or disinhibition) has also been linked to unsafe sexual behaviour (Krugler et al., 2002). Donohew et al (2000) found that female high school students scoring high on impulsivity reported unwanted
sex under pressure and when drunk, significantly more often than those low on impulsivity. Impulsivity was also significantly related to sexual risk variables of multiple lifetime sexual partners, misuse of alcohol or drugs before sex and practising unsafe sex among both genders (e.g. Winters et al, 2009).

**Family-system factors** influencing adolescents’ risky sexual behaviour include family structure variables (such as single parenting, SES and parental education) and family process variables (such as three dimensions of parenting behaviour: parental monitoring, parents-adolescent relationship quality and parent-adolescent communication (e.g. Dutra et al, 1999; Scaramella et al, 1998 etc.)

**Extra-familial system factors** are related to adolescents’ social environment, and can be split into its own unique subsystems of influence, such as peer system (e.g. peer sexual behaviour and peer group norms); neighbourhoods and school factors (e.g. school climate (e.g. Brewester, 1994; Pendergrast et al, 1992 etc.)

The multi-systemic perspective suggests that the relations among all systems are transactional and interactional, with each system exerting both direct and indirect effects on behaviour. It was also proposed that one system may serve as a partial or full mediator of the behavioural effects for other systems or some factors within other system. In addition, according to this model, ‘sexual behaviour itself may also exert some influence on the self, family, and extramarital systems in a feedback mechanism that continually shapes and re-shapes the relations among the systems’ (Kotchick et al, 2001, p. 497).

One of the major problems with multi-systemic perspective is its uncertainty about what kind of mechanism is underlying this model and how factors from all its multiple systems of influence may interact or combine with each other to shape behaviour. Social, emotional and environmental pathways through which biological variables relate to adolescents’ risk-taking behaviour were not fully explored. Furthermore, findings from the multitude of studies on different systems are not consistent (Kotchick et al, 2001).

As many determinants of risky sexual behaviour within multi-systemic perspective (e.g. alcohol misuse, sensation-seeking, and impulsivity) are suggested to be mediated by
individual differences in self-control skills, this raises the question about the role of self-control as possible regulating mechanism involved in governing young people’s sexual behaviour.

3.1.3.2 Person x Situation Model of sexual risk-taking behaviours (Cooper, 2010): an attempt to account for dynamic contexts of adolescent risky sexual behaviour

Introducing her Person x Situation Model of sexual risk-taking behaviours, Cooper (2010) proposed that risky sexual behaviour cannot be understood in a static way and independent of its relationship contexts; it rather must be viewed as a complex creation of the personal characteristics, the relationship context and the situation. The schematic representation of this model (Figure 3.3) demonstrates that personality is argued to predict risky sexual behaviour directly and indirectly via relationship context. According to this model, both situational and relationship contexts could also directly predict risky sexual behaviour, and at the same time moderate the strength of personality effects on this behaviour. Situational factors are treated as exogenous within this model.

![Figure 3.3 Person x Situation interactionist model of sexual risk-taking behaviour (adopted from Cooper, 2010)](image)

However, despite providing support for person x situation interactionist perspective on sexual risk-taking behaviour, the results of testing this model in longitudinal study of adolescents 13 to 19 years old in the USA (Cooper, 2010) failed to converge on a single, consistent explanatory model of risky sexual behaviour. The patterns of
behaviour emerging from this study indicated that personality characteristics were stronger predictors of sexual behaviour with new or casual partners, whereas an individual’s sexual behaviour appeared to be more interdependent with an established or serious partner. In addition, the results of testing this model showed that the increased self-confidence, assertiveness and dominant characteristics may have both risk-protective and risk-promotive consequences among women but not among men. Ambiguity of interpretation of these findings suggest consideration of the contribution of a broader and more comprehensive set of personality variables and the existence of a possible mediating factor that can account for combining effect of the present constellation of factors in this model. Well-documented indirect link between risky sexual behaviour and individual differences in self-regulation skills indicates the potential benefit for considering self-control factors within this model.

### 3.1.3.3 The prototype willingness model (Gibbons & Gerrard, 1998, 2008): an attempt to explain adolescent unintended risky sexual behaviour

The prototype model is based on assumption that any health behaviour is resulted from two types of decision-making: a reasoned path, as described in the theory of reasoned action, which involves analytic processing of desired behaviour; and a social reaction path that is image-based and involves heuristic processing. In order to increase the predictive validity of this model, two new constructs: risk prototypes (e.g. images of typical sexual risk-takers) and behavioural willingness to engage in risky behaviour, has been incorporated in social reaction path.

According to the prototype willingness model (Figure 3.4), adolescent risky sexual behaviour is often not planned or even intentional but, nevertheless, adolescents do volitionally engage in this behaviour, and some of them engage in this behaviour repeatedly. The discrepancy between intentions and behaviour is seen as ‘a reaction to common risk-conducive situations’ (Gerrard et al, 2008, p. 36) that facilitates risky sexual behaviour (e.g. a party where alcohol and drugs are available). In these situations, adolescents’ willingness to engage in this behaviour determines their actual behaviour.
Being a dual-process model, the prototype willingness model suggests that the intentional, reason-driven processes, and affect-laden social reaction processes could operate simultaneously to affect overt behaviour. Prototype favourability is associated with a number of factors, amongst which an individual’s temperament and individual differences in self-control are considered to be the most important factors. The relations between individual differences in self-control and adolescent risky sexual behaviour are suggested to be mediated by cognitive processing modes. In addition, some dimensions of temperament are considered to be protective (i.e. high task orientation and positive emotionality) and associated with less willingness, avoidance of negative outcomes and decreased risk behaviour; while others are considered to increase vulnerability (i.e. high activity level and negative emotionality), linked to the failure to inhibit impulses that facilitate risk behaviour and associated with poor control, increased willingness and subsequent risky sexual behaviour. Consequently, both positive and negative effects of temperament on behaviour are argued to be mediated by individual differences in self-regulation skills.

Although being the most prominent attempt to acknowledge the unintentional nature of adolescent risky sexual behaviour, the prototype willingness model suffers from methodological difficulties in assessment of behavioural willingness via self-reports, as this assessment could not prevent a conscious consideration of behavioural risks under imagined sexual temptation circumstances scenarios. As the result, there is typically quite substantial correlation between self-reported behavioural willingness and behavioural intentions (Gibbons et al, 1998).
To capture the complexity and dynamics of adolescents’ sexual behaviour, this present PhD thesis offers the example of application of self-regulation theory and dual-system Reflective-Impulsive Model (RIM) to this behaviour. The focus of this PhD thesis is on exploring solely oral sex behaviour.

3.2. Self-Regulation Theory: complex, dynamic and interactive system of behaviour regulation

Self-regulation refers to the capacity of the self to alter its behaviour in accordance to the standards, ideals and goals, stemming from either internal or societal expectations (Baumeister & Vohs, 2007). It is argued to be a complex, dynamic and interactive system which consists of a wide range of cognitive and motivational operations that help individuals to guide themselves, in many possible ways, towards important goal states (e.g. Baumeister, 1998; Gollwitzer, 2006). Although self-regulation sometimes equates with self-control, as exerting self-control is often important for self-regulation, the term ‘self-control’ mostly refers to conscious and deliberate processes, whereas the term ‘self-regulation’ may also encompass automatic and non-conscious processes (Dijksterhuis & Aarts, 2010; Vohs & Baumeister, 2005).

As self-regulation is considered to be one of the self’s major executive functions, it reflects active, intentional aspects of regulating the self which is ultimately responsible for the individual’s actions. The presence and quality of these actions is thought to depend on an individual’s beliefs and motives (e.g. Zimmerman, 2001). Everyday self-regulation involves the pursuit of many different goals, standards, and ideals (e.g. Shan & Kruglanski, 2002) and sometimes could occur as responses to the environmental surrounding without conscious awareness or active intervention of the self. Self-regulation is argued to be crucially important to human survival as it is directly connected with the goal of social acceptance (e.g. Baumeister & Vohs, 2007).
3.2.1 Main components of self-regulation

According to self-regulation theory, self-regulation includes four main components, namely: standards, monitoring, strength and motivation. In order for self-regulation to be successful, each of these four components needs to be present. Furthermore, self-regulation theory suggests that these components to some degree can substitute for each other. Motivation is argued to be effective in boosting monitoring or substituting for self-control strength, but not enough to substitute for the lack of clear standards.

In order to alter behaviour, the first component of self-regulation, *standards*, needs to be clear and well-defined, as ambiguous, uncertain, inconsistent or conflicting standards can undermine self-regulation and, therefore, contribute to self-regulation failure (Baumeister et al, 1994). These standards can be briefly divided on ‘ideal’ (positive striving towards personal aspirations ‘to be’) and ‘ought’ (positive stirvings focused on what to avoid rather than what to pursue) (Higgins, 1987; Higgins et al, 1994, 1999) and associated with the different type of regulatory standards. As failure to regulate both of them is accompanied by negative emotions, Higgins (1987) argued that failure to regulate towards ideals produce dejected, low-arousal emotions (such as sadness and disappointment), whereas failure to regulate towards thoughts lead to agitated, high-arousal emotions (such as anxiety and worry).

The importance of *monitoring* the individual’s behaviour, the second component of self-regulation, was emphasised by the work of Carver & Scheier (1982, 1998) who adopted feedback-loop theory to human self-regulation. The core concept of the feedback-loop involves a sequence of steps towards comparing and altering behaviour according to standards, such as test, operate, test, exit (known as TOTE). The first step consists of comparing the current state of the Self against the relevant standard; the operate step consists of attempting to alter discrepancies between the perceived aspects of the Self and the relevant standards. During or after this operation, the self may perform additional tests to see whether the discrepancies were resolved. When the Self has met relevant standards, further operations are stopped, and the Self’s attention turns to other issues. A potentially important role of motivation in compensating for greater difficulties in monitoring was emphasised by Baumeister & Vohs (2007).
Although feedback-loop is considered to be cognitive theory, it recognises emotions as influencing self-regulation in terms of providing a powerful feedback system with another function to highlight discrepancies that arise in test phases (i.e. being below standard is likely to provoke aversive emotions; reach the relevant standard arise positive emotions). Different types of emotions were linked to different kinds of discrepancies (e.g. Higgins, 1987). Furthermore, emotions were proposed not simply react to existence of discrepancies but registry change, react to the rate of the progress towards the goal or standard (i.e. individual argued to have positive emotions when moving towards the target).

3.2.2 Self-regulatory strength

The third component of self-regulation is referred to as self-regulatory strength, capacity to make changes, or willpower (Baumeister, 1998). This component of self-regulation is contained in the operate phase of the feedback loop and involves one’s internal processes to change the current state and override the impulsive responses set in motion, either by innate programming, learning, habit, or motivation, that prevent self-regulation from running to its normal outcomes.

The Strength (or Resource) Model of self-control considers self-control as an inner capacity that relies on some limited internal resources of energy (e.g. Baumeister & Heatherton, 1996; Baumeister, Heatherton & Tice, 1994; Muraven & Baumeister, 2000; Baumeister & Tierney, 2011). According to this theory, engaging in conscious self-regulation controlled actions quickly consumes and depletes these limited resources of self-control, resembling a muscle that gets tired. In this depleted state, any further efforts to exert self-control on behaviour are prone to failure, leaving the individual in the ‘ego depletion’ state.

The term ‘ego depletion’ was referred to the state of diminished resources following exertion of self-control in many situations or different tasks that might deplete the same self-control resource, such as resisting a food temptation, regulating emotions, discussing sensitive issue, presenting a desired image to others or tolerating pain (e.g. Muraven et al, 1998; Schmeichel et al, 2003; Schmeichel, 2009; Vohs et al, 2008; Hagger et al, 2010). This ego-depletion effect is argued to have nothing to do with
diminished sense of self-efficacy or with one being poor at self-control (e.g. Wallace & Baumeister, 2002).

A number of studies have established that in the situation of ego depletion, not only trait self-control, but other variables (e.g. the consumption of alcohol, working memory capacity, emotional states, physical tiredness etc.) also reduce the impact of restraint standards on health-related behaviour outcomes (e.g. Muraven et al., 2002; Vohs & Heatherton, 2000; Boon et al, 2002; Fillmore & Vogel-Sprott, 2006). These situational circumstances were also found to apply to sexual behaviour and its correlates. For instance, individuals whose self-regulatory resources were depleted after engaging in an initial self-control task appeared to engage in less restrained sexual behaviour (Gailliot & Baumeister, 2007) and to drink more alcohol (Muraven et al, 2002) than participants who were not depleted. Impulsive precursors on health-related behaviour were found to predict health-related behaviour only for depleted participants (Hofmann et al, 2007), including in sexual interest behaviour studied in laboratory setting (Friese & Hofmann, 2008; Thush et al., 2009; Wiers et al, 2007).

The distinction between trait self-control and the ability to restrain sexual behaviour was further explored in studies that aim to assess sexual activity in situations of depletion of self-control strength as a result of non-sexual acts of self-control. Research indicates that individuals with low trait self-control and/or those with self-control being depleted by recent acts of exerting non-sexual self-control were less likely than others to suppress inappropriate sexual thoughts and to resist the temptation to engage in sexual activities outside their primary relationship (Gailliot & Baumeister, 2007). These individuals also reported more poorly-controlled or impulsive sexual behaviour generally and were found to be engaged in more sexual activity in the laboratory. The effect of diminished self-control was found to be stronger in men, sexually unrestricted individuals and amongst individuals with less sexual experience.

Adopting the Strength Model of self-regulation has had several important implications for the theory. Firstly, it is argued that regular exertions of self-control can improve self-control capacity in the sense that performance at self-control tasks deteriorates at a slower rate, just as exercise can make muscles stronger (Baumeister et al, 2006). Secondly, the severity of behavioural impairment during depletion was argued to partly depend on whether the individual expects further challenges and demands that required
exertion of self-control and on how important the outcomes of behaviour are for them (Muraven et al, 2006). The fear of losing the capacity for self-control completely performing the important for the individual hypothetical task in future, was argued to cause ego depletion effects as people start conserving their remaining strength (e.g. conservation hypothesis).

Despite being extremely popular in the literature on self-regulation and self-control, the Resource Model of self-control so far has not offered a precise mechanistic account of self-control and its depletion, and the nature of this limited resource or strength of self-control has remained unclear. The last decades of research on ego depletion have accumulated findings to challenge the Resource Model (e.g. Muraven & Slessareva, 2003; Job, Dweck & Walton, 2010; Alberts, Martijn & de Vries, 2011; Tice et al, 2007; Schmeichel & Vohs, 2009). These findings suggest that beliefs, affirmations, moods, perceptions, monitoring issues, and other variables can compensate for the depleted resources of self-control, and that impairment in self-control can happen when actual resource depletion seems unlikely to have occurred.

3.2.3 Motivation to achieve the goals or meet the standards

The fourth component of self-regulation, motivation to achieve the goals or meet the standards, was added to other components by Baumeister (2007). Pointing out the importance of motivation in self-regulation, he argued that having and knowing standards is not sufficient for successful self-regulation without motivation to comply with these standards: ‘if standards are clear, monitoring is fully effective, and the person’s resources are abundant, that person may still fail to self-regulate due to not caring about reaching the goal’ (Baumeister, 2007, p. 3). Besides, motivation is possible to be subject to change in a response to a variety of circumstances and also could fluctuate according to many factors (i.e. expected utility, efficacy expectations etc).

Variation in self-regulatory motivation is an important but understudied aspect of self-regulation. The most active area of research on self-regulatory motivation refers to a person’s regulatory-focus motivational orientation (RFO) (Higgins & Spiegel, 2004). Promotion-focused people are thought to be motivated to achieve desirable outcome using eagerness approach orientated strategies (i.e. to pursue ideals and obtain nurturance), whereas prevention-focused people are thought to be motivated to achieve
desired outcomes using vigilant, avoidance-orientated strategies (i.e. satisfy thoughts and obtain security). When an individual’s preferred regulatory motivation is matched by characteristics of the task (Higgins, 2000), this results in improvement in self-regulatory outcomes (regulatory fit). The results of Higgins’ Laboratory studies have demonstrated that this difference in strategic orientation has important implications for decision-making and problem-solving, as well as for people’s experiences while engaging in different activities in their lives (e.g. Freitas & Higgins, 2002; Camacho et al, 2003). The implications of this difference for research on self-control and motivation and as related to individuals’ well-being have received insufficient attention in self-regulation literature and need to be examined further.

Most recent research on capacity-related aspects of self-control and on the relation between control capacity and control motivation (e.g. Baumeister & Vohs, 2007; Robinson, Schmeichel & Inzlicht, 2010) emphasized the necessity to consider the role of motivation to control behaviour as a potential factor that may affect strength of the intention-behaviour relationship in regulating the self and in controlling behaviour.

The role of motivation was argued to be the most salient in the situation of ego depletion as a substitution for self-regulatory strength, and, to some extent, as a compensation for the impaired capacity to self-monitor (e.g. under alcohol intoxication) (e.g. Muraven & Slessareva, 2003; Webb & Sheeran, 2002; Tice et al, 2007). It was suggested that power of motivation to overcome depletion may lie in the fact that the depleted states do not reflect a complete exhaustion of resources, but their temporarily deficit, and ego depletion effects indicate the point on which self-regulation resources are cut back to save some of the resources in case of pressing need or exceptional opportunity (e.g. the conservation hypothesis) (Baumeister & Vohs, 2007; Muraven et al, 2006). These findings suggest that motivation may vary situationally and dispositionally (Cialdini et al, 1995) and, therefore, be a function of perception of the relevant self-control processing (Fishbach & Dhar, 2005).

In real-life situations, this means that, for some individuals, high motivation to control their sexual behaviour may compensate for the detrimental effects of reduced resources in ego depletion by giving them abilities to recruit any left-over resources to boost reflective self-control processing and behave according to expected standards. But at the same time, if motivation is low, even the individuals with high self-control capacities
will be inclined to ‘conserve’ their remaining resources for the tasks that they consider more important, and sexual behaviour will be left to impulsive self-control processing.

### 3.2.4 Self-regulation failure

Failure to self-regulate was subdivided into two categories, known as under-regulation and misregulation (Sayette, 2004). Under-regulation failure was found to occur because of deficient standards, inadequate monitoring, or inadequate strength, whereas misregulation failures occur because of false assumptions (Heatherton & Ambady, 1993; Heckhausen & Strang, 1998) or misdirected efforts (Baumeister et al, 1993; Ward & Eisler, 1987), especially an unwarranted emphasis on emotions (Tavris, 1989; Wegner, 1992). Failure in transcendence (Baumeister & Heatherton, 1996), various lapse-activated causes (Marlatt, 1985; Lawson, 1988), loss of attentional control (Baumeister et al, 1994; Wegner, 1994) were found to contribute to self-regulatory failure.

Research indicates that culture and social climate could also lead to failure in self-regulation (e.g., Anderson, 1994; Jankowski, 1991, Baumeister & Heatherton, 1996).

### 3.2.5 First step in dynamic approach of managing individual’s sexual behaviour: Reflective-Impulsive dual-system model of attitude-behaviour relations

Within self-regulation theory, social behaviour (including sexual behaviour) is argued to be a behaviour that is governed by the individual’s conscious self-regulation processes, but, at the same time, a behaviour that, to some degree, could be regulated unconsciously driven by perceptions related to stimuli from the current environment (Bargh et al, 1996). Exerting self-control over this behaviour on some occasions is more difficult because of arising conflict between immediate impulses on one hand and reasoned attitudes and behavioural standards on the other (e.g., Baumeister & Heatherton, 1996; Carver, 2005). The mechanisms for resolving this conflict for sexual behaviour are not fully understood yet.

In order to gain a more comprehensive understanding of these mechanisms, the research described in this PhD thesis has applied to risky sexual behaviour the dual-system
Reflective-Impulsive Model (RIM) of attitude-behaviour relations (Strack & Deutsh, 2004; Hofmann et al, 2008). This model was used to distinguish between conscious volitional processes and more automatic processes involved in oral sex behaviour.

According to this dual-system model, interaction with perceptual stimulus creates in long-term memory the associative clusters of behaviour that later have become “strengthened by temporal or spatial co-activation of external stimuli, affective reactions, and associated behavioural tendencies. Once formed, such associative clusters can be reactivated quickly by perceptual input in close interaction with internal triggering conditions, or other inner states of homoestatic dysregulation” (Hofmann et al, 2008, p. 115). When these clusters become reactivated, they automatically turn on an impulse consisting of an appropriate value attributed to stimuli and a matching behavioural schema (e.g., Chen & Bargh, 1999; Neumann et al, 2004; Seibt et al., 2007). These associative processes are presumed to be independent of conscious awareness and personal evaluation (Gawronski & Bodenhausen, 2006) and, more importantly, they assume to operate effortlessly (Strack & Deutsch, 2004).

At some points, these uninhibited impulses can interfere with individual’s long-term goals and generate a conflict (e.g. Carver, 2005; Tangney et al., 2004). In everyday functioning, the reflective system serves the function of resolving these conflicts by employing “higher-order mental operations which provide a large and flexible degree of control over decisions and actions of everyday life”. These operations include “executive functioning such as making reasoned judgments and evaluations, putting together strategic action plans for goal-pursuit, and inhibiting or overriding responses (e.g., impulses or habits)” (Hofmann et al, 2008, p.115). They use relatively slow controlled processes based on symbolic representations and operations (Smith & DeCoster, 2000; Strack & Deutsch, 2004). In addition, the cognitive resources available for these reflective operations can be situationally or dispositionally limited (Evans, 2008; Fazio & Towels-Schwen, 1999; Vohs, 2006), and individuals may fail to detect the presence of the conflict state (e.g. Carver & Scheier, 1981) and/or fail to restrain impulsive influences violating these standards.

The dual-system model (RIM) suggests that both impulsive and reflective systems have access to a final mechanism for behavioural execution; the overt behaviour happens by the activation of appropriate behavioural schemas. Winning behavioural schema is
assumed to receive higher strength input from the competing systems (Hofmann et al, 2008).

RIM posits that as “two systems follow differential operating characteristics, certain situational and dispositional boundary conditions may shift the potential for schema activation in favour of one of them” (Hofmann et al, 2008, p.115). These conditions are normally related to the momentary accessibility of self-control resources (e.g. ego depletion) that can “impair the reflective system by undermining its ability to symbolically represent attitudes or restraint standards and to monitor ongoing behaviour in accordance with those representations” (cited in Hofmann et al, 2008, p.115). On these occasions, the impulsive system may win over the reflective system which would fail to activate the overruling schema of successful self-regulation. When available control resources are sufficient for effective self-regulation, this results in the winning of the reflective system, unless additional situational and dispositional factors (such as mood or motivation) will interfere to challenge self-control resources in successful self-regulation. When the individual has a sufficient level of self-control and the cognitive resources available to exert it, the reflective mode is likely to switch on, which represents the traditional attitude-behaviour relation (e.g. Ajzen & Madden, 1986).

Figure 3.5 illustrates the proposed by dual-systems RIM framework for the prediction of health-related behaviour.

In contrast with dual-system prototype-willingness model framework, the Reflective-Impulsive dual-system model attempts to integrate impulsive, unconscious processes that underlie the individual’s experience in temptation situation that are not mediated by intentions, and indirectly assess these non-cognitive impulsive processes (Hofmann et al, 2008). This dual-system model has been previously used to test the effects of both impulsive and reflective systems on a final mechanism for overt behaviour execution in health-related research.
Findings from several recent studies applying this dual system framework on consumption of unhealthy snacking demonstrated that impulsive precursors of such behaviour were transformed into actual behaviour for people with low trait self-control (Freise & Hofmann, 2009). However, while the relationship between impulsive snack buying tendency and snack consumption were found to be rather straightforward, the results concerning attitudes were more complicated (Honkanen et al., 2012). They suggested that the high food-related self-control is not enough to refrain from unhealthy snacking; the healthy choices were found to depend on positive/negative attitudes which individuals hold towards unhealthy snacking.

The existence of some “automatized forms” of self-regulation (such as an habitual link between certain tempting stimuli and overruling restrictive behaviours or an automatic link between key situational factors and actual goal-directed behaviour) was proposed by research on automaticity of self-control (e.g., Bargh et al, 2001; Fishbach et al, 2003).

Several recent studies, which explored how automatic self-regulation can operate in real-world situations, found that triggers of automatic self-regulation could be cues related to characteristics of the social environment, cues related to certain types of people, cues related to habitual behaviour and cues related to situational norms (Andersen et al, 1996; Fitzsimmons & Bargh, 2003; Shah, 2002). Research on the cognitive structure of the situational norms hypothesised that norms are represented mentally as associations between situations and behaviour normally performed in these

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**Figure 3.5 A framework for the prediction of health behaviour by impulsive versus reflective precursors and associated boundary conditions (adopted from Hofmann et al, 2008)**
situations (Aarts & Dijksterhuis, 2003). This suggests that situational norms may cause self-regulatory responses that are not guided by conscious control but can instead be considered automatic responses to demands of the current environment.

Temptation-elicited goal activation has been demonstrated across several self-regulatory domains (e.g. dieting behaviour), and shown to be most pronounced for people for whom the goal is important and who perceived themselves as successful self-regulators (e.g. Fishbach et al, 2003; Van Koningsbrugge et al, 2011). Current research on temptations and goal pursuit suggests that for some people, temptation increases the cognitive accessibility of long-term goals typically undermined by these temptations (Fishbach et al, 2003). A facilitative link between temptation and goal develops when people repeatedly and successfully exert self-control in tempting situations, and subsequent exposure to the tempting cues then automatically activates the goal behaviour, allowing for more motivational control over thought and action related to this behaviour.

From the dual-system (RIM) perspective, risky sexual behaviour, as any type of health-related behaviour, may often result from the interplay between impulsive and reflective processes and their dispositional boundary conditions related to the availability of control resources. This suggested that individuals’ risky sexual behaviour may depend on not only differences in their reasoned attitudes/personal normative standards to restrain their behaviour but also on differences in their impulsive reactions toward tempting sexual stimuli and situations (due to genetic endowment, differences in learning history and current need states) (e.g. Verplanken & Herabadi, 2001; Dittmar, 2005; Verplanken & Sato, 2011). Present dual-systems model (Hofmann, 2007) argues that such differences in reasoned and impulsive reactions could have a critical impact on the final behaviour and should therefore be incorporated as meaningful predictors into models of any health-related behaviour, including risky sexual behaviour.

3.2.6 Distinguishing between self-control and motivational processes in self-regulation: PI-Model of Self-Control

Finally, The General Model of Preventive and Interventive Self-Control (PI-Model) (Hofmann & Kotabe, 2012) was used to distinguish self-control processes from
motivational processes and to explain cognitive strategies supporting self-control and motivational failures and its well-being consequences as applied to practice of oral sex.

The PI-Model of self-control was introduced as an attempt to further specify and help with analysing self-control phenomena in self-regulation research. This model considers self-control as not a unitary phenomenon but as a collection of different cases and types of self-control within motivational processes. The seven basic components are argued to comprise a taxonomy that allows distinction between two main types of self-control, namely preventive self-control (i.e. the use of anticipatory strategies) and interventive self-control (i.e. exertion of self-control in the presence of temptation, ‘here and now’). These basic building blocks of the PI-Model framework are presented in Figure 3.6.

![Figure 3.6 The seven basic components of the PI-Model of Self-Control, distinguishing preventive (i.e., anticipatory) self-control and interventive self-control (i.e., the components involved in the ad-hoc experience and control of desire) (Hofmann & Kotabe, 2012)](image)

This PI-Model proposes that this provisional division of self-control also helps to distinguish between different classic types of self-control failure (e.g. self-monitoring failure, motivational self-control failure and volitional self-control failure) and cases of exercising self-control in anticipation of temptation in order to improve the individual’s chances of sticking to their self-regulatory goals and values (e.g. operation of proactive self-control).

From a PI-Model perspective, situation control (e.g. the avoidance of tempting situations) and stimulus control (e.g. the removal of tempting stimuli from the individual’s environment) could be considered as the two most powerful preventive self-control strategies. Research demonstrates that in addition to their straightforward effects, these techniques can reduce the opportunity for the individual even to use the self-control in the first place (e.g. Finkel et al, 2012). Recent research suggests that individuals high in trait self-control more often use situation selection and stimulus
control than individuals low in trait self-control, and they report less temptation situations in their everyday lives (Hofmann et al, 2012). This leads researchers to imply that the individuals high in trait self-control may have to exercise self-control less often than those with low self-control. The main implication from these findings to the field of sexual behaviour is that individuals with high level of self-control could demonstrate different patterns of behaviour than individuals low in self-control, as for them preventive type of self-control would shape the very nature of temptation to fight.

To summarise, self-regulation theory provides health-related research with a much broader picture on successful or unsuccessful management of behaviour. It also offers theoretical framework for analysing failures to self-regulate individual’s behaviour.

As sexual behaviour is part of a more complex individual’s psycho-social functioning, there are several main patterns through which self-control can affect sexual behaviour and health-related outcomes independently. In this PhD thesis, self-regulation theory was applied in order to investigate the falls in self-control in managing oral sex behaviour.

3.3 Link between sexual behaviour and mental health

Research in sexual medicine revealed that there is a strong link between sexual behaviour and positive health outcomes.

A growing body of research demonstrates that sexual behaviour (i.e. vaginal intercourse) is associated with relatedness and better physical and mental health, including greater heart rate variability (an index or autonomic cardiac regulation associated with health, longevity, and emotional function), less alexithymia (inability to perceive and express emotions, a trait associated with psychopathology), better blood pressure response to stress, and less obesity (Brody & Costa, 2009).

From the point of psychophysiological functioning, ostorgasmic prolactin surge that is associated with sexual satiety (whether directly or as a process secondary to dopaminergic effects) have an important role in mental health. In addition, human experimental (non-correlational) research demonstrated psychoneuroendocrine
differences between non-coital and vaginal sexual orgasm. The greater prolactin surge following vaginal orgasm is due to some combination of greater physiological sexual excitation provoking a greater homeostatic countervailing force (e.g. greater central dopaminergic activity offset) and a more complex orgasmic release and satiety. A more complete ‘resetting’ of central dopaminergic tone is beneficial for better regulation of central neurotransmission and psychophysiological functioning (Brody & Kruger, 2006). More specifically, the higher frequency of vaginal intercourse was associated with more satisfaction with sexual life, life in general, and physical and mental health (Langstrom & Hanson, 2006). The frequency of non-coital sex (e.g. oral sex) was found to associate with less relationship satisfaction and less love for the partner than frequency of vaginal intercourse.

The comparison between two types of sexual activity in relation to all indices of satisfaction for both sexes is represented in Table 3.1.

<table>
<thead>
<tr>
<th></th>
<th>Vaginal sex</th>
<th>Oral sex</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with sex life</td>
<td>.61***</td>
<td>.38***</td>
</tr>
<tr>
<td>Satisfaction with relationship</td>
<td>.26***</td>
<td>.04</td>
</tr>
<tr>
<td>Satisfaction with mental health</td>
<td>.11***</td>
<td>.06*</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>.21***</td>
<td>.09**</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with sex life</td>
<td>.59***</td>
<td>.37***</td>
</tr>
<tr>
<td>Satisfaction with relationship</td>
<td>.26***</td>
<td>.15***</td>
</tr>
<tr>
<td>Satisfaction with mental health</td>
<td>.15***</td>
<td>.05</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>.19***</td>
<td>.06</td>
</tr>
</tbody>
</table>

**NOTES:** *p<.05; **p<.01; ***p<.001

The findings from Brody & Costa study (2009) indicated that although oral sex had some significant univariate correlations with some satisfaction indices, these correlations were significantly weaker then with vaginal sex. For males, oral sex was not significantly associated with relationship satisfaction, whereas for females, oral sex had no associations with mental health. These findings were also supported by Philippsohn & Hartmann’s (2009) study which showed that women’s sexual satisfaction was associated rather with their perceived quality of vaginal sex than with other types of sexual behaviour.
The main implications of sexual medicine research for this present PhD thesis is in providing an empirical link between sexual behaviour and mental health outcomes that could also be mediated by individual differences in self-regulation. In addition, findings from these sexual medicine studies support findings from psychology research on depression and anxiety reported by young females as a result of being engaged in oral sex practices, described in Chapter 2.

As definitions of mental health sometimes differ between the medical field and the field of public health and psychology (Diener, 1997) the next section will provide a brief theoretical approach to mental health in modern psychology.

### 3.4. Understanding mental health: multi-dimensional perspective of well-being

Within the medical field, mental health is traditionally seen merely as the absence of mental illness. Due to reasons related to the professional development of scientific disciplines, research in areas of medicine and clinical psychology is often concentrated on mental problems of interest, such as depression, anxiety, psychosis, drug/alcohol misuse and problems like CD or ADHD.

In the health psychology field, research on positive psychological states taken as protective factors for physical and mental health has started over the last two decades. The more positive conception of health was made explicit in the Preamble of the World Health Organisation’s First Articles of Association in 1948 and in 1986.

“*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*” (WHO, 1948).

“*In order to reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities*” (Ottawa Charter for Health Promotion. WHO, Geneva, 1986)
These popular definitions of health from the WHO turn the idea of positive health to the concept of well-being. Academic debates on scientific perspective of well-being in psychology are rooted in two old philosophical orientations: hedonism (Epicurus) and eudaimonia (Aristotle).

The first of these perspectives (e.g. Kahneman et al, 1999) defines well-being as the presence of positive affect and the absence of negative affects. The second perspective suggests that well-being refers rather to living fully and allowing for maximizing all possible human potential (e.g. Ryan & Deci, 2001). In the field of modern psychology, the main concept stemming from the first, hedonic perspective is the concept of subjective well-being, which combines both an emotions component (i.e. affective balance) with a cognitive component (i.e. perceived life satisfaction).

The second, eudaimonic concept argues that well-being lies in acting coherently with an individual’s deep personal values. Happiness, or so-called psychological well-being, is considered within this concept as the result of a well-lived (according to individual’s values and perception) life. This perspective offers a multi-dimensional model of psychological well-being consisting from several different domains (Vázquez et al, 2009).

The attempt to close the gap between hedonic and eudaimonic perspectives on well-being is represented by the self-determination theory (Ryan & Dezi, 2001) which posits that optimal psychological functioning includes both satisfaction of basic psychological needs with an individual’s aspirations. In this sense, hedonic and eudaimonic perspectives can be seen as representing different “paths to happiness” (Vázquez et al, 2009, p. 22). Nevertheless, the concepts of well-being, either hedonic or eudaimonic, are presently in the process of development and maturation, and the future of the ‘united’ concept of well-being is unclear.

In this PhD thesis I was interested in assessing mental health amongst the young adult population and in relation to their more complex psycho-social functioning, including their sexual behaviour. As thus, I needed to use multi-dimensional measures of well-being that could reflect short and long-term regulation mechanisms of subjective psychological well-being in different environmental domains.
From this perspective, growing data about more consistent relations of eudaimonic well-being measures with health-related outcomes suggest that a eudaimonic concept could offer a more dynamic approach to assessing well-being and mental health. While the reasons for these findings are still unclear, it was suggested that hedonic well-being is more related to static satisfaction and enjoyment of immediate circumstances whereas eudaimonic well-being may be related to short and long affect regulation mechanisms through the search for optimal survival behavioural functioning and adjusting to changing environmental demands (e.g. adjusting life goals and priorities, making sense of experiences, searching for the positive in what happens to individuals etc) (Vazquez & Castilla, 2007).

Adapting Ryff’s psychological multi-dimensional approach to well-being allowed me to assess the role of self-regulatory processes as related to oral sex behaviour in each of six different dimensions of optimal well-being. Each of these domains is argued to posit a different challenge that young adults find in their efforts to function positively (Ryff & Keyes, 1995; Keyes et al, 2002). These domains are as follows:

a) Self-Acceptance (SA): positive self-regard that includes awareness of personal limitation (link between mental health, self-esteem, body image satisfaction, sexual behaviour and self-regulation);
b) Positive Relations with others (PR): development and keeping ties with others (link between mental health, sexual behaviour, self-esteem, body image satisfaction, power relation pressure and self-regulation);
c) Environmental Mastery (EM): creating a surrounding context to satisfy needs and desires (link between mental health, sexual behaviour, power relation pressure and self-regulation);
d) Autonomy (A): a strong sense of individuality and personal freedom (link between mental health, self-esteem, sexual behaviour, power relation pressure and self-regulation);
e) Purpose in Life (PL): sense of direction in life that unifies their efforts and challenges (link between mental health, sexual behaviour, self-esteem, power relation pressure and self-regulation);
f) Personal Growth (PG): dynamic of life-long learning and of continuous development of their abilities (link between mental health, sexual behaviour, self-esteem, and self-regulation).
3.5 Summary

To conclude, self-regulation plays an important role in an individual’s ability and capacity to control their behaviour whereas the precise mechanisms of interaction between these processes in relation to sexual behaviour and mental health are unclear. As self-regulation is proposed to be a complex and multi-faceted process, it is not possible to identify a single cause or casual sequence that could explain all instances of self-control application in identifying success of failure in risky sexual behaviour and related to this behaviour consequence for an individual’s mental health and psychological well-being.

Based on previous streams of behavioural research, the research described in this PhD thesis aimed to investigate adolescents’ oral sex behaviour as a part of their more complex psycho-social functioning and to explore the associations between sexual behaviour and its numerous determinants, mediated thought the construct of self-control and motivation proposed by self-regulation theory. Applying self-regulatory theory to explain risky sexual behaviour may provide a theoretical framework that can encompass the multitude of sometimes contradictory findings in research on determinants of risky sexual behaviour. By exploring the role of self-control and motivation in regulating sexual behaviour, this PhD thesis is offering an empirical way of testing a range of distinctive psychological mechanisms which could underlie certain behavioural patterns of risky sexual behaviour and cognitions. Identifying these patterns may also offer a possible route for implementing evidence based sexual health related interventions. To my knowledge, there have been no attempts to apply such a holistic approach to risky sexual behaviour before.
4.1 Research questions, aims and objectives

The core research question addressed in this PhD thesis concerns the role that self-control and motivation, as particular variables of self-regulation, play in successful or unsuccessful management of adolescents’ oral sex behaviour, and how it could affect their psychological well-being.

When facing this research question, it was important to recognise the necessity to consider sexual behaviour (and exertion of self-control over it) in terms of personal and situational dimensions, and also take into account that self-regulation of sexual behaviour is a complex process which may include both conscious and unconscious forms of self-control and motivation to control sexual behaviour.

In both tempting situations and in ego depletion states, I was interested in exploring the interactions and interplay between self-regulation variables and other determinants/predictors of risky sexual behaviour (namely, alcohol consumption, sensation-seeking, impulsivity, personality characteristics such as attachment style, individual’s regulatory focus orientation, body image satisfaction and habitual negative thinking about one’s body image). I aimed to gain some insights of how this interaction could influence the process of decision-making about engagement in risky oral sex behaviour and how and to which extent these decisions could possibly compromise adolescents’ physical and psychological health. Awareness of such interactions between self-regulation variables and personal and situational characteristics of risky sexual behaviour can contribute to our understanding of mechanisms and processes involved in governing of adolescents’ risky sexual behaviour and can be used to modify health-related behaviour. These interactions were explored in Study 2 (SPSH Survey) and Study 3 (SMSC Survey).

Drawing from a PWB perspective, the next question was whether high levels of self-control and motivation to restrain sexual behaviour could result in positive or in negative psycho-social consequences for the particular individual. In line with the
theory, successfully controlled sexual behaviour would be expected to generally increase psycho-social outcomes (for example, from risk perception perspective or considering health-related outcomes) and therefore result in an individual’s positive psychological and health-related well-being. However, it may alternatively be the case that when controlling sexual behaviour over personal aspirations and situational needs, the individual’s desired psycho-social outcomes could decrease (for example, increase dissatisfaction with personal or social life) and subsequently results in negative psycho-social consequences. Evidence for such effects of controlling specific behaviours was found in dietary restraint studies. Dietary restraint has been associated with body dissatisfaction and psychological distress (e.g. Johnson & Wardle, 2005), vulnerability to distraction (Bellisle & Dalix, 2001), or sensitivity to relevant cues (e.g. Fedoroff, Plivy & Herman, 2003), whereas evidence of similar consequences associated with self-control were not found for food related behaviour. PWB consequences of engagement in oral sex for adolescents with different level of self-control and regulatory focus orientation were investigated in quantitative part of Study 2 (SPSH Survey).

Taking a closer look at two different types of self-control, the third question was whether trait self-control will be a more powerful predictor of resistance to engage in oral sex behaviour in tempting situations than the ability to restrain sexual behaviour. Previous research indicated that people high in trait self-control reported generally less risky oral sex behaviour, fewer problematic desires that needed to be controlled in their everyday life, and, as a consequence, less active usage of self-control than those who are low in trait self-control. On one side, it implies that trait self-control primarily supports preventive rather than an interventive type of self-control by shaping the nature of desires in everyday life, in the avoidance of tempting situations or in the removal of tempting stimuli from people’s immediate environment. On the other side, in tempting situations and in the presence of tempting stimuli in people’s environments (where the interventive type of self-control is presumed to be highly involved), would trait self-control still be the main restrictive force to control sexual behaviour, and what will be a relationship between trait self-control and dispositional ability to restrict sexual behaviour in managing probability of engagement in oral sex. The interplay between these two types of self-control was explored in the quantitative part of Study 2 (SPSH Survey).
Taking into account the complexity and dynamic of self-regulation processes, the fourth question concerned the role that motivation to control sexual behaviour could play in regulation of oral sex behaviour. I was interested in possible interactions between self-control and motivation to restrain sexual behaviour, in tempting situations and in ego depletion states (e.g. physical tiredness, cognitive load, emotional rise, alcohol intoxication), and particularly in what would be the primary factor in self-regulation of oral sex behaviour in ego depletion states. The principal question here was if motivation to control sexual behaviour could potentially contribute to success in recruiting sufficient volitional resources for successful exertion of self-control or substitute for limited self-control resources in ego depletion states. Framing this question within a dual-processing model (RIM), Study 3 (SMSC Survey) aimed to investigate whether harder efforts in motivation to restrict sexual behaviour will result in tendency for this behaviour to follow reflexive route and, accordingly, less motivational efforts will result in tendency to follow impulsive route, and how variations in motivation to control this behaviour can affect the self-regulation processes in ego depletion. Previous research on motivation as a potential moderator between impulsive behaviour and reflexive behaviour in the domain of prejudice (Fasio et al, 1995) and in the context of alcohol-related cognition and prospective alcohol use (Thrush et al, 2009) found mixed evidence for a moderation effect of motivation.

Finally, referring to females’ personal experiences, their standards and health-related outcomes of their engagement in oral sex, I aimed to uncover what kind of supportive cognitive strategies they may generate and use to support their decisions to engage or not to engage in oral sex behaviour, and to deal with the consequences of this engagement. These patterns of cognitive reasoning were explored in the qualitative part of Study 2 (SPSH Survey) and in Focus groups discussions in Study 4.

Therefore, in this PhD thesis I have introduced both quantitative and qualitative research questions.

In order to address these research questions, four principal research aims and objectives were outlined: a) investigate adolescents’ oral sex behaviour as an activity that is relevant and consistent with their goals and priorities, alongside their situational and personal characteristics and explore the associations between its determinants (i.e. self-regulation, sensation-seeking, alcohol consumption, attachment style, reasons for
engagement in oral sex and attitudes to oral sex) and psychological well-being; b) examine the effects of trait self-control and situational sexual self-control, both individually and in conjunction, on patterns of adolescents’ sexual behaviour and its consequences for their well-being; c) explore the effect of motivation in self-regulatory processes in the situation of temporarily limited-capacity of available self-control resources (e.g. ego depletion) and whether motivation can be compensating for such a shortage of self-control resources; d) investigate the mechanism of decision-making underlying involvement in oral sex behaviour in the situation of ego depletion and under gender power pressure from dual-system approach; explore motivated reasoning and supportive cognitions leading to engagement in risky oral sex behaviour, or withdrawal from it.

4.2. Research Hypotheses

On the basis of findings from previous research literature, the main hypotheses for my research were formulated, as follows:

Consistent with previous research on the role of self-regulation in health-related behaviour, I hypothesised that engagement in oral sex would be related to an individual’s level of self-control skills.

Based on literature examining determinants of risky sexual behaviour, I have also predicted that engagement in oral sex behaviour will be shaped by the joint contribution of personality, situations, and relationship contexts. Therefore, I hypothesised that engagement in oral sex will be to some extent associated with certain personality characteristics (e.g. sensation-seeking), individuals’ regulatory focus orientation, their attitudes to oral sex and reasons for engagement in oral sex.

In line with research on the situational capacity of self-control, I predicted that in ego depletion states, alongside an individual’s self-control skills, engagement in oral sex will be related to an individual’s motivation to restrain sexual behaviour. Furthermore, due to the limited self-control resources in ego depletion, the role of motivation to restrain sexual behaviour in ego depletion will be more salient, as it could contribute to or substitute for impaired capacity of self-control to regulate sexual behaviour.
Based on research on body image consciousness and sexual behaviour, I hypothesised that in ego depletion states and under gender power pressure within a relationship context, engagement in oral sex behaviour will be related to the female’s self-esteem and body image satisfaction.

Finally, on the basis of medical research on sexual behaviour and mental health, psychology research on ‘regulatory fit’ and psychology research on emotional consequences of sexual ‘hook-ups’, I hypothesised that there will be a link between self-control and psychological well-being as related to engagement in oral sex behaviour.

4.3 Main research methods

The choice of my research methodology was defined by the nature of my research questions. As in this research I introduced both quantitative and qualitative research questions, I used mixed methods approach to analyse the data from quantitative and qualitative studies.

The mixed methods is “a procedure for collecting, analysing and integrating both quantitative and qualitative data at some stage of the research process within a single project for the purpose of gaining better understanding of the research problem” (e.g. Tashakkori & Teddlie, 2003; Creswell, 2003; Ivankova et al, 2006). The rational for mixed methods approach is grounded in the fact that both quantitative and qualitative methods, used in combination, by complementing each other and taking advantage of the strength of each other, can provide a more robust analysis of research data (Miles & Huberman, 1994; Tashakkori & Teddlie, 2010; Morgan, 1998).

Quantitative and qualitative data were integrated in a complementary way using a sequential explanatory design. This design is widely applied in both social and behavioural science research and consists of two distinct phases: quantitative results obtained at the first phase followed by collection of qualitative data which help to explain the quantitative results obtained at the second phase, and then these two phases connected in the final stage (Cresswell et al, 2003). Despite lengthy periods of time and limited feasibility of resources to collect and analyse both types of data, I have chosen this design for its straightforwardness and opportunities for the exploration of the
quantitative results in more detail, especially when these results are predicted to be unexpected and unclear (Morse, 1991, 2010).

The purpose of a mixed-methods sequential explanatory design of this research was to identify factors contributing to students’ oral sex behaviour and related well-being by obtaining results from the two surveys of university students. Then I follow up with five focus groups on purposefully selected topics to explore those results in more depth through a qualitative thematic analysis. The explanatory sequential mixed methods design which used both quantitative and qualitative approaches was best suited to gain comprehensive understanding of how the aspects of self-regulation of sexual behaviour may be related to perception, understanding and potential psychological consequences of oral sex behaviour among university students.

In the quantitative phase of study, the research questions focused on how selected internal and external variables served as predictors of students’ sexual behaviour and well-being. Self-reported measures were used to address specific behaviour patterns (e.g. engagement in oral sex practices), to measure cognition (e.g. normative beliefs, motivation, negative thinking) and feelings (e.g. body image satisfaction) which influence emotions and psychological well-being states. Various self-reported measures were employed to explore personality characteristics (e.g. sensation-seeking, trait self-control, and sex related self-control) which are likely to influence sexual behaviour and may have an impact on overt behaviour and consequently on perceived psychological well-being. I used both univariate and multivariate statistical procedures to analyse the survey data from quantitative part of Study 2 and Study 3.

In the qualitative phase, the answers to open-ended questions from the Study 2 and female focus group discussions from Study 4 explored in depth the results from the statistical tests. In this phase, the research questions addressed internal (e.g. motivation, self-control, body image satisfaction) and external factors (e.g. relationship imbalance, social and media pressure) found to be differently contributing to sexual behaviour in ego depletion. The data from observed interactions between female respondents’ in Study 4 was incorporated in qualitative analysis, as interactions during focus groups have been found to have negative or positive influences on the data (Kidd & Parshall, 2000; Owen, 2001). Observing and documenting the interactions of the focus group in terms of uncovering the emotional aspects of oral sex behaviour aimed to help me to explore how the context of the focus group discussion can influenced the generation of
data (Carey & Smith, 1994; Hollander, 2004), and enable a richer, more complete understanding of the problem (Miles & Huberman, 1994).

Thematic analysis was employed to explore the patterns of thought and different types of meanings attached to engagement in oral sex. I aimed to address gender differences in underlying motivated reasoning and supportive cognitions related to engagement in oral sex; the reasons that may lead heterosexual female students to revise their intentions when faced with the temptation to engage in oral sex behaviour; and also counteractive strategies of self-control that can buffer against motivational weakness of will by bolstering the value of the self-regulatory goals and decreasing the value of temptation.

During the interpretative phase of the study, qualitative results were used to explain quantitative findings. To integrate the combined findings from quantitative and qualitative research, I used a themed structure of the questionnaires as an integral part of the topic guide for focus groups (Adamson et al, 2004). A graphical representation (the Visual Model) of the mixed-methods procedure used in this research is provided in Figure 4.1.

During Study 2 (SPSH Survey) the quantitative and qualitative data were collected concurrently, with merging as a main approach to integration. The open-ended responses on the survey’s questions that addressed reasons for being engaged/non-engaged in oral sex were developed intentionally with a content of the particular survey’s scales in mind.

The separate analysis of the quantitative and qualitative data was conducted in parallel. For the quantitative analysis I calculated descriptives, means, and standard deviations; Chi-Squares were used to allow comparisons between groups; regression and SEM analysis were used to identify the most powerful predictors of engagement in oral sex and to create a model explaining PWB as related to oral sex behaviour. For the qualitative analysis, I developed a coding scheme, and conducted thematic analysis. The results from the quantitative and qualitative data were integrated using two approaches. First, the results of matching scales from a survey and open-ended questions were integrated using a joint display. In the final report, the quantitative and qualitative data integration used a narrative approach that describes the quantitative and qualitative
Figure 4.1 The Visual Model of the mixed-methods procedure used in this PhD
results thematically. As the results were connected to each other thematically, weaving as the specific type of narrative integration was used; this allowed the quantitative and qualitative data to weave back and forth around similar themes or concepts.

Study 3 and 4 represented the second stage of this research. The first phase of this stage was a quantitative study 3 (SMSC Survey), followed by a qualitative study 4 (Focus groups on perception of oral sex experiences), in the second phase. The connecting point included developing the interview questions for the qualitative data collection based on the results of quantitative and qualitative analyses from the both surveys. The content of the interview protocol for focus group study was grounded in these results.

The quantitative data for Study 3 and qualitative data for Study 4 were collected sequentially and analysed separately. Methodological integration occurred through embedding survey results using identical themes and concepts from qualitative interviews. Resulting report illustrated staged integration, and analysis expanded previous findings by showing that socially and personally well-adjusted to practicing oral sex, females used multifaceted self-regulation strategies to support their positive well-being.

Each investigation, quantitative and qualitative, was independently scrutinised to ensure they met acceptable methodological standards of validity and reliability, and each of them is able to stand alone as an independent piece of research (Bowling and Ebrahim, 2005).

4.4 Methodological challenges related to assessment of sexual behaviour and Psychological Well-Being (PWB)

4.4.1 Assessing Sexual Behaviour

Investigating any type of sexual behaviour presents a major challenge for experimental studies and in real-life situations because, in contrast to most other health-related behaviours, sexual behaviour cannot be directly observable or easily manipulated, and any research on sexual behaviour has to rely on self-reports or be based on diary studies.
A further challenge here arises from a general measurement problem in sexual behaviour research (Wiederman, 2004). It is argued that measurement of sexual behaviour present unique challenges to health researchers as it includes considering concerns about privacy, cultural taboos and stigmatising behaviour. Researchers also need to measure motives for sexual behaviour (e.g. Catania et al, 1990; Schroder et al, 2003a), and take into account the dyadic nature of sexual behaviour. As a result, assessment of complex sexual behaviour very often requires multiple types of assessment measures and methodology.

In this research, I attempted to assess sexual behaviour from two perspectives, from an individual perspective and from a dyadic perspective. On an individual level, sexual behaviour was assessed by self-reported measures, namely, internet-based surveys.

Several factors have been associated with reporting bias (e.g. Graham et al, 2005; Weinhardt et al, 1998) and potentially influencing the accuracy of self-reported sexual behaviour, amongst them, social desirability and level of assessment.

The potential challenge of response bias was addressed by using an internet-based survey. Internet-based self-interviews (IBSI) have been found to be the method of assessment for self-reported sexual behaviour that provide a more private, less intrusive and less threatening means of reporting sensitive behaviour, allowing participants to skip potentially embarrassing questions (Catania et al, 1999; Durant & Carey, 2000; Schroder et al, 2003b), overcome the issue of social desirability and more accurately recall and report their sexual behaviour (McAuliffe et al, 2007; Booth-Kewley et al, 2007). It also offers the potential to survey a wide range of respondents to allow completion at a time and place convenient for respondents, and make them less vulnerable to coercion (e.g. Pequegnat et al, 2007; Rhodes et al, 2003). The real issue about using this type of assessment is concern about data confidentiality or security (e.g. Baer et al, 2002).

In order to increase the reliability of self-reports measures I used established standardized (published) questionnaires and questionnaires with reverse-scored questions (e.g. dispositional ability to restraint sexual behaviour (Baumeister & Gailliot, 2007). I also ensured a clear and unambiguous wording of questions in other measurement instruments developed for this research, and tried to combine the
recommended use of composite measures (e.g. frequency) with incidence reports (dichotomies) or categorical measures (Schroder et al, 2003a).

From a dyadic perspective, in this research sexual behaviour was assessed by likelihood approach with 8 vignettes sexual scenarios. My aim was to measure behaviour in ego depletion situations considering specific type of relationships (e.g. casual relationship/long-term relationship), specific type of partners (e.g. casual partner/boyfriend) and specific type of sexual acts (e.g. oral sex/vaginal sex). Research examining aggregate versus partner-specific formats and non-specified versus specified the type of sexual act being assessed has revealed that partner-specific and act-specific SAQs produce more accurate self-reports of sexual behaviour than do aggregate and non-specified question formats (e.g. McAuliffe et al, 2007; Sheeran & Abraham, 1994). As the questionnaires to assess sexual behaviour based on the above-mentioned criteria are still waiting to be developed, to capture the choice of sex behaviour in ego depletion situation, in Study 3, I introduced the instrument provisionally called Likelihood of None/Engagement in Sexual Behaviour (LNESB/LESB Scale). In sexual research, the similar type of instrument, named LSH (Likelihood to Sexual Harass Scale), is extensively used in sexual harassment research (Pryor et al., 1993, 1995; Lee et al., 2003).

4.4.2 Assessing psychological well-being in healthy young adults population

The definition and measurement of mental health sometimes differ between the medical field, the field of public health and psychology (Diener, 1997). Within the medical model, mental health is often seen merely as the absence of mental illness. Therefore, the majority of measurements of mental health are designed to diagnose mental illness, or to evaluate if an individual is mentally ill or normal. These measures focus on the aspects of psychiatrists’ and clinical psychologists’ mental problems of interest, such as depression, anxiety, psychosis, drug/alcohol misuse and problems like CD or ADHD. The methodological issue here is that, as they are designed for diagnosing purposes, they can produce continuously distributed scores, but the resulting distributions tend to be positively skewed, with most people reporting almost perfect mental health. These offer a little help to measure positive mental health or any improvement in mental health (Stewart-Brown, 2002).
In psychology, the terms ‘psychological well-being’ and ‘subjective well-being’ or ‘happiness’ are normally used to talk about mental health. The range of available questionnaires to measure this concept in psychology is very wide. Nevertheless, the psychological measurements developed to measure ‘happiness’ and ‘life satisfaction’ suffer from the same methodological issues as mental health diagnostic tools; they also seem to be positively skewed (Gudmundsdottir, 2011) thus giving little room for measuring positive health and improvement. As I was interested in measuring subjective psychological well-being in healthy university students, and their satisfaction with themselves and their lives, I investigated the measurements of psychological and subjective well-being. The comparison of the factor structure of main mental health questionnaires on the factor that they labelled as subjective well-being is presented in Table 4.1.

**Table 4.1 Measurements of mental health (source: adapted from Compton, Smith, Cornish & Qualls, 1996)**

<table>
<thead>
<tr>
<th>Measurements</th>
<th>SWB (Factor loading)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness (Fordyce, 1977)</td>
<td>.84</td>
</tr>
<tr>
<td>Satisfaction with life (Diener, Emmons, Larsen and Griffin, 1985)</td>
<td>.83</td>
</tr>
<tr>
<td>Sense of coherence (Antonovsky, 1987)</td>
<td>.78</td>
</tr>
<tr>
<td>Affect balance (Bradburn, 1969)</td>
<td>.74</td>
</tr>
<tr>
<td>Quality of life (Flanagan, 1979)</td>
<td>.69</td>
</tr>
<tr>
<td>Optimism (Scheier and Carver, 1985)</td>
<td>.69</td>
</tr>
<tr>
<td>Psychological well-being (Ryff, 1989)</td>
<td>.60</td>
</tr>
<tr>
<td>Self-esteem (Rosenberg, 1965)</td>
<td>.51</td>
</tr>
</tbody>
</table>

The instrument of choice, the Psychological Well-Being scale, has been developed by Ryff (1989) on the basis of existing literature on positive mental health and psychological well-being. This scale consists of 6 subscales measuring self-acceptance, personal growth, positive relations with others, autonomy, purpose in life and environmental mastery. In its full version, each subscale has 14 questions which amount to a total of 84 questions. Ryff & Keyes (1995) argued that their psychological well-being scale is a relatively wide measurement scale that includes aspects of happiness and satisfaction with life. Table 2 demonstrates the comparison of their theory-based indicators of well-being with these other frequently used measures of subjective well-being.
Table 4.2 Psychological well-being scales: correlations with SWB and depression (source: adapted from Ryff and Keyes, 1995)

<table>
<thead>
<tr>
<th>SWB</th>
<th>Psychological well-being scales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>Happiness</td>
<td>.54*</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>.64*</td>
</tr>
<tr>
<td>Depression (CES-D)</td>
<td>-.70*</td>
</tr>
</tbody>
</table>

NOTES: *p<.05.
SA, self-acceptance; PR, positive relations with others; PL, purpose in life; PG, personal growth; AU, autonomy; EM, environmental mastery.

As it can be seen from the Table 4.2, two of the subscales – self-acceptance and environmental mastery – showed moderate to strong correlation with the single and multi-item scales of happiness, life satisfaction and depression. The remaining four subscales of PWB showed comparable but mixed to medium association with these indicators of well-being, except for personal growth. Importantly, sub-scales correlations with happiness and life satisfaction were positive whereas their correlations with depression were negative.

Lastly, comparing psychological well-being defined by Ryff (1989) against Jahoda’s (1958) definition of positive mental health, Gudmundsdottir (2011) found great similarities between their concepts (See Table 4.3).

Although Ryff’s PWB Scale (in different versions) has been widely criticised for high factor correlations among the dimensions of well-being (e.g. Abbott et al., 2006; Springer & Hauser, 2006; Van Dierendonck et al., 2007), the link between PWB in its current form and a number of health outcomes was recognised by a majority of the critics. Yet, Ryff’s PWB scales are recognised as appropriate tools for assessing distinct aspects of PWB at a general level, though a caution is placed about the extent to which this can be replicated across populations as the results will be influenced by sampling characteristics (Burns & Machin, 2009).

Table 4.3 Comparison of Jahoda’s positive mental health and Ryff’s PWB (source: adapted from Biswas-Diener, 2011)

<table>
<thead>
<tr>
<th>Positive mental health (Jahoda, 1958)</th>
<th>Psychological well-being (Ryff, 1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards the self</td>
<td>Self-acceptance</td>
</tr>
<tr>
<td>a) adequate self-awareness</td>
<td>a) positive self-evaluation</td>
</tr>
<tr>
<td>b) accurate self-concept</td>
<td>b) the ability to acknowledge</td>
</tr>
<tr>
<td>c) self-acceptance, and</td>
<td>multiple aspects of self</td>
</tr>
<tr>
<td>d) a positive global caring view of</td>
<td>c) the ability to accept both</td>
</tr>
<tr>
<td>the self</td>
<td>positive and negative qualities</td>
</tr>
<tr>
<td></td>
<td>into a balanced picture of one’s</td>
</tr>
<tr>
<td></td>
<td>abilities</td>
</tr>
<tr>
<td>Growth, development and self-actualization</td>
<td>Personal growth</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>a) the ability to accept challenges and tension in the present in the interest of future goals and b) investment in living or an extension of self through involvement in different pursuits, a concern for other people, and a desire to help others and be of service</td>
<td>a) capacity to grow and develop potential b) personal changes over time that reflect growing self-knowledge and effectiveness, and c) openness to new experiences</td>
</tr>
</tbody>
</table>

As I had a homogeneous population of generally mentally and physically healthy university students of relatively same age and similar oral sex experiences and I was interested in assessing positive/negative aspects of their PWB at a general level, the choice of Ryff’s PWB Scale was considered appropriate.
FACTORS PREDICTING ENGAGEMENT IN ORAL SEX BEHAVIOUR AMONG YOUNG PEOPLE IN THE UK, ACCORDING TO NATIONAL SURVEY OF SEXUAL ATTITUDES AND LIFESTYLES (NATSAL II)

5.1. Introduction

Before embarking on research to answer the main research question of this thesis, it was considered useful to test the theoretical links between core determinants of oral sex behaviour, known from research on adolescents in the USA, Australia and Canada, on the sample of British adolescents.

Research on adolescents’ risky sexual behaviour presented in Chapter 2 has identified the demographic variables and predictors of engagement in oral sex behaviour and linked this engagement to adolescents’ ethnicity, region of living, their socio-demographic status, their alcohol consumption, school and media influences, peers behaviour, engagement in vaginal sex and also their religious or spiritual beliefs, and the personal importance of these beliefs to them.

Although adolescents’ sexual behaviour, including oral sex behaviour, has been studied by researchers on a micro-level in a college population in the UK (e.g. Stone et al, 2006), previous research has not resulted in any general macro-level investigations of adolescents’ oral sex behaviour, its demographic characteristics and determinants of engagement on national level. As the British National Survey of Sexual Attitudes and Lifestyles (NATSAL II) included data on sexual behaviour of adolescents 16-24 years old, this Survey was chosen with a purpose to test predictions for engagement in oral sex amongst British adolescents derived from previous research in the USA, Australia and Canada.

NATSAL II was conducted between 1999 and 2001 by a collaborative research team from three UK organisations: National Centre for Social Research (NatCen), Royal Free and University College Medical School (UCL), and London School of Hygiene and Tropical Medicine (LSHTM). This survey of sexual behaviour in Britain included a nationally representative sample of 16-44 years old. Using the sample of young people,
aged 16-24, extracted from the NATSAL II report, the current study aimed to determine what factors would predict the engagement in oral sex practices in young people in the UK. Specifically, the study examined whether, following statistical control for gender, the respondents’ parents’ social class, religiosity, geographical region of living, alcohol intake, engagement in vaginal sex, source of sex education, as predictor variables, would influence their engagement in oral sex practices (criterion variable).

Based on previous research, the following hypotheses were formulated for this current study:

1. Respondents’ parents’ social class, respondents’ religious affiliation, their geographical region, and academic qualification as demographic variables, will be significant predictors for engagement in oral sex practices.

2. Source of sex education, as a ‘social influence’ variable and personal importance of religious beliefs, as attitudinal variable, will significantly influence engagement in practices of oral sex.

3. Higher level of alcohol intake and engagement in vaginal sex, as behavioural variables, will be also significant predictors of oral sexual behaviour above and beyond the contribution of other explanatory variables.

5.2 Method

5.2.1 Participants

The NATSAL II survey included 12,110 respondents (42.7% males and 57.3% females) aged 16-44 years old. The sample was designed to over-represent people living in the Greater London area. This strategy was chosen to account for a higher frequency of many HIV-related risk behaviours in London, and in order to provide the best estimates of the incidence of risky sexual behaviours for groups that are most at risk of acquiring HIV infection. Aiming to reduce inequalities in health (including sexual health) and taking into consideration that the proportion of ethnic minority respondents included in national general population surveys is normally relatively small, NATSAL II also incorporated into the main sample of respondents a boost sample of people from four ethnic minority groups – Black Caribbean, Black African, Indian and Pakistani.
Because the focus of this present research was on sexual behaviour of young people in Britain, the sample of the interest included 2,938 participants (46.7% males and 53.3% females) aged 16-24 years old, taken out from NATSAL II total number of participants. The sample was nearly equally distributed by age and by gender. The age and gender distribution of the sample (%) could be seen from the Table 5.1.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>TOTAL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 years</td>
<td>48.9</td>
<td>51.1</td>
<td>10.7</td>
</tr>
<tr>
<td>17 years</td>
<td>48.1</td>
<td>51.9</td>
<td>12.4</td>
</tr>
<tr>
<td>18 years</td>
<td>50.3</td>
<td>49.7</td>
<td>11.6</td>
</tr>
<tr>
<td>19 years</td>
<td>47</td>
<td>53</td>
<td>10.3</td>
</tr>
<tr>
<td>20 years</td>
<td>42.1</td>
<td>57.9</td>
<td>10.9</td>
</tr>
<tr>
<td>21 years</td>
<td>46.8</td>
<td>53.2</td>
<td>11.3</td>
</tr>
<tr>
<td>22 years</td>
<td>44.7</td>
<td>55.3</td>
<td>10.9</td>
</tr>
<tr>
<td>23 years</td>
<td>45.5</td>
<td>54.5</td>
<td>10.7</td>
</tr>
<tr>
<td>24 years</td>
<td>46.2</td>
<td>53.8</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Participants represented young people from 11 regions of the UK: North East, North West, Yorkshire and Humber’s, East Midlands and West Midlands, South West and South East, Eastern region, London, Wales and Scotland. 23.8% of the sample was from greater London area.

5.2.2 Measures

The predictor variables used were gender, respondents’ academic qualifications, their parents’ social class, their religiosity, geographical region of living, their alcohol intake, their engagement in vaginal sex and their source of sex education. The criterion variable was their engagement in oral sex practices. All variables were re-recorded as categorical dummy variables in order to maintain the appropriate sample size in each group.

**Academic qualification** was determined by the highest level of formal education that respondents had completed before entering the survey, and was represented by 5 following categories: (0) a degree (n=279); (1) A-AS levels (n=601); (2) GCSEs A-C (n= 1109); (3) GCSEs D-G (n= 280); (4) others (n= 235).

**Respondents’ parents’ social class** was represented by six categories, as follows: (0) professional/managerial (n=568), (1) managerial/technical (n=571), (2) skilled non-manual (n=189), (3) skilled manual (734), (4) partly skilled/unskilled (n=394), (5) had no job (n=162).
Religiosity was measured by three variables, resultant from asking respondents whether they 1) belong to a particular religion, 2) the personal importance of their religious beliefs, and 3) which religion they belonged to. The first variable was coded as: (1) yes (n=1288), and (2) no (n= 1650). The second variable was coded as: (1) very important (n=406), (2) fairly important (n= 612), (3) not very important (n=1018), and (4) not important at all (n= 893). The third variable was represented by 7 following categories: 0) Christians, no denomination (n=321), (1) Roman Catholics (n=251), (2) Church of England (n=279), (3) Church of Scotland (n=35), (4) Other Christians (n=78), (5) Muslims (Islam) (n=222), (6) Asians religions (Hindu, Sikh and Buddhism) (n=86).

Geographical region of living were represented by: (1) North East; (2) North West; (3) Yorkshire and Humber’s; (4) East Midlands; (5) West Midlands; (6) South West; (7) Eastern; (8) London; (9) South East; (10) Wales; (11) Scotland.

Alcohol intake was determined by respondents’ average alcohol consumption when they do drink (excluding parties/special occasions) and was coded as: (1) low; (2) medium; (3) high.

Source of sex education was represented by the following categories: (1) mother and the family members; (2) lessons at school; (3) friends of my age/first sex partner; (4) doctor/nurse/clinic; (5) media.

Engagement in vaginal sex and engagement in oral sex were determined by respondents’ answers to the question whether they ever had vaginal or oral sex (e.g. ever given/received oral sex), and was coded as yes (0) or no (1), in the same manner for both variables.

5.2.3 Procedure

Ethical approval for this study was granted by the Department of Psychology Ethics Research Committee.

The dataset ‘SN 5223 (project Number: P1873) was downloaded from the Economic and Social Data Service (ESDS) website
The data was collected in 1999 by NATSAL II survey administrators. The general population sample involved a multi-stage stratified probability design, with postcode sectors selected as the primary sampling units (PSUs), addresses selected at the second stage, and finally one eligible adult randomly selected at the final stage. The ethnic minority boost sample used independent but also a multi-stage probability design. An initial selection from Postcode Address File (PAF) was ‘screened’ for the target ethnic minority groups and for the presence of at least one eligible adult. The introduction letter was sent to the selected households asking for their residents’ willingness to participate in the survey. When the consent was obtained, the trained NATSAL II interviewers visited households in order to conduct the interview. The interview format involved a combination of computer-assisted personal interview (CAPI) and computer-assisted self-interview (CASI) questionnaires on sexual behaviour (Erens et al, 2003).

The CAPI (computer-assisted personal interview) included questions about the respondent’s health, smoking and drinking habits, family background, sexual lifestyle, the source of sex education, the first sexual experience and the types of contraception used. Whereas some questions were asked in face-to-face format, the most sensitive questions on sexual behaviour were asked in a self-completion questionnaire that was filled by the respondent on the personal laptop computer, or alternatively, in a paper version. Males and females completed separate versions of the questionnaire (Erens et al, 2003).

The response rate was 63.9% for the general population sample and 62.9% for the boost sample. After applying the non-response weight, the distributions of age, sex and region for the NATSAL II, the sample was considered closely reflect the general population.

5.2.4 Analysis

Data was analysed using PAWS version of SPSS-18 (SPSS Inc, 2011). A number of standard checks for accuracy ensured that the working dataset was clean. A number of research variables in the working dataset were transformed into a number of summary (dummy) variables in order to answer research questions. A filter was installed for the
total dataset to eliminate cases where respondents aged over 24 years old, that were not of interest for this study.

The aim of this study was addressed via running Descriptives and Chi-Square tests and then via multiple logistic regressions, with ‘engagement in oral sex practices’ being the dependent variable and a range of potential predictors, chosen by examination of the literature from the pool of available explanatory variables, being the independent variables. Because the inclusion of all available independent variables into a regression analysis is considered to be a poor practice (Afifi & Clark, 1996; Howell, 1997), systematic variable selection was conducted in preliminary analysis.

**Preliminary analysis** examined bivariate associations among the study variables. Only those predictors, yielding value ≤.05, were selected for inclusion in the regression analysis. Resulting from this, the set of predictors was subject to regression analysis to elicit a preliminary regression model. **Primary analysis** involved a sequence of logistic regression models predicting the index of engagement in oral sex practices. Variables were entered using Backward Stepwise logistic regression in order to eliminate all non-significant (Wald’s p>.05) for the perfect model predictor variables, after which analysis was re-run with the rest of them. Re-running regression analysis in order to generate a number of competing models is considered to be a good practice for making a decision to as to which of these was the best based via the principle of parsimony (Hosmer & Lemeshov, 1989). In our case this was a vital necessity, as one of the ‘religiosity’ variables – religious affiliation – significantly reduced our sample size (55.8% of respondents had reported no religious affiliations). Following analysis was conducted on both models to test the best fit of indicators of engagement in oral sex. Multicollinearity issues were assessed by examining regression outputs and running the linear equivalent of the logistic analysis. Impact of outliers on regression analysis was also considered by checking Cook’s D for instances where D> 1.00 (Howell, 1997). In all analyses, results were judged to be non-significant (NS) if p>.05.
5.3 Results

5.3.1 Demographics

The sample consisted of 2,938 participants (46.7% males and 53.3% females) aged 16-24 years old, from 11 regions of the UK. The characteristics of the sample could be seen from the Table 5.2.

Table 5.2 The sample profile

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Gender</th>
<th>All valid cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male N</td>
<td>Female N</td>
</tr>
<tr>
<td>1. Academic qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>1187 47.4%</td>
<td>1317 52.6%</td>
</tr>
<tr>
<td>A-AS level</td>
<td>139 49.8%</td>
<td>140 50.2%</td>
</tr>
<tr>
<td>GCSEs A-C</td>
<td>280 46.6%</td>
<td>321 53.4%</td>
</tr>
<tr>
<td>GCSEs D-G</td>
<td>518 46.7%</td>
<td>591 53.3%</td>
</tr>
<tr>
<td>Other</td>
<td>141 50.1%</td>
<td>139 49.7%</td>
</tr>
<tr>
<td>N</td>
<td>109 46.4%</td>
<td>126 38.8%</td>
</tr>
<tr>
<td>1. Parents’ social class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/managerial</td>
<td>277 48.8%</td>
<td>291 51.2%</td>
</tr>
<tr>
<td>Managerial/technical</td>
<td>278 48.7%</td>
<td>293 51.3%</td>
</tr>
<tr>
<td>Skilled non-manual</td>
<td>79 41.8%</td>
<td>110 58.2%</td>
</tr>
<tr>
<td>Skilled manual</td>
<td>345 47.0%</td>
<td>389 53%</td>
</tr>
<tr>
<td>Partly skilled/unskilled</td>
<td>174 44.2%</td>
<td>220 55.8%</td>
</tr>
<tr>
<td>Never had a job</td>
<td>64 39.5%</td>
<td>98 60.5%</td>
</tr>
<tr>
<td>3. Belong to particular religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1365 46.6%</td>
<td>1564 53.4%</td>
</tr>
<tr>
<td>No</td>
<td>775 47.5%</td>
<td>856 52.5%</td>
</tr>
<tr>
<td>4. Religious affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christians, no denomination</td>
<td>578 45.4%</td>
<td>694 54.6%</td>
</tr>
<tr>
<td>Roman Catholics</td>
<td>150 46.7%</td>
<td>171 53.3%</td>
</tr>
<tr>
<td>Church of England</td>
<td>111 44.2%</td>
<td>140 55.8%</td>
</tr>
<tr>
<td>Church of Scotland</td>
<td>111 39.8%</td>
<td>168 60.2%</td>
</tr>
<tr>
<td>Other Christians</td>
<td>12 34.3%</td>
<td>23 65.7%</td>
</tr>
<tr>
<td>Asians (Hindu, Sikh, Buddhists)</td>
<td>34 43.6%</td>
<td>44 56.4%</td>
</tr>
<tr>
<td>Muslims (Islam)</td>
<td>117 52.7%</td>
<td>105 47.3%</td>
</tr>
<tr>
<td>5. Government region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North East</td>
<td>1371 46.7%</td>
<td>1567 53.3%</td>
</tr>
<tr>
<td>North West</td>
<td>80 2.7%</td>
<td>81 2.8%</td>
</tr>
<tr>
<td>Yorkshire and Humber’s</td>
<td>147 5.0%</td>
<td>184 6.3%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>110 3.7%</td>
<td>116 3.9%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>101 3.4%</td>
<td>101 3.4%</td>
</tr>
<tr>
<td>South West</td>
<td>91 3.1%</td>
<td>87 3.0%</td>
</tr>
<tr>
<td>Eastern</td>
<td>101 3.4%</td>
<td>116 3.9%</td>
</tr>
<tr>
<td>London</td>
<td>328 11.2%</td>
<td>370 12.6%</td>
</tr>
<tr>
<td>South East</td>
<td>153 5.2%</td>
<td>184 6.3%</td>
</tr>
<tr>
<td>Wales</td>
<td>44 1.5%</td>
<td>69 2.3%</td>
</tr>
<tr>
<td>Scotland</td>
<td>106 3.6%</td>
<td>137 4.7%</td>
</tr>
</tbody>
</table>

Note: 55.8% of the respondents in the sample did not report any religious affiliations
5.3.2 Engagement in oral sex amongst British adolescents 16-24 years old

Overall, in the 16-24 age group 78.2% of respondents reported to have ever had vaginal sex. 76.1% of the sample reported to have vaginal sex in the last 5 years; 72.1% - in the last year, and 55.6% reported to have vaginal sex in the last month.

71.5% of the sample reported to have ever given/received heterosexual oral sex, among them 67.5% reported to ever having given oral sex and 69.5% - ever receiving oral sex. Amongst those who reported to give oral sex, 65.8% reported to do it in the last 5 years period; 61.4% - in the last year and 40.7% in the last month. Amongst those who reported to have received oral sex, 67.8% reported to receive it in the last 5 years, 62.9% - in the last year and 41.4% - in the last month.

There was no significant gender difference in engagement in vaginal sex and oral sex practices (p=0.6) (Table 5.3).

Table 5.3 Percentage distribution of respondents, by selected behaviour measure, according to gender

<table>
<thead>
<tr>
<th>Measure</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N=1331)</td>
<td>(N=1544)</td>
</tr>
<tr>
<td>Ever had vaginal sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>77.6</td>
<td>78.6</td>
</tr>
<tr>
<td>No</td>
<td>22.4</td>
<td>21.4</td>
</tr>
<tr>
<td>Ever had oral sex</td>
<td>(N=1332)</td>
<td>(N=1545)</td>
</tr>
<tr>
<td>Yes</td>
<td>70.6</td>
<td>72.2</td>
</tr>
<tr>
<td>No</td>
<td>29.4</td>
<td>27.8</td>
</tr>
<tr>
<td>Ever received oral sex</td>
<td>(N=1332)</td>
<td>(N=1545)</td>
</tr>
<tr>
<td>Yes</td>
<td>68.9</td>
<td>69.9</td>
</tr>
<tr>
<td>No</td>
<td>31.1</td>
<td>30.0</td>
</tr>
<tr>
<td>Ever given oral sex</td>
<td>(N=1332)</td>
<td>(N=1545)</td>
</tr>
<tr>
<td>Yes</td>
<td>65.7</td>
<td>68.9</td>
</tr>
<tr>
<td>No</td>
<td>34.3</td>
<td>31.0</td>
</tr>
</tbody>
</table>

Although females reported to receive slightly more oral sex than males ever and over 5 year period, the difference was not significant (p=0.6). Nevertheless, overall, 24 years old males reported to receive more oral sex than females, and there was a statistically significant difference between sexes in this age group in receiving oral over the last month period ($\chi^2=4.389; df=1; p=.04$), with males reporting to receive more oral sex than females. Accordingly, females reported to give more oral sex than males, and this difference was close to significant (p=.08).
Those, who reported their friends or their first partner to be the main source of their sex education, were more likely to report higher engagement in oral sex ($\chi^2=138.498; \text{df}=4; \ p<.001$). Those who reported to be already engaged in oral sex were more likely to have STD diagnosis ($\chi^2=35.898; \text{df}=4; \ p<.001$).

A higher level of alcohol intake and having an academic degree and A-AS levels were found to be associated with a higher level of engagement in oral sex ($\chi^2=229.790; \text{df}=4; \ p<.001$ and $\chi^2=36.317; \text{df}=4; \ p<.001$, respectively).

### 5.3.2.1 Patterns of giving/receiving oral sex

The patterns of oral sex behaviour amongst adolescents 16-24 years old are represented in Figure 5.1.

*Figure 5.1 The patterns of oral sex behaviour amongst adolescents 16-24 years old*

As we can see from this Figure, there was an increase in giving and receiving oral sex between ages 16 and 17 (by 19.3% for males vs 13.2% for females and by 15.9% for males vs 17.1% for females, accordingly), ages 17 and 18 (by 13% in males vs 18.2% in females and by 17.7% in males vs 15% in females, accordingly) and ages 18 and 19 (by 10% in males vs 18.1% in females and by 9% in males vs 18.1% in females).
5.3.2.2 Patterns of vaginal and oral sex

For both genders aged 16 to 24, there was found a strong association between engagement in vaginal and oral sex. Those who reported to have oral sex were more likely to be engaged in vaginal sex ($\chi^2=1829.297; \text{df}=1; \text{p}=.001$).

The patterns of vaginal and oral sex behaviour are presented in Figure 5.2.

Overall, adolescents in the UK appear to be more engaged in vaginal sex than in oral sex. The engagement in oral sex increased with the engagement in vaginal sex and was lower than engagement in vaginal sex across both genders and across all age groups.

**Figure 5.2** Patterns of vaginal and oral sex behaviour amongst 16-24 years old over the last month period

5.3.2.3 Patterns of oral sex behaviour by region

Overall, amongst youngsters aged 16-24, the highest amount of oral sexual experience was reported in Scotland and Wales (around 75%), South East (74%), Eastern region (73%), South West (72%) and North West (72%). The UK regions with lowest percentage of youngsters engaged in oral sex were London (64.7%) and West Midlands.
(65%). The difference in oral sex patterns between these regions was significant ($\chi^2=22.828; \text{df}=10; p=.01$).

Giving oral sex and receiving oral sex was a less popular practice amongst youngsters in Yorkshire and Humber, West Midlands and London (giving: $\chi^2=36.103; \text{df}=10; p=.001$), whereas receiving oral sex was also less popular amongst 16-24 year old in East Midlands ($\chi^2=21.102; \text{df}=10; p=.02$).

The highest number of 16 year olds with experience of oral sex was in the Midlands (45.4%) whereas the lowest number was in Scotland (15%). In the 17 years age group, oral sex experience was more prevalent amongst youngsters in Eastern region (59%) and Scotland (57.1%). The lowest amount of oral sex experience was reported by youngsters of this age from North East (11.8%) region. Amongst those aged 18, the highest amount of oral sex engagement was reported by young people from the South West (80%). The lowest amount of oral sex experience in this age group was reported by young people in London (52.7%) and in the East Midlands (54.2%). Amongst 19 year olds, the highest amount of oral sex was reported amongst youngsters in East Midlands (92%). The lowest amount of oral sex experience amongst 19 year olds was reported in London (62.3%) and the West Midlands (64.5%). Amongst 19 years olds, males and females from the West Midlands, South West and London reported to have significantly less oral sex than those from the remaining regions ($\chi^2=23.025; \text{df}=10; p=.01$).

For the age group 20 years old, the higher engagement in oral sex was in reported in the South West (93.8%) and Wales (93.8%). The lowest amount of young people with oral sex experience was in East Midlands (50%). Among 20 years olds, males and females from the East Midlands and West Midlands, London and South East reported giving/receiving significantly less oral sex than those from the remaining regions ($\chi^2=28.842; \text{df}=10; p=.001$).

Amongst 21 year olds, the highest numbers of youngsters with oral sex experience continued to be in Wales (93.3%) and the South West (92.9%) whereas only 73.8% from London have reported ever giving/receiving oral sex. Up to the age of 22, all males and females from South West region reported to have oral sex experience. The lowest percentage of oral sex experience in this age group was reported in West
Midlands (70%). In the 23 year olds group, the leading regions with highest number of males and females being engaged in oral sex were South East and Scotland (90.3%). The lowest amount of oral sex experience in this group was reported in West Midlands (61%). Amongst 24 year olds, 94.4% from South West and 93% from Eastern region have reported having experienced oral sex. The lowest amount of oral sex experience in this age group was reported in Wales (70%).

5.3.2.4 Patterns of oral sex behaviour by parental social class

Overall, there was no difference found in engagement in oral sex amongst youngsters by their parental social class (ps>0.6). However, at age 21, youngsters from professional/managerial, managerial/technical and skilled manual families were reporting having more oral sex than others ($\chi^2=23.04; df=5; p<.001$).

5.3.2.4 Patterns of oral sex behaviour by religious affiliations

Those 16-24 years old who reported to belong to any particular religion were found to give/receive less oral sex than those who did not report any religious affiliations ($\chi^2=87.209; df=1; p<.001$). Those of them for whom religion was important (very important and fairly important) reported a significantly lower level of engagement in oral sex than those for whom religion was not very important or not important at all ($\chi^2=224.183; df=3; p<.001$).

Those who reported attending church once a week, once in two weeks and once a month reported to have less oral sex than those who attend church less often, whose attendance varied or who never ever attend the church ($\chi^2=97.893; df=7; p<.001$).

Among different religious affiliations Roman Catholics and Anglican Protestants were found to report more oral sex ($\chi^2=159.987; df=6; p<.001$) and more vaginal sex ($\chi^2=127.113; df=6; p<.001$) than other Christians, Muslims and Hindu. Muslims ($\chi^2=252.334; df=6; p<.001$) reported significantly lower levels of engagement in oral sex than adolescents from other religious affiliations.
5.3.3 Preliminary analysis

Bivariate correlations among the study variables are shown in Table 5.4. 31 of 54 correlations were significant at p<.001 (equivalent to an overall p-level of .05). Significant correlations ranged in magnitude from .05 to .79 (in the small to high range; Cohen, 1988).

Engagement in oral sex practices was significantly correlated with academic qualification, alcohol intake, with religiosity, source of sex education and having experience of vaginal sex. Youngsters who got engaged in practices of oral sex were more likely to have higher academic qualifications, higher alcohol consumption and being engaged in vaginal sex. They were more likely not to consider religion to be personally important to them and not to have any religious affiliations. They were also more likely to have media as the main source of sex education.

Turning to inter-correlation between gender and engagement in oral sex practices, both genders, males and females, were equally likely to be engaged in oral sex practices. Being female was positively associated with belonging to a lower parental social class; consuming less alcohol on average and having more family and school orientated as main sources of sex education. Having higher academic qualifications was positively associated with higher parental social class, less consumption of alcohol, a higher probability to belong to any particular religion and more family/school orientated source of sex education.

Engagement in vaginal sex predictor variable was strongly and positively correlated with engagement in oral sex practice criterion variable, suggesting that they tap the same behavioural domains.

5.3.4 Primary analysis

The variables that showed significant correlation with engagement in oral sex formed the basis for the first regression model (Model 1).

From this first model, two further models were considered. Specifics of both regression models are contained in Table 5.5.
Table 5.4 Bivariate correlations among study variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Government region</td>
<td>.021</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parents’ social class</td>
<td>.042</td>
<td>-.056*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Academic qualification</td>
<td>.004</td>
<td>.067*</td>
<td>.213*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Alcohol intake</td>
<td>-.222*</td>
<td>-.090*</td>
<td>-.060*</td>
<td>-.032</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ever had vaginal sex</td>
<td>.012</td>
<td>-.001</td>
<td>.035</td>
<td>-.048</td>
<td>.253*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Importance of religion</td>
<td>.026</td>
<td>-.064*</td>
<td>.033</td>
<td>.052*</td>
<td>.292*</td>
<td>.240*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Belong to any religion</td>
<td>.021</td>
<td>-.020</td>
<td>.054*</td>
<td>.063*</td>
<td>.163*</td>
<td>.166*</td>
<td>.579*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Source of sex education</td>
<td>-.041</td>
<td>-.011</td>
<td>.174*</td>
<td>-.018</td>
<td>-.275*</td>
<td>-.216*</td>
<td>-.333*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Religious affiliation</td>
<td>-.059*</td>
<td>.013</td>
<td>-.090*</td>
<td>-.061*</td>
<td>.052*</td>
<td>.049</td>
<td>.033</td>
<td>.004</td>
<td>.004</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. Ever had oral sex</td>
<td>.017</td>
<td>.007</td>
<td>-.010</td>
<td>-.088*</td>
<td>.274*</td>
<td>.798*</td>
<td>.263*</td>
<td>.174*</td>
<td>-.243*</td>
<td>.066*</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Categorical variables were coded such as: a higher score identified being female, lower social class, lower level of education, higher alcohol intake, having experience of vaginal sex, not belong to any religion, lower personal importance of religion, more orientated on media source of sex education, having experience of oral sex

* Correlation is significant at the .001 level.
Table 5.5 Descriptions of three logistic regression models

<table>
<thead>
<tr>
<th>Regression model</th>
<th>Np</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 (preliminary)</td>
<td>7</td>
<td>All predictors where $\chi^2$-tested against the dependent variable and yielded a p-value ≤.05.</td>
</tr>
<tr>
<td>Model 2 (maximizing the sample)</td>
<td>6</td>
<td>As Model 1, but religious affiliation predictor, accounting for the largest proportion of missing data, removed in order to maximise the available sample.</td>
</tr>
<tr>
<td>Model 3</td>
<td>5</td>
<td>As Model 2, but non-significant predictors (where the associated Wald p≥.05) removed.</td>
</tr>
</tbody>
</table>

Note: Np = the number of predictors in the model

Model 2 arose because there was a problem with data on religious affiliation variable in Model 1, which led to the loss of almost three quarters of otherwise eligible respondents. The very nature of religious affiliation variable meant that those respondents who had not had any religious affiliations (58.8%) were excluded from the analysis. Model 3 was merely re-run of Model 2 with only significant predictors (Wald statistics (p>.05) remained. No influential points were identified and there was no evidence of multicollinearity between predictor variables in any three models. A significant issue was the presence of outliers in solution.

Table 5.6 summarises the results of the three regression models undertaken. All three models were statistically significant and all had a large model chi-squared, which indicated usefulness of variables in the regression equation (Afifi & Clark, 1996). Using Nagelkerke $R^2$ as a measure of effect size and defining a large effect where $R^2 > .26$ (Cohen, 1988), a large effect was present in all three models, with around 72-73% of the variance explained by the predictors.

Table 5.6 Summary statistics for each of the logistic regression models

<table>
<thead>
<tr>
<th>Valid N</th>
<th>Number of variables</th>
<th>Cases %</th>
<th>Model accuracy %</th>
<th>Nagelkerke (Pseudo)$R^2$</th>
<th>Model $\chi^2$</th>
<th>Df</th>
<th>Model p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>946</td>
<td>7</td>
<td>32.2</td>
<td>.732</td>
<td>709.69</td>
<td>7</td>
<td>.000</td>
</tr>
<tr>
<td>Model 2</td>
<td>2185</td>
<td>6</td>
<td>74.4</td>
<td>.722</td>
<td>1467.53</td>
<td>14</td>
<td>.000</td>
</tr>
<tr>
<td>Model 3</td>
<td>2185</td>
<td>6</td>
<td>74.4</td>
<td>.721</td>
<td>1467.3</td>
<td>14</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: p-values were not absolutely zero; they appeared so because of an artefact of reporting to three decimal places.

Parsimony led Model 1 to be the candidate for the best model, having only two variables in the equation. Model 1 also had better $R^2$ than Model 2. However, Model 1
suffered from a significant loss of the sample respondents due to the fact that 58.8% of respondents have not reported having any religious affiliations at all. On the other hand, Model 2 identified a larger proportion of respondents correctly as compared with Model 1 (93.1 against 91.8), and there was no improvement from the baseline for Model 3 compared with Model 2. Model 2 also had a better $R^2$ than Model 3.

After careful consideration, I decided to keep both models (Model 1 and Model 2), Model 1 (Religious Affiliation Model) as better explaining engagement in oral sex practices with inclusion of religious affiliation, and Model 2 (Integrated Model) as providing me with predictors of overall engagement in oral sex practices for the general population. The variables in the equation for Model 1 and Model 2 are summarised in Table 5.7.

Variables with negative regression coefficients ($B$-values) can be seen as factors: protecting from engagement in oral sex; the odds of being engaged in this behaviour drop as scores on this variables increase. Conversely, variables with positive $B$-values can be seen as risk factors of being engaged in oral sex behaviour; the odds of being engaged in this behaviour increase as scores on this variables increase. Thus, according to the Religious Affiliation Model (Model 1), risk factors for engagement in oral sex among young people aged 16-24 who belong to particular religions were: high alcohol intake and already having been involved in vaginal sex. The Integrated Model (Model 2) representing the overall sample, added to these two significant risk factors, three additional factors: having an academic degree or completing A-AS levels; a source of sex education (e.g. friends/first sexual partner) and personal importance of religious beliefs. Therefore, factors protecting from engagement in oral sex were identified as low alcohol intake, no previous experience of vaginal sex, having a school doctor/nurse as a main source of sex education in comparison to media and friends; not having academic qualifications, and holding strong or fairly strong personal or religious beliefs. However, whether predictors such as high (vs. medium) alcohol intake, a main source of sex education, having academic qualifications such GCSEs D-G or lower, and considering religion not to be personally important (vs. not important at all), have an effect on likelihood of being engaged in oral sex behaviour is questionable, as the value
<table>
<thead>
<tr>
<th>Predictors</th>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>SE</td>
<td>Wald</td>
<td>p</td>
</tr>
<tr>
<td>1. Alcohol intake</td>
<td></td>
<td>-0.877</td>
<td>0.060</td>
<td>0.275</td>
<td>0.021</td>
</tr>
<tr>
<td>(1) low (vs. high)</td>
<td></td>
<td>0.206</td>
<td>0.838</td>
<td>0.375</td>
<td>0.001</td>
</tr>
<tr>
<td>(2) medium (vs. high)</td>
<td></td>
<td>2.372</td>
<td>1.061</td>
<td>0.001</td>
<td>0.375</td>
</tr>
<tr>
<td>2. Vaginal sex</td>
<td></td>
<td>-5.565</td>
<td>0.409</td>
<td>5.565</td>
<td>4.000</td>
</tr>
<tr>
<td>(1) no (vs. yes)</td>
<td></td>
<td>10.691</td>
<td>0.030</td>
<td>10.691</td>
<td>0.000</td>
</tr>
<tr>
<td>3. Source of sex education</td>
<td></td>
<td>0.012</td>
<td>0.292</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>(1) mother &amp; family (vs. media)</td>
<td></td>
<td>-0.162</td>
<td>0.271</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>(2) school lessons (vs. media)</td>
<td></td>
<td>0.529</td>
<td>0.276</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>(3) friends (vs. media)</td>
<td></td>
<td>-0.166</td>
<td>1.136</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>(4) doctors/clinic (vs. media)</td>
<td></td>
<td>23.168</td>
<td>0.000</td>
<td>23.168</td>
<td>0.000</td>
</tr>
<tr>
<td>4. Academic qualification</td>
<td></td>
<td>0.796</td>
<td>0.394</td>
<td>2.394</td>
<td>0.043</td>
</tr>
<tr>
<td>(1) degree (vs. other)</td>
<td></td>
<td>0.916</td>
<td>0.336</td>
<td>2.916</td>
<td>0.043</td>
</tr>
<tr>
<td>(2) A,AS Levels (vs. other)</td>
<td></td>
<td>0.115</td>
<td>0.293</td>
<td>0.015</td>
<td>0.005</td>
</tr>
<tr>
<td>(3) GCSE’s A-C (vs. other)</td>
<td></td>
<td>-0.384</td>
<td>0.344</td>
<td>1.244</td>
<td>0.265</td>
</tr>
<tr>
<td>(4) GCSE’s D-G (vs. other)</td>
<td></td>
<td>-1.160</td>
<td>0.296</td>
<td>15.377</td>
<td>0.000</td>
</tr>
<tr>
<td>5. Importance of religion</td>
<td></td>
<td>-0.705</td>
<td>0.259</td>
<td>7.989</td>
<td>0.005</td>
</tr>
<tr>
<td>(1) very important (vs. not at all)</td>
<td></td>
<td>-0.277</td>
<td>0.233</td>
<td>1.418</td>
<td>0.234</td>
</tr>
<tr>
<td>(2) fairly important (vs. not at all)</td>
<td></td>
<td>-0.277</td>
<td>0.233</td>
<td>1.418</td>
<td>0.234</td>
</tr>
<tr>
<td>(3) not very important</td>
<td></td>
<td>-0.277</td>
<td>0.233</td>
<td>1.418</td>
<td>0.234</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>2.654</td>
<td>0.458</td>
<td>2.358</td>
<td>0.004</td>
</tr>
</tbody>
</table>

*Note:* B is the logistic regression coefficient
P-values of .000 are not absolutely zero; they appeared so because of an artefact of reporting to three decimal places
1.0 is increased in confidence intervals in all four cases (in each case, the associated p>.05).

Of the remaining predictors, an examination of the odds ratio (OR) tells us about the degree of risk or protection hold by each predictor. Those with an academic degree had twice the odds (OR=2.218) of being involved in oral sex than those with lower than GCSEs academic qualifications; similarly, those with A-AS level degree (OR=2.499) have around two-and-half-fold the odds than others. As far as protective factors are concerned, young people with low alcohol intake have around two-fifth of the odds of being involved in oral sex compared with those with high alcohol intake (OR=.447). Young people with very strong personal religious beliefs had around one-third of the odds to be involved in oral sex (OR= .313) compared with those for whom religion was not important at all, whereas those with fairly important religious beliefs had only half of the odds of being a case (OR=.494). The odds of having engaged in oral sex decreased the most (OR=.003) if the subject had no experience of vaginal sex compared to those who already had it.

5.4 Discussion

The aim of this study was, using the nationally representative sample of British adolescents taken from NATSAL II survey, to explore which of the demographic, behavioural, attitudinal, social and religious predictors of adolescent risky sexual behaviour, known from the research literature, will be most influential for engagement in oral sex behaviour amongst British adolescents. The findings from this study helped me to define the population for my next research on investigation of self-regulation processes involved in adolescents’ oral sex behaviour.

The results of this study have demonstrated that higher academic qualifications, higher amounts of alcohol consumption, engagement in vaginal sex, friends and media as main sources of sex education and personal unimportance of religious beliefs were the key predictors of engagement in oral sex among the young population in the UK. There was a noteworthy increase in giving oral sex for males (19%) between 16-17 years old and for females (18%) between 17-19 years old; and in receiving oral sex for males (17.7 %) between 17-18 years old and for females (18.1%) between 18-19 years old.
No gender differences were found in the level of engagement in oral sex, both young males and young females demonstrated the same level of engagement in oral sex. According to results, about 72% (33% of males and 39% females) from the total sample reported to ever having an oral sex experiences. Although females demonstrated slightly higher rates of being engaged in oral sex, the difference between genders was not significant. These findings are consistent with the findings from Stone, Hatherall, Ingham & McEachran study (2006) on oral sex and condom use among young people in the UK, although this NATSAL survey showed a lower level of engagement in oral and vaginal sex amongst young people in the UK than in the Stone et al (2006) study (oral sex: 54 vs.33 for males, 58 vs.39 for females; vaginal sex: 42 vs. 36 for males; 52 vs. 42 for females). The possible explanation for this may be the time difference between conducting the NATSAL survey (1999) and the Stone et al (2006) study. The other possible explanation is that the results, presented by Stone et al (2006), were based on a relatively small sample of 16-21 year old students from the South West (Southampton area), the majority of which (90%) were White British adolescents. The NATSAL survey data included a larger sample of respondents which were recruited from a wider multicultural religious community and therefore more accurately represented the distribution of population (and their oral sex practices) across the UK.

Additionally, in the Stone et al (2006) study, respondents reported to have more oral sex than vaginal sex (oral vs. vaginal sex: 54% vs. 42% for males and 58% vs. 52% for females). From the NATSAL data, I can see the inverse patterns of engagement in both sexual behaviours for 16-24 year olds. Nevertheless, the findings of Stone et al (2006) study provides support for my Integrated Model of predicting engagement in oral sex behaviour, as the majority of Stone’s participants were students (according to this model, the higher academic qualifications are seen as a risk factor for being engaged in oral sex).

This present study found a high correlation between engagement in oral sex and engagement in vaginal sex. NATSAL survey did not include the question whether respondents had oral sex before or after the time when they had first vaginal intercourse. This did not allow us to explore the relationships between the time point of initiating/performing oral sex and initiating/performing vaginal sex among young people. Logistic regression analysis identified engagement in vaginal sex as a high risk factor for being involved in oral sex, and this was in accordance with findings from Lindberg et al (2008) study in the USA, which drew on the use of data from NSFG
(National Survey of Adolescents Males and the National Survey of Family Growth). As this seems to be a plausible explanation for males’ behaviour (males typically report earlier onset of vaginal intercourse than females, CDC, 2006), perhaps, the different patterns exist between initiating/performing oral sex and vaginal sex for females and also, in different populations (e.g. large cities vs. rural villages), where the parental social class and geographical location could be important factors.

As opposite, Stone’s et al (2006) study found that, overall, 22% of 16-21 years old (24% of males and 21% of females) reported having oral sex but had not yet been engaged in vaginal intercourse. The NATSAL data showed that, overall, through all age points from 16 to 24, young people in the UK reported having been engaged more in vaginal sex than in oral sex. The NATSAL survey asked their participants about their age of the first sexual intercourse but did not specify whether this was an oral sex or vaginal sexual intercourse. On the other hand, Stone’s et al (2006) results are supported by the Brewster a& Tillman (2008) study from the USA which was based on NSFG survey data (used by Lindberg et al, 2008) which reported that engagement in practice of oral sex appears to delay the onset of vaginal sexual intercourse. Because all these studies suffered from different methodological limitations (e.g. cross-sectional design, choice of measure to assess sexual behaviour etc), in order to resolve this issue there is a clear need to conduct a prospective longitudinal study on adolescents’ sexual behaviour.

Regarding other demographic characteristics, this study found limited evidence that the geographical region of living was significant for predicting engagement in oral sex. A series of chi-square analysis revealed that there were regions with higher proportions of young people reporting to be engaged in oral sex at each age point, but, overall, the difference was not significant. Logistic regression analyses eliminated geographical location as a potential risk factor for being engaged in oral sex practices. So far, only the Fishbein et al (2007) study, based on an analysis of national survey of Canadian adults (CAMPAS Polling, 1998) reported significant differences in experiences of oral sex amongst five Canadian provinces, where these differences were independent from ethnical factors.

Not surprisingly, logistic regression analysis identified higher alcohol intake to be a risk factor for engagement in oral sex. The link between alcohol consumption and engagement in risky sexual behaviour is well established in many studies all over the
world (LaBrie & Eareywine, 2000; DiClemente, 1996; Langer et al, 1997; Cooper, 2002 etc).

This present study revealed that higher academic qualifications (a degree or A-AS Levels) could be a potential risk factor for engagement in oral sex. This finding was in accordance with the findings from Brewster et al (2008) and Brewster & Tillman (2008) studies in the USA, and Fishbein et al (2007) study in Canada. A higher than average proportion of white, educated adolescents engaging in oral sex practices also emerged from Stone et al (2006) study in England, indicating the importance of this tendency for the youngsters in the UK. The studies from the USA (e.g. Fielder & Carey, 2010; Kaestle & Halpern, 2007; Ompad et al, 2006) have also found that young people from a white ethnical background and with higher socio-economic status have a greater chance of engaging in oral sex practices. However, in this study, contrasting to the findings from the USA, I found no significant influences of respondents’ parents’ social class on their engagement in oral sex.

Looking at respondents’ religious affiliations included in the NATSAL survey, gave me a good idea about the popularity of oral sex practices among different religious groups. I found that, although there was a significant difference between the level of engagement in oral sex between White British and Muslim (Islam) British, the level of engagement in oral sex did not significantly differ for White British and for Asian British. Young Muslim British people reported the lowest level of engagement in oral sex behaviour. Being Christian (no denomination or other Christian), to belong to the Church of England and to the Church of Scotland increased the probability of engagement in oral sex compared with being Muslims (Islam), but decreased the probability of engagement in oral sex compared with being Hindu, Sikh and Buddhists. Those who belong to the Roman Catholic Church presented the highest level of engagement in oral sex compared with all other groups. These findings can be partly explained by racial, ethnic differences and cultural norms, but mostly by differences in the religious practices of different Churches. For example, Islam seems to be a very strict religion; the Christian Reformist Church (e.g. the Church of England or the Church of Scotland) have established limitations to some hedonistic recreational sex activities, such as oral sex, whereas Asian religions and the Roman Catholic Church seems to have more permissive attitudes towards these sexual practices.
One of the factors that significantly affected engagement in oral sex was the main source of sex education. According to the logistic regression results, having friends or a sexual partner as a main source of sex education significantly increased the probability of being engaged in oral sex, even compared with media and controlling for all other factors. This was true for both, the Integrated Model and the Religious Affiliation Model. These findings are correspondent with previous research on adolescents’ sexual behaviour and reflect how social factors, such as peer pressure, popularity and adolescents’ perception of their ‘best friends’ behaviour (Remez, 2000; Halpern-Felsher et al, 2005; Prinstein et al, 2003) can influence their involvement in oral sex.

5.4.1 Implications

This study was to my knowledge the first study that explored the impact of religious affiliations on the practice of oral sex, controlling for all other variables. Although research on religiosity and sexual practices has been established for decades (Mahoney, 1980; Koenig, 2001; Burris et al, 2009 etc), this study considered how the range of main religious practices in the UK may influence the patterns of oral sex behaviour.

The most interesting findings of this study appeared from including a religious affiliation variable in the list of predictors for the model of engagement in oral sex. Controlling for all other factors, entering religious affiliation significantly changed the Integrated Model. Accounting for religious affiliations left two out of five factors that were important for engagement in oral sex behaviour, which were alcohol intake and previous experience of vaginal sex. For the pool of respondents who reported religious affiliations, the personal importance of religion, source of sex education and academic qualification were no longer valid predictors for engagement in oral sex. There is one plausible explanation of these findings so far; this is that youngsters with religious affiliations counted for less than 50 per cent of the total sample, and a separate investigation may be needed in order to define their demographic characteristics, which could differ by gender, by education and by parents’ social class and geographic region of living (residence). For example, Muslims comprise 18% of the total religious affiliation sample, 25% of the sample were Christians (no denomination) and only about 3% and 7% were those who belong to the Church of Scotland and Asian religions, respectively. Considering the fact that the religious affiliation sample was so diverse and not proportionally distributed, only two out of five predictors seem to hold the universal values for Religious Affiliation Model. Further analysis need to be performed.
on each religious community sample separately, in order to determine which of the Integrated Model’s predictors (if any) will work for each particular cultural community, with reference to their religious norms. For example, the personal importance of religion, as a factor, may appear to have different meanings and different value for Christians and Muslims; the importance of academic qualification factors could vary among Muslims’ and Hindu’s females; the main source of sexual education, as a factor, could be considered differently in different cultures due to their religious norms.

Findings from this study demonstrate that friends of their own age (peer group) appeared to be the most influential source of sex education for young people, even in comparison to the media. This fact needs to be considered by education providers who attempt to close the gap between the school-based sex education and adolescents’ actual experience, by delivering more comprehensive sex education in school. Considering the level of engagement in oral sex among British adolescents, and the soaring trends in Sexually Transmitted Infections (STIs) among young people in the UK, which, even if they are curable, can have serious physical and psychological health consequences; sex educational programmes at schools need to be modernised in order to deliver a clear message about the consequences of engagement not only in the practice of vaginal sex, but also in the practice of oral sex. Through establishing a new system of ‘peer’ sex education as a government programme will provide appropriate training, delivered by doctors, medical students and nurses to young people – peer educators, can provide a valuable contribution for long-term provision of sexual health services to the young generation in the UK.

5.4.2 Limitations

This study contained some noteworthy limitations. For instance, our analysis was based on cross-sectional surveys which did not cover respondents younger than 16 years old. Ideally, future research on the practices of oral sex amongst adolescents in the UK should rely on longitudinal data and should consider the onset of both vaginal and oral sexual behaviours as they seem to be very closely bound together so that the onset of one type of sexual behaviour could be closely followed by another one, irrelevant of which one came first.

Another limitation of this study was in that the important variable of ethnicity was not included in the final analysis. In the future, longitudinal studies need to be more precise
in order to account for race, ethnicity and cultural differences and the diversity of the
British population, and also take into consideration religious affiliations and inter-
relations between them as a powerful element, which could and which would affect oral
sexual behaviour among young people within the UK.

5.4.3 Summary

A major contribution of this study to the research described in this PhD thesis, was in
supplying a more comprehensive understanding of the determinants of oral sex
behaviour amongst British adolescents. It also assisted with understanding the possible
inter-correlations between demographic, attitudinal, behavioural, social, cultural and
religious factors accounting for differences in oral sex engagement.

As I was interested in investigating the role of self-regulation in oral sex behaviour and
related psychological well-being, these findings helped me to identify the population of
the interest for my next study.

My choice of this population to be white, heterosexual, First Year university students
aged 18-19 years old was based on the following results from analysing NATSAL II:

a) A higher probability of engagement in oral sex was associated with higher
academic qualification (e.g. having A-Levels rather than GCSEs);

b) A significant increase in oral sex practice between age of 17 and 19 across all
regions and across both genders that can be attributed to young people leaving
home to study for their degree at university.

In addition, adolescents from the South West (i.e. my region of living and studying)
demonstrated the highest engagement in oral sex practice at age 18 than all other UK
regions. Therefore, they appeared to have the highest risk of engagement in oral sex
behaviour and consequently are more susceptible to its health-related consequences.

The study presented in the next chapter is intended to explore first year university
students’ oral sex experiences, its determinants and correlates from a self-regulation
perspective. It will also investigate the possible link between students’ engagement in
oral sex and their psychological well-being.
EXPLORING ORAL SEX BEHAVIOUR AMONGST FIRST YEAR UNIVERSITY STUDENTS: A LONGITUDINAL QUANTITATIVE STUDY (SPSH Survey)

6.1 Introduction

In the previous study, I aimed to identify the main characteristics and determinants of engagement in oral sex behaviour amongst British adolescents by analysing the data from National Survey of Sexual Attitudes and Lifestyles (NATSAL II). The results suggested that there was around a 20% increase in oral sex practice amongst adolescents between the ages of 17 and 19, and this increase varied by gender within this age group. The highest rate of engagement in oral sex across all UK regions appeared to be amongst adolescents aged 18 in the South West area. Considering this age group, the findings from analysis of NATSAL survey that adolescents with a higher level of education have a higher probability to get involved in oral sex activity and also taking into consideration my location at the University of Bath, I set up the present study to explore the university students’ oral sex behaviour in the South West area.

In accordance with previous research, the findings from NATSAL II have also demonstrated that adolescents’ engagement in oral sex was influenced by their peers' behaviour (i.e. social context predictors), their alcohol consumption (i.e. situational predictor), and strength of their religious and personal beliefs and attitudes (i.e. cultural and personal predictors). The multi-systemic perspective on adolescents’ risky sexual behaviour (Kotchick et al, 2001) argued that a comprehensive understanding of this behaviour must include some knowledge of both personal and environmental factors which may contribute to their decisions to engage in risk-promoting or risk-reducing sexual behaviour. It also suggests that the relations among these systems are transactional and interactional, with each system exerting both direct and indirect effects on behavior. Nevertheless, this perspective had been found to be problematic in identifying a mechanism that is underlying their model and in how factors from all its multiple systems of influence may interact or combine with each other to shape behaviour.
On the basis of research on the individual differences in self-control and determinants of risky sexual behavior (sensation-seeking, impulsivity, drinking behavior) (e.g. Raffaelli & Crockett, 2003; Quinne & Fromme, 2010), I intended to explore adolescents’ differences in self-control skills as a potential mechanism of shaping their oral sex behavior. Aiming for this, I have had to adopt a more general and holistic approach and to consider the university students’ sexual behaviour as a part of their complex and dynamic psycho-social self-regulatory functioning, and as an activity that is relevant and consistent with their goals and priorities, alongside their situational and personal characteristics.

Entering the university is really a challenging and demanding time for emerging adults, it is an important transition period for adolescents aged 17-19 years old. Not surprisingly, as part of their adjustment process for a relatively new life style, their reported PWB could be lower at the point of the entering to the university and then go up when the adjustment process is completed.

Previous research found some evidence that being engaged in the practice of oral sex could diminish PWB among adolescent females (Brady & Halpern-Felsher, 2007; Grello at al, 2006) but could increase the PWB in adolescent males (Owen et al, 2011). This present study aimed to investigate the ways in how engagement in oral sex can influence students’ mental and psychological well-being. On the basis of this stream of the literature on mental health outcomes related to the practice of oral sex amongst college students, I proposed that self-control, as applied to their oral sex behaviour, could potentially influence students’ well-being in terms of resulting health-related outcomes. On the example of oral sex behaviour, I aimed to explore the relationships between students’ oral sex behaviour, its correlates and their psycho-social consequences mediated through the constructs of self-control proposed by self-regulation theory.

Amongst correlates of oral sex behaviour I was particularly interested in the impact of reasons/motives for engaging in oral sex, as one of the most overlooked variables in research on oral sex behaviour, and the number of oral sex partners, as one of the most studied variables in terms of its consequences for physical health but not in terms of mental health. Findings from this research imply that the process of compliance with
cultural, religious and societal norms and rules will require from people with different personality characteristics different amount of self-regulatory resources. Therefore, the consequences of this adjustment should be seen in their behaviour and, in turn, could potentially affect their psychological well-being (PWB).

In addition to exploring the role of differences in trait and situational self-control, I was also interested in investigating if individual’s regulatory focus orientation (RFO) could be a variable influencing individual’s PWB in relation to oral sex behaviour.

According to the classic theory of achievement motivation (e.g. Atkinson, 1964; McClelland, 1961, 1965; McClelland, Atkinson, Clark & Lowell, 1953), for individuals with a subjective history of success, a new achievement task should elicit feelings of pride which produces anticipatory goal reactions that energize and direct behaviour to approach the new task goal (i.e. promotion regulatory focus orientation). Self-regulation for promotion orientated individuals is mainly concerned with the presence/absence of positive outcomes, with advancement, aspiration and accomplishment. For individuals with a subjective history of failure, a new task should elicit a feeling of shame which produce anticipatory goal reactions that energize and direct behaviour to avoid the new task goal (i.e. prevention regulatory focus orientation). Self-regulation for prevention orientated individuals is mainly concerned with the presence/absence of negative outcomes, with protection, safety and responsibility. Each regulatory focus orientation (RFO) use different means of goal attainment. Eagerness means involve ensuring ‘hits’ (against errors of omission/misses), while vigilance means involve ensuring ‘correct rejections’ (against errors of comission/false alarms).

Regulatory focus theory proposes that there is a ‘natural fit’ (Higgins, 2000) between promotion focus orientation and the use of eagerness means, and between prevention focus orientation and the use of vigilance means. This ‘fit’ appears in how the individuals value the outcomes of behaviour (gains/secure the losses) and how they evaluate their decisions as better (use of correct means for each orientation). Any discrepancies between individuals’ RFO and use of correct means in attaining goals are indicated by affective reactions (i.e. positive/negative emotions) (Higgins, 1999).

Using strategic means that ‘feel right’ while doing the task also lead people to ‘feel good’ about doing the task, and can also lead people to believe that what they are doing
is right (Freitas & Higgins, 2002). Moreover, ‘feeling right’ from regulatory fit can transfer to the evaluation of the rightness of what someone else is planning to do or has done (Camacho et al, 2003). The ‘fit’ effect also has been shown to be independent of participants’ moods. The results of Higgins Laboratory studies demonstrate that this difference in strategic orientation has important implications for decision-making and problem-solving, as well as for people’s experiences while engaging in different activities in their lives. The implications of this distinction for motivation and well-being have received insufficient attention in the achievement literature and needs to be examined further.

These results indicate that regulatory focus theory could be applied to oral sex behaviour to investigate the influence of RFO on PWB alongside other important variables, such as self-control and motivation to restrain sexual behaviour.

As the trait self-control is found to be a good predictor of success in many areas of life (e.g. Shoda et al, 1990; Tangney et al, 2004), including sexual life, I was interested in testing whether this relationship endures over time with concern to both oral sex practice and PWB.

### 6.2 The present study

The present study was conducted in three parts. The first part aimed to investigate the relationship between individual’s personal characteristics, engagement in oral sex and related variables, and their PWB outcomes, mediated through the concept of self-control at a cross-sectional level. Cross-sectional analyses proved to be useful in establishing the meaningful hypothesised associations (e.g. Kraemer et al, 2000).

In order to study hypothesised causal relationships and to assess the longevity of outcomes, as it is recommended (e.g. Pelletier et al., 2001), a longitudinal approach was used in the second part of this study. The second part aimed to assess the persistence of hypothesised relationships over time, by repeating measurements with the same sample of respondents four months later. In addition, the assessment of change over time rather than on a single occasion allowed examination of the factors within environmental contexts which could support or inhibit the dynamic processes involved in real and
perceived changes in PWB. A four month period was chosen to provide an opportunity for hypothesised changes in self-control and behaviour to take place, and to provide a baseline reference point consistent with that. In addition, it allowed to control for adjustment effects, given the fact that data collection at Time 1 was carried out after students entered the university (October-November 2012) and data collection at Time 2 was conducted after they were back at the university at the beginning of the new semester.

The examination of model tested through SEM was useful in establishing whether a hypothesised set of associations fit the data well. However, this present study was more concerned with a detailed assessment of associations between different levels of variables within the model over time, rather than the fit of the model as a whole. For instance, we planned to investigate whether the same self-control variables were equally good predictors of PWB at both time points, and to assess to what extent chronic individual differences in motivational orientations reflect meaningful PWB differences over time. Therefore, the analysis in part 2 was disentangled in order to explore each phase of the model over time more specifically, using different statistical techniques as appropriate.

The third part of this study tested if RFO could influence PWB at the second time point and if there would be any interactions between self-regulation variables and individual’s regulatory focus orientation.

Based on the previous research, in the present study I have developed and tested the following hypotheses:

*Hypothesis 1. There will be no gender differences in engagement in oral sex, in self-regulation skills and in sensation-seeking but there will be gender differences in the way the reasons for engagement in oral sex will affect males and females’ PWB scores.*

*Hypothesis 2. Engagement in oral sex will be related to individual’s trait self-control and dispositional ability to restrain sexual behaviour. Individuals with higher levels of self-control and dispositional ability to restrain sexual behaviour will demonstrate lower engagement in oral sex.*
Hypothesis 3. There will be increase in oral sex engagement and in PWB for both genders between the time of entering the university (time1) and over the next four months period (time 2). The increase in oral sex engagement will be associated with an increase in PWB scores in males but not in females.

Hypothesis 4. Overall PWB will be related to the individual differences in self-control skills (both trait self-control and dispositional self-control), the number of oral sex partners, reasons for being involved in oral sex, attachment style and alcohol consumption.

Hypothesis 5. As related to following engagement in oral sex practice at Time 2, PWB on entering the university (time1) will be a valuable predictor of PWB over a four month period (time 2).

Hypothesis 6. In particular, the individual’s Regulatory Focus Orientation (RFO) would affect their PWB at Time 2. Participants who have a promotion focus orientation would likely see their experiences of oral sex differently from participants who have a prevention focus orientation; they would take their experiences of oral sex more neutrally or positively and, in turn, will demonstrate higher PWB scores than participants with prevention orientation.

Hypothesis 7. There will be possible interactions between individual’s RFO and self-control skills in relation to PWB and engagement in oral sex.

6.3 Method

6.3.1 Participants

Participants were recruited by the principal investigator via inviting them to take part in online survey. A list of the ten universities within the local area was obtained, and universities were approached sequentially throughout the list. Finally four universities were recruited to take part; three of which were situated in the Bath and Bristol area (e.g. the University of Bath, Bath SPA University and the University of Bristol) and one was situated in the Plymouth area (The Nursing and Midwifery School of the University of Plymouth).
The initial sample constituted 237 first year students, 30% male (N=71) and 70% female (N=166), with a mean age of 18.98 (SD 1.16; range 18 to 24 years). 82% of the sample reported to be White Caucasian. Subjects studied varied and include Psychology (16.5%), Chemistry and Biochemistry (11.1%), Maths (10.1%), Medicine and Veterinary Medicine (8%), Modern Languages and Politics (8.9%); Nursing (Mental Health) and Midwifery (7.2%), Engineering and Architecture (5.5%), Natural Sciences (3.8%), Business and Economics (3.7%), Computer Sciences (3.4%), Pharmacy and Pharmacology (3.4%), Creative Art (3%), Law and Education (1.7% each, respectively) and Sport and Exercise (1.3%). The results for the cross-sectional analysis are therefore reported for these participants only.

Completed data on the two time points was collected for 180 of the original sample (male N=57 (31.7%), female N=123 (68.3%); mean age at time 2=18.94 years (SD=1.08; range 18-22 years old); 83% of the sample reported to be White Caucasian. The high dropout rate was partly caused by one of the four universities withdrawing from the study at time 2. The results for longitudinal analysis are reported for this sample.

6.3.2 Procedure

Prior to the data collection, consent to conduct the study was issued from the university of Bath Research Ethics Committee. In line with British Psychological Society guidelines (2000), head of departments were approached in the first instance, and those interested in taking part asked to provide access to their students. All students within the target year group were eligible to take part (first year students). The Presidents of the Student’s Unions in targeted universities were also contacted in order to assist with recruitment participants for this study. The advert inviting first year university students to take part in this survey was placed on the Student’s Home Page of the University of Bath. Participants from the Psychology Department at the University of Bath were also recruited to take part through Research Participation Scheme.

The Student Psychological and Sexual Health (SPSH) Survey was placed on Bristol Online Surveys website where this survey was completed by each participant privately and anonymously. The unique personal identification number (PIN) was
issued for each participant which was made up of a code allocated to participating institutions; a class code, plus a unique 4-digit personal identification number. To prevent multiple completions and monitor the response rate, every student approached received their own written PIN, irrespective of whether they participated. This PIN was distributed in an e-mail by the principal investigator alongside with study details and logon information. Before completing this survey, participants were invited to consent to participation in a longitudinal study that will seek further survey information after four months, through a computer generated e-mail reminder online.

The distribution list of the sample respondents was created according to the unique identifier codes allocated to each of the participating institutions. In order to increase the response rate, reminders were sent to everyone on the distribution list 3 times with the interval about 1 week after the initial e-mail invitation. The system-generated e-mail reminder was also issued to each participant at Time2 period, asking them to complete the second part of the study online. Each student was able to do this by pressing the e-mail link which re-directed them to the second part of online survey.

At Time 1 (October-November), the participants completed socio-demographic questions about gender, age, ethnic background and sexual orientation and the full online questionnaire pack. At Time 2 (February-March), the participants completed a questionnaire which contained transition questions about perceived changes that occurred since Time 1 related to their sexual status, alcohol consumption, and psychological well-being; and once again completed the Sexual Restraint Questionnaire (SRQ) (Gailliot & Baumeister, 2007) and Psychological Well-Being Questionnaire (Ryff, 1989) to assess any objective changes in their self-control related to sexual behaviour and psychological well-being.

6.3.3 Measures

The following measures listed below were combined onto a single questionnaire (Appendix 1).

Self-regulation. The impact of self-regulation was assessed using two standardised measures. The Brief Self-Control Scale (BSCS; Tangney, Baumeister & Boone, 2004) was chosen to minimise the response burden for participants, to measure trait-related
self-control (measured only at Time 1). This is the 13-items scale with items rated on a 5-point Likert scale where 1=not at all and 5=very much. The BSCS is associated with behavioural measures of self-regulation and a wide range of theoretically relevant outcomes (Tangney et al, 2004). The BSCS demonstrated good internal consistency (α ranging from .83-.85; Tangney et al, 2004) in research with college students and good internal consistency (α ranging from .83-.84; Quinne & Fromme, 2010) in research with university students. In the present work, the alpha coefficients were .87 and .88 (237 and 180 participants’ sample, respectively).

Self-control related to sexual behaviour was measured by the Sexual Restraint Questionnaire (SRQ) (Gailliot & Baumeister, 2007) which examines the ability to restrain sexual behaviour within the context of the demands of daily life (measured at Time 1 and Time 2). In the present study, 10-items version of this questionnaire showed alpha coefficients of .84 and .88.

Sensation-seeking was assessed by the Brief Sensation Seeking Scale (BSSS; Hoyle, Stephenson, Palmgreen, Lorch & Donohew, 2002) (measured only at Time 1). The BSSS is an 8-items self-report instrument with items rated on a 5-point Lickert scale ranging from 1=strongly disagree to 5=strongly agree. The BSSS previously demonstrate an adequate internal consistency (α =.74 -.79; Hoyle et al, 2002) with general population and in research with college students (α =.82; Fulton et al, 2010). The alpha coefficient in the present study was .80.

Psychological well-being was assessed using PWBS-42 version of the Ryff’s Scale of Psychological Well-Being (Ryff, 1989) (measured at both time points). Ryff’s inventory consists of a series of statements reflecting the six areas of psychological well-being: Autonomy, Environmental Mastery, Personal Growth, Personal Relationship, Purpose in Life, and Self-Acceptance. The medium form of PWBS is 42-items scale (7 items per scale) with items rated on 6-point Likert scale from 1=strong disagree to 6=strong agree. Both, the long and medium forms of PWBS showed good internal consistency (α ranging from .81-.83; Seifert, 2005). The validity of the instrument has been tested previously on adults age 25 or older but not on traditional-aged college students. In the present study, the alpha coefficients for total 42-item PWB were .84 (237 sample) and .85 (180 sample) at Time 1 and .85 at Time 2. Across PWB domains, the alpha coefficients were .68 and .71 at Time 1 and .83 at time 2 for Autonomy; .77 at Time 1
and .84 at time 2 for Environmental Mastery; .69 and .72 at Time 1 and .77 at time 2 for Personal Growth; .75 at Time 1 and .82 at time 2 for Personal Relationship; .72 at Time 1 and .79 at time 2 for Purpose in Life; .77 and .81 at Time 1 and .87 at time 2 for Self-Acceptance.

*Attachment style* (measured only at Time 1) was assessed by the Relationship Questionnaire (RQ) (Bartholomew & Horowitz, 1991) which required respondents to read four prototypical descriptions representing the four attachment categories and select the one that best describes them. Then respondents were directed to rate the degree to which each category fits them on the 7-point Likert scale. RQ questionnaire was reported adequate reliability, discriminant validity, predictive validity, and convergent validity for relationship questionnaire (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994; Bartholomew & Shaver, 1998).

*Regulatory orientation* was assessed by Regulatory Focus Questionnaire (RFQ; Higgins et al, 2001) which contains two psychometrically distinct subscales, the Promotion subscale and the Preventive subscale, reflecting an individual sense of their history of promotion or prevention success in goal attainment, respectively. 11 items of this questionnaire rated on 5-point Likert scale anchored by 1 (*never or seldom/never true/certainly false*) to 5 (*very often/always/certainly true*). Each of these scales exhibited good internal reliability (*α* =.73 for the Promotion scale and *α* =.80 for the Prevention scale; Higgins et al, 2001).

*Oral sex practice* at Time 1 were assessed by asking questions about the participant’s engagement in two types of oral sex (a) giving oral sex to the partner and (b) receiving oral sex from the partner, with the range of answer such as “yes”, “no” and “not applicable”. At Time 2 participants were asked if they engage in giving or receiving oral sex since Time 1. Participants were also asked to give their reasons for engagement or non-engagement in oral sex. The number of their lifetime oral/vaginal sex partners at Time 1 and Time 2 was measured by choosing an answer from 0 (*none*) to 4 (*more than 10*). The participants were asked to indicate whether they use any protection (condom use) during oral/vaginal sex (i.e. “yes” or “no”).

*Frequency of alcohol use* was assessed by the single question, “In the last year, how often did you drink alcohol on the average?” with the range of possible answers as
follow: 1 (I don’t drink alcohol), 2 (1 or 2 times a week), 3 (At least once a day), 4 (2 to 4 times a day), 5 (5 and more times a day). Frequency of intoxication was assessed by the single question “In the last year, when you have drunk alcohol, how many drinks did you consume, on the average, on one occasion?” with answers ranging from 1 (I do not drink) to 5 (more than 25 units). Quantity of alcohol use was assessed by asking the question “In the last year, how many times have you gotten drunk or ‘very high’ on alcohol?” with the range of possible answers from 1 (I didn’t get drunk) to 5 (4 or more times a day) (Stephenson et al, 2007).

Perceived changes in PWB and sexual life since Time 1 were assessed by two questions: ‘Since you last answer the survey, how much did your PWB/sexual life changed?’ rated on 7-point Likert scale ranging from -3(very much worse) to +3(very much better).

6.3.4 Analysis

6.3.4.1 Part 1: Cross-sectional data

Descriptive statistics were calculated separately for males and females. Differences across gender were explored using t-tests, Chi-Square tests and one-way ANOVA tests.

The adequacy of the theoretical cross-sectional model (see Figure 6.1) was tested via structural equation modelling (SEM) using AMOS Version 18.0 (Arbuckle, 2003). The model predicted that: a) individuals’ level of trait self-control and dispositional ability to restraint their sexual behaviour will affect their reasons to get engaged in oral sex and the number of their oral sex partners, b) alcohol, proneness to risky behaviour and attachment style will be variables that influence the strength of pathways between them, c) the impact of oral sex practice on the PWB will be a part of complex interaction between these variables and subject to gender and individual differences.

SEM assesses the fit of a hypothesized model to the variance and covariance matrices of the data, producing statistical indices which report on the disparity between the two. A number of indices were selected on which to base decisions of acceptable or unacceptable fit, as many vary in their accuracy according to the sample size, and there is no single gold standard (Hu & Bentler, 1999a). The adequacy of fit to the model in
the present study was judged on the basis of generally accepted thresholds of the following fit indices: the Comparative Fit Index (CFI) and Incremental Fit Index (IFI), which both compare the fit of the model to a hypothetical case in which all variables are unrelated; the Standardized Root Mean Square Residual (SRMR) which calculates the average differences between the sample and estimated variances and covariances; and the Root Mean Square Error of Approximation (RMSEA) as a measure of absolute fit. A model that fits the data well, should generate values close to or greater than .95 for the CFI and IFI, and values of (or less than) .08 and .06 for the SRMR and RMSEA, respectively (Hu & Bentler, 1999).

As my sample consisted mainly of females (70%), and I knew that there would be differences between genders in how some variables could affect the total PWB score, I did not re-specify the model to make it suitable for both males and females, and then use it as a baseline for gender invariance analysis (Bentler, 1995). Instead I investigated the relations between variables in the initial model using regression analysis (Tabachnick & Fidell, 2001). I used a series of hierarchical multiple regressions to examine the contribution of gender, trait and dispositional self-control, sensation-seeking, reasons for oral sex, the number of vaginal/oral sex partners and alcohol consumption to the prediction of PWB (DV). Finally, based on the prediction from my SEM model, I split file by attachment and re-ran the same regression analyses again in order to investigate how the attachment style could influence patterns of interactions between all variables that have been already established as predictors for PWB.

In all analyses, results were judged to be non-significant (NS) if p>.05.

6.3.4.2 Part 2: Longitudinal analysis

The change in PWB between two time points was assessed by a series of paired-samples t-tests (in total and according to gender). Two types of analysis were conducted in order to fully explore the nature of long term associations.
Figure 6.1 Hypothesised model of association between self-control, sensation-seeking, alcohol, oral sex variables, attachment and PWB
1) Categorical analysis

The degree of change in sexual status and in total PWB over the follow-up period was classified into one of four categories. This method was selected to assist in the ease of interpretation of findings.

According to their sexual status, participants were thus classified into one of four groups: sufficiently active in sex at both time points (termed maintainers), active at Time 1 but inactive at Time 2 (termed drop-outs), inactive at Time 1 but active at Time 2 (termed take-ups), and inactive on both occasions (termed avoiders) (Gillison, 2007).

The PBW scores were calculated and categorised according to Ryff Scales of Psychological Well-Being guidelines for dimensions of Well-Being (Ryff & Keyes, 1995), where, for each category, a high score indicates that the respondent has a mastery of that area in his or her life and, conversely, a low score shows that the respondent struggles to feel comfortable with that particular concept. There are no acknowledged cut-off points to determine good PWB, however, the traditional QoL criteria for determining poor QoL suggest it to be half of a standard deviation below the mean. In line with these recommendations, participants were categorised as having good or poor PWB, where the term good was intended to imply good enough PWB (i.e., not poor) rather than referring to highly scoring individuals. In recognition that the mean PWB score may vary over time (as a result of either response shift or true change in QoL), the threshold for poor PWB was estimated separately at Time 1 and Time 2, such that PWB was considered in relation to the peer group at that particular point in time. Using this threshold to classify good, or poor PWB at each time point, participants were categorised in to one of four groups: (1) no change, good PWB on both occasions, (2) improvement in PWB from poor at Time 1 to good at Time 2, (3) deterioration of PWB from good at Time 1 to poor at Time 2, or (4) no change, poor PWB on both occasions.

Change in categorisation over time was assessed using Chi-square tests ($\chi^2$). The degree of differences between groups was assessed through the calculation of effect sizes (Fitzpatrick, 1998), using Hedges g to weight for unequal sample size (Hedges, 1981). Differences in the means between and sex status and PWB groups were compared using a one-way ANOVA. In order to control the type I error rates associated with performing multiple statistical tests and to adjust confidence intervals, I used Bonferroni correction method that adjusts alpha levels regardless of the manipulation (Howell, 2002).
2) Regression analysis

A series of hierarchical multiple regressions were conducted to assess the relative importance of the most influential variables from cross-sectional analysis in predicting PWB over a four month period (Time2). A hierarchical approach was used to retain the theoretical coherence of the relationships between independent variables (cf., Tabachnick & Fidell, 2001). Time 1 Total PWB scores, and total scores for each domain, were entered into the equation as a first step of the analysis as these were expected to have the greatest explanatory power of the outcome at Time 2. Sexual status variables were entered as a second step into the equation as they are expected to be indirectly associated with behavioural and affective outcomes through self-control variables (e.g. trait self-control and dispositional ability to restrain sexual behaviour) and regulatory focus orientations (e.g. promotive and preventive), which were themselves added in the third stage of the analysis. The final step in the analysis was to add perceived change variables or personal beliefs into the equation, to assess whether they could add additional explanatory power to the model.

6.3.4.3 Part 3: Testing the impact of RFO on PWB and their possible interactions with other study variables

The series of multiple logistic regressions were conducted to explore the relationship between RFO and PWB at Time 2, including the other variables of importance from cross-sectional study. Any possible interactions between RFO and self-regulation variables in influencing PWB were tested by regressing self-regulation variables on RFO variables.

To reveal the influence of regulatory focus orientation on PWB in relation to oral sex practice, I examined the influence of Promotion vs. Prevention orientation on PWB scores for those who reported receiving/giving oral sex and whose who reported not receiving/giving oral sex since Time 1, separately. To illustrate the patterns of results, I classified participants in terms of whether, compared to others, they were relatively more promotion oriented or relatively more prevention oriented based on the median split on the difference between their RFO Promotion and RFO Prevention scores. To test the prediction that PWB scores will be influenced by promotion RFO, I coded poor
PWB as ‘1’ and good PWB as ‘2’, and regressed them on the RFO promotion and preventive scales in logistic regression.

In all analyses, results were judged to be non-significant (NS) if p>.05. Effect sizes (Hedges g) were considered to be large if above .80, moderate if above .50, small if above .20, but not to be meaningful if below .20. Partial eta squared was used to calculate effect sizes in ANOVA analyses, which represents the amount of variance which is accounted for by the effect.

6.4. Results

6.4.1. Cross-sectional Results

6.4.1.1 Descriptive Statistics

Descriptive statistics for both samples are summarised in Table 6.1.

6.4.1.2 Genders differences in engagement in oral sex, self-control, sensation-seeking and PWB

At Time 1, there was no statistically significant difference between genders in engagement in oral sex (p=0.5). From the frequency data obtained using the oral sex status, approximately 28% and 24% of males and approximately 20.5% and 18.7% of females reported not to be engaged in giving oral sex and receiving oral sex, respectively. 70% of males and 75% of females have already had experience in giving oral sex and 76% of males and 78% of females in receiving oral sex.

The results showed that there were no significant differences between genders on total trait self-control (TSC) score (although males score generally higher than females, p=0.3). There was a significant effect of gender on Sensation-Seeking (SS), with males scoring higher than females (t (236) = -55.636, p=.01), and on Dispositional Ability to Restrain Sexual Behaviour (DSC) at Time 1 (F=4.26, p=.04, eta²=.02 [small]), but not at Time 2.

At Time 1, in the 237 respondents sample, there was no statistically significant difference in the PWB score between males and females (p=0.2), but in the 180
Table 6.1 Demographic characteristic of two participants’ samples (Time1=237; Time2=180)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Gender</th>
<th>All valid cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (Time1=237)</td>
<td>Time2 (180)</td>
</tr>
<tr>
<td></td>
<td>N=71 (30%)</td>
<td>N=57 (31.7%)</td>
</tr>
<tr>
<td>How many vaginal sex partners have you had?</td>
<td>None</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>1 partner</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>2-4 partners</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>5-10 partners</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>More than 10</td>
<td>6</td>
</tr>
<tr>
<td>How many oral sex partners have you had?</td>
<td>None</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>1 partner</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>2-4 partners</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>5-10 partners</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>More than 10</td>
<td>11</td>
</tr>
<tr>
<td>Have you ever given oral sex?</td>
<td>Have not had oral sex yet</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Have you ever received oral sex?</td>
<td>Have not had oral sex yet</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Have you used protection during vaginal sex?</td>
<td>Not had sex yet</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Every time</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Sometime</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Rarely</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>3</td>
</tr>
</tbody>
</table>
### Demographics

<table>
<thead>
<tr>
<th>Protection during oral sex</th>
<th>Male (Time 1: 237)</th>
<th>Female (Time 1: 237)</th>
<th>All valid cases (Time 1: 237)</th>
<th>Male (Time 2: 180)</th>
<th>Female (Time 2: 180)</th>
<th>All valid cases (Time 2: 180)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not have sex yet</td>
<td>N=71 (30%)</td>
<td>N=166 (70%)</td>
<td>N=123 (68.3%)</td>
<td>N=71 (30%)</td>
<td>N=166 (70%)</td>
<td>N=123 (68.3%)</td>
</tr>
<tr>
<td>Every time</td>
<td>13 (18.3%)</td>
<td>30 (18.1%)</td>
<td>43 (18.1%)</td>
<td>3 (4.2%)</td>
<td>2 (3.5%)</td>
<td>5 (2.2%)</td>
</tr>
<tr>
<td>Sometime</td>
<td>3 (4.2%)</td>
<td>10 (6.0%)</td>
<td>13 (5.5%)</td>
<td>2 (3.5%)</td>
<td>9 (5.4%)</td>
<td>12 (5.1%)</td>
</tr>
<tr>
<td>Rarely</td>
<td>4 (5.6%)</td>
<td>9 (5.4%)</td>
<td>12 (5.1%)</td>
<td>3 (4.2%)</td>
<td>7 (5.0%)</td>
<td>11 (5.0%)</td>
</tr>
<tr>
<td>Never</td>
<td>48 (67.6%)</td>
<td>54 (67.6%)</td>
<td>67 (59.9%)</td>
<td>40 (64.4%)</td>
<td>40 (64.4%)</td>
<td>40 (64.4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have you been HPV vaccinated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To what extent do you consider yourself to be religious?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Slightly</td>
</tr>
<tr>
<td>Moderately</td>
</tr>
<tr>
<td>Very</td>
</tr>
<tr>
<td>Extremely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To what extent do you have strong personal beliefs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Slightly</td>
</tr>
<tr>
<td>Moderately</td>
</tr>
<tr>
<td>Very</td>
</tr>
<tr>
<td>Extremely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How often do you drink on average? Do not drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Medium</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>
respondents sample, males reported to have significantly higher PWB scores than females (t=2.135, df=178, p=.03).

Overall, amongst PWB domains, males scored higher than females on the Autonomy domain (t (236) =76.015, p=.002), whilst females scored higher than males on Personal Relationships domain (t (236) =71.196, p=.02). Both at Time 1 and Time 2, there was a significant effect of gender on Autonomy (F=11.79, p=.001, eta²=.06 [moderate] and F=11.51, p=.001, eta²=.06 [moderate], respectively) and Environmental Mastery (F=6.54, p=.01, eta²=.04 [moderate] and F=7.47, p=.007, eta²=.04 [moderate]) domains. Gender influenced Purpose in Life domain score at Time 1 (F=4.59, p=.03, eta²=.03 [small] but not at Time 2, and Self-Acceptance domain score at Time 2 (F=5.31, p=.02, eta²=.03 [small] but not at Time 1.

6.4.1.3 The role of dispositional and trait self-control in engagement in oral sex at Time 1

The series of one-way ANOVA tests revealed that there was a significant difference in TSC between groups in relation to engagement in giving oral sex (F(2,177)=5.08, p=.007). Post Hoc Tests showed that this difference was significant between those who reported never having had oral sex before and those who reported having had it (p=.017), and also between those who reported never having had oral sex before and those who reported not having giving oral sex (p=.007). Students who have not had oral sex yet showed the higher TSC score than those who have had oral sex and those who have had oral sex but have not given oral sex. Although there was no significant difference in TSC scores between groups in relation to engagement in receiving oral sex (p=0.1), there was a difference in TSC scores between those who have not had oral sex yet and those who received oral sex before (p=.04). Students who reported receiving oral sex before had significantly lower TSC scores in comparisons with other groups. Those who never received oral sex before demonstrated the highest TSC scores.

As far as DSC is concerned, there was a significant difference in DSC scores between groups in relation to both giving and receiving oral sex (F(2,177)=9.59, p<.001 and F(2,177)=10.32, p<.001). Post Hoc Analysis revealed that, in relation to giving oral sex, these differences existed between those who had not have oral sex yet and those who have had oral sex already (p<.001) and between those who did not have oral sex yet and
those who had not given oral sex (p=.001). Students who had not given oral sex yet demonstrated a significantly higher DSC scores, whereas those who had not given oral sex showed the lowest DSC scores. These was also a difference between students who had not have oral sex yet and those who have had it in relation to receiving oral sex (p<.001). Students who have not received oral sex yet showed a significantly higher level of DSC, whereas those who have received oral sex showed the lowest DSC scores.

6.4.1.4 Testing Cross-sectional Model

The results for the hypothesised model using SEM showed a reasonable fit to the data ($\chi^2 (195) = 480.32$, p<.001, CFI=841, IFI=844, RMSEA=.08). However, modification indices suggested that the disturbance terms of SC and DSC be allowed to co-vary, and the path between SS and PWB can be added, but the path between SS and Reasons, and SS and DSC can be removed as non-significant. Assuming that students’ PWB could be influenced by their inclination to get more sensational experiences, this path was added to the model and the others two were removed from the model, as it is in accordance with existing theory (Crocker et al, 2003). The re-specified model showed a marked improvement in fit to the data ($\chi^2 (184)= 297.894$, p<.001, CFI=937, IFI= 938, RMSEA=.05). The standardised solution for the final model is presented in Figure 6.2.

Goodness-of-fit related to hypothesized model was tested separately for males and females. Model fit statistics indicated an acceptable fitting for females (CFI=.908, RMSEA=.06) but an only a modest fit for males (CFI=.796, RMSEA=.11).

As my sample consisted mainly of females (70%), and I knew that there would be differences between genders in how some variables could affect the total PWB score, I investigated the relations between variables in the initial model using regression analysis.

Gender, reasons for oral sex (Reasons), SC, SS, DSC and two Alcohol variables were first entered. Then I multiplied gender by SC, SS and DSC scores (Aiken and West, 1991). These interaction terms were entered in the second step (Table 6.2).

In the first step the model was significant (F(7,229)=10.00, p=.001, $R^2=.23$). There was no significant main effect for gender, SS and Reasons, but SC and DSC scores appeared
Figure 6.2 Final cross-sectional model of relationship between self-control, sensation-seeking, alcohol, oral sex variables, attachment and PWB
to be significant predictors of PWB ($\beta=.43$, $t=5.92$, $p<.001$ and $\beta=.17$, $t=2.25$, $p<.03$, respectively) as much as average alcohol consumption ($\beta=-.16$, $t=-2.37$, $p<.02$) and frequency of being high on alcohol ($\beta=.27$, $t=3.05$, $p<.003$) variables.

**Table 6.2 Summary of hierarchical regression analysis for variables predicting PWB**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-3.565</td>
<td>3.367</td>
<td>-.063</td>
</tr>
<tr>
<td>Reasons</td>
<td>-1.349</td>
<td>1.113</td>
<td>-.079</td>
</tr>
<tr>
<td>TraitSelf-Control(TSC)</td>
<td>1.355</td>
<td>.229</td>
<td>.440***</td>
</tr>
<tr>
<td>Sensation-seeking(SS)</td>
<td>.480</td>
<td>.229</td>
<td>.114</td>
</tr>
<tr>
<td>DispositionalSelf-Control(DSC)</td>
<td>.547</td>
<td>.244</td>
<td>.165*</td>
</tr>
<tr>
<td>Alcohol consumption on average</td>
<td>-9.512</td>
<td>4.018</td>
<td>-.164*</td>
</tr>
<tr>
<td>How often high on alcohol</td>
<td>6.239</td>
<td>2.044</td>
<td>.256**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>32.163</td>
<td>30.035</td>
<td>.573</td>
</tr>
<tr>
<td>Reasons</td>
<td>-9.678</td>
<td>4.199</td>
<td>-.566*</td>
</tr>
<tr>
<td>TraitSelf-Control(TSC)</td>
<td>1.692</td>
<td>.789</td>
<td>.537*</td>
</tr>
<tr>
<td>Sensation-seeking(SS)</td>
<td>1.165</td>
<td>1.198</td>
<td>.277</td>
</tr>
<tr>
<td>DispositionalSelf-Control(DSC)</td>
<td>1.864</td>
<td>.912</td>
<td>.562*</td>
</tr>
<tr>
<td>Alcohol consumption on average</td>
<td>18.353</td>
<td>14.278</td>
<td>.316</td>
</tr>
<tr>
<td>How often high on alcohol</td>
<td>-10.083</td>
<td>8.059</td>
<td>-.414</td>
</tr>
<tr>
<td>Gender x Reasons</td>
<td>4.797</td>
<td>2.403</td>
<td>.537*</td>
</tr>
<tr>
<td>Gender x TraitSelf-Control(TSC)</td>
<td>-.242</td>
<td>.476</td>
<td>-.220</td>
</tr>
<tr>
<td>Gender x SensationSeeking(SS)</td>
<td>-.393</td>
<td>.674</td>
<td>-.221</td>
</tr>
<tr>
<td>Gender x DispositionalSC(DSC)</td>
<td>-.789</td>
<td>.520</td>
<td>-.697</td>
</tr>
<tr>
<td>Gender x Alcohol consumption</td>
<td>-15.693</td>
<td>8.407</td>
<td>.505</td>
</tr>
<tr>
<td>Gender x How often high alcohol</td>
<td>9.045</td>
<td>4.568</td>
<td>.651*</td>
</tr>
</tbody>
</table>

**NOTE:** *p<.05; **p<.01; ***p<.001. The dependent variable is the total PWB score

Adding the interaction terms in step 2 resulted in a significant increase in explained variance ($\Delta R^2=.05$, $p=.04$) and the final model was significant ($F(6,223)=2.30$, $p=.04$, $R^2=.28$). Adding interaction terms made significant contributions to predicting PWB, with the main effect of Alcohol variables became not significant whereas Reasons variable gaining significant effect ($\beta=-.566$, $t=-2.31$, $p<.02$). Interaction terms of SC, SS and DSC scores did not made significant contribution to predicting PWB.

Given the significant interaction effect of alcohol and reasons for oral sex as predictors of PWB, I examined the relation between these factors and self-control variables for males and females separately. I split the sample by gender and constructed separate regression using SC, SS and DSC, Reasons and Alcohol variables to predict PWB by gender. Variables were entered in two steps in order to explore the unique effect of
Reasons and Alcohol variables for males and females, respectively. The results are represented in Table 6.3.

**Table 6.3** Summary of hierarchical regression analysis for variables predicting PWB by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons</td>
<td>-4.770</td>
<td>1.380</td>
</tr>
<tr>
<td>Trait Self-Control(TSC)</td>
<td>1.435</td>
<td>.264</td>
</tr>
<tr>
<td>Sensation Seeking(SS)</td>
<td>.741</td>
<td>.356</td>
</tr>
<tr>
<td>Dispositional SC(DSC)</td>
<td>1.095</td>
<td>.317</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons</td>
<td>-4.881</td>
<td>1.500</td>
</tr>
<tr>
<td>Trait Self-Control(TSC)</td>
<td>1.450</td>
<td>.274</td>
</tr>
<tr>
<td>Sensation Seeking(SS)</td>
<td>.773</td>
<td>.432</td>
</tr>
<tr>
<td>Dispositional SC(DSC)</td>
<td>1.076</td>
<td>.327</td>
</tr>
<tr>
<td>Alcohol on average</td>
<td>2.655</td>
<td>5.028</td>
</tr>
<tr>
<td>How often high alcohol</td>
<td>-1.039</td>
<td>2.892</td>
</tr>
</tbody>
</table>

Note: p<.001; **p<.01; ***p<.001. The depend variable is the total PWB score.

In the first step the model was significant for males (F(4,66)=25.47, p<.001, R²=.61). There was a significant effect for all step 1 variables: for Reasons (β=.29, t= 3.45, p=.001), for SC (β=.52, t= 5.44, p<.001), for SS (β=.17, t= 2.08, p=.04), and for DSC (β=.34, t= 3.45, p=.001). Second step did not result in significant increase in explained variance for males.

For females, both steps in the model had nearly equal explanatory effect. The model was significant in the first step (F(4,161)=3.10, p<.02, R²=.61), with only one main significant effect for SC (β=.29, t= 2.94, p=.004). Adding the Alcohol variables in step 2 resulted in a significant increase in explained variance (ΔR²=.06, p=.006), and the final model was significant (F(2,159)=5.35, p=.006, R²=.13). Alcohol variables made a significant contribution in predicting PWB for females but not for males. All self-control, sensation-seeking and dispositional self-control were significant predictors explaining altogether about 61% of variances in PWB score for males, but only self-control accounted for 7% of variances in PWB score for females, with alcohol accounting for another 6% of variances.
Next, based on the SEM model, I added to the regression analysis two additional predictors related to the number of vaginal sex partners and the number of oral sex partners that could add more explanatory power to the model for females. These two predictors were entered in hierarchical multiple regression analysis in step 3 (Table 6.4).

As expected, the addition of step 3 variables did not add any explanatory effect to the model for males (both, step 2 and step 3 did not result in significant increase in explained variance). For females, adding two variables in step 3 resulted in a significant increase in explanatory power ($\Delta R^2=.04$, $p=.02$), and the final model was significant ($F(2,157)=3.96$, $p=.02$, $R^2=.172$).

Table 6.4 Summary of hierarchical regression analysis for variables predicting PWB for females

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait Self-Control(TSC)</td>
<td>.970</td>
<td>.330</td>
<td>.290**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait Self-Control(TSC)</td>
<td>1.208</td>
<td>.333</td>
<td>.361***</td>
</tr>
<tr>
<td>Alcohol consumption on average</td>
<td>-13.044</td>
<td>5.554</td>
<td>-.199*</td>
</tr>
<tr>
<td>How often high on alcohol</td>
<td>8.006</td>
<td>2.692</td>
<td>.301**</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait Self-Control(TSC)</td>
<td>1.141</td>
<td>.332</td>
<td>.341***</td>
</tr>
<tr>
<td>Alcohol consumption on average</td>
<td>-12.415</td>
<td>5.458</td>
<td>-.190*</td>
</tr>
<tr>
<td>How often high on alcohol</td>
<td>7.620</td>
<td>2.744</td>
<td>.286**</td>
</tr>
<tr>
<td>Number of vaginal sex partners</td>
<td>-8.332</td>
<td>3.746</td>
<td>-.365*</td>
</tr>
<tr>
<td>Number of oral sex partners</td>
<td>10.642</td>
<td>3.782</td>
<td>.477**</td>
</tr>
</tbody>
</table>

NOTE: *p<.05; **p<.01; ***P<.001. The depend variable is the total PWB score

There was a significant main effect for the number of vaginal sex partners ($\beta=-.365$, $t=-2.224$, $p=.03$) and for the number of oral sex partners ($\beta=.48$, $t=2.82$, $p=.006$).

Finally, based on the prediction from the SEM model, I split the file by attachment and ran the same regression analysis again in order to investigate how the attachment style could influence patterns of interactions between all variables that have been already established as predictors for PWB.

The patterns of results suggest that PWB for females is predicted by their trait self-control score, their alcohol consumption and by number of their sex partners. For males, both types of self-control and reasons for being involved in oral sex were significant predictors of their PWB score, whereas alcohol consumption and number of sex
partners contributed modestly to it. The results also demonstrated that the patterns of PWB scores could be differently affected by individuals’ attachment styles.

6.4.2 Longitudinal Results

6.4.2.1 Categorical analysis

Changes in oral sex engagement at Time 2

As expected, there was about a 20% and 27% increase in first year students who got engaged in giving and receiving oral sex, respectively, at Time 2.

The distribution of engagement in oral sex among participants is represented in Tables 6.5a and b.

Table 6.5a Proportion of respondents classified as active/inactive according to being engaged in practice of giving oral sex

<table>
<thead>
<tr>
<th></th>
<th>Time 2 inactive</th>
<th>Time 2 active</th>
<th>( \chi^2 ) (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inactive</td>
<td>36 (78.3%)</td>
<td>10 (21.7%)</td>
<td>22.001 (1,1) p&lt;.001</td>
</tr>
<tr>
<td>active</td>
<td>29 (21.6%)</td>
<td>105 (78.4%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.5b Proportion of respondents classified as active/inactive according to them as being engaged in practice of receiving oral sex

<table>
<thead>
<tr>
<th></th>
<th>Time 2 inactive</th>
<th>Time 2 active</th>
<th>( \chi^2 ) (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inactive</td>
<td>28 (71.8%)</td>
<td>11 (28.2%)</td>
<td>13.871 (1,1) p&lt;.001</td>
</tr>
<tr>
<td>active</td>
<td>38 (26.9%)</td>
<td>103 (73.1%)</td>
<td></td>
</tr>
</tbody>
</table>

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Changes in PWB at Time 2

Change in PWB from Time1 to Time2 was firstly assessed by series of paired-samples t-tests. The results indicated that there was a statistically significant improvement in PWB scores between Time1 and Time2, in total (t(179)=-4.47, p<.001) and for each gender (t(56)=-2.29, p=.03, for males, and t(122)=-3.84, p<.001, for females).

Talking about particular six domains of PWB, both male and female students reported significant improvements in personal relationships (PR) domain (t(56)=-2.29, p=.03 and t(122)=-3.95, p<.001, respectively). While male students also reported significant improvement in self-acceptance (SA) domain (t(56)=-2.34, p=.02), female students reported significant improvement in personal growth (PG) domain (t(122)=-3.41, p=.001) and purpose in life (PL) domain (t(122)=-3.6, p<.001).

Differences in PWB scores at Time 2 across genders

At Time 2, there was no significant difference in PWB scores between genders although overall male demonstrated the higher level of good PWB than female (p=0.4) (Tables 6.6a,b,c).

Table 6.6a Proportion of all participants experiencing change in PWB over time

<table>
<thead>
<tr>
<th></th>
<th>Time 2, Good PWB (N= 128, 71.1%)</th>
<th>Time 2, Poor PWB (N= 52, 28.9%)</th>
<th>χ² (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1 good PWB (N=109, 60.6%)</td>
<td>101 (92.7%)</td>
<td>8 (7.3%)</td>
<td>62.466 (1,1) p&lt;.001</td>
</tr>
<tr>
<td>Time 1 poor PWB (N=71, 39.4%)</td>
<td>27 (38%)</td>
<td>44 (61.9%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.6b Proportion of male experiencing change in PWB over time

<table>
<thead>
<tr>
<th></th>
<th>Time 2, Good PWB (N= 46, 80.7%)</th>
<th>Time 2, Poor PWB (N= 11, 19.3%)</th>
<th>χ² (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1 good PWB (N=40, 70.2%)</td>
<td>38 (95%)</td>
<td>2 (5%)</td>
<td>17.606 (1,1) p&lt;.001</td>
</tr>
<tr>
<td>Time 1 poor PWB (N=17, 29.8%)</td>
<td>8 (47%)</td>
<td>9 (52.9%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 6.6c Proportion of female experiencing change in PWB over time

<table>
<thead>
<tr>
<th>Time 1 good PWB (N=69, 56.1%)</th>
<th>Time 2, Good PWB (N= 82, 66.7%)</th>
<th>Time 2, Poor PWB (N= 41, 33.3%)</th>
<th>χ² (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>63 (91.3%)</td>
<td>6 (9%)</td>
<td>42.931 (1,1)</td>
</tr>
<tr>
<td>Group B</td>
<td>6 (9%)</td>
<td>Group C</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Time 1 poor PWB (N=54, 43.9%)</td>
<td>19 (35.2%)</td>
<td>44 (64.8%)</td>
<td></td>
</tr>
</tbody>
</table>

Gender differences were further tested by comparing means of t-tests. Table 6.4.3 shows the change in 6 domains of PWB and self-control variables for the Time2 respondents sample, providing data at both time points.

Table 6.7 Mean values of PWB domains and self-control variables at both time points

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male M (SD)a</th>
<th>Female M (SD)b</th>
<th>t</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Self-Control</td>
<td>42.89 (9.73)</td>
<td>41.35 (7.59)</td>
<td>1.34</td>
<td>.01</td>
</tr>
<tr>
<td>Sensation-Seeking</td>
<td>25.87 (6.1)</td>
<td>23.68 (6.27)</td>
<td>4.84*</td>
<td>.03</td>
</tr>
<tr>
<td>t1DispositionaSelf-Control</td>
<td>35.23 (8.52)</td>
<td>37.79 (7.17)</td>
<td>4.26*</td>
<td>.02</td>
</tr>
<tr>
<td>t1PWBAutonomyDomain</td>
<td>30.33 (5.36)</td>
<td>27.46 (5.15)</td>
<td>11.79***</td>
<td>.06</td>
</tr>
<tr>
<td>t1PWBEnvironmMasteryDomain</td>
<td>29.72 (5.22)</td>
<td>27.52 (5.43)</td>
<td>6.54***</td>
<td>.04</td>
</tr>
<tr>
<td>t1PWBPersonalGrowthDomain</td>
<td>31.42 (4.33)</td>
<td>30.35 (5.52)</td>
<td>1.67</td>
<td>.01</td>
</tr>
<tr>
<td>t1PWBPersonalRelationDomain</td>
<td>29.07 (6.35)</td>
<td>30.16 (6.27)</td>
<td>1.71</td>
<td>.01</td>
</tr>
<tr>
<td>t1PWBPersonlifeDomain</td>
<td>30.72 (6.09)</td>
<td>28.75 (5.53)</td>
<td>4.59*</td>
<td>.03</td>
</tr>
<tr>
<td>t1PWBSelfAcceptanceDomain</td>
<td>30.05 (7.03)</td>
<td>28.26 (5.89)</td>
<td>3.18</td>
<td>.02</td>
</tr>
<tr>
<td>T1TotalPWB</td>
<td>181.32 (26.81)</td>
<td>172.51 (25.22)</td>
<td>4.56*</td>
<td>.03</td>
</tr>
<tr>
<td>t2DispositionaSelf-Control</td>
<td>36.21 (9.59)</td>
<td>36.94 (7.74)</td>
<td>.29</td>
<td>.02</td>
</tr>
<tr>
<td>t2PWBAutonomyDomain</td>
<td>31.28 (6.09)</td>
<td>28.12 (5.68)</td>
<td>11.51***</td>
<td>.06</td>
</tr>
<tr>
<td>t2PWBEnvironmMasteryDomain</td>
<td>30.81 (5.07)</td>
<td>28.34 (5.87)</td>
<td>7.47***</td>
<td>.04</td>
</tr>
<tr>
<td>t2PWBPersonalGrowthDomain</td>
<td>32.18 (5.17)</td>
<td>32.19 (4.81)</td>
<td>.001</td>
<td>.00</td>
</tr>
<tr>
<td>T2PWBPersonalRelationDomain</td>
<td>30.98 (6.35)</td>
<td>32.57 (5.49)</td>
<td>2.82</td>
<td>.02</td>
</tr>
<tr>
<td>t2PWBPersonlifeDomain</td>
<td>30.61 (5.39)</td>
<td>30.71 (6.0)</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>t2PWBSelfAcceptanceDomain</td>
<td>31.32 (6.38)</td>
<td>28.87 (6.75)</td>
<td>5.31*</td>
<td>.03</td>
</tr>
<tr>
<td>t2TotalPWB</td>
<td>187.18 (25.53)</td>
<td>180.78 (26.97)</td>
<td>2.64</td>
<td>.01</td>
</tr>
</tbody>
</table>

Notes: a N-male=57, b N-female=123. Effect size is represented by partial eta squared.
*p<.05; **p<.01 and ***p<.001

Two one-way ANOVA tests were run in order to compare the differences in PWB scores between genders among those who reported to be engaged and not engaged in oral sex practice at Time2. All Post Hoc Tests used Bonferroni correction.

The first one-way ANOVA test, with Reasons for being engaged in oral sex as independent variable and PWB score as dependent variable, revealed that there were no
significant differences between PWB scores at Time 2 and males’ reasons for being engaged in oral sex \( (p=0.6) \). Conversely, females’ PWB scores appeared to be affected by their reasons for engagement in oral sex \( (F=2.37, \ df=5, \ p=.05) \). Post Hoc Test showed that there was a significant difference between PWB scores amongst females engaged in oral sex for power and pleasure reasons \( (p=.04) \); amongst females engaged in oral sex by power and part of committed relationship reasons \( (p=.01) \); amongst females engaged in oral sex by power and two way system reasons \( (p=.01) \); and amongst females engaged in oral sex by partner request and two ways system reasons \( (p=.04) \). The results are graphically represented in Figure 6.3.

**Figure 6.3** PWB scores at Time 2 according to gender and reasons for being engaged in oral sex

![Figure 6.3](image)

Independent t-test revealed that, amongst both genders, males who have been engaged in oral by power motives had a significantly higher PWB score than females \( (t(6)=2.62; \ p=.04) \). Females who reported to be engaged in oral sex by power motives had the lowest Time 2 PWB score than all other groups, whereas females who did oral sex because they considered it to be a two way system demonstrated the highest PWB scores. As opposites, males engaged in oral sex by power motives showed the highest Time 2 PWB score than all other groups, whereas males who did it by partner request or as alternative to vaginal sex showed the lowest PWB scores.

The second one-way ANOVA test, with Reasons for NOT being engaged in oral sex as independent variable and PWB score as dependent variable, revealed that there also
were no significant differences between PWB scores at Time 2 and males’ reasons for NOT being engaged in oral sex (p=0.2). As opposite, females’ PWB scores appeared to be affected by their reasons for NONE engagement in oral sex (F(6, 42)=3.75, p=.004). Post Hoc Test showed that there was a significant difference between PWB scores amongst females who did NOT engage in oral sex by not fancy a partner and: fear (p=.02), ‘not right time/place’ reasons (p=.02), oral sex as unattractive/unpleasant, (p=.04), ‘do not want to do oral sex’ reasons (p=.05); amongst females who did NOT engage in oral sex by ‘not want to do it’ reasons and ‘feeling uncomfortable/no trust reasons’ (p=.01); amongst females who did NOT engage in oral sex by ‘feeling uncomfortable/no trust’ reasons and: fears (p=.01), ‘not right time/place’ reasons (p=.01), oral sex as unattractive/unpleasant (p=.01), and ‘moral/not in relationship yet’ (p=.02). The results are graphically represented in Figure 6.4.

**Figure 6.4** PWB scores at Time 2 according to gender and reasons for NOT being engaged in oral sex

Independent t-test revealed that, amongst both genders, males who have NOT engaged in oral sex because they did not fancy a partner had a significant higher PWB scores than females (t(7)=3.55; p=.01). Females who reported NOT engaging in oral sex because they did not fancy a partner and because they felt uncomfortable or did not trust the partner had the lowest Time 2 PWB scores than all other groups, whereas females who did not have oral sex for moral reasons and because they consider themselves not being in right place/right time demonstrated the highest PWB scores. Oppositely, males who had NOT engaged in oral sex because they did not fancy a partner and because
they did not consider themselves being in the right place/right time had the highest Time 2 PWB score than all other groups, whereas males who had NOT engage in oral sex because they do not wanted to appeared to have the lowest PWB scores.

The role of dispositional and trait self-control in engagement in oral sex at Time 2

At Time 2, there was no difference in TSC scores between those who have had given and who have had received oral sex since Time 1 (p=0.3).

In comparison with TSC scores at Time 2, there was a significant difference in DSC scores between those who have given and who have received oral sex since Time 1 and those who have not (F(1,178)=21.13, p<.001 and F(1,178)=11.05, p=.001, respectively). Students who reported not giving oral sex and not receiving oral sex since Time1 demonstrated a higher level of DSC scores than those who did report to be engaged in oral sex.

6.4.2.2 Regression Analysis

Descriptives
In Table 6.8, means, SDs and correlations of self-control and all the variables at Time 2 are presented.

Table 6.8 Means, SDs and correlations of the study variables

<table>
<thead>
<tr>
<th>Variables and range</th>
<th>M</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SC</td>
<td>41.83</td>
<td>8.33</td>
<td>.43**</td>
<td>.39**</td>
<td>.06</td>
<td>-.07</td>
<td>-.02</td>
<td>-.14</td>
<td>-.03</td>
<td>.12</td>
<td>.03</td>
</tr>
<tr>
<td>2. t2DSC</td>
<td>36.71</td>
<td>8.34</td>
<td>.16**</td>
<td>.07</td>
<td>-.09</td>
<td>-.26</td>
<td>-.48**</td>
<td>-.09</td>
<td>-.02</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>3. t2PWB</td>
<td>182.81</td>
<td>26.61</td>
<td>.32**</td>
<td>-.004</td>
<td>.13</td>
<td>.03</td>
<td>-.02</td>
<td>.09</td>
<td>.37**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ChangePWB</td>
<td>.31</td>
<td>1.07</td>
<td>.44**</td>
<td>.16*</td>
<td>.02</td>
<td>.26**</td>
<td>-.05</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ChangeSex</td>
<td>.33</td>
<td>1.13</td>
<td>.26**</td>
<td>.21**</td>
<td>.29**</td>
<td>.04</td>
<td>.18*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Vag partenrs</td>
<td>.82</td>
<td>.67</td>
<td>.71**</td>
<td>-.06</td>
<td>-.04</td>
<td>.15*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Oral partenrs</td>
<td>.86</td>
<td>.75</td>
<td>-.07</td>
<td>.04</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. ChangeAlch</td>
<td>.02</td>
<td>.93</td>
<td>-.04</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Religious B</td>
<td>1.53</td>
<td>.92</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Personal B</td>
<td>3.31</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: SC=Trait Self-Control; t2DSC= Dispositional ability to restraint sexual behaviour at Time 2; ChangePWB=perceived change in PWB at Time2; Changesex=perceived change in sexual life at Time2; Vagpartnrs=how many vaginal sex partners since time1; Oralpartnrs=how many oral sex partners since time1; Changealch= perceived change in alcohol consumption since time1; ReligiousB=to what extent do you have religious beliefs; PersonalB= to what extent do you have personal beliefs.

Note 2: N=180, *p<.05; **p<.01 and ***p<.001
Trait self-control and the dispositional ability to restrain sexual behaviour correlated significantly with each other and with total PWB at Time2, but not with perceived changes in PWB at time 2. Dispositional ability to restrain sexual behaviour significantly correlated with the number of oral sex partners since Time1, whereas the trait self-control did not. As expected perceived change in PWB (but not changes in sex life) at Time 2 correlated with the total PWB scores at Time2. While PWB at Time 2 significantly correlated with personal beliefs, both self-control variables did not correlate with them.

**Assessing PWB at Time 2 in relation to self-control and reported perceived changes in PWB and sexual life since Time1**

Change in PWB at Time 2 in relation to self-control variables and perceived changes in PWB and sexual life was assessed by a multiple regression which included PWB at Time 1 entered on stage 1, two self-control variables on stage 2, engagement in oral sex since Time1 on stage 3, perceived changes in PWB and sex life on stage 4 and students’ religious or personal beliefs on stage 5. The results are summarised in Table 6.9.

**Table 6.9 Multiple regression analysis predicting PWB at Time2**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>R²-change</td>
<td>Final β</td>
</tr>
<tr>
<td>Step1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1PWB</td>
<td>.57***</td>
<td>.26</td>
<td>.44***</td>
</tr>
<tr>
<td>Step2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TraitSelfControl</td>
<td>.39***</td>
<td>.16</td>
<td>.17**</td>
</tr>
<tr>
<td>Step3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ReceivedOral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PercChangePWB</td>
<td>.21***</td>
<td>.04</td>
<td>.29***</td>
</tr>
<tr>
<td>PercChangesex</td>
<td>-.15*</td>
<td>.02</td>
<td>-.19***</td>
</tr>
<tr>
<td>Step5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PersonalBeliefs</td>
<td>.26***</td>
<td>.06</td>
<td>.26***</td>
</tr>
</tbody>
</table>

Notes: N=180, R²=.54; N=123, R²=.50

**Note:** *p<.05; **p<.01 and ***p<.001

The analysis revealed that in total PWB at Time 2 was predicted by students’ PWB at Time 1 (accounting for 26% of variances, their trait self-control (16%), their perception of changes in PWB (4%) and in sexual life (2%) and their personal beliefs (6%).
The picture appeared to be different for genders. For male students, trait self-control was not a significant predictor of changes in PWB at Time 2. For males, 53% in their PWB at Time 2 was accounted by their PWB at Time 1, 10% by their perception of changes in their PWB and sexual life, and 9% by their engagement in oral sex (receiving oral sex predicted a significant improvement whereas giving oral sex predicted a significant decline in their PWB at Time2).

For female students, trait self-control appeared to be a significant predictor of their PWB at Time 2 (3%). While 34% of variances in their PWB at Time 2 were explained by their PWB at Time 1, 4% related to their perception of changes in their PWB and 9% were due to their personal beliefs.

6.4.3 Testing the impact of RFO on students’ PWB at Time 2

6.4.3.1 Impact of RFO on PWB at Time 2

Impact of RFO on PWB at Time 2 was assessed by adding to previous regression equations two RFO variables (i.e. promote and preventive orientations).

The results (Table 6.10) revealed that addition of RFO to the equation undermined the effect of students’ trait self-control in predicting PWB at Time 2 and, in total, increased the amount of variance accounting for PWB at Time 2 by their PWB at Time 1 (from 26 to 40%). Whereas students’ perception of changes in their PWB and sexual life kept 6% of predictive power, the influence of promote RFO accounted for 12% in PWB at Time2.

This picture again differed by gender. Whereas for male students the presence of new variable in regression equations did not make any difference to previous predictions, for female students promote RFO replaced the effect of trait self-control in predicting their PWB at Time2, accounting for 17% of variance explained.
Table 6.10 Multiple regression analysis predicting PWB at Time2, including RFO

<table>
<thead>
<tr>
<th>Predictors</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>R²-change</td>
<td>Final β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1PWB</td>
<td>.63***</td>
<td>.40</td>
<td>.35***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TraitSelfControl</td>
<td>.153*</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ReceivedOral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GivenOral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PercChangePWB</td>
<td>.21***</td>
<td>.04</td>
<td>.29***</td>
</tr>
<tr>
<td>PercChangesex</td>
<td>-.15*</td>
<td>.02</td>
<td>-.16**</td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote</td>
<td>.43***</td>
<td>.12</td>
<td>.39***</td>
</tr>
<tr>
<td>PersonalBeliefs</td>
<td>.21***</td>
<td>.04</td>
<td>.21***</td>
</tr>
<tr>
<td>Notes: N=180, R²=.64</td>
<td>N=57, R²=.72.4</td>
<td>N=123, R²=.64.3</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p<.05; **p<.01 and ***p<.001

6.4.3.2 Impact of RFO, self-control variables and students’ perception of changes in their PWB and sex life since Time1 on six domains of PWB at Time 2

To complete the picture, I further looked at the impact of all above mentioned variables on particular six domains of PWB at Time 2. The results are summarised in Table 6.11.

As it could be expected from the previous analyses, PWB at Time 1 was a significant predictor of PWB at Time2 in all six domains, and it holds more explanatory power for males than for females.

DSC proved to be important in predicting changes in PWB at Time 2 in Autonomy domain (2%) and Purpose in Life domain (3%) for males but not in any PWB domains for females, whereas TSC accounted for 9% in variances in predicting PWB at Time 2 in environmental mastery (EM) domain for males and personal relationship (PR) and purpose in life (PL) (6% in each), domains for females.
### Table 6.11 Multiple regression analysis predicting scores in six PWB domains at Time2

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Autonomy</th>
<th>Environmental Mastery (EM)</th>
<th>Personal Growth (PG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>β</td>
<td>R² change</td>
<td>Final β</td>
<td>β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1DomainScore</td>
<td>.81***</td>
<td>.65</td>
<td>.72***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PromoteRFO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSC</td>
<td>.16*</td>
<td>.02</td>
<td>.16*</td>
</tr>
<tr>
<td>DSC</td>
<td>.42**</td>
<td>.09</td>
<td>.31**</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PercChangePWB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PercChangesex</td>
<td>-.19**</td>
<td>.04</td>
<td>-</td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td>.21**</td>
<td>.04</td>
<td>.17**</td>
</tr>
<tr>
<td>Notes:</td>
<td>N=57, R²=.74.6</td>
<td>N=123, R²=.43.6</td>
<td>N=57, R²=.55</td>
</tr>
</tbody>
</table>
Table 6.11 (continue) Multiple regression analysis predicting scores in six PWB domains at Time2

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Personal Relationship (PR)</th>
<th>Purpose in Life (PL)</th>
<th>Self-Acceptance (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>β</td>
<td>R² change</td>
<td>Final β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1DomainScore</td>
<td>.51***</td>
<td>.53</td>
<td>.45***</td>
</tr>
<tr>
<td>Step 2</td>
<td>ReceivedOral</td>
<td>.40***</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>GivenOral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>t2Oralsexprtn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>TSC</td>
<td>.25**</td>
<td>.06</td>
</tr>
<tr>
<td>DSC</td>
<td></td>
<td>.23**</td>
<td>.03</td>
</tr>
<tr>
<td>Step 4</td>
<td>PromoteRFO</td>
<td>.29***</td>
<td>.07</td>
</tr>
<tr>
<td>PreventRFO</td>
<td>.21*</td>
<td>.03</td>
<td>.21*</td>
</tr>
<tr>
<td>Step 4</td>
<td>PercChangePWB</td>
<td></td>
<td>.27***</td>
</tr>
<tr>
<td>PercChangesex</td>
<td></td>
<td>-.23*</td>
<td>.04</td>
</tr>
<tr>
<td>Step 5 Personal B</td>
<td>.29***</td>
<td>.07</td>
<td>.29***</td>
</tr>
</tbody>
</table>

Notes: N=57, R²=.42  N=123, R²=.38  N=57, R²=.77  N=123, R²=.37  N=57, R²=.67  N=123, R²=.69
Promote orientation appeared to be a more salient predictor than self-control in explaining changes in every PWB domain for females. For males, promotion orientation added 7% to explaining improvement in Autonomy domain score at Time 2 and 4% in personal growth (PG) domain score at Time 2. For females, having both promotion and preventive RFO improved their scores in PR domain at Time 2 (7% and 3%, respectively).

Students’ perception of changes in PWB at Time2 accounted for 8% improvement in scores in EM domain and 7% in purpose of life domain (PL) at Time2 for males, and 5% for improvement in EM domain, 5% in SA domain and 6% in PG domain at Time 2 for females. For both genders, perception of changes in sex life accounted for a decline in scores for different domains at Time2: for males it accounted for 4% of decline in scores both in Autonomy and PL domains, whereas for females it accounted for 3% of decline in PG score.

The number of oral sex partners since Time1 and engagement in giving oral sex since Time 1 were significantly negative predictor of males’ scores (4% decrease) in PL domain at Time 2, whereas receiving oral sex significantly and positively contributed (9%) to the score in PL domain for males.

6.4.3.3 Exploring interactions between RFO and self-control, and their influence on PWB at Time2

To investigate the interaction between RFO and self-control variables in their influence on PWB at Time2, I firstly examined the correlations between self-control variables and RFQ variables. Table 6.12 presents Means, SD and inter-correlations of self-control and RFQ variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Total TraitSelfControl</td>
<td>41.84</td>
<td>8.33</td>
<td>.44**</td>
<td>.43**</td>
<td>.43**</td>
</tr>
<tr>
<td>2.PromoteRFO</td>
<td>20.87</td>
<td>3.19</td>
<td>.12</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>3.PreventRFO</td>
<td>17.05</td>
<td>3.97</td>
<td>.41**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.Total DispositionalSC</td>
<td>36.71</td>
<td>8.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N=180, *p<.05; **p<.01 and ***p<.001
As it could be seen from the table, trait self-control trait correlated significantly with both RFQ variables; whereas DSC correlated with preventive but not with promote RFO. As expected, two RFO variables did not correlate with each other.

Then two self-control variables, PWB at Time 2, students’ perception of changes in PWB and sex life at Time 2, oral sex variables and religious/personal beliefs variables were regressed in sequential steps on RFO variables. The results are presented in Table 6.13 and 6.14.

Table 6.13 Multiple regression analysis explaining interactions between RFO and other important variables

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Promote RFO&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Prevent RFO&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>R&lt;sup&gt;2&lt;/sup&gt;-change</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t²PWB</td>
<td>.66***</td>
<td>.42</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DispositionalSC</td>
<td></td>
<td>.36***</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait SelfControl</td>
<td>.21***</td>
<td>.04</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t²Oralsexpart</td>
<td></td>
<td>-.23***</td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t²PerceivedChangePWB</td>
<td>.11*</td>
<td>.01</td>
</tr>
<tr>
<td>Step 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious beliefs</td>
<td></td>
<td>.16*</td>
</tr>
</tbody>
</table>

Note 1: <sup>a</sup> R²=.49; <sup>b</sup> R²=.29; N=180
Note 2: *p<.05; **p<.01 and ***p<.001

In total, TSC appeared to be important for both types of RFO, but controlling for gender differences, it was significantly important for females but not for males. DSC was significantly associated with preventive RFO (in total, and for both genders), and was inversely associated with the number of oral sex partners since Time1. For male students, preventive RFO was also inversely associated with receiving oral sex since Time1.

In comparison with preventive RFO, promote RFO was significantly and positively associated with PWB at Time2 (in total, and for both genders). Promote RFO also had a significant association with perceptions of changes in PWB for female students but not for male students. For males, promote orientation was inversely associated with the number of vaginal sex partners. While promote RFO was positively associated with personal beliefs, preventive RFO was positively associated with religious beliefs in males but not in females.
Table 6.14 Multiple regression analysis predicting RFQ from TSC, DSC and related variables

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Promote RFQ</th>
<th>Prevent RFQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>β</td>
<td>R²-change</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispositional SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2PWB</td>
<td></td>
<td>.66***</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>.18**</td>
</tr>
<tr>
<td>Trait Self Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2Received oralsex</td>
<td></td>
<td>-.27**</td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
<td>.18*</td>
</tr>
<tr>
<td>t2Vagsexpart</td>
<td></td>
<td>.22*</td>
</tr>
<tr>
<td>t2Oralsexpart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percev Change PWBt2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal beliefs</td>
<td></td>
<td>.22*</td>
</tr>
<tr>
<td>Religious beliefs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=57, R²=.54                  N=123, R²=.49    N=57, R²=.42    N=123, R²=.27

Note: *p<.05; **p<.01 and ***p<.001
6.4.3.4 Promote focus orientation was more likely associated with higher PWB at Time 2 in relation to engagement in oral sex

Finally, I investigated how students’ RFO will affect their PWB score at Time2, in relation to their engagement in oral sex.

Overall, 38% of participants indicated that they have not been engaged in oral sex and 62% that they have been engaged in oral sex since Time 1; 71% among all participants reported to have good PWB at Time 2. In accordance with my predictions, their PWB was influenced by their RFO. The results of logistic regression indicated that higher Promote scores (controlled for Prevention scores) were positively related to having good PWB, $\beta=1.69$, $p=.001$, whereas higher Prevention scores (controlling for Promotion scores) were not, $\beta=.46$, $p>.06$.

Amongst all participants who reported engagement in oral sex since Time 1, there were approximately 60% of participants with relatively more Promote orientation and around 40% participants with relatively more Prevention orientation.

Among the relatively more promote orientated participants, more than 85% of those who had not receive oral sex since Time 1 and around 82% of those who received oral sex since Time 1 reported good PWB at Time 2. Among the relatively more prevention orientated participants, 55% of those who did not receive oral sex since Time 1 and 52% of those who received oral sex since Time 1 reported good PWB at Time 2. These differences were statistically significant in both cases, $t(1, 180)=7.43; p=.01$ and $t(1, 180)=11.28; p=.001$, respectively.

Accordingly, among the relatively more promote orientated participants, about 86% of those who had not given oral sex since Time 1 and around 82% of those who had not given oral sex since Time 1 reported good PWB at Time 2. Among the relatively more prevention orientated participants, around 58% of those who had not given oral sex since Time 1 and 51% of those who given oral sex since Time 1 reported good PWB at Time 2. These differences were also statistically significant in both cases, $t(1, 180)=6.73; p=.01$ and $t(1, 180)=11.79; p=.001$, respectively.
Whereas there was no statistically significant difference in PWB related to oral sex engagement and regulatory focus orientation for males, this difference existed for females (Table 6.15)

Table 6.15 PWB score in relation to RFQ group and practice of oral sex for female

<table>
<thead>
<tr>
<th>PWB</th>
<th>Given oral sex</th>
<th>Received oral sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (N=44)</td>
<td>Yes (N=79)</td>
</tr>
<tr>
<td></td>
<td>Prevent (N=14)</td>
<td>Promote (N=30)</td>
</tr>
<tr>
<td></td>
<td>Prevent (N=15)</td>
<td>Promote (N=33)</td>
</tr>
<tr>
<td>Poor</td>
<td>7 (50)</td>
<td>5 (11.6)</td>
</tr>
<tr>
<td></td>
<td>(83.3)</td>
<td>(44.1)</td>
</tr>
<tr>
<td>Good</td>
<td>7 (50)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>(83.3)</td>
<td>(44.1)</td>
</tr>
</tbody>
</table>

Notes: $\chi^2(1, 1)=5.35; p=.03$  
$\chi^2(1, 1)=9.45; p=.004$  
$\chi^2(1, 1)=6.17; p=.02$  
$\chi^2(1, 1)=8.79; p=.004$

6.5 Discussion

The primary purpose of this study was to investigate students’ oral sex behaviour as a part of their complex and dynamic psycho-social self-regulatory functioning in everyday life during their first semester at the university, and to explore the potential effects of these oral sex practices on their psychological well-being. The findings from this study clarified the role of self-control processes in the engagement in oral sex and revealed relationship between self-control and other determinants of engagement in risky sexual behaviour, known from the literature (i.e. sensation-seeking, alcohol consumption, reasons for engagement in oral sex, attachment style, and regulatory focus orientation). The role of trait self-control and dispositional ability to restrain sexual behaviour was investigated at both cross-sectional and longitudinal levels, thereby allowing to illustrate the interplay between these types of self-control in management of oral sex behaviour over two time assessment periods. Mental health outcomes of students’ engagement in oral sex behaviour were considered and explained through the construct of self-control and regulatory focus orientation.

In line with previous research, I found that on entering the university around 70% of males and 75% of females have already had experience in giving oral sex and 76% of
males and 78% of females had experience in receiving oral sex. In accordance to my predictions, there was about a 20% increase among those students who reported giving oral sex over 4 months of study and a 27% increase among those students who reported to receive oral sex over this time. However, this masked considerable variation for a proportion of students involved in oral sex practice at an individual level as, over the same time, around 21% of students reported to stop giving oral sex and 27% reported to stop receiving oral sex.

Additionally, these figures were found to differ by gender. The number of ‘take-ups’ in giving oral sex was higher amongst females (22%) than amongst males (18%). The patterns for receiving oral sex looked very different: in comparison with 13% of females, 50% of males reported to experiencing receiving oral sex since Time 1. These findings in general replicate patterns in giving and receiving oral sex as it known from the research literature. As far as ‘drop-outs’ figures are concerned, 23% of males and 20% of females were found to withdraw from giving oral sex since Time 1, and about 30% of males and 25% of females reported to stop receiving oral sex over the study period. These findings demonstrate dynamics in students’ oral sex behaviour over the first semester of their university life.

Finally, it’s worth noticing that although it seems that the number of students who take-up oral sex practice during the period of survey appear to be nearly equal to the number of those who dropped out this practice, in terms of exposure to HPV infection, the increase in number of new ‘take-ups’ is the reason for concern. This basically means that in the first four months after entering university, about 27% of students aged 18-21, who did not have experience of oral sex before, get engaged in this practice which can be potentially harmful to their health. In addition, on this side there also were 79% of ‘maintainers’ (77% of males and 80% of females) who reported to continue giving oral sex at both time points, and 73% of those (70% of males and 75% of females) who reported to be active in receiving oral sex at both time periods.

In terms of psychological well-being, overall, all respondents reported a higher level of PWB at Time 2 than at the Time 1, and this can be attributed to their psycho-social adjustment to the university lifestyle. The data indicates that among those students who showed good PWB at Time 1, about 93% (95% males and 91% females) demonstrated good PWB also at Time 2. 38% (47% males and 35% females) of students, who
reported to have poor PWB at Time 1, improved their PWB to good at Time 2. About 62% (53% males and 65% females) of those who had poor PWB at Time 1, reported to retain poor PWB at Time 2. My findings showed that 7% of all students (5% males and 9% females) reported their PWB to deteriorate over assessed period of time.

For males, engagement in giving oral sex was associated with a higher PWB score among those who previously had no experience of oral sex (take-ups group) and for maintainers. For females, avoiders demonstrated better PWB scores than those who got engaged in oral sex between Time 1 and Time 2. There was little change in PWB scores amongst female maintainers; both, who had good PWB scores at Time 1 and who had poor PWB scores at Time 1, had demonstrated approximately the same scores at Time 2.

Engagement in receiving oral sex was associated with higher PWB score for males who previously had no experience of oral sex (take-ups group). For females, avoiders and maintainers again demonstrated higher PWB score than those of females who got involved in oral sex between Time 1 and Time 2.

At the beginning of the semester there was a significant difference in PWB between genders, with females demonstrating lower PWB than males. However, at Time 2 female respondents reported just slightly lower PWB than male respondents. These findings indicate that although females had a lower PWB than males when entering university, in general they demonstrated a greater tendency to improve their PWB over the first semester.

**Part 1** analysis assessed the relationships between students’ oral sex behaviour and its psycho-social consequences at a cross-sectional level, by testing the suggested model of associations through SEM. Following some minor modifications this model was supported. The results of testing the model for measurement invariance across gender revealed that this model differs between genders: this model fits the data well for girls but not for boys. This finding was in line with previous research which has shown that engagement in oral sex could be influenced by different reasons for adolescent girls and boys, and its impact on PWB could also differ depending on gender.

The contribution of gender, trait self-control, dispositional ability to restrain sexual behaviour, sensation-seeking, reasons for oral sex, the number of oral sex partners and
alcohol consumption to the prediction of PWB were tested separately for males and females.

In general, males showed higher scores on TSC than females, although the difference was not significant. Males also demonstrated significantly higher scores on sensation-seeking and dispositional ability to restrain sexual behaviour. For both genders, the reasons for engagement in oral sex and the number of oral sex partners were influenced by the trait self-control and dispositional ability to restrain sexual behaviour. These findings were in accordance with previous research (Baumeister & Gailiott, 2007).

The direct path from trait self-control to PWB was also significant for both genders. Nevertheless, the number of oral sex partners and alcohol consumption had a direct link with PWB for females but not for males. For males, two type of self-control (TSC and DSC) and reasons for being involved in oral sex were significant predictors of their PWB.

In addition to association between self-control and the number of oral sex partners, there were direct relationships between PWB and alcohol and sensation-seeking. The direction of the effect between alcohol and sensation-seeking was consistent with that found in previous research investigating the correlates of risky sexual behaviour. Both alcohol and SS were associated with having a detrimental effect to an individual’s self-control. Although I identified the negative direct link between alcohol and self-control, the positive association between alcohol and PWB was somewhat unexpected finding. This effect could be partly explained by the fact that a) respondents mainly reported moderate level of drinking; b) drinking behaviour was considered in the context of oral sex behaviour, and c) analysis was separate for males and females. As some females previously reported a psychological distress related to oral sex behaviour, it is possible to suggest that moderate level of drinking prior or after engagement in any type of oral sex behaviour could positively contribute to their total PWB.

The direct positive pathway between PWB and SS was another interesting finding which can be explained by the literature treating sensation-seeking as personality trait factor that can influence the process of decision-making (e.g. Zuckerman, 2007; Haslam, 2001). This trend in research demonstrates that increased level of SS could be considered as a salient feature of higher achievers in goal-directed behaviour which is
aimed to maximise their success, and therefore, could positively affect high achievers’ PWB. As in the second part of this study, I found an association between improvement in PWB score and having promote orientation, it is possible that students with higher SS also possess a promote orientation.

In general, by showing the possible pathways and relationships between different variables in students’ oral sex behaviour, my findings are consistent with both the theoretical tenets of self-regulation, and research on correlates of risky sexual behaviour and self-control in adolescents. Collectively, the present findings support a suggestion that higher level of self-control could be beneficial for improving mental health in relation to oral sex behaviour, and reinforce the need to understand the role of motivation element of self-control in this process.

The second part of the study aimed to assess whether the relationships between variables and their influence on PWB could be tenable over four months. I also aimed to explore how students’ RFO could influence their PWB at the Time2 assessment point. The individual pathways of the Time1 model were partially incorporated in the concept of baseline PWB, in order to check if this baseline PWB and supporting its components will be valid in predicting PWB at time2. This allows me to conduct a more detailed analysis of the associations between constructs, and test them against my study hypotheses.

The results indicated that, although trait self-control was a significant predictor for PWB at Time2, this effect was demonstrated for females but not for males. For both, males and females, the baseline PWB score at Time1 and perceived changes in PWB were found to be good predictors of PWB at time2. While students’ perception of changes in their PWB since Time 1 was positively associated with their PWB at Time2, perceived changes in their sex life since Time1 negatively affected PWB at Time 2 in autonomy and purpose in life domains for males, and had the same detrimental effect on females’ scores in personal growth domain at Time 2. In addition, oral sex variables were shown to affect different domains of PWB at Time 2 for males, but not for females. For males, receiving oral sex since Time1 had a significantly positive effect on their PWB at Time 2 for their personal relationships and purpose of life domains, whereas giving oral sex since Time1 was negatively associated with purpose in life domain’s score at Time 2.
Entering the regulatory focus orientation into equation predicting PWB at Time 2 had detrimental effect on self-control, reducing its influence to the point of being non-significant. Interestingly, the impact of promote orientation in combination with baseline PWB score was salient for predicting PWB in females but not in males. For males, the effect of baseline PWB score was significant for PWB at Time 2 in combination with engagement in oral sex and their perceived changes in PWB and in sexual life, and had no significant associations neither with trait self-control nor promote orientation.

My findings indicated that while both regulatory focus orientations appeared to be generally affected by trait self-control, dispositional ability to restrain sexual behaviour had significant role for preventive orientation and also proved to be important for non-engagement in oral sex with multiple partners. Talking about particular domains, for males, dispositional self-control had a significant predictive power for improvement in autonomy scores, while trait self-control was significant in improvement in environmental mastery domain scores. Improvements in scores in purpose in life domain were positively associated with dispositional self-control for males as opposite to trait self-control for females. In comparison with females’ scores in all six domains at Time 2 being positively affected by promote orientation; this regulatory focus orientation positively influenced only two, environmental mastery and personal growth, domains for males.

My findings demonstrated that promote orientation was positively associated with actual PWB scores at Time 2 and perceived changes in PWB for females, but not for males. For males, promote orientation was positively associated with their personal beliefs while preventive orientation was positively associated with religious beliefs. The influence of promote orientation on PWB in relation to oral sex was further demonstrated by the findings that promote orientated females showed significantly higher PWB scores compared with prevention orientated females, irrespectively if they were engaged in oral sex or not. This finding was in accordance with a concept of ‘natural fit’ (Higging, 2000).

According to this concept, in approaching the desired goal (e.g. sexual pleasure), there will be a natural fit between promote focus orientation and the use of eagerness means
(e.g. ensuring hits and ensure against errors of omission), and self-regulation system of promote orientated participants will direct them towards feeling good and believing that what they have done was right (matches to desired end-states). This should result in them taking any of their experiences (positive or negative) of oral sex more neutrally or positively and in demonstrating higher PWB scores.

Accordingly, participants with preventive focus orientation would take their experiences of oral sex more negatively (in both cases), as there will be a mismatch between their prevention focus inclination and desired end-states. Use of avoidance means (e.g. withdrawing from oral sex) will fulfil their inclination for the absence of negative outcomes but the desired goal will not be achieved. Use of eagerness means (e.g. engagement in oral sex) will ensure the desired goal but will split a natural fit between prevention focus orientation and the use of vigilance means. This will negatively reflect on their well-being and results in demonstrating lower PWB scores.

Findings that promote orientated females showed significantly higher PWB scores than preventive orientated females were logically accompanied by findings that indicated that females’ perception of changes in their PWB since time 1 (e.g. their appraisal of these changes) showed to significantly contribute to improvement in their psychological well-being over 4 months period. The influence of cognitive appraisal processes on perceived PWB demonstrated the importance of attitudinal component in the structure of PWB.

To conclude, taken together, findings from this study demonstrated that both engagement in oral sex and psychological consequences attached to this engagement were influenced by an individual’s ability to self-regulate their sexual behaviour. Motivational achievement orientation and cognitive appraisal processes were shown to have important implication for individuals’ experiences of oral sex and psychological well-being related to these experiences.

**6.6 Implications**

The findings from the present study could have important implications for implementation of any counselling or clinical treatment programmes. As it seems to be unrealistic to insist on reducing oral sex practice amongst young people nowadays
simply by referring to the dangers of STIs, these findings could be used to inform intervention programmes which aim to facilitate behavioural changes.

The results from this study indicate that by modifying/changing individual’s focus orientation, it seems possible to increase individual psychological well-being which would have a positive effect on the outcomes of any counselling or clinical treatment. If motivation achievement orientation is a product of individuals’ life experiences of successes or failures in achievement the goals and it could be induced by manipulation, it makes perfect sense to develop and elaborate such programmes for young people and any patients affected by consequences of low psychological well-being related to sexual health problems. Moreover, such programmes could have a good future in facilitating any areas of behavioural change. The findings from this study also pointed out the necessity to take into consideration gender differences as it comes to dealing with the consequences of oral sex behaviour for psychological well-being.

6.7 Limitations

The current study had several limitations.

The first limitation of this study was that the data was collected only at two time points and the interval between these time points was limited to a 4-month period. Longer-term follow-up intervals would provide information on the durability of these effects and patterns of change and allow more time for delayed effects to emerge. Extending the study to measure outcomes on three or more occasions would also increase the confidence that the findings reflect real effects rather than transient fluctuations.

The second limitation of the current study was that although our final sample included 180 students, only a relatively small number (20-27% of students) transitioned to oral sex practice in the first semester of the university, therefore, the psychological well-being analysis was underpowered. In addition, the sample size and the sample characteristics (e.g. 70% of females) prevented cross-validation of the model that was developed. Future research should recruit larger samples and recruit more males to overcome these limitations.

The next limitation of this study was the use of self-report measures; a method that can result in participants responding in a socially desirable way. To limit social desirability
responding, our survey was anonymous, Internet-based and self-administered. However, while self-administered questionnaires were found to provide a more private, less intrusive, and less threatening means of reporting sensitive behaviours on the other side, self-administration could result in precluding additional clarification of unclear questions, thus increasing the chance for missing responses or inconsistent data reporting (Catania et al, 1990; Durant & Carey, 2000; Schroder et al, 2003b). To minimise these errors and to improve overall measurement precision, most of the measures I used were already established, psychometrically validated questionnaires. Therefore, although subject to a certain degree of error, the self-report measures used to collect sexual behaviour data in this research was considered to be a justifiable and appropriate choice.

6.8 Summary

A major contribution of this study to this PhD thesis was in revealing the role of students’ individual self-regulation processes (e.g. trait self-control, dispositional self-control and motivational achievement orientation) in engagement in oral sex and related to this engagement psychological well-being consequences.

In accordance with expectations, the strength of abilities to regulate themselves and individual’s motivational focus orientation were found to influence not only students’ engagement in oral sex behaviour but also to affect their PWB as related to this behaviour. This study revealed a gender difference in self-control governing engagement in oral sex and subsequent PWB, and in regulatory focus orientations involved in appraisal of consequences of oral sex engagement for both genders. It also demonstrated that cognitive, appraisal processes underlying individual’s perception of changes in PWB and sexual life, could influence their actual PWB to the same extent than other self-regulation variables.

In the following qualitative study, presented in the next chapter, I aimed to further investigate the nature of these gender differences by uncovering students’ beliefs about oral sex and their reasoning behind these beliefs. This approach can help to understand the meanings of engagement in oral sex for males and females, and possibly to demonstrate the ways how these meanings can affect their psychological well-being.
EXPLORING ORAL SEX BEHAVIOUR AMONGST FIRST YEAR UNIVERSITY STUDENTS:
A QUALITATIVE STUDY AND INTEGRATION OF RESULTS
(SPSH Survey)

7.1 Introduction

In the previous chapter, I discussed the quantitative findings from a longitudinal Student Psychological and Sexual Health (SPSH) Survey among first year students attending four universities in the South West UK. Alongside other findings, survey results demonstrated that students’ PWB was influenced by their reasons for being engaged in oral sex, and these reasons have contributed differently to PWB for males and for females.

The purpose of the present chapter is to further investigate the meaning and perception of oral sex practices for those students who participated in the survey on exploring students’ oral sex behaviour discussed in the previous chapter. This online survey was supplemented by six open-ended questions that invited students to explain their reasons for being engaged in oral sex or to avoid this engagement (in general, and in relation to fellatio and cunnilingus). This type of survey design was introduced with the aim to make explanatory qualitative input into our understanding of students’ motives for being involved in oral sex, their perception of oral sex and to tap into possible negative feelings and anxiety attached to their experiences. Qualitative thematic analysis of this data and its implications will be discussed in this chapter.

The results from thematic analysis were then integrated with quantitative findings and further discussed within the existing body of literature on oral sex behaviour among young adults.

As the main purpose of psychological research on adolescent sexual behaviour is usually to assess, predict and intervene in risks (physical and psychological) associated with engaging in this behaviour from a public health (e.g. Remez, 2000) or normative perspectives (e.g. Hensel et al, 2008), research literature on sexual behaviour is largely
focused on identifying patterns of this behaviour rather than exploring the meaning this behaviour for genders.

The number of qualitative studies conducted to reveal how the reasons for engagement in oral sex can influence adolescents’ emotional experiences of this engagement is surprisingly scarce; and for a few exceptions (e.g. Sorsoli & Tolman, 2008; Burns et al, 2011), the majority of them are quantitative studies (e.g. McKay, 2004; Brady & Halpern-Felsher, 2007, Stone et al, 2006; Chambers, 2007; Bay Cheng et al, 2011; Vannier & O’Sullivan, 2012).

The most prevalent reasons/motives for engagement in oral sex for both genders are normally identified as physical pleasure, intimacy and curiosity/experimentation, followed by power and avoiding intercourse motives. Emotional and intimacy-based motives were identified as common reasons for engaging in oral sex (Cornell & Halpern-Felsher, 2006); these motives and emotional experiences were found to be influenced by gender (e.g. Chambers, 2007; Vannier & O’Sullivan, 2012). Most young females and males reported positive emotions associated with their experiences of oral sex, such as love, excitement and physical arousal. Negative emotions attached to oral sex experiences, such as guilt and anxiety, were found to be more likely reported by younger females and females who are not in love with their partners (Malacad & Hess, 2010), and also by young males who, for various reasons, have to abstain from engagement in oral sex (Paul et al, 2000).

The relationship context in which oral sex occurs has also appeared to have some implications for young adults’ well-being. On the one hand, some research studies found a perception of oral sex as hardly intimate sexual behaviour and suggest that oral sex is common during casual sex encounters (Lewis et al, 2011), whereas others report perceiving oral sex to be highly intimate behaviour, with the majority of samples indicating that they would not be comfortable engaging in oral sex outside committed relationships (Chambers, 2007; Kaestle & Halpern, 2007). Experience of oral sex with a casual partner was linked to feelings of guilt and anxiety for young females (Malacad & Hess, 2010), whereas experience of oral sex with multiple partners was linked to an elevated risk of contracting of STIs, such as HPV (D’Souza et al, 2000) for both genders, particularly for young males.
Two most recent qualitative studies on adolescents’ oral sex behaviour that explored girls’ fellatio experiences, have enhanced the existing body of literature with narratives of coercion, shame, guilt, ignorance attached to girls’ oral sex experience (Sorsoli et al, 2011), on the one side of spectrum, and also with narratives of oral sex as an academic achievement (Burns, Futch & Tolman, 2011), on the other side. The narrative approach taken by qualitative researchers allowed them to “thread the sexual experiences and wants of young people to the ideologies, policies, power relations, institutions, families and school in which they live and develop” (McClelland & Fine, 2008, p.244), and therefore, to consider them within the wider social contexts and within the culture.

In the present study, I was interested in revealing how university students’ experiences can be influences by the reasons behind both their engagement in and withdrawing from oral sex. Although previous research provides useful insights regarding the motives behind giving and receiving oral sex, there are still several clear gaps in our understanding of university students’ oral sex experiences.

Firstly, the reasons for university students’ choice to engage in oral sex remain unclear. Previous research on motives of oral sex behaviour investigated the experiences of oral sex among different types of young adults; some of them targeted college males’ experiences of engagement in oral sex over a short period of time (Paul, 2000); some of them concentrated on recall of females’ life-time experiences of oral sex (Bay-Cheng, 2011); some of them studied the attitudes and emotions associated with oral sex experiences of 18-25 years old females from general population (Malacad & Hess, 2010), American adolescents of high school age (Halpern-Felsher, 2006) and British college students (Stone et al, 2006). As it appeared from the NATSAL study, university students can be defined as a distinctive population of young adults. In the closest to this population study of oral sex experiences among American college students (Chambers, 2007), response options for students’ motives for giving and receiving oral sex were limited to physical pleasure, power, and avoidance of other sexual activities, and therefore, may provide us with a biased, or incomplete, understanding of students’ motives for engagement in oral sex.

Secondly, we still know little about the link between both positive and negative experiences of oral sex and the ways in which oral sex is incorporated into young people’s sexual routines. Research revealed that casual encounters that included only
oral sex appeared less likely to lead to negative psychological consequences than casual encounters that also include intercourse (Higgins et al, 2010). Within relationships, the effects of unidirectional (with one partner giving oral sex while the other receives) or reciprocal in nature (with both partners giving and receiving oral sex) oral sex encounters with young adults experiences of oral sex was hardly studied at all. Although some research findings suggests that young females are more likely to have positive experiences of giving oral sex, and young males are more likely to enjoy receiving oral sex (Chambers, 2007; Leichliter et al, 2007), these findings are not consistent across all studies (Brewster & Tillman, 2008), especially across most recent studies (Bay-Cheng et al, 2011).

In the first part of this chapter, I report students’ talks about their oral sex experiences, focusing on a broad range of meanings evident from their accounts of oral sex experiences. My theoretical framework here was a constructionist one. This means that I was seeking not only to analyse students’ reported experiences, beliefs, motives and attitudes to oral sex, but also examine the extent to which those experiences were interlinked with broader socio-cultural ways of making sense of students’ oral sex experiences, namely, what was their meaning, what were they like, and what they were intended for. I have considered this as a reciprocal process, in which students’ experiences and ways of talking about oral sex experiences appeared to be informed by broader socio-cultural meanings attached to oral sex, and, in turn, such talks about these oral sex experiences provided and, in some ways, aided to shaping that socio-cultural context. Therefore, I hypothesised that negative or positive account of oral sex experiences will be influenced by students’ personal attitudes to and beliefs about oral sex outside and inside relationship, which, in turn, will be informed by wider socio-cultural context, including their reference peer group.

In the second part of this chapter, I integrate the quantitative and qualitative results of students’ online survey by matching the reasons/motives for engagement in oral sex to the range of emotions, negative and positive, attached to students’ experiences of oral sex. This integration allowed me to further explore the possible pathways of how these students’ experiences of oral sex can influence their psychological well-being.
7.2 Part 1. Analysing qualitative results from the Student Psychological and Sexual Health (SPSH) Survey

7.2.1 Data and Methods

Qualitative data were collected as a part of an anonymous internet-based survey on exploring oral sex behaviour amongst first year university students. 237 students from different departments of the University of Bath, University of Bristol and University of Plymouth (The Nursing and Midwifery School) participated in this survey. The sample consisted of 30% of males (N=71) and 70% of females (N=166), with a mean age of 18.98 (SD=1.16; range 18-24 years old). 82% of them reported to be White Caucasian. Demographic characteristic of the sample is presented in Table 6.1 in the previous chapter.

Based on their own oral sex experience, students answered 6 open-ended questions. These questions invited them to explain their reasons for engagement in oral sex behaviour and covered the following particular areas of this sexual behaviour: engagement in oral sex or non-engagement in oral sex in general; engagement in giving oral sex and non-engagement in giving oral sex; engagement in receiving oral sex and non-engagement in receiving oral sex. The data collection occurred on the cross-sectional level.

The anonymous data was subject to qualitative analysis for commonly recurring themes. In this analysis I concentrated on two overarching and often overlapping themes found in students’ talks about their oral sex experiences: oral sex as embarrassment and oral sex as enjoyment.

7.2.2 Thematic Analysis

7.2.2.1 Oral sex as embarrassment

A negative description of oral sex (e.g. oral sex as an embarrassment) ran distinctively throughout respondents’ talks about their experiences of oral sex. This description was present in talks of both male and female respondents; and it was found both in talks
about personal experiences and in talks about how society and their peers see engagement in oral sex.

This negative description of oral sex as embarrassment can be categorised in four different ways, namely: a) dirtiness and disgust; b) feeling uncomfortable; c) absence of control, and d) societal expectations and peer judgements.

**a) Dirtiness and disgust**

Both males and females identified a cultural context in which sexual organs are thought of in an ‘unclean’ manner and, subsequently, oral sex is seen as ‘a weird concept’ and something ‘unpleasant and unattractive’, ‘unhygienic’ and ‘not appealing sexually’.

This perception of oral sex and similar attitudes to oral sex, affected by the same socio-cultural meaning, were frequently identified as possessed by students’ partners, and tended to be unambiguously expressed by some but not most of the participants themselves. Accounts on males’ anxiety, reluctance and disgust at oral contact with female genitalia has been reported in other research on oral sex where they have been considered as a part of ‘a historical cultural connection between women’s genitals and filth and disease’² (e.g. Shostak, 1981, Reinholtz & Muehlenhard, 1996).

In the present study, in some instances, similar male and female opinions were reported. For example, one female respondent described how her boyfriend’s negative ‘attitude’ to her vagina reflected her attitude to oral sex: ‘He found it gross and that made me not enjoy it’ (FN6m). On the other side, negative attitude towards males’ sexual organs within oral sex practice was also demonstrated by one of the female respondents, although it was framed more in health-related rather than in ‘weird’ context: ‘It is unhygienic as the penis is also a urinary organ and it might be hazardous to one's health’ (FN6k).

However, these reports were not limited to demonstration of solely MALE attitudes to women’s genitals as disgusting. In the context of oral sex, female respondents themselves often expressed thoughts that their sexual organs could not be ‘cleaned properly’ and on this basis they, similar to males (‘Girl does not look clean’ (MN6h)), were ready to reject oral sex: ‘I feel like sometimes mine is not clean, and I don’t want my partner to experience it when it’s not cleaned properly’ (FN6n). The females’

² Roberts et al, 1996, p.112
arguments for rejecting receiving oral sex was mainly based on self-embarrassment issues which were more clearly articulated as ‘not attractiveness’ of this practice: ‘I feel that it is not an act of intimacy … doesn’t look attractive’ (FN6r), ‘Do not find it appealing sexually’ (FN6b), ‘Didn’t want my boyfriend to go through with it. Not so pleasant’ (FN6a).

These extracts reflect women's ‘anxiety’ about their genitals reported in other studies. This ‘anxiety’ is suggested to be resonant with a societal representation of women’s genitals as ‘not nice’, and this negative cultural meanings women have to face and live with ‘in their embodiment’ in everyday life. Braun & Wilkinson (2003) and Reinholtz & Muehlenhard (1995) in their studies have found that anxiety expressed by their respondents usually reflect particular contexts in which genitalia might be judged in some way, and these perceptions can vary amongst different sexual activities (e.g. receiving oral sex).

b) Feeling uncomfortable

A number of respondents expressed the feeling of being uncomfortable with oral sex practice in general: ‘I do not feel comfortable doing oral sex’ (FN4l); and with engagement in receiving oral sex, particularly: ‘I didn’t feel 100% comfortable with receiving oral sex’ (FN4h); ‘I haven’t been in the position where I’ve felt comfortable enough with a person to receive oral sex’ (FN4i). The latter accounts were related mostly to female respondents.

Anxiety attached to this feeling of being uncomfortable or nervous with the general idea of engagement in oral sex was a recurrent theme for many female respondents: ‘I have received oral sex, but put it off for almost a year because I was nervous’ (FN13b); ‘It (e.g. receiving oral sex) makes me self-conscious’ (FN4d). For females, these anxieties were visibly transformed to worries about their body image: ‘I was worried that my body does not look attractive’ (FN13a); ‘I was ashamed of my body and didn’t want anyone to see me’ (FN13c).

The feeling of being uncomfortable and anxious about engagement in oral sex was also described by respondents as the real trouble for them in particular contexts where such an issue became especially salient. These contexts were articulated very clearly. Both males and females were talking about oral sex outside loving relationships or in absence

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3 Braun & Wilkinson, 2001, p.119
of strong attraction, with particular emphasis on the concept of ‘trust’ on both a physical and psychological/emotional level: ‘Bit of a prude. Have not reached that stage of trust/intimacy with anyone yet’ (MN5r); ‘I will not engage in oral sex if I cannot trust that person on an emotional level’ (FN5aa). Interestingly, this concept was applied to both giving oral sex and receiving oral sex: ‘If I do not feel very strongly about the person or do not trust them, then I will not give oral sex’ (FN5z); ‘I wouldn't do it outside a relationship because I would want to trust the other person before receiving it’ (FN5u). One of the female respondents articulated the idea that there was a difference for her between receiving and giving oral sex, and this difference was in receiving oral sex, as receiving oral sex for her required higher level of trust and intimacy: ‘The trust and love that I need to feel in order to allow myself to receive oral sex is more than the level of trust and love I need to experience to give oral sex’ (FN5y).

c) Absence of control

The issue of anxiety about oral sex experiences was also attached to respondents’ accounts about oral sex that happened ‘in the heat of the moment’ and as something that was ‘out of control’. Here respondents were talking about power relations in the context of sexual relationship, as it can be seen from following passages: ‘First time I was forced…’ (FN15b); about not being able to stand up the pressure from the partner: ‘I refused but sometimes, it cannot be controlled’ (FN15a), and about not being able to resist the temptation (e.g. situational self-control failure): ‘It’s like nature - it happens, even if I don’t want it’ (FN15c).

d) Societal expectations and peer judgements

The somewhat different manifestations of oral sex as an embarrassment were found in students’ talks about societal expectations and peer judgements.

Some females explicitly acknowledge the issue of embarrassment about engagement in oral sex in their talks of ‘bad reputation’ and judgement by their peers. One female respondent wrote: ‘(I do not do oral sex) if I do not have feelings for the person and (because of) fear of judgement by peers’ (FN9c). The next respondent expanded this even further: ‘Not wanting a bad reputation, not seeing a need to do so’ (FN9a).

Similarly, this idea appeared to reveal itself in different forms through talks of societal expectation and social reciprocation. One female respondent plainly said that she does
oral sex because of ‘intimacy with a partner and social expectations’ (FP10r). Explaining why they do not want to be engaged in oral sex, other respondents had made references to the hidden social aspects of this practice: ‘I do not want to make a case’ (FN16a), ‘If a partner got it once, he might ask for it again in the future even if I don’t like it’ (FN16c); ‘I felt I had to as I had received it’ (FP4a).

In these accounts, engagement in oral sex was talked about in the ways that suggest this practice somehow balances a potential societal expectation for young adults to be involved in oral sex, on one side, and, also to be negatively judged by peers for doing it, on other side.

7.2.2.2 Oral sex as enjoyment

A positive description of oral sex experiences (e.g. oral sex as an enjoyment) was an alternative to a negative description of oral sex that ran separately throughout respondents’ talks about oral sex. These talks can be summarised in three distinctive themes of: a) trust and intimacy; b) pleasure and fun; and c) power.

a) Trust and intimacy in relationships

In contrast to accounts of oral sex being something dirty and disgusting, or causing feelings of being uncomfortable, most respondents expressed satisfaction and comfort with engagement in oral sex practice. ‘Both myself and my partner wanted to try it to see what it would feel like for one another giving and receiving. After trying it for the first time, we liked it and give each other oral sex when we are in the mood for it’ (FP1t). In these accounts, oral sex is represented as a good and comfortable practice within a committed relationship: ‘I think that sex plays an important role in a loving relationship and that variety and creativity improves it a lot, then after having tried I really liked it (oral sex)’ (FP5k).

Matters of intimacy and trust were dominant themes in these accounts: ‘It's an intimate and personal thing that I am comfortable to share with my boyfriend’ (FP10b); ‘It’s a close and intimate thing to do with a partner and is pleasurable for both’ (FP10c); ‘Again it shows trust, and I like to please women that way’ (MP10p); ‘(It happened) because it was with someone I trust very much’ (FP10u).
On this occasion, some respondents expressed very strong negative feelings about even the possibility of the opposite scenario: ‘I have only given oral sex to people that I am in a relationship with. I want to please that other person and it’s something I want to do for them. I will only give oral sex if I envisage myself being with them for a significant amount of time and if I trust them completely’ (FP10q).

Many students regarded engagement in oral sex in committed relationships as part of being in love or the demonstration of their strong sexual desire and the high level of partner’s attractiveness to them: ‘I was attracted to that person and we were comfortable being that intimate’ (FP10f); ‘When I'm in a relationship and I feel comfortable with my partner, I think this way of intimacy can be very enjoyable for both of us’ (FP9d).

In summary, the idea of oral sex being pleasurable in close relationships as demonstration of intimacy with and trust to the partner was expressed by the majority of respondents, both males and females. For many of them, engagement in oral sex was associated also with strong positive emotional feelings towards their partners (e.g. love, attraction).

b) Pleasure and Fun

Students’ talks about positive experiences of oral sex were very often related to their experiences of mutual pleasure: ‘(I do oral sex) to give and receive pleasure to and from my partner’ (FP12u); ‘It being pleasurable for me, and knowing it was pleasurable for my partner’ (FP12hh); ‘Sexual pleasure; whether to enhance closeness with the recipient or pleasure for its own sake’ (MP12dd).

However, respondents’ understanding of pleasure greatly varied from seeing oral sex as a good foreplay before having ‘a real sex’ (‘It’s a nice thing to do before having sex’ (FP13c); ‘Routine foreplay that I enjoy’ (FP13f); ‘We both wanted to have some fun before having sex’ (MP13l), to considering oral sex as a valid alternative to full sex.

The talks of oral sex as an alternative to ‘full’ sex were very common. Some accounts made very brief comments about oral sex at this instance: ‘Pleasure. Not ready for vaginal sex’ (FP3c); whereas others gave more detailed and various explanations of meaning attached to this practice among students: ‘It's less of a commitment than vaginal sex with a partner that you're not ready for vaginal sex with yet’ (FP3e). Here I
have also found some comments reflecting the relationship’s intimacy attached to the meaning of oral sex for those female respondents who do not want to be engaged in ‘full’ sex yet and for whom engagement in oral sex was the only the way to show other person its love and seriousness of relationship: ‘(It is an) intimacy while not being engaged in full sex’ (FP3f); ’It’s nice to be physically intimate with a partner you care about. It’s a less serious alternative to full sex’ (FP3j); ‘I wanted to make my partner feel good, and we didn’t have sex for a while at the start (because I was initially uncomfortable with the idea), so oral sex served as a good alternative’ (FP3i).

A special place amongst talks of pleasure attached to engagement in oral sex belonged to talks about oral sex as a mean of new experiences; these accounts typically combined both ‘pleasure’ and ‘fun’ themes: ‘We both wanted to try something new’ (FP8g); ‘It was a step up from what we were used to and it felt amazing’ (FP15i); ‘Something new, exciting, fun. Enjoyable. Partner enjoyed giving it’ (FP15e); ‘I felt comfortable and we both wanted to experience something new!’ (FP15d).

For many respondents the particular construct of oral sex as ‘pleasure’, ‘fun’ and ‘new experience’ revolved around talks about friends’ recommendations: ‘Friends have said it was good and to be fair it is’ (FP16a); ‘My friend told me about having a pleasure of oral sex and we did try it for change’ (FP16d); ‘Hearing other people enjoyed it and so wanting to try new things’ (FP16c); ‘I heard good things from other people about it which made me more inclined to try it and I like to try new things’ (FP16f); ‘My friends said me that it was great! And I can say they were right’ (FP16g).

All talks about oral sex as pleasure and fun were accompanied by the positive evaluation of this practice in psychological and emotional terms, as referring to ‘feeling right’ or ‘feeling good’ about it. Several respondents at this point expressed the opinion in favour of oral sex before ‘full’ sex: ‘It felt pleasurable and I prefer this to regular sex’ (FP3b); ‘It feels good, is better for me than vaginal sex’ (FP9l).

Students’ accounts of pleasure and fun, as applied to oral sex practice, can be divided in three very distinctive themes: oral sex as mutual pleasure, as I referred to above; oral sex as pleasure to recipient and oral sex as pleasure to performer.

I have chosen to consider the last two sub-themes separately; as, in my opinion, they were more related to a concept of power in the context of sexual relationship.
c) Power

Some male and female respondents talked about oral sex as something that gives them power.

In these accounts the idea of power was conceptualised in two distinctive ways – as power associated with ‘sexual pleasure’, and as a general ‘way of manipulating/controlling the partner’. For example, when asked the question why they had been engaged in oral sex, some respondents replied in a way which appeals to power associated with ‘sexual pleasure’, typically for both partners: ‘(It) arouses you. I have an orgasm more easily if I am given oral sex …To arouse them I like giving; it arouses me’ (FP6h); ‘I like it, and, as my boyfriend likes it too, and I like to create him a sensation of pleasure’ (FP6n). Although these talks included elements of control over one’s own or their partner’s orgasm, such talks of sexual power were typically referred to as having pleasure themselves or giving a pleasure to the partner.

Other respondents described their power, as applied to oral sex, in slightly different ways, and mainly as a manipulation tool which enables them to control their partners. These respondents used the concept of sexual power in a less sexual but more controlling manner. Females have described this power in the way as it allows them to have a feeling of control over males by giving/or not giving them the pleasure associated with receiving oral sex: ‘(As I) give my partner great pleasure, (I) enjoy having that effect on someone’ (FP6k); ‘I want a man to feel really good and to be the reason for that pleasure’ (FP6i); ‘To make the partner feel appreciated and enable them to enjoy themselves’ (FP6p). For some females, this power was associated with a concept of purely ‘feeling powerful’: ‘I wanted to put it in my mouth, I enjoy having that power’ (FP6b); ‘I like the feeling to give a pleasure to a guy’ (FP6l); ‘It is a big turn on to be pleasing a guy’ (FP6c). For males this feeling of sexual power was accompanied by the thought that this power gives them ability to make the partner to do what they want sexually: ‘pleasure and feeling that I have a power to make her to give it to me when I want to’ (MP6a); ‘pleasure, enjoyment of her giving me pleasure’ (MP6e).

The way how some respondents described their experiences, engagement in oral sex gives them power over their partner. A similar interpretation of sexual power has also been found in studies on women’s’ talk about the vagina, focusing on various meanings of the vagina in the broader socio-cultural context (Braun & Wilkinson, 2003).
7.3 Part 2. Integration of quantitative and qualitative results from the Student Psychological and Sexual Health (SPSH) Survey

7.3.1 Method

During the students’ online survey on exploring oral sex behaviour, the quantitative and qualitative data was collected concurrently, with merging as a main approach to integration (Creswell et al, 2003; Rossman & Wilson, 1985; Tashakkori & Teddlie, 1998). The open-ended survey’s questions about reasons of being engaged or non-engaged in oral sex (collecting qualitative data) were developed intentionally with a content of the particular quantitative survey’s scales in mind; and were supplemented by students’ PWB scores that corresponded with their reasons for engagement in oral sex (quantitative data). Making this choice intentionally during the design stage allowed me to follow integration through merging in the easiest and most natural way.

As can be seen from the previous chapter - describing quantitative results of the SPSH Survey, and from the first part of this chapter - describing qualitative results of the SPSH Survey, I conducted separate analyses of quantitative and qualitative data on reasons for engagement and non-engagement in oral sex in parallel. For the quantitative analytics, I calculated descriptive statistics, mean scores, and standard deviations across six and seven students’ groups according to their engagement and non-engagement in oral sex. Statistical analyses on these groups were performed and histograms of the data were developed to allow intra-group and intergroup comparisons. For the qualitative analytics, I developed a coding scheme, and conducted thematic searches using the codes. The codes on the coding scheme were developed based on the items on the scales and the answers to open-ended questions. As additional themes emerged, codes to capture these were added to existing codes. This procedure assisted with thematic searches of qualitative database about perceived negative and positive consequences students’ engagement/non-engagement in oral sex that then could be marked and merged with the scaled data on reasons for being engaged/non-engaged in oral sex.

When the quantitative and qualitative data was organised in the format based on thematic relevance to allow merging, higher order integration interpretation was performed using two recommended approaches (Fetters et al, 2013).
Firstly, the results of matching scales from the survey and open-ended questions were integrated in a joint display. On the second stage, the quantitative and qualitative data integration used a narrative approach that describes the quantitative and qualitative results thematically. As the results were connected to each other by common themes, weaving as the specific type of narrative integration was used; this allowed me to weave back and forth around similar themes or concepts in the quantitative and qualitative data. The narrative provides intragroup comparisons of the results from the scales about the reasons for engagement in oral sex and attached to them PWB scores that are supported by text from the qualitative database. Each of the sections of the results contain quantitative scores with intragroup comparisons among the 6 groups for their reasons in engagement and 7 groups for their reasons in non-engagement in oral sex.

7.3.2 Results

Figure 7.1 represents the joint display illustration of the interpretation of quantitative and qualitative results from the SPSH Survey.

The comments from the qualitative part of the survey (on the right) provide information about the spectrum of scores around the negative and positive consequences of oral sex practice amongst males and females in relation to PWB and according to the reasons for engagement in oral sex (on the left). The left side provides students’ quantitative ratings of their reasons for engagement/non-engagement in oral sex from the scales according to gender and matching scores on PWB scales, with the lowest points signifying the poorest reported PWB and the highest points signifying the best possible reported PWB. Colour matching of the box plots from the quantitative part and comments in brackets from the qualitative part was devised to help match visualisation of quantitative and qualitative responses from the groups across genders.

As it can be seen from the Figure 7.1, there was a dispersion of students’ PWB scores across six areas which represent the reasons for engagement in oral sex and seven areas that represent the reasons for non-engagement in oral sex.

Quantitative findings that males who have been engaged in oral for power reasons had a significant higher PWB scores than females have been supplemented by the text responses that demonstrated that males feel psychologically better if they are able to
The survey design poses PWB as connected with oral sex practices from students’ perspective.

**Figure 7.1 Joint Display Illustration of the interpretation and reporting level from SPSH Survey**

**ALTERNATIVE TO SEX**
“It felt pleasurable and I prefer this to regular sex” (male participant).
“It’s nice to be physically intimate with a partner you care about. It’s a less serious alternative to full sex” (female participant).

**PLEASURE**
“It feels amazing, and I like to give that feeling to women” (male participant).
“Sexual pleasure; whether to enhance closeness with the recipient or pleasure for its own sake” (female participant).

**PART OF COMMITTED RELATIONSHIP**
“Intimate moment with girlfriend, in a long term relationship” (male participant).
“I have only given oral sex to people that I am in relationship with. I want to please that other person and it’s something I want to do for them. I will only give oral sex if I envisage myself being with them for a significant amount of time and if I trust them completely” (female participant).

**POWER**
“Pleasure and feeling that I have a power to make her to give it to me when I want to” (male participant).
“It arouses me and give me control over my partner”; ‘I want a man to feel really good and to be the reason for that pleasure’ (female participant).

**TWO WAYS SYSTEM**
“I enjoy it and if I give oral, then I want to receive it… it’s only fair!” (female participant).
“I do oral to give her something back. Fairness is important in any relationship” (male participant).

**PARTNER REQUIRED**
“She wanted to, and I asked” (male participant).
“My boyfriend wanted to do that to me” (female participant).
The survey design poses PWB as connected with oral sex practices from students’ perspective.

**DO NOT FANCY A PARTNER**
“Never been close with a girl in a liking sense or been drunk at a party and then doing… you know what with the girl” (male participant)
“I have not meet anyone whom I like enough” (female participant)

**DO NOT WANT TO DO IT**
“Didn’t want to. Girl does not look clean” (male participant)
“I am not interested or do not need to have oral sex” (female participant)

**FEEL UNCOMFORTABLE/NO TRUST**
‘Girl that I loved felt uncomfortable with the idea of oral sex’ (male participant)
“If I do not feel very strongly about the person or do not trust them, then I will not give oral sex” (female participant)

**FEARS**
“I was ashamed of my body and didn’t want anyone to see me” (female participant)
“Fear of judgement by peers, fear of STDs and not being in a committed relationship with a partner” (female participant)

**NOT RIGHT TIME/PLACE**
“Didn’t want to do anything physical (too tired, wanted to do something else)” (male participant)
“It wasn’t the right time or wasn’t what we were wanting that night” (female participant)

**UNATTRACTIVE/UNPLEASANT**
“Do not find it appealing sexually” (female participant)
“Didn’t want my boyfriend to go through with it. Not so pleasant” (female participant)

**MORAL/NOT IN RELATIONSHIP**
“Bit of a prude. Have not reached that stage of trust/intimacy with anyone yet. Think sex should be in relationships and I am not in one” (female participant)
“Morals and no relationships yet” (male participant)
have a sex partner who are willing to take a submissive role in sexual relationship or to make them feel in such way: “Feeling that I have power to make her give it to me when I want to” (male participant). Similar example of males’ desire to be superior in making decisional choices of sexual activity can be seen in text illustration that explains quantitative findings that males who did it by partner request demonstrated the lowest PWB scores: “She wanted to, and I asked” (male participant). At the same time, findings that those females who reported to be engaged in oral sex for power reasons had a lower PWB score than females in all other groups, are supported by females’ statements that indicates that engagement in oral sex for females caused by their motives to simply feel that they can control and manipulate their partner using oral sex as a weapon of manipulation, do not benefit females’ psychological well-being. These findings are in accordance with Sexual Script theory.

Responses from the open-ended questions supported quantitative findings that males and females, who have been engaged in oral sex for pleasure motives or performed oral sex in a committed relationship, have demonstrated the highest PWB scores than for all other reasons for engagement in oral sex. In the core of their higher PWB seems to be the issue of trust, an understanding of oral sex as a highly intimate sexual activity (“an intimate moment with girlfriend in a long term relationship” (male participant)), and a desire to please their partner (“I want to please that other person and it’s something I want to do for them. I will only give oral sex if I envisage myself being with them for a significant amount of time and if I trust them completely,” (female participant)). These findings correspond with findings from existing research literature on sexual behaviour.

Qualitative comments on seeing oral sex as a sexual activity that has to work both ways had expanded our understanding of why females who did oral sex because they considered it to be a two way system demonstrating the highest PWB scores among other reasons’ groups. They demonstrated that the issue of ‘fairness’ in sexual relationships is highly beneficial to females’ psychological well-being. These findings are in line with feminist research on adolescent girl’s sexual behaviour.

On the opposite spectrum of NON-engagement in oral sex, quantitative findings why males who have chosen NOT to engage in oral sex because they did not fancy a partner had a significant higher PWB scores than females were partially explained by different textual data. For males, it was rather an issue of lack of closeness with the girl or, anecdotally, the issue of not being drunk enough, that counted for their non-engagement
in oral sex (“Never been close with a girl in a liking sense or been drunk at a party and then doing you know what with the girl”). For females, the key to explanation of their non-engagement and, at the same time, for their significantly lower in comparison with males PWB attached to it, were the absence of attractive for them partner (“I have not meet anyone whom I like enough”).

Qualitative findings also aided in explanation of quantitative findings on differences in PWB scores between males and females who reported non-engagement in oral sex for non-willingness reason. Males in this case appeared to have the lowest PWB scores among scores for all reasons between all groups, and the possible explanation for this unwillingness was referred to issue of girls’ hygiene (“Didn’t want to. Girl does not look clean”). Females, who on this occasion demonstrated significantly higher PWB scores than males, came forward with a different textual explanation of the lack of interest in oral sex engagement or no necessity for them to participate in this sexual activity at the particular moment of time (“I am not interested or do not need to have oral sex”).

The statistical difference in PWB scores between males and females (males scores higher on PWB) who have chosen not to engage in oral sex by feeling uncomfortable with the idea of oral sex or by lack of trust reasons was also clarified by qualitative illustrations. Textual data indicated that this choice of behaviour for males was more influenced not by their own feelings of being uncomfortable with oral sex but rather by the feelings of their female partners (“Girl that I loved felt uncomfortable with the idea of oral sex”). Females’ explanation of this choice of behaviour was influenced by issue of trust to or strong attractiveness of their male partner (“If I do not feel very strongly about the person or do not trust them, then I will not give oral sex”).

Choices of non-engagement in oral sex for moral/religious reasons or by non-appropriateness of such behaviour because of the wrong time/place were demonstrated to result in very similar explanations and fairly equal distribution of PWB scores among both males and females by both quantitative and qualitative data.

The last two themes and textual data attached to these themes and PWB scores appeared to be relevant only to females’ reasons for non-engagement in oral sex. Females who have chosen not engage in oral sex because of fear demonstrated the highest PWB across all other reasons among female groups. Textual data showed that this reason for non-engagement in oral sex could be possibly explained by body image issues (“I was
ashamed of my body and didn’t want anyone to see me”), fear of contracting STIs and a fear of negative judgement by peers (“Fear of judgement by peers, fear of STDs and not being in a committed relationship with a partner”). Both quantitative and qualitative data demonstrated that the issue of unattractiveness or unpleasantness of oral sex was related to only females’ accounts of oral sex (“Do not find it appealing sexually”, “Didn't want my boyfriend to go through with it. Not so pleasant”).

With regard to a fit of quantitative and qualitative data, the integrating resulted in the expansion of understanding. The comments from the qualitative part provided information about the spectrum of scores around negative and positive consequences of oral sex practice amongst males and females in relation to PWB. Scales illustrated that there was polarisation of their PWB scores among reasons for engagement and non-engagement in oral sex.

7.4 General Discussion

In this chapter, in order to elucidate students’ beliefs about oral sex, to identify their reasoning behind these beliefs and to uncover the meaning of engagement in oral sex for males and females, I analysed the data from the qualitative part of SPSH Survey. Followed by integration of the data from both quantitative and qualitative parts of this survey, a mixed-method analysis, performed in this chapter, allowed me to address my research question about how students’ experiences of oral sex and their psychological well-being can be influenced by their reasons for engagement or non-engagement in oral sex, and to achieve a better understanding of possible cognitive strategies they may generate and use to support their decisions to engage or not to engage in oral sex behaviour. The results of this study were useful in uncovering positive and negative sides of experiences and attached to them meanings of oral sex for individual students.

7.4.1 Oral sex: Embarrassment or Enjoyment?

In this qualitative study, I have focused on two main themes in students’ talks about oral sex – oral sex as embarrassment (as referred to talks about dirtiness and disgust; feeling uncomfortable and out of control, and societal expectations and peer judgements) and oral sex as enjoyment (as referred to talks about trust and intimacy, pleasure, and power). However, the way students talked about oral sex allows me to suggest that negative or positive aspects of each of these types of talks exist within the combination of ‘attitudinal/personal’ and ‘relationship context’ accounts. In other words, for most of
the participants, oral sex appeared to be judged as embarrassment or enjoyment on both a personal and relationship level. This implies the certain type of interplay between these two levels of judgements about oral sex which can vary and differ on particular stages of the individual’s sexual life. This also suggests that the meaning of engagement in oral sex (including the type of oral sex) can change and vary for some individuals depending on their gender, relationship status, context and value of relationship for them and, at the same time, it will always depend on their personal characteristics (e.g. including their body image satisfaction, partner’s attractiveness, relationship factor and their fears about being judged on performing oral sex and their health concerns) and their attitudes to oral sex (which can change over time).

Through looking at the male and female accounts, I can also see the link between their talks about oral sex and its broader socio-cultural context. Talks about oral sex as both embarrassing and for enjoyment mirrored socio-cultural representations of oral sex. Talks about oral sex as something nasty and dirty maps onto social-cultural representation of oral sex as a negative (e.g. non-reproduction) practice closely linked to historically non-acceptable or generally prohibited non-reproductive sexual experiences. Positive accounts of oral sex as enjoyment can be similarly seen as cultural products, mapping onto alternative socio-cultural representations of oral sex as pleasant recreational activity which entail trust and intimacy in loving or mutually enjoyable healthy sexual relationships.

Students’ talks about oral sex also reflected the difference in societal inclination to accept different sexual scripts and roles in oral sex for males and females. This difference is based on historically promoted religious beliefs, such as the ‘sinfulness’ of women and the dirtiness of women’s vagina that aimed to place women in sexual relationship in an unequal and submissive position to men. Braun & Wilkinson (2003) argued that the attitudes and behaviours attributed to men, and the anxieties identified by females, are ‘articulation of socio-cultural representations of women’s vagina as something disgusting (e.g. that smells, is dirty or diseased)’ (p.38). Therefore, while oral sex is accepted in heterosexual relationships, males are normally seen as the main recipients and females are seen as performers of oral sex within oral sex practice. The reflection of these views echoed in students’ talks on males avoiding giving oral sex and females avoiding accepting oral sex on the basis of non-attractiveness of females’ vagina, and in females’, the fear to accept oral sex on the basis of imperfection of their bodies. Psychological distress attached to the females’ motive to perform oral sex to
gain control over males also reflects maintained within society and culture views about non-appropriateness for females to take on males’ social roles in sex. Following this theoretical framework, the results of this study support the argument that socio-cultural representations ‘simultaneously reflect and produce the object they ostensibly describe, and allow for possible ways of experiencing one’s own, and other people’s bodies’ (Braun & Wilkinson, 2003, p.39).

Nevertheless, in line with the recent stream of research on young females’ sexual behaviour (Bay-Cheng, Robinson & Zucker, 2009, Bay-Cheng et al, 2011 etc.), results from this study indicated that despite Sexual Script theory and previous research on adolescent girls’ distress attached to the practice of oral sex, many female students really enjoy giving and receiving oral sex, and many males are happy to give their female partners oral sex in committed and loving relationships. Therefore, female students’ talks about enjoyment of receiving oral sex could be interpreted as the success signs of feminists’ movement which intended, in the context of equality and empowerment of women in personal relationships, to help them in expressing their sexuality by encouragement of their bodily awareness and acceptance.

7.4.2 Conclusions

To sum up, students' willingness to talk about oral sex demonstrates that oral sex is a popular and routine practice in students’ sexual experiences and in their sexual life. At the same time, students’ talks of their oral sex experiences have revealed that oral sex is also a part of their sexual life that for most of them is influenced by different socio-cultural representations of oral sex that varies between genders.

On an individual level, the results from this study demonstrate that feeling comfortable with engagement in oral sex, including receiving oral sex for females and giving oral sex for males, and enjoying these experiences, is important part of young people’s psychological health and well-being. The essential part of this enjoyment for both genders appeared to be the feeling of having control over their sexuality and their sexual behaviour. Whilst females taking control over sexual activity is the position that contradicts traditional societal and cultural sexual scripts (e.g. Gagnon & Simon, 1987), the results of this study indicate that it seems psychologically more difficult for young females to feel positive about controlling their partners in terms of when and how to have sex (wanted or unwanted) and more psychologically difficult for males to delegate
this control to their female partner. Furthermore, although fellatio and cunnilingus are considered as being equivalent forms of sexual activity in many respects, we have to bear in mind that fellatio and cunnilingus are normally not viewed as equivalent by males and females (Chambers, 2007; Vannier & O’Sullivan, 2012), because they require different states of undress, and are surrounded by different social norms (Tolman, 2005) and also reflect individual (Reinholtz & Muehlenhard, 1995) and gender differences (Morrison et al, 2005) in genital perceptions.

The data presented in this study demonstrate the existence of not only negative but often positive accounts of what taking control over oral sex activity and receiving oral sex means for female students, and how these positive experiences could co-exist alongside more negative meanings. Promotion of such positive meanings by academics, health professionals and popular media, and disruption of negative meanings traditionally attached to practising oral sex for females will greatly contribute to empowerment of women in personal relationships.

7.4.3 Summary

To summarise, findings from qualitative study decribed in this chapter have revealed that, although some female students talked about their enjoyment of oral sex, some of them expressed certain anxiety attached to engagement in oral sex practice. Identified by quantitative study, gendered differences in types of self-control, motivational orientation and determinants of engagement in oral sex, which I discussed in the previous chapter, also indicated that oral sex appeared to be a type of sexual activity that holds different social and personal meanings and complications for females and males.

The references to oral sex as an embarrassing, unpleasant and not sexually appealing activity were largely found in females’ accounts of oral sex experiences. As findings from this study also revealed that females’ engagement in oral sex could be influenced by socio-cultural pressures imposed on young females and power imbalances in the context of sexual relationships, it was important to explore female choices to engage in oral sex behaviour in situations of gender power imbalance and under conditions of limited resources of self-control available to them in this situations (i.e. ego depletion state). Therefore, my next study was set up to further explore the impact of self-regulation processes on oral sex behaviour in these situations in healthy heterosexual female students.
8.1 Introduction

In previous chapters, I examined a proposed cross-sectional model of relationships, between self-control, oral sex behaviour and psychological well-being. The participants were followed up four months later to obtain repeated measures for a longitudinal analysis of proposed relationship between constructs. However, the gender differences during the longitudinal assessment of PWB data raise potential questions that I could not address in the previous studies. The following study was set up to further explore the impact of self-regulation processes on oral sex behaviour.

The reasons for choosing to run this study on the female student population was grounded in the results of my investigation of students’ oral sex behaviour and were based on previous research that indicated that risky sexual behaviour needs to be considered in the wider social context and within gender power relations (e.g. Holland et al., 1990). These results indicated that young females appeared to be in a more vulnerable population affected by social expectations and social pressures related to their sexual behaviour than boys (e.g. Travis, 2006; Byers, 1996; Morokoff, 2000).

The theorists of TPB consider subjective norms to be the perceived social pressure to engage or not to engage in behaviour. Subjective norms are assumed to be determined by the total set of accessible normative beliefs concerning the expectations of important reference group. Specifically, the strength of each normative belief is weighted by motivation to comply with the referent group’s expectations. According to TPB, the more favourable are the attitudes and subjective norms, and the greater the perceived behavioural control, the stronger should be the person’s intention to perform the certain type of behaviour. While exploring oral sex behaviour in this study, I followed the TPB framework. At the same time, attitudes to engagement in oral sex behaviour were supplemented by the factor representing perceived by respondents’ pressures to comply
with the social norms. This resulted in adding to attitudinal variables a variable that I named as Concern with Acting Sexually Preoccupied (CASP).

Research in the area of women-focused HIV prevention indicates that seemingly identical contexts of sexual behaviour can have unique effects on women and men (Yoder & Kahn, 2003), and understanding women’s HIV/STD risk via heterosexual transmission should consider the role of relationship power (Amaro & Raj, 2000; Wyatt & Rierdale, 1994). Because women are often seen to be the less powerful partner in relationships, it was argued that they are less likely to participate in decisions about safer sex and they also could experience increased difficulty negotiating safer sex behaviour (Bowleg et al, 2000; Harvey & Bird, 2004; Holland et al, 1992) that could lessen their self-efficacy for refusing sex (Soet et al, 1999). The results of my survey exploring students’ oral sex behaviour, described in the previous chapters, were in accordance with these findings on negotiation in risky sexual behaviour from research literature. Therefore, in the present study I aimed to account for the role of relationship power pressure in females’ attempts to control (or not to control) their engagement in oral sex behaviour.

The difficulty arises when I tried to identify what to understand by gender power pressure to engage in oral sex behaviour for female students. Turning back to research in the area of the condom use implementation, I found that Wingood & DiClemente’s (2000) extended version of the Theory of Gender and Power (TGP) suggests that an imbalanced sexual situation increasingly favours the female’s male partner, and these dynamics are thought to be further amplified in relationships perceived by women as long-term or serious relationships (Hobfoll, 1998; Impett & Peplau, 2003). Based on these research findings and on some females’ comments about relationship pressures to engage in oral sex from the students’ survey, I considered performing oral sex outside relationship as a condition of the absence of gender relationship power pressure and, consequently, performing oral sex behaviour in relationship as a condition of gender relationship power pressure for females.

I also needed to recognise the fact that sexual behaviour, as a type of social behaviour, sometimes can be ‘automatically regulated and adopted to the current environment in motivational and perceptual ways’ (Bargh et al, 2001); and thus could be seen as a behaviour that is learnt through repeated practice and guided by cultural, religious and
societal rules. This means that exerting self-control over this behaviour on particular occasions requires some effort and can be framed in terms of a conflict between immediate impulses on one hand and reasoned attitudes and standards to restraint behaviour on the other (e.g., Baumeister & Heatherton, 1996; Carver, 2005). The mechanisms of resolving this conflict for actual behaviour are not fully understood yet. Self-control has been found to be an important motivational force that keeps impulsive behaviour in check (e.g. Baumeister, 2007). Therefore, a significant level of self-control and cognitive resources available to exert it can potentially switch on behaviour in these situations in the reflective mode, which represents the traditional attitude-behavioural relation (e.g. Ajzen & Madden, 1986).

Research on personal differences suggests that individuals may not only differ in their reasoned attitudes or their personal standards to restrain potentially problematic behaviour; they are also likely to differ in their impulsive reactions toward tempting stimuli (due to genetic endowment, differences in learning history and current need states) (e.g. Verplanken & Herabadi, 2001; Dittmar, 2005; Verplanken & Sato, 2011). Besides, individuals differ in their dispositional ability to exert self-control and also in their current available resources for exerting self-control (state self-control). As some individuals have been found to have a strong ability to self-regulate consistently from early childhood through to adulthood, others appear to be consistently less successful at self-regulating (e.g. Shoda et al, 1990). As far as ‘current state’ self-control is concerned, it is argued there are fluctuations in these states of self-control, and these fluctuations are suggested to depend on the momentarily availability of self-control resources (e.g. Tangney et al, 2004).

Research indicates that impulsive sexual behaviour may occur when self-control is being compromised, for instance in ego depletion states caused by physical tiredness, alcohol intoxication, higher/lower emotional states and cognitive overload. Leith & Baumeister, (1996), Gailliot & Baumeister (2007), Raffaelli & Crockett (2003) found that individuals with low trait self-control and/or those with self-control being depleted by recent acts of exerting non-sexual self-control were less likely than others to suppress inappropriate sexual thoughts and to resist the temptation to engage in sexual activities outside their primary relationship. Certain correlates of risky sexual behaviour, such as drug/alcohol misuse, have been proven to associate with an individuals’ lack of ability to successfully control their behaviour (e.g. Neal & Fromme, 2007; Quinne & Fromme, 2010). Recent research on capacity-related aspects of self-
control (e.g. Hagger et al, 2010) and on the relationship between control capacity and control motivation (e.g. Baumeister & Vohs, 2007; Robinson et al, 2010) emphasized the role of motivation to control behaviour in affecting the strength of the intention-behaviour relationship in controlling behaviour. Nevertheless, research on motivation as a potential moderator of the impulsive behaviour and reflexive behaviour relationship in the domain of prejudice (Fasio et al, 1995) and in the context of alcohol use (Thrush et al, 2009) found a mixture of evidence for moderating the effect of motivation.

In the present study, I explored oral sex behaviour by using and adapting the dual-system model of impulse versus self-control developed by Hofmann et al (2009). Based on self-regulatory theoretical mechanisms of dual-system model, I aimed to test the effects of self-control and motivation on risky oral sex behaviour. A number of studies have established that ego depletion, alcohol consumption, trait self-control and working memory capacity reduce the impact of restraint standards on health-related outcomes (Gailliot & Baumeister, 2007; Muraven et al., 2002; Vohs & Heatherton, 2000). Impulsive precursors of health-related behaviour were found to predict health-related behaviour only for depleted participants (Hofmann et al, 2007), including in sexual interest behaviour studied in a laboratory setting (Friese & Hofmann, 2008; Thrush et al, 2009; Wiers et al, 2008). In accordance with previous research, I considered the reflective route as represented by the attitudes and subjective norms towards oral sex, and the impulsive route as represented by the tendency to get involved in oral sex on impulse.

A key question regarding the moderating role of motivation in dual-system processing was whether motivation is able to substitute for limited self-control resources in ego depletion situations. I also aimed to explore how control motivation, as applied to risky oral sex behaviour, may shift the potential for activation of impulsive-reflexive behavioural schema in favour of one of them, particularly in the situation of gender power relationship pressure.

In addition to self-regulation variables, based on the previous research that demonstrates that besides self-control, oral sex behaviour could be influenced by a number of other variables, and their relationships are complex and vary across studies, I included in analysis, two of the most potential variable, self-esteem (Overby & Kegeles, 1994; Miller et al, 2000) and body image satisfaction (e.g. Cash, 2002a). My decision to
include body image variables was also based on some females’ comments about refusing to engage in oral sex because of their body image concerns, gained from qualitative part of my online students’ survey exploring oral sex behaviour.

Besides, taking into consideration findings from this survey that oral sex behaviour is the subject of individual’s cognitive appraisal, I included in analysis variables representing negative body image thinking habits. Their cognitive components were found to be highly automatic and difficult to control and independently and significantly account for variances in self-esteem for girls (e.g. Verplanken, 2006; Verplanken et al, 2007; Verplanken & Velsvik, 2008). As the cognitive body appraisal processes are suggested to work within a particular cultural model which includes socio-cultural factors in the form of peer, parents and media pressure (e.g. van den Berg et al, 2007), body image satisfaction can also be considered as a factor related to cultural, religious and social norms.

Based on previous research and findings from my previous studies, in the present study I have developed and tested the following hypotheses:

**Hypothesis 1:** Females with a high level of self-control will demonstrate lower engagement in oral sex behaviour in comparison with females with lower level of self-control.

**Hypothesis 2:** Females with higher level of difficulties in motivation will demonstrate higher engagement in oral sex behaviour in comparison with females with less difficulty in motivation.

**Hypothesis 3:** Self-control and motivation will be significant predictors of engagement in oral sex behaviour alongside attitudes to oral sex behaviour and impulsivity.

**Hypothesis 4:** Motivation to control oral sex behaviour can potentially moderate the relationship between reflective and impulsive processes in ego depletion and under relationship power pressure.

**Hypothesis 5:** Motivation to control behaviour could potentially contribute to low self-control or substitute for low self-control in ego depletion in the context of gender power.
imbalance. Opposed to this, self-control should be able to substitute for low motivation to control oral sex behaviour.

Hypothesis 6: Females’ engagement in oral sex behaviour will be associated with their body image satisfaction; female participants with a higher level of negative body image thinking habits will demonstrate lower engagement in oral sex behaviour. Females who are higher in self-control and motivation to control their oral sex behaviour will demonstrate lower engagement in oral sex behaviour, irrelevant of their body image satisfaction and negative thinking habits. Patterns of oral sex behaviour will be also affected by relationship power pressure and females’ self-esteem.

In order to account for relationship pressures and to explore females’ process of making choice to engage/not engage in oral sex behaviour in ego depletion (e.g. physical tiredness, alcohol intoxication, cognitive load and emotional rise), I developed more focused highly structured tasks in form of scenarios of engagement in oral sex in these ego depletion states, considering gender power relationship pressure (e.g. vignettes). Following the tradition adopted in research on sensitive issues to assess females’ oral sex behaviour in ego depletion, I used the likelihood approach. A number of studies have shown that likelihood scales could have good reliability and validity (Lee et al., 2003) and high internal consistency (Pryor et al, 1995). Accordingly, I added to the previous set of hypotheses the final one:

Hypothesis 7: There will be the difference in the choice of oral sex behaviour in different ego depletion situations and this difference will depend on relationship power pressure.

8.2 Method

8.2.1 Participants

Female participants from the University of Bath were recruited by the principal investigator via inviting them to take part in online survey. The final sample consisted of 248 females from University of Bath students. Their ages ranged from 19 to 25 years; mean age 20.37 years (SD=1.42 years).
8.2.2 Procedure

Prior to the collection of data, consent to conduct the study was issued from the university of Bath Research Ethics Committee.

The participation in the study was on a volunteer basis. The inclusion/exclusion criteria for participation were as follow: females from 18-24 years old who have experienced oral sex; are fluent in English; able to give informed consent, and be able to use a computer online. The invitation to participate in this online study was placed on the Student’s Home Page of the University of Bath and on the internal Research Project site of the university of Bath Psychology Department. Participants from the Psychology Department were also recruited to take part through a Research Participation Scheme which allows them to receive 2 research credit points.

‘Controlling Sexual Behaviour Survey’ was placed on Bristol Online Survey’s website where this survey was privately and anonymously completed by each participant. In order to ensure participants’ anonymity and to prevent multiple completions every participant received a unique coded identifier to log on to the Bristol Online Surveys website, where the study was completed. All participants were given clear information about their right to withdraw from participating in the research at any time, in which case, any information and personal data by which they can be identified would be destroyed. Before completing this survey, participants were invited to consent to participation by pressing the ‘submit’ button in order to proceed to the actual survey. The survey was completed on one occasion.

The pilot project was conducted to test 20 vignettes developed by the researcher for this study. These vignettes aim to represent the different situations of gender power imbalance in students’ everyday life and in the situations of ego depletion related to oral sex behaviour (Appendix 4). The vignettes were tested by 21 students through the Psychology Department students’ Research Participation Scheme. Each vignette scenario was presented in two versions (e.g. versions A and B): with or without gendered power imbalance. Participants were given only one version of this scenario which was assigned to each of them randomly, in order of their participation (e.g. participant 1 was given scenario Version A, participant 2 was given scenario Version B, and then again following this order).
10 participants completed version A of the pilot and 11 participants completed Version B of the pilot. Vignettes were tested for their plausibility, negativity, and for using the appropriate choices of behaviour in the given situations. The most realistic and relevant vignettes, as rated by participants, were chosen for the actual study (Appendix 4, part 2).

8.2.3 Measures

The following measures listed below were combined onto a single online questionnaire (Appendix 4, part 1). As sexual behaviour could be viewed as being personal behaviour and social behaviour at the same time, I considered this behaviour as being governed by factors related to both personal characteristics and cultural, religious and social norms and rules. My choice of measurements was based on the methodological approach (e.g. the dual-system perspective).

**Attitudes** towards engagement in oral sex were measured by asking participants the question: “Oral sex is...” with the following responses: “pleasant”, “acceptable” or “exciting”. The items were measured on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). In the present study, this measure of attitudes showed alpha coefficients of .87.

**Impulsive tendencies** of getting involved in oral sex were measured by three items, which were taken and adapted from Verplanken & Herabadi (2001). The items were presented as related to sexual behaviour: “I often end up engaging in oral sex without thinking”, “I find it difficult to turn down the offer to engage in oral sex”, and “I sometimes cannot suppress the feeling of wanting to be engaged in oral sex”. They were measured on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). In the present study, an alpha coefficient was .78.

**Sex related self-control** was assessed by three items, which were taken and adapted from Baumeister & Gailliot (2007). These items showed the highest score on confirmatory factor analysis during study 2, and were as follow: “I wish I had more self-discipline when it comes to getting involved in oral sex”, “Sometimes I cannot stop myself from being engaged in oral sex, even if I know it’s wrong to do so”, and “When I am with a guy or a girl who I like and who wants to engage in oral sex and I do not, I
still engage in that behaviour”. They were measured on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). In the present study, an alpha coefficient was .78.

*Concern with acting sexually preoccupied* was assessed by 8 items. Some sample items were as: “In today’s society it is important that one is not perceived as being sexually preoccupied in any manner”; “I get angry with myself when I get thoughts or feelings that might be considered as sexually preoccupied”; “It is important for me that other people don’t think that I am sexually preoccupied, and “If I have sexual thoughts or feelings, I keep it to myself”. Responses were given on 5-point scales, ranging from 1 (strongly disagree) to 5 (strongly agree). High scores indicated a strong negative body image thinking habit. The internal reliability of the proposed CASP scale was good, alpha coefficient = .84.

*Negative body image thinking habits* were assessed by 13 items from HINT (Habitual Index of Negative Thinking) questionnaire (Verplanken & Orbell, 2003). They were measured on a Likert scale from 1 (strongly agree) to 5 (strongly disagree). In the present study, this questionnaire demonstrated an alpha coefficient of .94.

*Body image satisfaction* was assessed by 9 items from Body Image Questionnaire (Cash, 2000). They were measured on a Likert scale from 1 (very dissatisfied) to 5 (very satisfied). In the present study, an alpha coefficient was .84.

*Self-esteem* was assessed by 10 items from Rosenberg’s Self-Esteem questionnaire (Rosenberg, 1965). They were measured on a Likert scale from 1 (strongly agree) to 4 (strongly disagree). In the present study, an alpha coefficient was .95.

*Sexual behaviour* Gendered power pressure to get engaged in sexual behaviour in ego depletion was manipulated using structural tasks developed for this study. Each participant was presented with 8 of these vignettes, which included oral sex behaviour scenarios in different types of power imbalances; four of them related to behaviour outside relationships and the other four related to the same type of behaviour in relationships. These vignettes represented four types of ego depletion (e.g. physical tiredness, alcohol intoxication, cognitive load and emotional rise). Participants were given four choices to reply to these scenarios which included two non-engagement options, represented non-engagement in sexual behaviour: a) say no and leave; b) say
no and stay; and two engagement options, represented engagement in sexual behaviour: 
c) agree to have oral sex; d) agree to have full sex. Participants’ behaviour was 
measured on a Likert scale from 1 (least likely) to 7 (most likely).

As a validated measure of control motivation in sexual behaviour is still waiting to be 
developed, I assessed the motivation to control oral sex behaviour in compliance with 
socio-cultural norms by asking participants to indicate ‘how hard they were ready to 
motivate themselves to make a conventional behavioural choice’ in each ego depletion 
scenario situation. I measured this motivational factor on a 1-5 Likert scale with ‘I’ 
labelled as ‘very much’ and ‘5’ labelled as ‘just a natural choice for me/not at all’. After 
completing the responses to all eight of the scenarios, the highest score a person could 
get was 40 and the lowest possible score was 8. Higher scores indicated the lower 
motivation effort to choose the appropriate behavioural choice.

Participants’ relationship status was assessed by asking the question: ‘Are you currently 
in relationship?’ with two possible answer options as ‘yes’ or ‘no’.

8.2.4 Analysis

8.2.4.1 Part 1: Testing main hypotheses

1) Descriptive statistics
The descriptives were presented by means, SDs and Pearson’s inter-correlations of the 
study variables. Differences between groups with higher/lower sex-related self-control, 
motivation to control sexual behaviour, body image satisfaction and negative body 
image thinking were explored by a series of t-tests.

2) Regression analysis
A series of hierarchical multiple regression analysis were conducted to assess the 
relative importance of all potential variables in predicting the dependent variables. A 
hierarchical approach was used to retain the theoretical coherence of the relationships 
between independent variables (Tabachnick & Fidell, 2001).

The hypotheses stated that the attitudes, sex related self-control, impulsive tendencies, 
preoccupation to engage in sex behaviour will independently account for oral sex choice
behaviour (choice C, e.g. ‘agree to have oral sex’). Hierarchical multiple regressions were conducted with this sexual behaviour choice performing them inside and outside of relationships, respectively. These variables were regressed on attitudes, sex-related self-control and impulsivity on Step 1, preoccupation to engage in sex behaviour on Step 2, body image satisfaction and negative body image thinking habits on Step 3.

In all analyses, results were judged to be non-significant (NS) if p>.05. Effect sizes (Hedges g) were considered to be large if above .80, moderate if above .50, small if above .20, but not to be meaningful if below .20. Partial eta squared was used to calculate effect sizes in ANOVA analyses, which represents the amount of variance which is accounted for by the effect.

3) Moderation analysis
Alongside with the main effects, we examined if sex-related self-control and motivation factors would have a moderating effect on attitudes to oral sex and impulsivity in making oral sex behaviour choice (choice C, e.g. ‘agree to have oral sex’) in ego depletion and under gender power pressure.

Moderation analysis in social sciences involves the use of linear multiple regression analysis or causal modelling (Cohen et al, 2003). Attitudes and impulsivity, as independent variables, and sex-related self-control and motivation variables, as presumed moderators, were centred by converting them to Z-scores with means of zero, and the interaction variables were created by multiplying the two Z-scores together. The independent variables and the presumed moderator were entered into a regression as a group, followed by the entry of the interaction variables. For moderation analysis of high/low groups, outputs were organised by groups. Participants were allocated to the appropriate group by the mean of their total score.

To probe the possible interaction effect, I plot the effect of self-control and motivation on oral sex behaviour at low and high values of attitudes and impulsivity (e.g. values that are one standard deviation above and below the mean were chosen for this) and supplement it by simple slope analysis, which determines whether the effect of self-control and motivation on oral sex behaviour is statistically significant at particular values of attitudes and impulsivity.
8.2.4.2 Part 2: Testing the differences in sexual behaviour choice in ego depletion

To assess the differences in sexual behaviour choice responses in ego depletion scenarios (i.e. physical tiredness (1), alcohol intoxication (2), cognitive load (3) and emotional rise (4)), reported in relationship and outside relationship, and to explore how these differences correspond with actual participants’ relationship status, a repeated-measures MANOVA analysis with a two within-participant factor of scenario type (1, 2, 3 or 4) and response types (i.e. (a) say no and leave; b) say no and leave; c) agree to have oral sex and d) agree to have full sex)) and one between-participant factor of relationship status (i.e. yes vs. no) was conducted with outside-relationship and inside-relationship scores as dependent variables.

Multivariate analysis of variance (MANOVA) is a statistical test procedure for comparing multivariate means of several groups when there are two or more correlated dependent variables. I used MANOVA instead of running two ANOVA analyses as this test has a number of advantages over ANOVA. Firstly, by measuring several DV’s instead of only one, it allows the researcher to improve the chance of discovering the strength of the relationship between the two dependent variables (Tabachnick and Fidell, 2007). The most important purpose of MANOVA is to explore how independent variables influence some patterning of response on the dependent variables (Carey, 1998). Secondly, MANOVA was used as I was looking for a single, overall statistical test on my set of variables instead of performing multiple individual ANOVAs. All multiple comparisons used Bonferroni corrections. This helped to protect my results against inflated Type I error due to the multiple tests of likely correlated DVs (Tabachnick & Fidell, 2001).

8.3 Results

8.3.1 Part 1. Testing main hypotheses

Descriptive statistics

Means, Standard Deviations and correlations of the study variables are represented in Table 8.1.

Oral sex behaviour was significantly positively correlated with attitudes to oral sex, sex-related impulsivity, and significantly negatively correlated with sex-related self-control,
### Table 8.1 Means, SDs and correlations of the study variables

<table>
<thead>
<tr>
<th>Variable and range</th>
<th>M</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td>10.49</td>
<td>.23**</td>
<td>-.40***</td>
<td>.42**</td>
<td>-.13*</td>
<td>-.17**</td>
<td>-.43**</td>
<td>-.02</td>
</tr>
<tr>
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<td>15.98</td>
<td>4.21</td>
<td>-.09</td>
<td>.39**</td>
<td>.13*</td>
<td>.04</td>
<td>-.08</td>
<td>-.27**</td>
<td></td>
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<td>3. Sex related self-control</td>
<td>17.82</td>
<td>3.72</td>
<td>-.62**</td>
<td>-.01</td>
<td>.05</td>
<td>.24**</td>
<td>-.27**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sex related impulsivity</td>
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<td>-.04</td>
<td>-.01</td>
<td>.23**</td>
<td>-.01</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. Body image satisfaction</td>
<td>28.73</td>
<td>6.03</td>
<td></td>
<td>.60**</td>
<td>.04</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Negative thinking habits</td>
<td>33.94</td>
<td>10.97</td>
<td></td>
<td>.20**</td>
<td></td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Motivation</td>
<td>29.55</td>
<td>6.35</td>
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<td></td>
<td></td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. CASP</td>
<td>19.43</td>
<td>5.91</td>
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<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

**NOTES:** N=248; *p<0.05, **p<0.01
motivation to control sexual behaviour, body image satisfaction and habitual negative body image thinking. Attitudes to oral sex were significantly and positively correlated with impulsivity and body image satisfaction, and significantly and negatively correlated with concern of acting sexually preoccupied. Sex related self-control was significantly positively correlated with motivation, and negatively correlated with impulsivity and with concern of acting sexually preoccupied. Motivation was significantly positively correlated with self-control and negative body image thinking habits, and significantly negatively correlated with engagement in oral sex and sex-related impulsivity.

**Hypothesis 1: Females with high levels of self-control will demonstrate lower engagement in oral sex behaviour in comparison with females with lower levels of self-control.**

A series of t-tests revealed that females who are higher in sex-related self-control demonstrated a significantly lower likelihood of engagement in oral sex behaviour in total (t (1,246) =-5.01; p<.001), outside relationship (t(1,246) =-4.71; p<.001) and inside relationship (t(1,246) =-3.65; p<.001).

**Hypothesis 2: Females with higher level of difficulties in motivation to control sexual behaviour will demonstrate higher engagement in oral sex behaviour in comparison with females with fewer difficulties in motivation.**

Females who reported higher difficulties to motivate themselves before making choices towards oral sex behaviour demonstrated a significantly higher engagement in oral sex behaviour in total t(1,246) =6.61; p<.001), outside relationship t(1,246) =5.11; p<.001) and inside relationship t(1,246)=5.48; p<.001) than females who reported less difficulties to motivate themselves.

**Hypothesis 3: Self-control and motivation will be significant predictors of engagement in oral sex behaviour alongside attitudes to oral sex behaviour and impulsivity.**

Hierarchical multiple regressions were conducted with the choice of engaging in oral sex behaviour performing total, outside relationships and inside relationships, respectively. The results are presented in Table 8.2 and Table 8.3.
Table 8.2 Hierarchical multiple regression analysis predicting oral sex behaviour choices in total, oral sex behaviour choice outside-relationship and oral sex behaviour choice inside relationship

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Oral sex behaviour choice in total</th>
<th>Oral sex behaviour choice outside relationship</th>
<th>Oral sex behaviour choice inside relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Attitudes</td>
<td>.32</td>
<td>.16</td>
<td>.13*</td>
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<tr>
<td>Self-control</td>
<td>-.75</td>
<td>.21</td>
<td>-.27***</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>.45</td>
<td>.19</td>
<td>.19**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Body image satisfaction</td>
<td>-.29</td>
<td>.09</td>
<td>-.17**</td>
</tr>
<tr>
<td>Negative thinking</td>
<td></td>
<td></td>
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</tbody>
</table>

NOTES: *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.

Oral sex behaviour choices in total: \( R^2=.25, R^2\text{-adjusted}=.23 \).
Oral sex behaviour choice outside relationship: \( R^2=.28, R^2\text{-adjusted}=.26 \).
Oral sex behaviour choice inside relationship: \( R^2=.12, R^2\text{-adjusted}=.11 \).
### Table 8.3 Hierarchical multiple regression analysis predicting oral sex behaviour choices in total, oral sex behaviour choice outside relationships and oral sex behaviour choice inside relationships

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Oral sex behaviour choice in total</th>
<th>Oral sex behaviour choice outside relationship</th>
<th>Oral sex behaviour choice inside relationship</th>
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</thead>
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<tr>
<td></td>
<td>B</td>
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<td>β</td>
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<tr>
<td>Step 1</td>
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<td></td>
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<tr>
<td>Attitudes</td>
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<td>.16</td>
<td>.13*</td>
</tr>
<tr>
<td>Self-control</td>
<td>-1.32</td>
<td>-1.16</td>
<td>-27***</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>.45</td>
<td>.19</td>
<td>.19**</td>
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<td>Step 2</td>
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<tr>
<td>CASP</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td>.10***</td>
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<tr>
<td>Motivation</td>
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<td>-1.09</td>
<td>-33***</td>
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<td>Step 3</td>
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<td>.02**</td>
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<td>Body image satisfaction</td>
<td>-1.26</td>
<td>-1.09</td>
<td>-15**</td>
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<tr>
<td>Negative thinking</td>
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</tbody>
</table>

**NOTES:** *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.

- Oral sex behaviour choices in total: $R^2=.34$, $R^2$-adjusted=.33.
- Oral sex behaviour choice outside relationship: $R^2=.38$, $R^2$-adjusted=.37.
- Oral sex behaviour choice inside relationship: $R^2=.22$, $R^2$-adjusted=.21.
The variance inflation factors varied from 1.00 to 1.66 in both analyses, indicating that there were no multicollinearity problems.

Both, sex-related self-control ($t(4,247) = -4.73, p<.001$) and impulsivity ($t(4,247) = 2.54, p=.012$) were significant predictors for oral sex choice behaviour outside relationship, whereas impulsivity alone ($t(2,247) = 5.00, p<.001$), predicted this choice inside relationship. Concern with acting sexually preoccupied ($t(4,247) = -3.05, p=.003$), and body image satisfaction ($t(4,247) = -3.28, p=.001$) also contributed to oral sex choice behaviour outside of relationships but not inside relationships, whereas negative body image thinking habits ($t(2,247) = -2.73, p=.007$) was a significant predictor for oral sex choice behaviour inside relationship. Outside relationship, body image satisfaction increased the variance accounted for the choice of oral sex behaviour (3%) over and above the contribution of sex-related self-control, impulsivity and concern with acting sexually preoccupied. Inside relationship, negative body image thinking habits increased the variances accounted for the choice of oral sex behaviour (3%) over and above the contribution of impulsivity.

Taken generally, attitudes ($t(4,247) = 2.44, p=.015$), sex-related self-control ($t(4,247) = -3.67, p<.001$) and impulsivity ($t(4,247) = 2.43, p=.016$) all contributed to oral sex behaviour choices in total; and body image satisfaction ($t(4,247) = -2.93, p=.004$) increased the variances accounted for the choice of oral sex behaviour by 3%.

Motivation, entered in all three equations, appeared to be a significant predictor of oral sex behaviour in total ($t(4,247) = -6.03, p<.001$), outside relationships ($t(4,247) = -6.49, p<.001$), and inside relationships ($t(4,247) = -6.23, p<.001$). While entering motivation did not significantly affect all predictors of oral sex behaviour in total and outside relationship, it had a detrimental effect on the predictive power of negative body image thinking habit and replaced it as a potential predictor. In all cases, motivation increased the percentage of variances explained by all predictors by approximately 10%. 
Hypothesis 4: Motivation to control oral sex behaviour can potentially moderate the relationship between reflective and impulsive processes in ego depletion and under relationship power pressure.

As motivation proved to have a direct effect on oral sex behavioural choice, it eliminates our hypothesis about a possible moderating effect of motivation on attitudes and impulsivity in ego depletion state and under gendered power pressure.

Hypothesis 5: Motivation to control behaviour can potentially contribute to low self-control or substitute for low self-control in ego depletion in the context of gendered power imbalance. Oppositely, self-control should be able to substitute for low motivation to control oral sex behaviour.

To test this hypothesis I split the file by high/low self-control groups and ran the same regression analyses predicting oral sex behaviour choice as for hypothesis 3. The results for oral sex behaviour choices in total and in different power imbalance situations for participants in low and high self-control groups are presented in Tables 8.4 (a, b).

Table 8.4a Hierarchical multiple regression analysis predicting oral sex behaviour choice outside relationships for participants in high and low sex related self-control groups

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Oral sex behaviour choice outside relationship</th>
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<tr>
<td></td>
<td>High self-control</td>
<td>Low self-control</td>
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</tr>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
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<td>.08</td>
<td>.18*</td>
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<td>Step 2</td>
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<tr>
<td>Impulsivity</td>
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<td>.09</td>
<td>.31***</td>
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<td>Step 3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
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<tr>
<td>Step 4</td>
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<td>.09</td>
<td>-.41***</td>
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<tr>
<td>BIS</td>
<td>-10</td>
<td>.05</td>
<td>-.15*</td>
</tr>
</tbody>
</table>

NOTES: *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.

High self-control group (N=123): R²=.40, R²-adjusted=.38
Low self-control group (N=125): R²=.30, R²-adjusted=.28
Table 8.4b Hierarchical multiple regression analysis predicting oral sex behaviour choice inside relationships for participants in high and low sex related self-control groups

<table>
<thead>
<tr>
<th>Predictor</th>
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<tr>
<td>BIS</td>
<td>.21</td>
<td>.09</td>
</tr>
</tbody>
</table>

NOTES: *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.

For oral sex behaviour outside relationships, in the high self-control group, the oral sex behaviour choice was predicted by person’s attitudes (t(1,117)=3.09; p=.002) and person’s motivation to control their sexual behaviour (t(1,117)=-5.71; p<.001). Body image satisfaction (t (1,117)=-2.0; p=.05) in high self-control group was a significant predictor outside relationship, and accounted for 2% of oral sex behaviour.

In the low self-control group, in addition to motivation (t(1,120)=-4.05; p<.001) and body image satisfaction (t(1,120)=-2.53; p=.01), sex related self-control (t(1,120)=-2.95; p=.004) was also a significant predictor of oral sex behaviour choice.

For oral sex behaviour inside relationships, in high self-control group, the choice of this behaviour was predicted by impulsivity (t (1,119) =2.31; p=.02), motivation (t (1,119) =-4.61; p<.001) and body image satisfaction (t(1,119)=2.59; p=.03), whereas in low self-control group both motivation (t (1, 120) =-4.4; p<.001) and sex related self-control (t(1,120)=-2.2; p=.03), and body image satisfaction (t(1,120)=2.99; p=.003) were significant predictors of the choice of this behaviour.

Overall, motivation appeared to be significant predictors of engagement in oral sex behaviour for the individuals who are high and low in self-control in all situations, contributing from 13 to 18% in this behaviour choice in high self-control group and from 7 to 12% in low control group. Sex related self-control found to be a predictor of engagement in oral sex behaviour for females with low trait self-control. Under relationship pressure BIS hold a positive value for engagement in oral sex for females.
with high trait self-control. The results for engagement in oral sex behaviour choice in total and in different power imbalance situations for participants in high motivational efforts group and low motivational efforts group are presented in Tables 8.5 (a and b).

**Table 8.5a Hierarchical multiple regression analysis predicting oral sex behaviour choice outside relationships for participants in high and low motivation efforts groups**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>High motivation efforts</th>
<th>Low motivation efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>.07**</td>
<td>.20***</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>.31</td>
<td>.10</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASP</td>
<td>-</td>
<td>.08</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
<td>-</td>
<td>.15</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>-</td>
<td>.13</td>
</tr>
<tr>
<td>Body image</td>
<td>-</td>
<td>.07</td>
</tr>
<tr>
<td>satisfaction</td>
<td>.24</td>
<td>.31***</td>
</tr>
</tbody>
</table>

**NOTES:** *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.
High motivation efforts group (N=122): R²=.17, R²-adjusted=.15
Low motivation efforts group (N=126): R²=.45, R²-adjusted=.43

**Table 8.5b Hierarchical multiple regression analysis predicting oral sex behaviour choice inside relationships for participants in high and low motivation efforts groups**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>High motivation efforts</th>
<th>Low motivation efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>.08**</td>
<td>.06**</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>.43</td>
<td>.14</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
<td>-.47</td>
<td>.19</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>-.74</td>
<td>.22</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative thinking</td>
<td>-.13</td>
<td>.05</td>
</tr>
</tbody>
</table>

**NOTES:** *p<.05, **p<.01, ***p<.001. N=248. Effect size is represented by the squared semi-partial correlation.
High motivation efforts group (N=122): R²=.16, R²-adjusted=.15
Low motivation efforts group (N=126): R²=.17, R²-adjusted=.15
For the individuals who reported higher motivational efforts to control their sexual behaviour, in both relationship power situations, impulsivity ($t(2,121) = 3.59; \ p < .001$ and $t(2,121) = 3.13; \ p < .002$, respectively) was a significant predictor of their choice of behaviour, whereas body image satisfaction was a significant predictor for engagement in oral sex behaviour outside relationship ($t(2,121) = -3.69; \ p < .001$). For the individuals who reported less motivational efforts to control their sexual behaviour, self-control ($t(3,125) = -4.18; \ p < .001$ and $t(3,125) = -2.71; \ p = .01$, respectively) was a significant predictor of engagement in oral sex behaviour in both situations. Negative body image thinking significantly contribute to this behaviour inside relationship ($t(3,125) = -2.69; \ p = .01$), while CASP ($t(3,125) = -2.42; \ p = .02$) outside relationship. Inside relationships, motivation to control sexual behaviour was a significant predictor of sexual behaviour choice for females in the high motivational efforts group ($t(2,121) = -3.43; \ p < .001$), whereas outside relationships, it was a significant predictor of oral sex behaviour for females in low motivational efforts group ($t(4,125) = -5.65; \ p < .001$).

A series of moderation analyses explored the interactions between potential moderators (e.g. trait self-control and CASP) and attitudes and impulsivity on likelihood of engagement in oral sex behaviour. The total sample was split and organised by participants’ groups with high/low self-control/motivation. The results are presented in Table 8.6.

**Table 8.6** Moderation effects of self-control and CASP in groups of participants with high and low self-control/motivation

<table>
<thead>
<tr>
<th>IV</th>
<th>Moderator</th>
<th>High self-control (N=123)</th>
<th>Low self-control (N=125)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R² Change</td>
<td>F Change</td>
</tr>
<tr>
<td>Oral sex behaviour outside relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes Impulsivity</td>
<td>CASP</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.02</td>
<td>5.23</td>
</tr>
<tr>
<td>Attitudes Impulsivity</td>
<td>TSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.05</td>
<td>14.79</td>
</tr>
<tr>
<td>High motivational efforts (N=122)</td>
<td>Low motivational efforts (N=126)</td>
<td>Oral sex behaviour outside relationship</td>
<td></td>
</tr>
<tr>
<td>Attitudes Impulsivity</td>
<td>TSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.04</td>
<td>5.15</td>
</tr>
</tbody>
</table>

**NOTES:** N=248.

CASP was found to have a moderation effect for impulsivity and likelihood of engagement in oral sex behaviour in the low self-control group. Self-control had a
significant moderating effect for attitudes and impulsivity and likelihood of oral sex behaviour choice. These effects were present outside relationships but not in the relationship.

**Hypothesis 6**: Females’ engagement in oral sex behaviour will be associated with their body image satisfaction; female participants with higher level of negative body image thinking habits will demonstrate the lower engagement in oral sex behaviour. Females who are higher in self-control and motivation to control their oral sex behaviour will demonstrate the lower engagement in oral sex behaviour, irrelevant of their body image satisfaction and negative thinking habits. Patterns of oral sex behaviour will be also affected by relationship power pressure and females’ self-esteem.

These hypotheses were tested by a series of t-tests performed on the participants’ samples split by the mean values of self-control, motivation, body image satisfaction (BIS) and negative body image thinking (NT) habits. The results are presented in Table 8.7 and 8.8.

The results revealed that there was a significant difference between self-control and motivation efforts group in high and low BIS and NT habits groups. Participants in low and high BIS groups were significantly less likely to engage in oral sex behaviour if they had higher level of self-control. Outside relationship, females with high level of self-control and with high level of BIS were significantly less likely to make oral sex behaviour choice than females with low body image satisfaction. Participants with high level of NT habits were significantly less likely to engage in oral sex behaviour than participants with low level of NT habits, irrelevant of their level of self-control. Participants with a higher level of self-control were less likely to choose oral sex behaviour in both high and low NT habits groups.

Outside relationships, females who have to motivate themselves harder were less likely to engage in oral sex behaviour if they had higher level of BIS. For oral sex choice behaviour in total and inside relationships, participants with a higher level of NT habits were less likely to engage in oral sex behaviour if they had less difficulty to motivate themselves to make oral sex behaviour choice.
**Table 8.7** Means and proportion of all participants in low and high self-control groups according to their BIS and NT scores relating to engagement in oral sex behaviour choice

<table>
<thead>
<tr>
<th></th>
<th>Oral sex behaviour choice in total</th>
<th>Oral sex behaviour choice outside relationship</th>
<th>Oral sex behaviour choice inside relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High self-control (N=123)</td>
<td>Low self-control (N=125)</td>
<td>t-value</td>
</tr>
<tr>
<td>High BIS (N=120)</td>
<td>74</td>
<td>46</td>
<td>-2.1</td>
</tr>
<tr>
<td>Low BIS (N=128)</td>
<td>49</td>
<td>79</td>
<td>-3.17</td>
</tr>
<tr>
<td>t-value</td>
<td>NS</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>NS</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Oral sex behaviour choice in total</th>
<th>Oral sex behaviour choice outside relationship</th>
<th>Oral sex behaviour choice inside relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High self-control (N=121)</td>
<td>Low self-control (N=127)</td>
<td>t-value</td>
</tr>
<tr>
<td>High NT (N=121)</td>
<td>70</td>
<td>51</td>
<td>NS</td>
</tr>
<tr>
<td>Low NT (N=127)</td>
<td>53</td>
<td>74</td>
<td>-4.25</td>
</tr>
<tr>
<td>t-value</td>
<td>-2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>NS</td>
<td>.012</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** NS (p>0.3)
Table 8.8 Means and proportion of all participants in low and high motivation groups according to their BIS and NT scores relating to engagement in oral sex behaviour choice

<table>
<thead>
<tr>
<th></th>
<th>Oral sex behaviour choice in total</th>
<th>Oral sex behaviour choice outside relationship</th>
<th>Oral sex behaviour choice inside relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High motivation (N=122)</td>
<td>Low motivation (N=126)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High BIS (N=120)</td>
<td>Low BIS (N=128)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>57</td>
<td>t-value -4.29 p-value .001 t-value -4.28 p-value .001 t-value -2.86 p-value .01</td>
</tr>
<tr>
<td></td>
<td>p-value NS</td>
<td>p-value NS</td>
<td>t-value NS</td>
</tr>
<tr>
<td></td>
<td>High NT (N=121)</td>
<td>Low NT (N=127)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>54</td>
<td>t-value -3.48 p-value .001 t-value -3.51 p-value .001 t-value -2.49 p-value .014</td>
</tr>
<tr>
<td></td>
<td>p-value NS</td>
<td>p-value .02</td>
<td>t-value NS</td>
</tr>
<tr>
<td></td>
<td>Low NT (N=127)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>72</td>
<td>t-value -5.62 p-value .001 t-value -3.58 p-value .001 t-value -5.10 p-value .001</td>
</tr>
<tr>
<td></td>
<td>p-value NS</td>
<td>p-value NS</td>
<td>t-value NS</td>
</tr>
</tbody>
</table>

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One-way ANOVA tests, with BIS/SE groups as a predictor variable and HINT and SE/BIS scores as dependent variables, revealed that there was a significant difference between BIS groups (high, medium, low) according to females’ self-esteem (high, medium, low) \( (F(2,245) =21.98, p<.001) \) and negative image thinking habits (high, medium, low) \( (F(2,245) =44.25, p<.001) \). Females with higher score on BIS had higher scores on self-esteem, and lower scores on negative body image thinking habits; the lower score on self-esteem was associated with higher scores on negative body image thinking habits. This difference was present between each of groups within each of the variable.

As far as self-esteem was concerned, when the relationship power pressure variable was entered in equation, there was a significant difference between self-esteem groups in likelihood of engagement in oral sex behaviour. Post Hoc analysis showed that when no relationship power pressure was inserted, this difference existed between high and low self-esteem groups \( (p=.01) \); under relationship power pressure there was a difference in self-esteem scores between high and low SE groups \( (p=.02) \), and between medium and low SE groups \( (p=.04) \), but not between high and medium SE groups. Females with low self-esteem demonstrated a higher likelihood of engagement in oral sex than females with medium or high self-esteem, irrelevant of being under relationship power pressure or not.

In alcohol ego depletion state, there was a difference between high and low SE groups in the likelihood of engagement in oral sex under relationship power pressure \( (p=.05) \). Females with higher SE demonstrated a higher probability to engage in oral sex behaviour than females with low SE under relationship pressure while being alcohol intoxicated. Although there was no significant difference between SE groups without relationship power pressure inserted in alcohol condition, generally females with higher SE demonstrated higher probability to get engaged in oral sex behaviour than females with low SE.

Looking at differences between BIS groups in an alcohol condition, Post Hoc analysis revealed that, when no relationship power pressure was inserted, there was a significant difference between medium BIS group and low BIS group \( (p=.03) \) related to likelihood of engagement in oral sex behaviour. Under relationship power pressure condition, there was a significant difference in the likelihood of being engaged in oral sex in alcohol
condition between high BIS group and low BIS group (p=.04). In the absence of relationship power pressure, females with medium BIS score showed a higher likelihood of engagement in oral sex behaviour than females with low BIS score. Under power relationship pressure, females with high BIS score demonstrated higher probability of being engaged in oral sex behaviour.

The combined effects of SE and BIS for alcohol condition are presented in Figures 8.1 and 8.2. They show that when no relationship power pressure was inserted, females with high BIS and low SE demonstrated the highest likelihood of engagement in oral sex, whereas females with low BIS and high self-esteem – the lowest. Under relationship power pressure, females with high BIS and high SE demonstrated the highest likelihood of engagement in oral sex behaviour, whereas females with low BIS and low SE demonstrated the lowest.

Therefore, in the absence of relationship power pressure, SE was found to cause inverse patterns of oral sex behaviour, while under relationship power pressure matching or equivalent high/low BIS and SE were important predictors of females’ engagement in oral sex. This indicates that under failure of monitoring, relationship power pressure and SE issues were influencing females’ engagement in oral sex behaviour.

**Figure 8.1** Likelihood of engagement in oral sex in alcohol ego depletion state, without relation power pressure, according to BIS and SE groups
8.3.2 Part 2: Testing the differences in sexual behaviour choices in ego depletion

_Hypothesis 7: There will be the difference in chosen oral sex behaviour in different ego depletion situations and these differences would depend on relationship power pressure._

A repeated-measures MANOVA analysis with two within-participant factors of scenario type (1, 2, 3 or 4) and response type (a, b, c and d) and one between-participant factor of relationship status (yes vs no) was conducted with outside-relationship and inside-relationship scores as dependent variables. All MANOVA tests were conducted with alpha altered for multiple comparisons using Bonferroni corrections. This revealed that there were two significant multivariate main effects between outside- and inside-relationship scores; the first one for scenario type (F (6, 241) = 19.22, p<.001, $\eta^2=.32$) and the second one for response type (F (6, 241) = 59.60, p<.001, $\eta^2=.59$), and they were not attributable to sampling error. I also had a significant multivariate effect across the interaction between response type vs. relationship status (F (6, 241) = 4.62, p<.001, $\eta^2=.10$) and across the interaction between scenario type and response type (F (18, 229)
= 28.99, p<.001, $\eta^2$=.69). The main effects and interactions are represented in Table 8.9.

**Table 8.9 MANOVA main effects and interactions**

<table>
<thead>
<tr>
<th>Main effects</th>
<th>Outside relationship</th>
<th>Inside relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario</td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Scenario 1: tiredness</td>
<td>3.39</td>
<td>.046</td>
</tr>
<tr>
<td>Scenario 1: drink</td>
<td>3.52</td>
<td>.050</td>
</tr>
<tr>
<td>Scenario 3: cognitive load</td>
<td>3.12</td>
<td>.044</td>
</tr>
<tr>
<td>Scenario 4: emotional rise</td>
<td>3.47</td>
<td>.056</td>
</tr>
<tr>
<td>Response 1: say no and leave</td>
<td>4.87</td>
<td>.102</td>
</tr>
<tr>
<td>Response 2: say no and stay</td>
<td>3.84</td>
<td>.092</td>
</tr>
<tr>
<td>Response 3: agree to have oral sex</td>
<td>2.43</td>
<td>.088</td>
</tr>
<tr>
<td>Response 4: agree to have full sex</td>
<td>2.35</td>
<td>.091</td>
</tr>
<tr>
<td>Relationship status 1: yes</td>
<td>3.36</td>
<td>.057</td>
</tr>
<tr>
<td>Relationship status 2: no</td>
<td>3.39</td>
<td>.053</td>
</tr>
</tbody>
</table>

Univariate between-group analysis showed that outside- and inside-relationship scores did not significantly differ depending on participants’ relationship status.

Within-group univariate analysis indicated that *scenario scores* significantly differed within outside-relationships (F(2.82, 246)=25.92, p<.001, $\eta^2$=.09) and in-relationships (F(2.88, 246)=18.59, p<.001, $\eta^2$=.05). There was also a significant difference in *response scores* within outside-relationships (F(1.8, 246)=152.81, p<.001, $\eta^2$=.38) and in-relationships (F(1.7, 246)=15.38, p<.001, $\eta^2$=.06) (irrespective of participants’ relationship status).

There were also significant differences in scores for interactions between *response and relationship* status outside relationships (F (1.8, 738) = 9.73, p<.001, $\eta^2$=.04), but not in relationships, and for interactions between *scenarios and response* both outside relationships (F (6.1, 738) = 61.09, p<.001, $\eta^2$=.20), and inside relationships (F (6.2, 738) = 57.99, p<.001, $\eta^2$=.19).

Further analyses of interactions showed that, across all scenarios, there was a significant difference amongst participants who reported to be in relationships in their responses to
scenario situations outside and inside relationships. Outside relationships, participants who reported to be in relationship were significantly more likely to choose sexual behaviour choice A (e.g. ‘say no and leave’) \( (t = 3.92, \ df = 246, \ p < .001) \), than C (e.g. agree to have oral sex) \( (t = -2.04, \ df = 246, \ p = .04) \), and D (e.g. agree to have full sex) \( (t = -2.91, \ df = 246, \ p = .004) \), in comparison with those who were not in relationships. Inside relationships, participants who reported not to be in relationship were significantly less likely to choose a sexual behaviour choice B (e.g. ‘say no and stay’) \( (t = -2.13, \ df = 246, \ p = .03) \). This difference, outside and inside relationship, was significant for those who reported not to be in a relationship \( (t = -5.01, \ df = 134, \ p < .001) \), but not for those who reported to be in relationship \( (t = -1.32, \ df = 112, \ p = .19) \).

Interactions between response type vs relationship status and between response type vs scenario type across outside and inside relationships are presented in Table 8.10 and 8.11.

With reference to the original hypotheses, the statistical analysis of differences supported our hypotheses that there would be difference in sex behaviour choice in different ego depletion situations due to the relationship power pressure.

### 8.4 Discussion

The study presented in this chapter addressed the research question concerned with the role that motivation to restrain sexual behaviour could play in self-regulation of oral sex behaviour. This present study also explored the possible interactions between self-control and motivation to control sexual behaviour in tempting situations and in ego depletion states (e.g. tiredness, alcohol intoxication, cognitive load and emotional rise), in absence of and under gender power relationship pressure. Framing this research question within the dual-systems Reflective-Impulsive Model (RIM), this study investigated if any deficiencies in self-control would result in behaviour that follow impulsive route and engagement in oral sex behaviour, and whether motivation to control sexual behaviour can contribute to success to control this behaviour or to substitute for limited self-control resources in ego depletion and under gender power relationship pressure. The findings of the study, presented in this chapter, revealed that females with higher level of self-control skills and motivation to control their sexual behaviour demonstrated lower engagement in oral sex in tempting situations in ego depletion states and under relationship power pressure. The results of this study also
Table 8.10 Interactions between response type vs. relationship status across outside/inside relationship

<table>
<thead>
<tr>
<th>Rel. Status</th>
<th>Response</th>
<th>S1: tiredness</th>
<th></th>
<th>S2: drink</th>
<th></th>
<th>S3: cognitive load</th>
<th></th>
<th>S4: emotional rise</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SE</td>
<td>df</td>
<td>t</td>
<td>p</td>
<td>M</td>
<td>SE</td>
<td>df</td>
</tr>
<tr>
<td>yes</td>
<td>1: say no and leave</td>
<td>1.32</td>
<td>.25</td>
<td>112</td>
<td>5.30</td>
<td>.001</td>
<td>1.43</td>
<td>.25</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>2: say no and stay</td>
<td>.80</td>
<td>.25</td>
<td>112</td>
<td>.320</td>
<td>.750</td>
<td>.42</td>
<td>.23</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>3: have oral sex</td>
<td>-1.04</td>
<td>.24</td>
<td>112</td>
<td>-4.32</td>
<td>.001</td>
<td>-.82</td>
<td>.26</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>4: have full sex</td>
<td>-1.01</td>
<td>.23</td>
<td>112</td>
<td>-4.43</td>
<td>.001</td>
<td>-.65</td>
<td>.27</td>
<td>112</td>
</tr>
<tr>
<td>no</td>
<td>1: say no and leave</td>
<td>-.31</td>
<td>.22</td>
<td>134</td>
<td>-1.40</td>
<td>.163</td>
<td>.49</td>
<td>.23</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>2: say no and stay</td>
<td>-.42</td>
<td>.18</td>
<td>134</td>
<td>-2.34</td>
<td>.021</td>
<td>-.64</td>
<td>.22</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>3: have oral sex</td>
<td>-.18</td>
<td>.19</td>
<td>134</td>
<td>-.95</td>
<td>.343</td>
<td>-.33</td>
<td>.19</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>4: have full sex</td>
<td>.09</td>
<td>.19</td>
<td>134</td>
<td>.51</td>
<td>.614</td>
<td>.07</td>
<td>.23</td>
<td>134</td>
</tr>
</tbody>
</table>
Table 8.11 Interactions between response type vs. scenario type across outside/inside relationship

<table>
<thead>
<tr>
<th>Outside relationship</th>
<th>S1: tiredness</th>
<th>S2: drink</th>
<th>S3: cognitive load</th>
<th>S4: emotional rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>M</td>
<td>SE</td>
<td>df</td>
<td>t</td>
</tr>
<tr>
<td>1: say no and leave</td>
<td>1.01</td>
<td>.28</td>
<td>246</td>
<td>3.65</td>
</tr>
<tr>
<td>2: say no and stay</td>
<td>-.10</td>
<td>.24</td>
<td>246</td>
<td>-.42</td>
</tr>
<tr>
<td>3: have oral sex</td>
<td>-.46</td>
<td>.22</td>
<td>246</td>
<td>-2.09</td>
</tr>
<tr>
<td>4: have full sex</td>
<td>-.64</td>
<td>.23</td>
<td>244</td>
<td>-2.73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inside relationship</th>
<th>S1: tiredness</th>
<th>S2: drink</th>
<th>S3: cognitive load</th>
<th>S4: emotional rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>M</td>
<td>SE</td>
<td>df</td>
<td>t</td>
</tr>
<tr>
<td>1: say no and leave</td>
<td>-.63</td>
<td>.29</td>
<td>228</td>
<td>-2.13</td>
</tr>
<tr>
<td>2: say no and stay</td>
<td>-.61</td>
<td>.28</td>
<td>230</td>
<td>-2.18</td>
</tr>
<tr>
<td>3: have oral sex</td>
<td>.39</td>
<td>.27</td>
<td>246</td>
<td>1.50</td>
</tr>
<tr>
<td>4: have full sex</td>
<td>.47</td>
<td>.26</td>
<td>220</td>
<td>1.81</td>
</tr>
</tbody>
</table>
emphasized the importance of females’ body image satisfaction and self-esteem on their engagement in oral sex behaviour.

In the first part of this study, I tested if sex-related self-control and motivation to control behaviour appeared to be significant predictors of female’s oral sex behaviour and, if not, would they have potential moderation effect on engagement in oral sex behaviour. I predicted that self-control and motivation will influence females’ oral sex behaviour and motivation to control sexual behaviour can contribute to the activation of reflective behavioural schema as a winning behavioural route in likelihood of engagement in sexual behaviour. These hypotheses were supported.

I found that sex-related self-control and motivation to control sexual behaviour had a direct effect on female students’ oral sex behaviour in ego depletion states, but this effect varies depending on relationship power pressure. The finding that self-control could still play a significant role in ego depletion state was based on conservation hypothesis (Muraven et al., 2006) stating that self-control resources during ego depletion state are not exhausted but temporarily conserved and a new additional challenge can bring them to life.

In line with research on capacity of self-control and motivation, my findings revealed that females with a higher level of self-control reported less engagement in oral sex. The role of motivation in oral sex behaviour was slightly more complicated. My findings demonstrated that females who had to motivate themselves harder before making socially acceptable choices to engage/not engage in sexual behaviour demonstrated a higher engagement in oral sex. The possible explanation of this finding is that motivation to control behaviour for these females was applied to compensate for less automatically adapted normative beliefs (e.g. attitudinal component). As self-control and motivation showed just a modest significant positive correlation in this study, it is possible that the relationship between self-control and motivation within oral sex behaviour is not straightforward, and these two important components of self-regulation probably work in slightly different ways (e.g. Hofmann & Kotabe, 2012).

Besides self-control and motivation, attitudes and impulsivity were also found to be significant predictors of oral sex behaviour in ego depletion states. In general, oral sex
behaviour was found to be predicted by self-control, impulsivity, body image satisfaction (e.g. attitudinal component) and motivation to control sexual behaviour. In the absence of relationship power pressure, body image satisfaction was replaced with concern of acting sexually preoccupied (e.g. normative beliefs component). Under relationship power pressure, oral sex behaviour was predicted by impulsivity and motivation, but not self-control. This basically means that under relationship power pressure, self-control fails in contributing to the input of activating reflective behavioural route, and in this situation only motivation component of self-regulation has an influence on the choice of behaviour. This supports research findings that self-control and motivation could have different functions in behavioural self-regulation, and in ego depletion state motivation can be a force that compensates for depleted self-control resources.

Splitting participants in two groups according to their level of self-control and their level of motivation and re-running the previous regression analyses revealed that motivation was a significant predictor of oral sex behaviour choices in both, high and low self-control groups and in both relationship power pressure conditions. Self-control was NOT a significant predictor of oral sex behaviour for females under relationship power pressure, irrespective of their level of self-control, and also for females with high levels of self-control, in absence of relationship power pressure. This means, firstly, that, irrespective of level and availability of sex-related self-control, females who found themselves to be under relationship power pressure most likely do not use self-control while making decisions about performing oral sex. The failure to use self-control under relationship power pressure for females, irrelevent of their level of self-control, could be explained by a substantial body of research on impact of relationship power on safe sexual behaviour (e.g. Harvey et al, 2004; Amaro & Raj, 2000; Impett & Peplau, 2003). The failure to use self-control under relationship power pressure in ego depletion could be explained simply by a lack of available self-control resources.

Secondly, this also indicates that, in absence of relationship power pressure, females high in self-control seem not to use self-control while making decisions about their sexual behaviour choices. The explanation for these findings can be grounded in proposed by Hofmann & Kotabe’s (2012) model of preventive and interventive self-control. In the situation of absence relationship power pressure, the oral sex behaviour of females with high trait self-control can demonstrate typical case of using preventive
self-control (e.g. predicting the situation of potential challenge and using their self-control not to get themselves into this situation). When faced tempting situation, these females fail to insert operational, interventive, sex-related self-control, as they do not exercise this type of self-control due to their habitual use of preventive self-control.

Finally, in line with motivational research, this volitional failure of self-control in ego depletion states could be caused by a shift in motivation, when the person just is not motivated enough to apply self-control to their current behaviour (Inglicht & Schmeichel, 2012). According to the Process Model of Ego Depletion, the volitional and motivational failures of self-control are parts of the same process of shifting motivation and attention away from the need to exert self-control and towards the cues signalling gratification. Cognitive processes supporting this shift are not fully investigated yet and require extensive qualitative research.

My findings indicated that self-control was a significant predictor of oral sex behaviour choice in absence of relationship power pressure and under power pressure but only amongst females who did have no difficulties to motivate themselves to make a conventional sex behaviour choice (e.g. low motivation efforts group). I interpreted this finding in favour of motivational research and as indication that females who have to motivate themselves harder to make the right behavioural choice failed to effectively use self-control in both situations, in the absence of relationship power pressure and under this pressure. Interestingly, under relationship power pressure their sexual behaviour choices were also influenced by motivational efforts.

Looking further at the female groups with high/low self-control, I also found that, when not being a direct predictor of engagement in oral sex behaviour, self-control could potentially (p-value of change .06) moderate a relationship between impulsivity and oral sex behaviour choice for females with high self-control, in the absence of relationship power pressure. These findings are in line with a dual-system model and also can be interpreted in favour of PI-Model, predicting that people with high self-control, through exercising it constantly, eventually make a habit of using self-control implicitly, without making conscious efforts to apply it to recurrent situations (Hofmann & Kotabe, 2012).

Normative beliefs (i.e. CASP) were found to moderate relationships between both, attitudes and impulsivity, for females low in self-control, in the absence of gendered
power pressure. This indicated that normative beliefs have power to compensate for females’ lower level of self-control in likelihood of engagement in oral sex behaviour in ego depletion. Females who reported less motivational efforts to make a behavioural choice were found less likely to engage in oral sex behaviour if they had higher concerns of acting sexually preoccupied. These finding demonstrated the self-regulation and motivational components of normative beliefs.

Findings from this study supported my predictions that females with a high level of self-control and high body image satisfaction demonstrate lower engagement in oral sex; but this prediction was true only in the absence of relationship power pressure. Under this power pressure, there was no difference in oral sex engagement between females with high and low self-control and high body image satisfaction, although females with low body image satisfaction and high self-control consistently demonstrated lower engagement in oral sex than females with low body image satisfaction and low self-control. Being under no relationship power pressure, females who have to motivate themselves harder were less likely to engage in oral sex behaviour if they had higher levels of body image satisfaction. Interestingly, in the absence of relationship power pressure, the high body image satisfaction associated with the lower likelihood of engagement in oral sex behaviour, independent of their level of self-control. These findings fit within research on females’ body-focused anxiety (e.g. Dittmar & Howard, 2004; Tiggemann, 2005; van den Berg et al, 2007).

In line with research on negative thinking mental habits, I found that females with high levels of negative thinking habits were significantly less likely to engage in oral sex behaviour than females with low level of negative thinking habits. There was a positive link between a high level of self-control and motivation and an ability to suppress negative body image thinking habits, in relation to engagement in oral sex behaviour. Females with high self-control were found less likely to choose oral sex behaviour, irrelevant of their level of negative body image thinking habits. Under gender power pressure, females with a higher level of negative body image thinking habits were less likely to engage in oral sex behaviour if they had less difficulty to motivate themselves to make oral sex behaviour choice.

There are also was a clear link between body image satisfaction and negative body image thinking habits. In the absence of relationship power pressure, the less body
image satisfaction in females was associated with a higher likelihood of engagement in oral sex behaviour, whereas under gender power pressure the likelihood of engagement in oral sex was less if a female showed a higher level of habitual negative thinking about her body. These findings are supported by research on habitual negative body image thinking and associated body image dissatisfaction (e.g. Verplanken & Tangelder, 2011; Henderson-King et al, 2001; Halliwell & Dittmar, 2004).

In part two, using the MANOVA analysis, I explored if there were any differences between the choice to engage in oral sex behaviour in four scenarios of ego depletion states (e.g. tiredness, alcohol intoxication, cognitive load, emotional rise), and if this choice would be influenced by relationship power pressure and females’ present relationship status. I found that the choice of engagement in oral sex behaviour differed for four scenarios and for each of these four response options (e.g. say no and leave; say no and stay; agree to have oral sex; agree to have full sex), and this difference was due to the relationship power pressure.

Overall, in the absence of power pressure, options of non-engagement in sexual behaviour were more popular amongst all females, irrespective of the type of ego depletion state and their relationship status. The highest number of females who were likely to reject the offer of oral sex behaviour and leave was in the ego depletion state caused by cognitive load. In this state, in comparison with other three scenarios, there was the greatest gap between non-engagement and engagement in sexual behaviour. Choice of engagement in oral sex behaviour was higher in alcohol intoxication and emotional rise ego depletion states.

Overall, in ego depletion states under relationship power pressure, there was no clear distinction between options of non-engagement and engagement in sexual behaviour across all scenarios. The option of rejecting sex but staying with a partner was the most popular choice in ego depletion state caused by tiredness; option of having full sex was the least popular one. In ego depletion state due to alcohol intoxication as well as cognitive load, the option of leaving and option of having oral sex were almost equally popular amongst females. In the ego depletion state due to the emotional rise, the option of having full sex was significantly more popular than any other options.
Not surprisingly, irrelevant of relationship power pressure, the highest numbers of females were likely to choose oral sex behaviour choice in ego depletion state caused by alcohol intoxication. These findings are supported by research on the role of alcohol in risky sexual behaviour.

In ego depletion states caused by emotional rise in absence of relationship power pressure and cognitive load under relationship power pressure females reported the approximately equal likelihood to engage in sexual behaviour as in ego depletion due to alcohol.

The possible explanation for finding a higher probability of engagement in oral sex in ego depletion due to emotional rise could be found in research on the role of emotions (positive vs. negative) in self-regulation. According to Higgins, emotions could be indicators of discrepancy between actual behaviour and standards (Higgins, 1987). In case of ego depletion due to emotional rise, the presence of positive emotions is contributing to the failure to detect discrepancy in behaviour and thus in failure to use self-control to alter behaviour. As much as attributing this failure to failure in monitoring, it could be considered as motivational failure.

The findings that in ego depletion state due to cognitive load and under relationship power pressure, females reported to have similar likelihood of engagement in oral sex than when under the influence of alcohol can be explained by research on cognitive processing. As ego depletion was found to affect fluid intelligence (the capacity to reason, manipulate abstractions, and discern logical relationships (Catell, 1987; Garlick, 2002) and destroy the self-choice effect (Kuhl & Kazen, 1994; Schmeichel et al, 2003), females choices to engage in oral sex behaviour in ego depletion due cognitive load could be made in less effortful manner (Baumeister et al, 2007). Overall, these findings are worth noticing, as a potential challenge of being in emotional rise or cognitive load depletion state, even without being under influence of alcohol, seems to lead in an increase of probability to get involved in risky sexual behaviour.

Overall, in the ego depletion in all scenarios, in the absence of relationship power pressure, female students were found more likely to refuse the offer of oral sex and leave. Under power pressure, females who consider themselves to be in relationship were more likely to refuse the offer of sex but stay with their partner than females who
considered themselves to be free. If they decide to engage in sexual behaviour, female students who consider themselves to be in relationships prefer the option of oral sex than full sex, whereas females who reported to be free did not make such a distinction between these two options. These findings were in general in accordance with previous research on gender power pressure and engagement in risky sexual behaviour (e.g. Holland et al, 1990; Amaro & Raj, 2000).

8.5 Limitations

This study has several limitations that need to be taken into account. Firstly, participants were recruited through a university online message board and by announcement on the University of Bath Psychology Research Participation Scheme. Although this method allowed me to include a relatively broad sample of ages of students from different departments, the sample was basically a convenience sample and, therefore, it could be a sample that does not represent oral sex behaviour of students’ population in general. Future research should attempt to target a wider student population, and among them students from different cultural backgrounds.

The second limitation of the study was in using self-reported measures of sexual behaviour. Although methodologically justified for assessing sexual behaviour in online self-administrated surveys, self-reported measures are still highly susceptible to self-serving and social desirability bias (e.g. Fisher, 1993).

Finally, another limitation of this study was related to the methodological difficulties in the assessment of sexual behaviour and the absence of validated questionnaires to assess motivation to control sexual behaviour in ego depletion states and in the presence of relationship power pressure. In this study, to measure motivational components of self-control and in assessing oral sex behaviour in various ego depletion states, I was unable to use established and validated questionnaires. Based on the previous research, I had to make a decision to develop some new questionnaires that were appropriate for assessing the variables that I was interested in.
8.6 Conclusions and Implications

The present study explored more complex aspects of self-regulation in shaping females’ oral sex behaviour; particularly, the interplay between self-control and motivational processes in ego depletion states (e.g. alcohol, cognitive load, physical tiredness, emotional rise) and within relationship power pressure.

This study was, to my knowledge, the first study that aimed to explore the combined effects of self-control and motivation to control sexual behaviour on the example of oral sex behaviour. Although research on capacity of self-control and on motivational elements of self-control have existed for more than two decades now, in this study I attempted to investigate the mechanism of their functioning and interacting in situations of temporarily limited resources of self-control (i.e. ego depletion).

One of the main implications of this study was in finding that in ego depletion states, both motivation to control sexual behaviour and sex-related self-control had a direct and independent effect on females’ oral sex behaviour, and that the effect of both of them appeared to depend on relationship power pressure. Despite the fact that self-control and motivation appeared to be two important components of self-regulation, they were found to work in different ways. In ego depletion states motivation to control sexual behaviour appeared to work as a force that compensated for depleted resources of self-control; moreover, this force seems also to possess a universal capacity to compensate for depleted self-control resources, in the absence of relationship power pressure and under power pressure, irrelevant of females’ self-control level.

Findings from this study indicate that, beyond females’ level of self-control and availability of self-control resources, the explanations of female’s decisions to engage in oral sex behaviour may be grounded in perceived value and strength of the current relationship for them, in the level of partner’s attractiveness and in their self-esteem and body image anxiety. These factors will determine how hard they would be willing to motivate themselves before making oral sex behaviour choices.
8.7 Summary

When combined, the findings from this study provided me with a more inclusive picture of processes involved in females’ decision-making processes of engagement or non-engagement in oral sex behaviour.

Although results of this study clarified some aspects of situational and personal characteristics of making sexual behaviour choices, they did not allow me to uncover the cognitive appraisal strategies that females use to justify their choices to engage in oral sex and to deal with the consequences of these choices.

As I believe that understanding of these processes is an important part of any investigation of sexual behaviour, the next focus group study was set up to qualitatively explore the females’ experiences behind their engagement in oral sex behaviour and the cognitive processes around their evaluation and re-appraisal of this engagement.
Chapter 9

DIFFERENCES IN PERCEPTION AND MEANING OF ORAL SEX AMONG HETEROSEXUAL FEMALE UNIVERSITY STUDENTS (The Focus groups study)

9.1 Introduction

In previous chapters I explored the self-regulation processes involved in students’ engagement in oral sex, and investigated the role of self-control and motivation to control sexual behaviour in females’ choices to engage in oral sex in ego depletion states, in the presence or absence of relationship power pressure. I also attempted to gain insight into students’ beliefs about oral sex, their reasoning behind these beliefs and the meaning of engagement in oral sex. Findings from qualitative part of SPSH Survey provided me with some information about the positive and negative sides of students’ experiences of oral sex and attached to them meanings of and reasoning behind their engagement or non-engagement in oral sex. The findings revealed that although many female students’ talked about their enjoyment of oral sex, some of them expressed a certain anxiety attached to their engagement in oral sex practices.

The manner in which female students talked about their oral sex experiences in the qualitative study allows me to suggest that aspects of each of these types of their experiences (e.g. negative/positive) exist alongside the combination of what can be seen as personal, relationship and social factors. In other words, for students participated in SPSH Survey, oral sex appeared to be judged as embarrassment or enjoyment based on personal, relationship or social reasons. Young females’ experience of oral sex, therefore, appeared to mirror socio-cultural representations of oral sex that exist within culture and society: their views on and attitudes to oral sex as something nasty and dirty map onto social-cultural representations of oral sex as a negative practice; similar to their positive views on and attitudes towards oral sex as enjoyment map onto alternative socio-cultural representations of oral sex as a pleasant recreational activity which entails trust and intimacy in a loving and mutually enjoyable healthy sexual relationship.

Previous research indicates that within oral sex practice, as a general rule, males are normally seen as mainly recipients and females are seen as mainly performers of oral
sex (e.g. Connell, 1987). Furthermore, there are certain double standards in the societal acceptance of different types of oral sex as an appropriate sexual activity for young males and young females. Any experiences of oral sex are agreed to benefit young males. Young females who give oral sex to males are very often, on one side, appeared to be stigmatized as ‘sluts’ by their female peers, and, on another side, can see themselves as sexual adventurers and achievers. Research on adolescent girls’ sexuality from feminist developmental framework revealed that two specific aspects of femininity ideology, namely inauthenticity in relationships and body objectification, can have significant negative implications for adolescent girls’ sexual health. Both of them were associated with poorer sexual self-efficacy and resulted in diminishing girls’ ability to act on their own desires in sexual relationships, in less sexual experience and in using less protection (e.g. Impett et al, 2005).

In the context of equality and empowerment of women in personal relationships, young females’ experiences of enjoyment receiving oral sex (e.g. Bay-Cheng et al, 2009, 2011) is usually interpreted as the sign of the success of the feminist movement which intended to help them to express their sexuality by encouraging bodily awareness and acceptance. Nevertheless, young females’ negative experiences of oral sex may well be an indication of the existence of negative meanings and negative physical and emotional experiences of oral sex among them. The research findings that it is mainly female students who report some psychological difficulties around oral sex practice (e.g. Fielder & Carey, 2010), suggest that females are more vulnerable to the short-term psychological consequences of oral sex than males.

Aiming to further clarify processes underlying females’ experiences of engagement in oral sex and the cognitive strategies that females use to support their choices and evaluate the consequences of their oral sex experiences, I conducted a focus group study described in this chapter. The purpose of this investigation was to identify and investigate any psychological distress that could be involved on different stages of evaluation and re-appraisal of females’ oral sex experiences.

The choice of focus group study was a well justified decision. Focus groups are considered to be a research tool that could provide us with the opportunity for triangulation in research (e.g. Denzin, 1989) by giving access to certain kinds of qualitative phenomena that are difficult to study with quantitative methods. Focus group
discussions allow us to undercover and to explore various definitions and understandings held by participants (e.g. Frey & Fontana, 1993); to collect and to observe interactions between participants (e.g. Morgan, 1998), and to study how the consensus is achieved or conflict handled within a group setting. This method also provided me with the opportunity to clarify questions and minimize misunderstandings (e.g. Krueger, 1998), encouraged females to address sensitive issues in a supportive environment (e.g. Zeller, 1993) and allow me to collect the data that provides explanations as well as descriptions (e.g. Kitzinger, 1994).

In this current study, I concentrated on two main themes in heterosexual female students’ experiences about oral sex – the ways of how decisions about involvement in oral sex might be affected by the power of romantic relationships and the role that the self-regulation processes might play in females’ decision-making to engage in oral sex and in evaluation of their oral sex experiences. While designing this study I was interested in finding out how females’ perceptions of oral sex could depend on the role that informal socialisation plays in personal acquisition of information about possible psychological distress related to a sexual life. I was also interested in the ways in which female students interact to try to make sense of each other’s experiences and how these interactions could have importance and meaning for their perception of oral sex and their re-appraisal of any possible distress related to their sexual life.

9.2 Method

9.2.1 Participants

Participants were recruited from advertisement on the University of Bath internal/students’ website; psychology students also were invited to take part in focus groups through the University of Bath Research Participation Scheme.

9.2.2 Procedure and Protocol

Participation in the focus groups was on a volunteer basis. Once the potential participants expressed their interest, the researcher sent them an e-mail with the information sheet about the study including a topic guide, the list of available timeslots/locations for the focus groups and a demographic questionnaire (Appendix 7). After each participant confirmed their willingness to take part in focus groups and
returned the completed questionnaire to the researcher, they were sent an e-mail with their timeslot/location for the focus group. A time lag between the administration of the questionnaire and the focus group varied from 2 to 5 days. A preliminary focus group with 2 participants was run as a pilot project. This pilot group tested the questions elaborated by researchers for this study.

A total of five female focus groups were run for this study; each group comprised 3 to 6 participants. To promote valuable discussions, groups were organised based on different levels of oral sex experience and type of feedback on this experience, according to information from the demographic questionnaires. The focus group took place in a comfortable non-formal location provided by the university facilities.

On arrival, participants were presented with an information sheet and a consent form, the first copy of this consent form was for the participant to keep, the second copy was retained by researcher. During the introduction talk by a focus group moderator (the researcher) participants were cautioned that given the group setting, confidentiality could not be guaranteed by the researcher, and offered to share the responsibility to keep the content of future discussion as confidential. Participants were given clear information about their right to withdraw from participating in this focus group at any time before the data was processed and anonymised. All discussions were led by female facilitator (the researcher), they lasted from 90 minutes to 2 hours, and were audio-taped and transcribed. Each participant received £10 for her participation.

At the beginning of the session the researcher set up the ground rules for the discussion and gave the instructions to participants. To encourage focus group discussion, each participant was offered to share their own pre-selected story related to their own, their friends or acquaintances experience of oral sex.

In accordance to the concept of collective interrogations (i.e. exploration of the intellectual and political possibilities of focus groups), I allowed the subject of oral sex to travel between personal experiences and combined imagination. I provided participants with a simple methodological probe of their peers’ short responses to oral sex survey questions about reasons for being involved in oral sex and asked them to explain how these came to be, or what the stories may be behind these data. Using McClelland & Fine’s (2009) terminology of thick desire, I asked the participants ‘to
interpret the material through the lens of thick desire’ (McClelland & Fine, 2009, p.251). This theory and design method recommends to theorize with participants how these facts may come to live, and that these facts ‘represent enduring, cumulative, and yet mutable outcomes of historic justice, not inevitable facts of irresponsible human behaviour in their community’ (McClelland & Fine, 2009, p.252). This method allows participants to step out of being passive subjects of research to find themselves in the position of expertise, provides them with the comfort zone of making inquiry, and gives them a chance to express their views.

Each focus group session was ended by debriefing participants. Through the informal debriefing talk with participants, I gained the feedback on their experience of participation in focus group and their reaction to the discussions.

9.2.3 Data Analysis

I used a narrative approach and thematic analysis (Hollway & Jefferson, 2000) to analyse data from focus groups. The researcher (i.e.me) and second coder read through the transcripts from each focus group separately. In accordance with methodological recommendation for the qualitative research (e.g. Bryman, 1988; Knodel, 1993; Tesch, 1990) at the first stage the researcher conducted line-by-line open coding in order to establish the main themes and sub-themes. Then the researcher reviewed these preliminary coding themes, and refined them, re-organizing those sub-themes that were less meaningful and less thematically coherent.

At the second stage, the researcher and second coder reviewed and revised the initial coding scheme. Both the researcher and second coder coded each focus group transcript individually, and then compared their results, gradually reaching an agreement regarding the meaning of individual codes, their definitions and relation to one another, and also their applications to the coding themes.

Based on what has been heard in each group, the researcher and the second coder designed a coding frame for the transcripts using themes of research interest. Once agreement was reached, the researcher revisited the transcripts and coded them by using the final coding scheme. The second coder coded two out of all transcripts randomly chosen by the researcher. During this process, the researcher and second coder
periodically discussed their coding strategy to ensure coding convergence on those transcripts that both of them had coded.

In the final stage, the researcher matched the main themes and sub-themes across each group and separated them on the basis of whether they occurred in the story about oral sex experience or in general discussion (e.g. Morgan & Spanish, 1984).

In addition to coding themes, the researcher compared the course of discussion across focus groups. As the main methodological benefit of focus group interview research is that they allow participants to freely interact with each other in the course of discussion, questioning and challenging one another thereby deepening individual understandings and broadening meanings (Wilkinson, 1998), focus group members themselves in this sense could serve as a source of data triangulation. I treated these moments of interaction, whether they were caused by incongruity, disagreement or inquiry, as potentially meaningful moments of group dynamics.

9.3 Results

In total, 24 female students from the University of Bath participated in focus groups. Their age varied from 18 to 22. 87.5% of participants (N=21) identified themselves as white, one participant said to be from Africa; two of the participants originated from India. Amongst white females, 2 students were from France, 1 student was from Romania. The remaining 18 participants (87%) were students from the UK. The participants’ subjects of study were spread across departments as follows: Biology (N=5), Management (N=4), Natural Sciences (N=3), PoLIS (N=3), Pharmacy and Pharmacology (N=3), Sport (N=2), Mechanical Engineering (N=1), and Psychology (N=1). Approximately 17% (N=4) participants reported to have an extensive experience of oral sex while the remaining 83% (N=20) reported rather moderate experience. Half the participants (N=12) indicated that they have performed oral sex both inside relationships and outside relationships; about 42% of females (N=10) said that they had oral sex only in relationships, while 8% (N=2) reported to have it solely outside relationships. Half of the female students (N=12) reported to have had a positive oral sex experience, 25% (N=6) had have neutral experiences, 21% could remember a mixture of experiences and one female student reported to have a negative experience of oral sex.
Participants demonstrated their full awareness that in British culture it is very difficult to talk and discuss issues related to sexual health:

\[ P1: \text{I think that in England a lot of people do feel awkward about it, because it is such a ‘no go’ topic area like people just don’t bring it up. But I think that this is just the way we are like, we can talk about money or anything like that, but not about sex, I think that it’s just our culture (PG2, 346-350).} \]

At the same time, participants explicitly expressed the opinion that within their own culture they feel very comfortable with the whole idea of sex being a highly intimate and personal matter, in comparison to other cultures:

\[ P3: \text{I think that in other countries it’s a bit too general, and it makes it feel like it’s another daily thing, well it’s not, it’s something special, and you are doing it with someone special, other than just random people, it’s not something between everyone, it’s between you and that one other person, like nobody else should really know about it, because nobody else is involved (PG2, 393-399).} \]

This comparison to other cultures was obviously in favour of the UK, especially with reference to Latin America countries. Participants considered these countries to be very sexualised and male dominated, and agreed that the exposure to males from these countries inserts an additional pressure on females in terms of sexual behaviour:

\[ P1: \text{It’s even like now, men are like still dominant and still have quite traditional rules, like, if she is willing to have oral sex with me, then she would be willing to do something else too. I don’t know, they would feel like that is the expectation to do it, they would be pressured (PG2, 367-370).} \]

Responding to explicit questions regarding what they see as advantages and the disadvantages of performing oral sex, focus group participants identified multiple issues around the practice of oral sex inside relationships and outside relationships, as well as cultural and media influences on them.
The theme of different purposes and the meaning of oral sex practices inside relationships and outside relationships was the one that many girls had internalized. As stated by one participant:

\[ P2: \text{I see oral sex as a fun thing for me and it is like a learning curve to learn about your partner and find out their pleasure points and what they like and don’t like. But I would not waste that on someone whom I would not know. I think with the one night stand it’s more like getting to the end and having the ‘ultimate’ pleasure at the end, when I can orgasm, rather than sort of connecting and having intimacy (FG1, 102-106).} \]

In addition to this theme, I observed the emergence of two other thematic domains, namely power balance in oral sex and the role of self-efficacy in oral sex. The latter theme was closely connected with alcohol consumption in relation to engagement in oral sex.

As participants described the pressure around engagement in oral sex faced by young females in general, they very often characterized themselves as the ones who had been affected by some of these issues before but are not affected by them anymore. Their perceived resistance to this pressure was attributed to their age, their university students’ status, their level of confidence and their sensible attitudes to oral sex practice. This finding was similar to findings of Bay-Cheng et al (2011) research on adolescent girls’ management of sexual risks. The researchers explained this phenomenon in the context of neoliberalism.

### 9.3.1 Different purpose and meaning of oral sex

Participants identified several different purposes and meanings of oral sex. I categorised them as sub-themes related to: a) intimacy, care and trust in relationships as opposed to ultimate ‘selfish’ pleasure and fun outside relationship; b) personal achievement; c) response to religious and cultural constraints in sexuality placed on young females.

Participants across groups discussed the importance of being confident and comfortable in relationships and the role of the partner’s attractiveness in enjoying oral sex. They also mentioned that for some of them there was a change in attitudes towards oral sex
from being not highly favourable, when they were young, to being pleasant at the present time. They accepted that some girls could see oral sex as a dirty and disgusting sexual practice, but attributed this disgust to their bad previous experiences, to the cultural and religious taboos, and also to the taboos regarding sexuality that can be held in the particular families.

Participants also agreed that oral sex has different meanings for boys and for girls although there were slight signs of disagreement about this across groups. Females were described as giving oral sex driven by intimacy and relationship-based emotional motives:

\[ P3: \text{I think that for a woman giving a man oral sex, it would actually make her feel even better emotionally rather than having penetrative sex because she is just giving him something, and she is not receiving anything back. He is excited by what she is doing and that makes her feel good as well, good as a person, it builds up her confidence and her self-esteem (FG4, 355-360)} \]

Younger males (up to 21 years old) were described as receiving oral sex driven by pleasure and power, and in order to gain status from this experience amongst their peers:

\[ P1: \text{In younger males 18-21 the aim of the game is to receive sex from as many women as they can and to tell everyone about it, and the idea of that would be to basically manipulate women into doing as much sexual things to you as you can possibly get, without knowing whom they are and what they are. So I don’t think that they really care about your feelings and about your emotions as a woman (FG4, 391-396)} \]

Older males were perceived differently; they were described as less selfish, more skilful and more caring about their female partners.

These findings were in line with Sexual Script Theory (Simon & Gagnon, 1984, 2003), and consistent with a large body of literature on differences in sexual motivation (e.g. Boyce et al, 2006; Meston & Buss, 2007; Patrick & Lee, 2008).
a) Oral sex as intimacy, care and trust in relationship

The most popular theme in discussions of oral sex in relationships was the theme of intimacy of oral sex practice. The opinions between females clearly differentiated oral sex as: a) a highly intimate sexual activity within committed relationships and, b) not intimate at all: a sexual act in a casual relationship.

Interestingly, that the intimacy standard was applied to different types of oral sex, with experience of fellatio considered to be less intimate than cunnilingus:

P2: I would not say that if I am giving oral sex then I don’t find it more intimate, whereas receiving, well because I know they might get a bit of pleasure from it, but it’s not quite the same as what you are receiving. So, you know that they are doing it for you, so much for you, because they want to make you feel good. It’s like more, um, more of an emotional relationship. Then it goes back to the one night stand, where it’s kind of more just about both of people wanting to feel good because they don’t necessarily care much about the other person’s feelings (FG5, 217-223)

P4: I think receiving oral sex is like probably more intimate than actual sex, I think because you kind of like, it’s like with sex, you want an equal footing really [agreement amongst participants], but receiving, it’s like he has got the upper hand in a sense, I think that is why maybe it makes you feel a bit more vulnerable (FG5, 227-230)

Female students who held personal beliefs that oral sex was not as intimate as penetrative sex considered oral sex not to be ‘real’ sex on the basis of their understanding of intimacy:

P2: It depends on your personal definition of real sex, but I feel like my level of definition is the level of intimacy that you reach with someone. And I had reached a higher level of intimacy during penetrative sex than oral sex, so I would not regard it [oral sex] as real, and I feel like in some way oral sex can be an” alternative” for me (FG4, 481-485)
At the same time, some participants held quite the opposite view, considering oral sex to be even more intimate than penetrative sex:

\[ P4: I \text{ think, for me giving someone head is more intimate than having sex with them (FG3, 321-322)} \]

Many females shared the opinion that they would never receive oral sex outside a relationship, as receiving oral sex was associated with trusting their partner and mutual care in relationships. Interestingly, some of them applied this even to giving oral sex.

\[ P2: O\text{n a one night stand, I would never give it to anyone, because I think that in any way you are quite in an intimate position with them (i.e. while giving oral sex). And not with the person whom you don’t really know, you are quite vulnerable to have sex with them [agreement by others] (FG2, 493-496)} \]

Participants described females as altruistic givers of oral sex in relationships, as they considered themselves to be ‘gatekeepers’ of relationships:

\[ P1: I \text{ am in a relationship at the moment so I agree with the fact that it does not matter if say one does orgasm and the other does not. So, it not always a two-way thing, and I think that because we respect each other it is like it doesn’t matter if you did not get anything this time, you can always get something the next time (FG2, 89-93)} \]

Furthermore, in one of the groups, young females connected their reluctance to give oral sex with their perception of problems in the relationship, and considered this reluctance as an alarming signal to address these problems:

\[ \text{Participant 1: If there is problem in the relationship, where you are less happy than you used to be, then you are not going to be wanting to do that as much, and then I would avoid doing it and then he would probably realise that neither of you wants to do that and that this problem needs to be addressed... So, I’m not just going to keep pretending because it’s not fair for the both of us (PG2, 557-585).} \]
b) Oral sex as a personal achievement

The purpose of doing oral sex for the sake of personal achievement and in order to feel successful was quite an unexpected finding. This theme appeared in one of the focus groups, and after it was introduced by one participant, the others expressed a full understanding of this concept.

P2: It does kind of make you feel good in a way such that it makes you feel successful, if that makes sense?
INT: Successful in what sense?
P2: You feel good about yourself because you have achieved something that day, if that makes sense?
INT: So oral sex is kind of an achievement?
P2: Yeah [...] 
P3: Umm, I agree with the others, I basically think that it’s about that sense of achievement because if you are not like turned on or anything, you feel like really bad about yourself, like why. I don’t say things like make them come or anything? (PG2, 48-56, 61-63)

The theme of sexual achievement is not a new theme in sexuality research and therapy (e.g. Masters & Johnson, 1966). The appearance of this theme in oral sex experiences of British students’ population also echoed an academic achievement discourse found in American adolescent girls’ fellatio narratives, described in Burns et al (2011) study.

c) Oral sex as response to religious and cultural constraints in sexuality placed on young females

As it was in the case of participants’ beliefs about the level of intimacy of oral sex, participants who were under the influence of cultural and religious taboos related to oral sex, considered oral sex not to be ‘real sex’. These participants shared the view that engagement in oral sex instead of penetrative sex helps them to keep their virginity until the actual relationship or marriage.

P3: when I was younger I did not actually want to lose my virginity, because I wanted to keep that for an actual relationship, for the person whom I cared about, but I did like want to be sexual with men, ‘cause I felt like it, I wanted to
experiment basically. So, I wanted to do things with men. So, I was okay with doing oral sex, both giving it and receiving it, but I was not okay with actually having penetrative sex because I felt that, that it would be more emotional and intimate for me, and actually, that was the case when I had first had penetrative sex, so for me oral sex is not as important but it’s not also such a major thing as sex is for me, sex is more personal (PG4, 471-478).

Talking about religious constraints on penetrative sex before marriage, participants referred to the widespread practice of performing oral sex amongst young Catholic girls.

P2: I am Catholic [laughter] and so many people that I know, that are religious, they would never have sex before marriage but they would give blowjobs out [laughter] which is just the same though [lots of laughter]
P1: and they would have oral sex with such raunchy men and they would just not have sex […]
P3: I have known some people whom were really religious and they would save sex for marriage but they would think that oral sex is fine. They were doing a lot of oral, and I was asking them why are giving oral sex out like that, but you are putting so much importance in penetrative sex, so what is the difference? In your opinion, you are still putting yourself in that vulnerable position. And you are being used by someone. I do think that these are two different things but they are not that much different, one is really taboo and the other one is just a really horrible thing (PG4, 825-829, 841-848).

9.3.2 Power balance in oral sex

Although the topic guide explicitly asked participants to identify the relationship pressure and personal pressure related to oral sex, during these discussion participants usually came to the issue of power and pleasure attached to oral sex.

It was clear that students did see females and males as both possessing different types of power that can influence engagement in oral sex. The issue of higher females vulnerability in oral sex was immediately and closely associated with a theme of power balance in oral sex. This vulnerability was related to as emotional and physical vulnerability. Girls explicitly described these types of vulnerability in plain terms:
P3: I am really sensitive down there and sometimes during oral sex, sometimes it’s painful, that is what I meant by vulnerable, so they have to be really gentle for me to be able to enjoy it and not feel any pain [...] P1: Yeah, mine are quite heavily based on feelings, so for me it can be painful not in a physical sense but in an emotional sense because of what they are going to be looking at me down there, and what if they find that I am unattractive down there? They are going to be right up against my vagina and look at other parts too, like they might find my stomach a bit too flabby for them at that angle? You know, it’s more liked vulnerable, like that kind of vulnerable, so it’s their opinion of me.

INT: So, it’s more related to your body image?

P1: Yes (PG4, 132-134, 138-145)

Notably, emotional vulnerability was connected with females’ body image issues.

During focus group discussions, females identified four primary factors that could influence females’ perception of vulnerability when engaging in oral sex:

a) females ‘worries’; b) females’ attempts to use oral sex as a manipulation tool; c) females’ perception of males controlling and dominating them in relationships; d) males’ attempts to change the balance of power in oral sex in their own favour.

a) **Females ‘worries’**

Participants discussed the social expectations that they have to give oral sex to boys, and the role of media in inserting pressure on young females in terms of how they have to look and what they have to do.

At the same time they emphasized that majority of boys are obtaining knowledge about oral sex from watching porn on the internet. The opinion of many of girls was reflected and echoed in following statements:

P2: *I think there is confusion between porn being a film, that is sort of exaggerated to make you feel turned on before you do your thing, and people feeling like that is what they should do in real life, when it’s not* (PG4, 433-435).
Boys especially younger boys like around 17 or 18, they kind of think that oral sex is like porn whereas it’s not (PG4, 931-932).

Participants regretted that the quality of this information from porn movies put young females in a very vulnerable position.

These ‘porn’ ideas about oral sex were classified as myths related to females’ physical appearance, the myths about how to give ‘good’ oral sex to girls and how to receive a proper ‘blowjob’ from girls, and the myths that girls can orgasm from oral sex numerous times.

Participants noted that the first of these myths made them feel self-conscious and reflect upon their body image satisfaction.

I think that women are worried because they know that men watch a lot of porn and that, and women in porn have these designer vagina’s, and I think that men expect that from us (FG5, 169-171)

Porn just gives them ideas like ‘Oh, this is nice!’ sort of things [laughter], and then it’s going up to girls and saying like ‘guys, it’s a good idea, get your girls to do this’ (FG1, 438-440)

It’s becoming more important to be shaved and stuff and then, like from social sort of stuff that they are just like on TV or something like. When guys watch porn it’s genuinely that they are all shaved, and that is what they kind of expect from the girls as well... There is more of the pressure, like on top of being pretty and skinny, to worry about.

I think that some guys think about it and it makes you feel more like self-conscious about yourself and, I think, a lot of women have this sort of illusional power of men, like sort of to abide by (FG1, 471-478)

Body image satisfaction was agreed to play a major role in oral sex.
P1: You have to think about how you look, not just that area, but like flabby tummies and everything else [lots of laughter], so it’s not just that but it’s the image on the whole

P2: Yeah, I feel really put off by receiving oral sex because I am like, what kind of angle are they getting down there from my face? [Laughter] You know, like double chin? (FG4, 74-78)

The discussion of the body image problem, as applied to oral sex practice, has made participants talk about other types of vulnerability, such as self-exposure and fear of judgement on the basis of their body image flaws:

P2: It’s their body image which worries them (females) more. I think because it is more intimate with oral, so they feel a lot more exposed so if you got any fears like that. But then again, that is probably also disturbance from body image problems from the media and pressure? (FG5, 193-196)

P1: Yeah, ‘cause women are quite worried on men picking up on any of their flaws and, you know, she might have a bit of cellulite or, you know, maybe there is the whole thing about men not liking pubic hair, as well, and that is a whole other issue for women to deal with. I think that women worry about hygiene down there, and then they worry about the rest of their body, whereas for men there is not so much of a pressure there. Maybe women just feel worried about that they are going to see all of me now rather than just, you know, my personality, they are going to see everything (FG5, 207-213)

Participants explicitly linked body image worries to the issue of general confidence that they consider to be very important in healthy females’ sexual and social life.

The myths about the ‘technical’ side of oral sex were related to the physical discomforts for girls attached to boys’ performance of oral sex. In many cases, these physical discomforts were accompanied by emotional distress. The discomforts and distress were related to both giving and receiving oral sex.
P2: When I was 17 or 18, I went out with idiots who thought that porn was normal sex. I think that it’s a belief among 18 year old males and I think that they think that is normal practice [...] 
P3: I think, it’s all because of all the porn out there we are [agreement by others] exposed to, because the first guy that I had had never done anything sexual, even with regards to oral sex and he had given me oral sex. It felt so weird and it was exactly like porn, which is not what you are supposed to do. It felt weird and painful for me because, as I said, I am really sensitive down there and he was being really rough, he was sorry for being rough but he was sucking on my vagina, it was not pleasurable, it was rather painful, and since he was my friend, but not in that bond emotionally, I did not feel comfortable enough to say, like, hey, what are you doing? But it was a really negative experience, because it was exactly as to what you would see in a porn movie (FG4, 4-17-421, 422-432)

The myths that girls can have orgasm from oral sex numerous times were discussed in the light of the fact that it’s pressure for girls to orgasm from oral sex:

P3: I think that some more naïve 17 year old see this woman orgasming like 10 times in a movie and they think, oh, they must really like this, and that they should do this, since women like this.
P1: And that puts pressure on women to orgasm like 10 times.
P3: Yeah, exactly, from oral sex I can only barely orgasm, because I do enjoy it, but it’s just not that awesome for me. So, for me it’s actually a big accomplishment to orgasm from oral sex. But in porn movies they orgasm like 5 times from it, and I think that is what younger boys should think that it’s supposed to be like that (FG4, 441-451)

Participants argued that this pressure led them to worry about not meeting ‘the standards’ and feeling guilty of not performing like in porn movies, such as not fulfilling boys’ expectations.

P1: I feel a pressure to orgasm, because it’s just such an effort to me. I feel like I have to orgasm, but then I feel like I cannot orgasm. So, sometimes I just say, oh I can’t [lots of laughter], so by the time they realise all that it’s gone, you know, particularly if I get stressed.
P3: I find the same thing with the pressure to orgasm, I do feel the same thing, because oral for me it’s nice but it’s not that exciting, like it actually takes quite a lot time for me to orgasm from oral sex, so I do feel that pressure, because if the guy is down there for like 10 minutes and I am still not close to it, just feels like selfish, and then it feels like I am taking advantage of him, and I worry that they might feel inadequate down there (FG4, 149-158).

In conclusion, one of the participants noted that she could see the ‘hidden’ control boys have over girls in these expectations that fuel all these female worries: “it’s kind of like he is controlling you in a way because you worry about it” (PG1, 771).

b) Females’ attempts to use oral sex as a manipulation tool

Despite the perception of vulnerability, participants across groups shared the idea that oral sex can give them some power in relationships and outside relationships. This type of power was referred to as taking control over boys’ pleasure and orgasm; using oral sex to keep hold on their boyfriends or to keep a relationship going, and using oral sex to get what they wanted or to impress their partner in order to be liked or loved.

The theme of taking control over boys’ pleasure/orgasm appeared to link the themes of power and emotional satisfaction that girls gained from performing oral sex.

Interestingly, the currents within the link connecting these themes operated in two different ways: in one direction, when girls expressed the feeling of power and emotional satisfaction from making boys to orgasm, and in the opposite direction, from faking their own orgasm and making boys to believe that it was a real one:

P3: I only reached an orgasm a couple of times, because sometimes, you know, it’s not going to happen, like it will be an illusion, because you know it’s not going to happen, but they are still going, and you are like ssh*t * imitates sounds of pleasure* and then ‘NO!!!’ [Laugher]

P2 : It’s kind of a curse really between a guy who does care about your pleasure [agreement] and it’s, like, you know that you are not going to get there, and you just don’t want to hurt their feelings, and feel like, like to stop, it’s not going to happen, so you try to consider that [others : yeah], so it’s just
like to spare us both [Interviewer : hum], so that is a bit of power as well, in a
way, I think, because you are faking it to get some fun, so you are making them
think otherwise. Yeah, so that the power that one day you can be like ‘You
know all those times? I faked it!’ [Laughs], so that is kind of power, I guess,
isn’t it? (FG1, 267-277)

While discussing the purpose of performing oral sex with the aim of keeping a hold on
boyfriends or to try to make a relationship work, participants demonstrated a full
awareness of what they were doing and applied explicitly the term of ‘power’ to such
actions.

P1: I think that, if you know that things are not great with your boyfriend, this
is sort of a way to show him that is what I can do to you, this is what you would
be missing if you are not with me sort of thing [agreement]. And you might
start thinking that he would think that ‘Oh, yeah, I will miss doing that with
you!’ and then that is the way that you could have on the decisions that he
should have made and start thinking in a different way.

P3: Yeah, I think that it’s again a power thing, and I know that a lot of women
actually use oral sex as a way to keep hold of their boyfriend, because,
especially for men, it’s sex that tends to be really important and something that
they want. And if they are not in a relationship, then they are actually going to
go out and look for sex, whereas women don’t tend to do that so much. So, I
think that a lot of women do tend to use it as a weapon to keep them close to
them and not break up with them, but I definitely don’t agree with it, and I
have never used it as weapon, I don’t like that (FG4, 313-325)

The theme of using oral sex as the tool of manipulation, with the purpose of getting
some benefits from the guy or even to be liked/loved by the guy, immediately emerged
in the discussion just after discussing the previous points. Although no one else
expressed affiliation to this behaviour, such discourse was met with full understanding
amongst other participants, as well as an apologetic confession of feeling ‘guilty’ doing
it.

P1: I find that in the past I had been using oral sex to get something that I
wanted and for getting men to like me not always but, I guess, it was a tool of
manipulation for me.
P2: And power [Laughter]
P1: But, yeah, so that is my views like that, really.
INT: Hum ok, that is quite interesting. Can you talk about it a little bit more? So, the oral sex for you it’s a little bit more a power tool?
P1: Yeah, very much so. It’s, um, if I am see someone and I quite like them, then I might go down on them because I want to maybe impress them or show that I am giving or a good lover? Or, yeah, I think that is probably what it is, I suppose, it is a power thing, you know, although you might be physically beneath them, you are kind of looking up at them, you have complete control of their genitals and you have control over their arousal, you know they are getting aroused over what you are doing, and it feels nice to know that. Even if you don’t like them or if they don’t like you, they are still being aroused by you (FG4, 193-212)

The last two of these power statements could be considered an implicit illustration of females’ vulnerability and, at some occasions, as their insecurity, both in relationships and outside relationships. These themes demonstrated the rather different types of female vulnerability in sexual relationships which appeared to come to life through the vehicle of oral sex. This conclusion was supported by the following comment made by one of the participants:

P3: I think, if he does not want to be with you and you are only using oral sex as a way to keep hold of him, then you are only abusing yourself not them and that is only you, you are the only person that is going to be affected at the end, if that makes sense? (FG4, 299-302)

c) Females’ perception of males controlling them and dominating in relationship

The issue of males’ mental and emotional control over girls that could happen at the beginning of the relationship was pointed out as a source of potential female vulnerability. These issues were mainly related to saying NO to unwanted oral sex if a female likes the partner and wants to have a relationship with him.

P3: I think, for me, at the beginning of the relationship it was hard to say no because, you know, you have those stupid ideas in head, like, ‘oh, if I say ‘no’ he will break up with me’ or it’s just the whole pleasing thing. Now I am facing this issue where I just don’t want to do it, and I control that and, except that,
you know, I’ll be ok with it and not get annoyed about it [...] There was some times but it was really early, I think because there is like a pressure, but most of the time I would have thought that there we might want to do it but if not then it depends on how early we are in the relationship.

P4: Well, with my boyfriend at the beginning we did not have sex with each other, it was literally just foreplay and stuff and there were some times when I was like ‘I don’t want to do it’, but I really couldn’t just, like, say no because then what else were we gonna do? [...] That is one of the biggest things for us saying NO. It would just completely ruin the atmosphere, and the guy might get really offended and annoyed, which is why in the early stages of the relationship I just didn’t say NO, like, how would he react if I say no? So, I just made the best effort not to say NO and just go with the flow [...] 

P3: I guess, if you really do like them that is really a relationship pressure, you really like them, so you don’t want to say NO (PG1, 630-668).

This dialogue awoke a debate amongst participants which resulted in the triumph of those who believed that sexual behaviour depends on the strength of female’s personal character:

P4: It depends on your confidence really, like if the guy is putting pressure on you to do something, then it is not ok, you should not be with someone whom makes you feel like that, and there are a lot of people in the world whom would feel pressured in all sorts of relationships, and they feel like they are just doing what is expected of them, but I think, it is just that confidence thing, like if you feel pressured then don’t do it! (FG1, 727-732)

Once again, participants clearly attributed such relationship pressure to get involved in oral sex as bringing a potential danger to be controlled and dominated by males.

Participant 3: It would affect the rest of your life as well, so when they are like pressuring you to have oral sex and you don’t want to, you would start thinking about other things that they do, like, if you both go out to dinner, he gets to choose what you eat and, like, when you are watching TV then he is the one who gets to choose, it just shows the way the pressure is more dominant! (FG1, 744-748)
d) Males’ attempts to change the balance of power in their own favour

The negative experiences of oral sex were directly associated with males taking physical control during oral sex that has been perceived by females as an attempt to change the balance of power in oral sex in their own favour.

Amongst the most unpleasant things, related to this perception, participants nominated boys ejaculating in their mouth and making them swallow the sperm; and boys physically pushing their heads down and making them feel uncomfortable.

\[P4: \text{I think that men do feel empowerment when they are having oral sex with you, because they can move your head and stuff like that (FG3, 468-469)}\]

Participants were very straightforward in expressing their discomforts and disgust of boys ejaculating in their mouth that they attributed it to the influence of porn.

\[P4: \text{I think that they think it because that is what women in porn do so they think well she is already giving me a blowjob so you know she is expecting that to happen anyway, like she is expecting me to ejaculate so yeah I think that they just assume that it is ok with you but for some girls it's really not (FG5, 628-632)}\]

Such discomfort and disgust were obviously rooted in girls’ perception of vulnerability.

\[P2: \text{I have had guys in the past that have been doing that to me, and they would move my head, and I would hate that I would feel very little when they did that (FG3, 473-474)}\]

\[P1: \text{Yeah, if they want you to do it differently, then they should just say, like, can you slow down a bit or speed up a bit, like, I hate if they start, like, thrusting it into your mouth and when they try and take control of the situation. I don’t like that at all, its like, ‘No, I am in control!’ (FG5, 590-593)}\]

This tendency was attributed to the very nature of males’ perception of sexuality:
P3: Actually, my boyfriend told me that he kind of likes when I am a bit uncomfortable and I had heard that by a lot of guys [...] It’s kind of a power thing but he didn’t really mean that he wants to hurt me. I think that they just find it sexy when you are a bit uncomfortable.

P2: Do you know what that might be? Because, obviously, the larger the penis, the more uncomfortable you are likely to be. So, it makes them feel more powerful and more masculine [...] 

P3: Yeah, but my boyfriend doesn’t have a problem with penis size, and he is not self-conscious about that. I think that it just has to do with their nature: they want to feel like they are powerful (FG4, 980-994)

Interestingly that during discussion the notion of ‘submission’ appeared to be the one that linked together discourses of taking control and of delegating control.

P2: I think, it can be very fetish and something that is arousing for certain people, for control and the power, and the control in sex as a form of power, you know, like a lot of people, they may not want to admit it but are always into either being dominant or being submissive, and they find that sexually arousing and, obviously, I think that oral sex plays a huge part, especially, for an instance, if you are a woman who likes to give sex to a man but, at the same time, you are being submissive, because it’s an extremely submissive act [...] 

I guess it’s more of a manipulation to getting him to like me, but the sexual arousal that I feel is more of an act of submission, but then again, manipulating him to like me that is not a sexual thing, that is more of an emotional thing, whereas the submissive thing is more of the sexual arousal thing which is why I enjoy to do oral sex (FG4, 229-243).

9.3.3 Sexual self-efficacy and the role of alcohol in it

At some point whilst discussing females’ vulnerability in oral sex, participants raised the issue of alcohol consumption during oral sex. The discussion about the role of alcohol led to distinguishing between two separate streams of thought: the themes related to the positive effect of alcohol in female students’ social and sexual lives and the themes related to the negative effects of excessive drinking.
The positive effects of alcohol on female students’ social and sexual life were generally identified as making them feel more confident, having less care about how they look, being more adventurous and open to new sexual experiences.

P3: I think that when I or any person just has a drink or a couple of drinks, they just tend to let their guard down and feel more confident, so I think, that might be why women are feeling more adventurous. If they have some reservations before they are, probably, just gone now, and they might be feeling like performing or trying something new, like oral sex or what they would not do had they not had a drink (FG4, 886-892)

P4: Yeah, I am less self-conscious [agreement] so when you are drunk, you are not focusing, as alcohol is a stimulant, so if you are not focusing on the bad things about yourself, you are just there because you feel happy about yourself, it’s like, you know, happy people generally don’t really care as much about the way they look and stuff. So, when you are on alcohol, you are generally on a happy level (FG1, 950-954)

The positive influence of alcohol on oral sex practice was described in four sub-themes.

The first sub-theme related to the role of alcohol in helping females to deal with physical disgust of giving oral sex:

P4: I think that you are probably going to be inclined to do the one that you dislike the most [agreement by others] so I would probably more likely to give head when I was drunk, probably, and so I would think about it less (FG, 740-742)

The second sub-theme pointed to the role of alcohol in giving females courage to try oral sex for the first time:

P2: This is because when you at the early stages of a relationship, and you get a bit tipsy with them, and then you go back with them, and then you do this thing that you have never done before with them, which is oral sex, and then you feel good afterwards maybe because you had oral sex with someone, and
you’ve done something, and you like them, and they like you rather than the
drink. It is actually the drink that is making you feel good rather than the
actual oral sex, and it’s facilitated by the drink, and the oral sex is making you
feel good, maybe? (FG4, 902-908)

Interestingly, in this talk the participant managed to establish a link between oral sex,
alcohol and overall female positive psychological well-being, the link that first appeared
in the quantitative results of the survey on exploring students’ oral sex behaviour.

The third sub-theme simply related to role of alcohol as an excuse for bad performance
in oral sex. As one of the participant noted, “… if it was bad you could always be like
well I was drunk so you have always got an excuse haven’t you?” (FG1, 916-917). In
this account I could hear the echo of academic/personal achievement discourse that I
discussed earlier (e.g. in oral sex, as in your academic studies, you have to perform
well).

The fourth sub-theme emphasised the role of alcohol in amplifying sensational
experiences in oral sex:

P4: I think that one of the best times that I have ever had was when me and this
guy came back from a night out, like, it was really, really good for some
reason, maybe it was because we were just so much more relaxed and stuff,
and perhaps more willing to do oral sex with each other. Maybe that
intensified the pleasure?
P3: I find it really bizarre actually, so you are saying that accepting oral sex
did go up when you were drunk?
P4: That is what I find quite shocking because, like, when you are drunk, you
accept oral sex a lot more than in a relationship and I think that it is much
rarer for couples to get drunk together, really, student life, you normally do it
with your friends, so this must really be in relation to one night stands (FG1,
906-917).

The themes related to the negative effects of excessive drinking were represented by
two sub-themes. First of them was related to alcohol lapse-activated pattern of self-
regulation failure (Marlatt, 1985) and engagement in sexual behaviour. The best illustration of this theme could be found in a respondent’s narrative about her friend:

P3: I do have a friend whom does this kind of thing, gets quite drunk, heavily drunk and then like does have sex and then she is so terrible about it the next day and she puts on having sex even more then I’m like why are you doing it? You know? Why do you continue to do it? And she is just like well it’s just like a cycle just when I am really, really drunk it’s just, I can’t say no, and then she just gets herself in a situation where it just makes her feel awful after that (FG1, 969-973).

The second sub-theme described excessive drinking as a main cause why ‘boys’ take advantage of ‘girls’:

P6: I know one of my friends who had been with her boyfriend but she hasn’t actually slept with him yet and when she was ridiculously drunk he had to come and pick her up because she couldn’t even like, we could not even get her to the club and that was the first time she had sex with him and I feel like how would a guy personally ever have sex the first time in that relationship, have oral sex and stuff with her when she is sort of not in the state to understand.

Participant 4: Well it’s like taking advantage really; it’s like the only time he would get it (FG1, 975-981).

Clearly, alcohol and oral sex were strongly associated by participants with one-night stands. Regarding the role of alcohol in performing oral sex inside a relationship, participants agreed that in relationships alcohol made them lose the intimacy of the act, the thing that they regarded as the main purpose of doing oral sex.

9.3.4 Focus group interaction and complexities

While discussing the topic guide questions in each focus group participants seemed to choose the particular topic of interest that they wanted to talk about. In focus group 1 it was issues related to sexual and reputational pressures inserted on girls by high school culture; participants in focus group 2 preferred to discuss the cultural differences in relation to sexual behaviour; participants in both group 2 and group 5 expressed the
interest to share their experiences of sex education in schools; while participants in groups 3 and 4 brought up into discussion the topics of control and submission.

As I was interested in capturing focus group dynamics, during all discussions I observed the ways in which participants in each focus group concurred and in which way they differed. The participants in all five focus groups were clearly divided on those who had very extensive experience of sexual relationships and felt comfortable to talk about these issues and those who were less experienced and more timid to discuss issues related to oral sex.

Some participants expressed ambivalence and admitted confusion about some examples of oral sex behaviour and their underlying reasons; some simply confessed that they never thought about rationales for their sexual behaviour. In the majority of cases, participants had a common ground and shared their opinions. In each group, there was at least one situation where participants have acknowledged that issues around sexuality are complicated with no obvious ‘right’ answers. For example, when participants discussed the pitfalls of sex education at school they came to a common view of criticising ‘scare tactics’ used by the teachers. One of the girls pointed out the reasons for doing this: “…it is quite difficult to explain sex to like a 13 year old or a 14 year old without it, because you are trying to encourage them not to go out and have sex, so you are not going to be telling them about how great it is” (PG2, 1095-1097).

In each group, there was also at least one instance when participants argued against others’ understanding of meanings of oral sex and related phenomenon, and offered other possible and sometimes alternative explanations of this behaviour.

In group 4, for instance, when one participant asserted that oral sex is not real sex as it is not intimate as a penetrative sex, another participant rebutted: “I completely disagree, as I think that even I have given men oral sex, I would not count it as I had had sex with them. But alternatively, if they had given me oral sex I probably would count that as sex, because I find that just as intimate, if not more intimate than sex” (FG4, 486-489).

In group 2, when one of the participant expressed her confusion about the issue of giving oral sex in order to improve relationships with a boyfriend (“I don’t see how that is going to make the relationship better!”), she was provided with a full explanation by
the other members of the group. Although all participants demonstrated understanding of girls’ reasons for giving oral sex in this case, their reactions again were ambivalent.

During each of the focus group discussions, I observed an active knowledge exchange between participants, with those of them who were more experienced and sometimes slightly older giving advice and explaining the ‘rules of the game’ to those who appeared to be less experienced. For instance, in group 3, during a lively discussion how much girls hate it when boys look at them while giving them oral sex, one participant provided them with a possible explanation of boys’ behaviour and girls’ reasons for not liking it, while they actually should do like that if they are in trusting and loving relationship: “I don’t mind doing it with my current partner, just because I am really comfortable and confident with him, and I trust him, and it’s not weird at all in the sense. I know that it makes it more intense because I know that I am looking at him and sometimes it completely makes me to lose control, because he likes it. It makes me feel more confident, and it really turns me on” (FG3, 565-569).

One of the most interesting examples of knowledge exchange between participants and their collective meaning-making arrived from a conversation about why boys want to make females feel uncomfortable while girls are giving them oral sex (FG4).

Across all focus groups participants expressed satisfaction about taking part in current focus group discussions, and admitted their own and other participants’ contributions to the positive atmosphere during discussions. Many of them described their participation in focus groups as a useful and positive personal experience. Similar to previous focus group studies on sensitive issues (e.g. Bay-Cheng et al, 2011), I found that students felt relatively ‘safe’ in the their group, because they all shared the same vulnerabilities, anxieties, embarrassment or desires.

### 9.4 Discussion

The focus group study presented in this chapter explored female students’ experiences of oral sex, cognitive appraisal strategies supporting their engagement in oral sex and the role of self-regulation processes in the evaluation of their oral sex experiences. All these processes were investigated with the purpose to address the research question on identifying the patterns of cognitive reasoning that females may generate to support
their decisions to engage in oral sex behaviour and to deal with the possible negative consequences of this behaviour.

Overall, participants across groups identified many of the same issues related to their oral sex experiences and many similar strategies of dealing with potential problems. All of them emphasized the role of confidence and sexual self-efficacy in females’ enjoyment or disgust attached to oral sex practice. Confidence and self-efficacy in oral sex was closely associated with communication between partners. Participants referred these communications to females’ ability to say ‘NO’ to unwanted oral sex offers in the service of preserving relationship and to express their own desires to their partner. These observations were consistent with findings from previous studies on self-efficacy in sexual relationships which have revealed that girls who find it difficult to communicate their own sexual desires were less able to communicate their needs in sexual situations (e.g. Impett & Peplau, 2003; Impett et al, 2005). Further, sexual self-efficacy was also found to be associated with the increased likelihood of practicing safer sex (e.g. Goldman & Harlow, 1993; Parsons et al, 2000).

On the other side, we heard many stories of very confident young females who appeared to be satisfied with performing oral sex on their male partners. Some of them did it in order ‘to please their partner’ and did not report any negative or positive emotional feelings attached to it, except of being proud that they could perform it to satisfy their men. Some of them saw their performance of oral sex as a personal achievement, and clearly evaluated it as a personal success, with positive emotions accompanying this success.

The discourse of desire was also present in females’ narratives about their experiences of oral sex, but this discourse was relatively rare. Generally, with one exception, females have not attached any ‘desire’ element and related to this pure ‘desire’ element of positive emotions from performing oral sex. The narrative of only one participant who openly said that she like to give oral sex because of her personal perception of giving oral sex to men as an extremely submissive and arousing experience, was exceptional in the current focus groups. This female student appeared to sound like a woman who likes her looks and who satisfied with her appearance and, subsequently, as a woman who feels particularly efficacious within an oral sex situation where her body displayed, a situation where women are typically afforded less power than men (Shearer
et al, 2005). This narrative can be interpreted as an example of the importance of stereotypical gender roles in sexual behaviour for females’ sexual desire and satisfaction (Amaro, 2000; Shearer et al, 2005). This story, taken in as a whole, also provided a strong link between female body-image, self-consciousness and their confidence and self-efficacy in oral sex.

Body image related concerns were identified by many participants as a salient issue in performing oral sex, because a greater body exposure during oral sex, in comparison with penetrative sex, appeared to make girls feel more vulnerable in both a physical and emotional sense. Physical vulnerability was referred to as related to problems of not being fit enough physically (e.g. flabby tummy, skinny legs) and having some physical disfigurements (e.g. skin problems, birth marks); whereas emotional vulnerability was more associated with not looking pretty enough to a partner during sex (e.g. under a particular angle and in a particular position).

These findings are in line with research on body image dissatisfaction and sexual health in modern Western cultures where women’s general body dissatisfaction is typically measured in accordance with societal standards to be thin. Within this research, body image self-consciousness during physical intimacy with a male partner was found to have a negative effect on young women’s sexuality (Wiederman, 2000). Studies on female college students found that those with greater body image self-consciousness reported less overall sexual experience and, even when engaged in sex, less frequent usage of condoms and contraception (e.g. Wingood et al, 2002).

The fact that many of participants were talking about their self-consciousness in terms of body image during oral sex, may be considered as a sign of their personal lack of sexual self-efficacy that has little to do with media pressures to be thin. This suggestion is supported by findings from the Wiederman (2000) study where young women who viewed themselves as good sex partners were found to be least concerned about their bodily appearance during physical intimacy. On the opposite side, there is another possible explanation which suggests that females with higher body image self-consciousness but similarly sized with their peers may have incorporated unrealistic cultural standards for females attractiveness to a greater degree, and their increased body image self-consciousness during oral sex could be a result of such extreme internalization (e.g. Fredrickson & Roberts, 1997; McKinley & Hyde, 1996).
Nevertheless, none of the focus group participants revealed that body image issues have stopped them from performing oral sex. As the majority of them reported to have a permanent partner, these issues seemed not to bother them very much, although some of them mentioned that body-image concerns were relatively important for them at the beginning of the relationship.

Consuming reasonable amounts of alcohol was identified by participants as a good mean of eliminating females’ problems related to their body image self-consciousness, as being ‘tipsy’ seemed to help many of them feel more confident with initiating and performing oral sex and enjoy it.

In participants’ accounts I could clearly identify the echo of social media messages and the internet porn culture on the ‘standards’ of oral sex behaviour. Many participants’ narratives pointed out an increased media pressure for young women look pretty and skinny, and to perform oral sex like porn star models. Participants’ narratives on their oral sex experiences were full of references to porn. Many young females were convinced that young males gained all their knowledge about the theoretical side and practical performance of oral sex from watching porn movies online. They actually portrayed young males as ‘hunters’ for as many sexual experiences as possible, inattentive to young women’s wants, desires and needs. This observation cannot be ignored or represented as a series of anecdote stories shared by girls because, in many of these stories, female students were talking about the influence of porn as referred to a harm to their physical health or as to shattering their sexual self-esteem and causing emotional distress.

The issue of power in oral sex, performed in relationships or outside relationships, appeared to be multifaceted and normally hidden from actual discussion for a while until one of the participants in each focus group brought it out as the focus of attention. In general, all participants agreed that both males and females hold a particular power in oral sex performance. Males’ power was referred to as their ability to make females give them oral sex, to control females’ sexuality and to make females worry about their sexual performance and their desirability for them. Females’ power in oral sex was defined in controlling males’ orgasms, and also in using their own oral sex performance as a tool of manipulating men. Females’ stories varied depending on the purpose of this
One of the main aims of such manipulation, spoken about quite openly by female participants was ‘to be liked by their partner’, to be ‘different’ (from other girls) and to be ‘special to the partner’. This issue has brought young females back to the importance of confidence and sexual self-efficacy.

The theme of confidence was the thread that linked all participants’ talk about oral sex. With many participants’ voices repeating this theme again and again, I could hear young females’ appeals for support in gaining this confidence from anywhere in the world around them, e.g. from their most successful and seemingly more confident peers, from their personal friends, from their grandmothers, from all available to them literature, from the members of the focus group and even from the researcher. Gaining this confidence in themselves as related to their sexual performance appeared to be a theme that took central place in the processes of appraisal and re-appraisal of young females’ oral sex experiences. Once completed, this process of re-appraising their sexual experiences, constantly going on the background, made females feel more psychologically comfortable, confident and successful. Problems related to their body image satisfaction, if they were resolved during this process of re-appraisal, seemed to become not so salient to participants any more, they faded away as their confidence and self-acceptance were growing.

### 9.4.1 Limitations

Despite many benefits of focus group methods used in this study, its findings and interpretations are subject to several important limitations. First of all, my convenience sample was comprised of a very selective group of female students, namely, those who were interested, confident enough and also able to participate in focus groups on such a sensitive subject as oral sex.

Secondly, groups were mixed in terms of students’ extent of oral sex experience, and this may have inhibited minority females from fully expressing their views. Although the interviews were conducted in the university’s facilities, centrally located on the campus and took place at a relatively convenient time for a majority of students, nevertheless, it is possible that the location and scheduling of the interviews precluded some interested individuals from participating.
It is also important to consider that the study has a narrow focus on heterosexual females. In this sense, the large area of oral sex in bisexual or homosexual relationships was not covered at all. In same-gender or bisexual relationships, the perception and meanings of oral sex, as well as power relations and sexual self-efficacy, may vary and differ from our findings, and it could be a very interesting and potential avenue for future research.

9.4.2 Implications and conclusions

One of the major implications of this study was in emphasizing the role of general confidence and a sexual self-efficacy in adolescents’ girl sexual lives during the time of their schooling. My participants identified this time in forming their feminine identity as the most difficult and confusing periods. For females, confidence and sexual self-efficacy were found to be major factors that play important roles in their enjoyment or disgust attached to engagement in oral sex.

The results of this study demonstrated that the confidence and self-efficacy of oral sex was closely linked to females’ body-image self-consciousness. Body-image concerns were reported to make girls feel vulnerable in both a physical and emotional sense. For them, the influence of this body image concerns attached to the whole nature of oral sex, found to be deteriorated by increased media pressure for young women to look pretty and skinny and perform sex as a porn star models.

Findings from this study indicate that internet porn culture that targets young males can present particular negative consequences for young females’ physical and psychological health, in terms of shattering their sexual self-esteem and provoking short-term emotional distress.

The finding that many participants hold a full understanding of others’ attempts to gain the confidence in social and sexual life from the alcohol was not in favour for health programmes and campaigns aiming to reduce excessive drinking in adolescents and young adults.
9.7 Summary

In this chapter, I used a narrative approach and thematic analysis to investigate the issues around female students’ negative and positive experiences of engagement in oral sex. The results of this study greatly contribute to our understanding of the effects of personal female students’ beliefs about oral sex as a combination of their individual characteristics and social influences in the context of relationship power pressure, on their psychological well-being and physical health, as attached to their engagement in oral sex.

The outcomes of the present study raise some interesting questions that could provide new directions for research, and emphasise the importance of exploring the effects of confidence and body image concerns on sexual self-efficacy in oral sex in naturalistic settings.
Chapter 10

DISCUSSION

This final chapter aims to draw together the main findings of all four studies to the degree that they might promote our understanding of mechanisms involved in regulating adolescents’ oral sex behaviour, and consider their practical implications and possible applications for future research.

Before discussing the findings and evaluating current research, I briefly summarise the main findings of this research.

10.1 Summary of Chapters

The four studies included in this thesis were designed to test a proposed pathway of effects between the self-control and successful or unsuccessful management of adolescents’ oral sex behaviour and its mental health consequences through the application of self-regulation theory. Students’ oral sex behaviour and psychological well-being related to it were tested at cross-sectional and longitudinal level, and analysed in detail through both quantitative and qualitative studies.

Based on the previous research on the role of self-regulation in health-related behaviour, I hypothesised that individual’s level of self-control will affect the likelihood of their engagement in oral sex behaviour. I also predicted that engagement in oral sex will be shaped by the joint contribution of the individual’s personality, specificity of situation, and relationship context. Therefore, on a quantitative level, it was predicted that engagement in oral sex would be to some extent associated with certain personality characteristics (e.g. sensation-seeking, attachment style), individuals’ regulatory focus orientation, their attitudes to oral sex and reasons for engagement in oral sex. In specific situations of limited self-control resources in ego depletion states (e.g. physical tiredness, alcohol, cognitive load, emotional rise) it was predicted that alongside an individual’s level of self-control skills, engagement in oral sex will be related to their motivation to restrain sexual behaviour, and this motivational element of behavioural regulation will be particularly salient in ego depletion states, as it could contribute to or
substitute for impaired capacity of self-control to regulate sexual behaviour. Finally, I hypothesised that in ego depletion states and under gender power pressure within relationship contexts, engagement in oral sex behaviour will be affected by female’s self-esteem and body image satisfaction. These hypotheses were tested in Studies 2 (SPSH Survey) and 3 (SMSC Survey).

The proposed link between engagement in oral sex behaviour and psychological well-being via an individual level of self-regulation skills was explored on both quantitative and qualitative levels. In the quantitative part of SPSH Survey (Study 2), I used the quantitative analysis to test the relationship between self-control and psychological well-being as related to engagement in oral sex behaviour. The qualitative thematic analysis in the second part of SPSH Survey and in Focus group study explored cognitive processes that involved in decision-making about engagement in oral sex and in evaluation of the consequences of oral sex behaviour.

Having reviewed the context of the analysis in the chapters, I shall now discuss the main findings in relation to each other and the contribution that they made in research. Taking into consideration the complexity of the self-regulation approach that has been applied to an understanding of oral sex behaviour, the main findings from this research will be considered within two main streams of emerging outcomes, namely as findings related to behavioural outcomes and as findings related to mental health outcomes of oral sex practice. Then the points of convergence will be identified and discussed.

10.2 Main findings as related to behavioural outcomes: mechanisms of self-regulation processes of engagement in oral sex

10.2.1 Self-control as a regulation force in managing oral sex behaviour

The findings from this research indicated that self-control was a significant predictor of students’ engagement in oral sex. Students with low self-control scores consistently demonstrated higher levels of engagement in oral sex behaviour.

At the cross-sectional level support was found for the premise that engagement in both, giving and receiving, oral sex was directly linked to DSC scores, and engagement in
giving oral sex was directly linked to TSC. In line with previous research grounded in self-control resource model (e.g. Gailliot & Baumeister, 2007), the negative impact of low trait self-control and less ability to restrain sexual behaviour was evident in a higher engagement in oral sex. When the relationship was tested over a longer time period, the impact of TSC on engagement in oral sex behaviour was no longer evident. However, the differences in ability to restrain sexual behaviour continued influencing oral sex behaviour during this period.

Therefore, the findings from this research provided some evidence that, although highly correlated, trait-self-control and dispositional ability to restrain sexual behaviour could represent two different faces of self-control. In the longitudinal analysis, DSC was positively and strongly associated with engagement in oral sex behaviour, while the effect of TSC faded over this period of time. Nevertheless, TSC remained positively and strongly associated with DSC. This suggests that the relationship between TSC and DSC could possibly be mediated by a third element in regulating oral sex behaviour, such as motivation. This also implied that the influence of this third element would be more evident in tempting situations that require immediate application of self-control resources.

The findings from this research also indicated that, as applied to sexual behaviour, TSC can be seen as acting rather as a preventive type of self-control, whereas DSC could be more associated with intervention type of self-control (e.g. Hofmann & Kotabe, 2012). The alternative explanation for the direct role of DSC in oral sex behaviour could be that DSC acts as a type of operational self-control related to immediate response to the specific behaviour temptation that is applied in a very first instance, while TSC is involved in performing other tasks, as discussed within the resource model of self-control (e.g. Baumeister et al, 2003).

Additionally, in the longitudinal analysis, a higher level of DSC was found to be associated with a person’s preventive individual focus orientation, whilst higher levels of TSC were positively associated with a person’s promote orientation. Higher TSC was also shown to be a more salient feature of promote orientated females, whereas higher DSC was found to be more evident in preventive orientated males. For females with preventive orientation high level of both types of self-control was important in regulation their oral sex behaviour. Taken within an RFO framework, these findings
could mean that, in relation to risky sexual behaviour, females with promote orientation could benefit from exercising their DSC.

While the results from cross-sectional survey demonstrated that self-control was a significant predictor of engagement in oral sex, the findings from the longitudinal online survey showed that self-control was also important in predicting students’ PWB as result of their engagement in oral sex.

10.2.2 Situational and personal characteristics of engagement in oral sex

10.2.2.1 Motivation to control sexual behaviour and self-control in ego-depletion

The findings from this research demonstrated that in ego depletion states both, sex-related self-control and motivation appeared to influence the patterns of engagement in oral sex. Both self-control and motivation were found to be significant predictors of engagement in oral sex. Those with higher levels of self-control and higher levels of motivation to control their sexual behaviour were less likely to engage in oral sex in ego depletion states.

When not affected by gender power pressure in ego depletion, self-control and motivation to control sexual behaviour hold approximately similar degrees of prediction in oral sex engagement. Insertion of gender power pressure in ego depletion resulted in a loss of predictive power of self-control in oral sex engagement and left motivation to become the main controlling self-regulation force of engagement in oral sex behaviour. The only exception from this rule were females with a high trait level of self-control, for whom engagement in oral sex without gender power pressure was not predicted by their high level of self-control; females high in self-control seem not to use self-control as applied to their oral sex behaviour or used it unconsciously, by a habit (i.e. automatic self-regulation). For them, motivation to control their sexual behaviour played a more important role in whether they would engage in oral sex. The habitual explanation of this finding could be supported by the finding that for them self-control appeared to moderate the relationship between impulsivity and engagement in oral sex behaviour.

At this point my findings diverged from the theory in degree of primary importance of self-control on regulating sexual behaviour. Considering the role of motivation in ego
depletion states and under gender power pressure, as related to engagement in oral sex behaviour, I could conclude that the role of motivation here was rather in directly substituting for the loss of self-control but not just simply in helping to recruit limited self-control resources.

On the other hand, my findings indicated that for females who reported some difficulties to motivate themselves in controlling their oral sex behaviour in ego depletion states and under gender power pressure, self-control still appeared to operate as a significant force that regulated their choices of oral sex behaviour. These findings are in line with previous research on self-control as applied to sexual behaviour.

Consequently, the system of self-regulation of oral sex behaviour in ego depletion states were found to work in the following way: any deficiency in self-control in regulating this behaviour triggered an activation of motivational resources, and, accordingly, any deficiency in motivation to control sexual behaviour resulted in an activation of self-control. Self-control and motivation appeared to be two important ingredients of self-regulation of oral sex behaviour: when resources of one were temporarily depleted, the second one appeared to step in to play its role in regulation processes, as required.

To our knowledge, this current research is the first study to explore the interplay between self-control and motivation in the area of sexual behaviour in ego depletion states and considering relationship power pressure.

10.2.2.2 BIS, negative thinking and self-esteem in ego depletion

The findings on body image satisfaction, negative body image thinking habits, self-esteem and the interplay of these factors with self-regulation processes were partially in accordance with research on body image satisfaction and sexual behaviour.

Contrary to some previous research on body image satisfaction (e.g. Ackard et al, 2000; Trapnell et al, 1997; Wiederman & Hurst, 1998), but in accordance with Gillen et al (2006) study, the findings from this research indicated that overall females with high BIS demonstrated lower engagement in oral sex and females with low BIS demonstrated higher engagement in oral sex. This effect can be attributed to the
research literature that found associations between poor views of individual’s body and their more risky behaviour (e.g. Orbach, 1996).

As far as the interplay between self-control and BIS was concerned, there was evidence of the importance of high self-control in non-engagement in oral sex.

In the absence of relationship power pressure, across all ego depletion states (except alcohol ego depletion) females with high body image satisfaction and high self-control reported lower engagement in oral sex. In this condition, high body image satisfaction was associated with a lower likelihood of engagement in oral sex behaviour, in both self-control groups. *Under relationship power pressure*, females with high body image satisfaction also demonstrated lower engagement in oral sex in both high and low self-control groups. However, in this condition, females with low body image satisfaction and high self-control consistently demonstrated less engagement in oral sex.

Similar positive influences of higher level of body image satisfaction were found for females who have had to motivate themselves harder to comply with conventional behaviour.

In line with previous research on the behavioural effects of negative mental thinking habits about an individual’s body image (e.g. Verplanken & Tangelder, 2011; Henderson-King et al, 2001; Halliwell & Dittmar, 2004), my findings demonstrated that females with high levels of negative thinking habits about their body were significantly less likely to engage in oral sex behaviour.

There was evidence of a beneficial role of higher self-control and motivation to control sexual behaviour for females with high levels of negative thinking habits about their body. *While not being pressurized*, females with high levels of self-control demonstrated less likelihood of being engaged in oral sex behaviour, across both high and low negative body image thinking habits groups. *Under gender power pressure*, females with higher levels of negative body image thinking habits were less likely to engage in oral sex behaviour if they demonstrated higher motivational efforts to control their sexual behaviour. These findings imply that higher levels of self-control and motivation could be generally beneficial for young females in controlling their negative body image thinking habits.
High self-esteem was also found to be beneficial for non-engagement in oral sex behaviour irrelevant of being under gender power pressure or not. Generally, females with low self-esteem demonstrated a higher likelihood of engagement in oral sex behaviour in all ego depletion states, except ego depletion due to alcohol intoxication. Females with higher BIS also showed higher self-esteem scores and low scores of negative body image thinking habits.

However, the consideration of BIS, self-esteem and negative thinking factors in conjunction with self-control and motivation to control sexual behaviour revealed some additional effect of self-control and motivation in alcohol ego depletion state.

Contrary to my findings from the first part of this section, in an alcohol ego depletion state under gender power pressures, females with high body image satisfaction demonstrated a higher probability of being engaged in oral sex behaviours. Variations in self-esteem further clarified this picture. In alcohol ego depletion, females with high body image satisfaction but with low self-esteem demonstrated the highest likelihood of being engaged in oral sex behaviour whereas females with high self-esteem but low body image satisfaction demonstrated the lowest. Moreover, in alcohol ego depletion state and while not being pressurized to engage in oral sex, females with average body image satisfaction reported as high likelihood of engagement in this behaviour as females with high body image satisfaction.

The explanation why females with high body image satisfaction demonstrated a higher likelihood of engagement in oral sex in alcohol condition was in the effect that alcohol had on their self-control. These findings are in accordance with previous research on the role of alcohol in health-related behaviour and risky sexual behaviour (e.g. Baumeister & Heatherton, 1996; Hull & Bond, 1986; Cooper, 2002; Quinn & Frome, 2010). Females who were more satisfied with their physical appearance and whose self-control was lessened by alcohol appeared to be more ready to engage in oral sex, especially if they considered themselves to be in relationship. Narratives from the qualitative studies also support this idea. They clearly point out the link between alcohol and engagement in sexual behaviour in a discourse of expected lessening in self-control that can give females a feeling of adventure and boost their self-confidence in relation to their appearance and social and personal desirability. The question here is what kind of self-
control failure we are dealing with in this situation: a classical failure of monitoring behaviour, a volitional failure due to the influence of relationship or situational characteristics, or a motivational failure due to personality characteristics?

These finding suggest that it is too simplistic to consider body image satisfaction issues, self-esteem, self-control and the effects of ego depletion states for engagement in oral sex behaviour in isolation of social context, situational factors and personality characteristics.

10.3 Main findings as related to mental health outcomes: mechanisms of self-regulation processes in psychological well-being

10.3.1 Self-control in managing PWB as related to oral sex behaviour

The point on which this thesis stands out from the traditional approach to the role of self-control in sexual behaviour was in exploring their importance for young adults’ psychological well-being. The concept of psychological well-being was considered from a positive psychology perspective.

It was predicted that individuals who do better in their abilities to insert and exercise self-control over their behaviours, including their oral sex behaviour, would demonstrate better psychological well-being in general, at first point of assessment, and after the first semester of studying, at the second point of assessment, when their adjustment to the university life is completed. In relation to engagement in oral sex behaviour, it was predicted that the young adults’ reasons for engagement in oral sex alongside other variables (i.e. sensation-seeking, alcohol consumption, self-control, number of their oral sex partners, RFO, etc.) will influence their overall PWB. These hypotheses were extrapolated from previous research (Paul et al, 2006; Owen & Fincham, 2011).

The findings from this research indicated that there was a significant improvement in PWB between the two time points of the research. They also indicated that for many students PWB at time point1 predicted their PWB at time point 2, although in a minority of cases their PWB changed in the opposite direction, i.e. dramatically
improved or gradually deteriorated. There were clear gender differences in PWB as related to oral sex behaviour. My findings indicated that engagement in oral sex between time point 1 and time point 2 was associated with a significant improvement in PWB for male students who take up this practice at that time. Opposed to this, female students who avoided engagement in oral sex during the first semester, reported higher PWB that those who did.

As expected, trait self-control was found to be a significant predictor of PWB as a result of students’ engagement in oral sex behaviour over four months. The influence of self-control on PWB was found to be more salient for females than for males.

My findings also indicated that the influence of self-control varied for different domains of PWB. It was found that trait self-control contributed to higher scores in personal relationships and purpose in life domains for females, and environmental mastery domain for males. This indicated that self-control plays an important role in normative developmental processes and increasing life experience affects different domains of students’ PWB.

10.3.2 RFO in managing PWB as related to oral sex behaviour

Students’ Regulatory Focus Orientation (RFO) was found to influence PWB with relation to their oral sex behaviour to an even greater degree than self-control. This influence was evident for males but significantly important for females.

Overall, females with promote orientation reported significantly higher PWB at time point 2 than females with preventive orientation, irrespective of whether they were engaged in oral sex or not engaged in oral sex.

The nature of this influence is argued to lie in the ways how cognitive re-appraisal processes work for each of this orientations. As I did not manipulate it situationally (e.g. using priming), the possible explanation could be based on Higgins’ concept of a natural fit suggesting that individuals can assign different importance to the same outcomes as a function of the relevance of these outcome to their regulatory orientation. From this point of view, it is possible that promotion orientated females take their experience of engagement/non engagement in oral sex more positively than prevention orientated participants and consequently demonstrate better PWB and better adjustment
to their oral sex behaviour, irrespective of their personal experiences. This also suggests that for females with promote orientation it will be easy to change their negative attitudes to and perception of oral sex as a result of their changing goals and priorities, therefore having or developing promote orientation will be beneficial for behavioural interventions aimed to improve mental health.

Further research could explore the effect of the RFO on different types of self-control in different situations. Better results may be achieved through studying a wider age group, by following young adults over a longer period of time, or through studying a purposive sample of those young adults with different levels of self-control.

**10.3.3 Managing the experiences of oral sex: understanding vulnerability within engagement in oral sex**

From the qualitative side, my findings indicated that negative psychological consequences related to engagement in oral sex behaviour for females were mainly related to the issue of vulnerability. Focus group discussions revealed that this vulnerability could be perceived as both physical and emotional, and could also co-exist at the same time and for the same person. Physical vulnerability was referred to as a partner’s level of knowledge of physiology in general and females’ physiology in particular. Emotional vulnerability refers to females’ individual body image consciousness, their self-esteem and their anxiety level. In many cases physical discomfort was found to be accompanied by emotional distress.

Focus groups showed that this actual or perceived vulnerability can be further amplified by different types of power pressures placed on young girls. Firstly, it was found to refer to the power pressure on young girls from societal norms and societal expectations related to their behaviour in general and to their sexual behaviour in particular. Young females reported to be pressurised by societal expectation to engage in oral sex and to perform both types of oral sex behaviour. Secondly, this pressure was identified as a gender power pressure that was related to the dynamics of negotiating sexual behaviour with their partners within a relationship, accounting for the attitudes, standards and desirable/non-desirable outcomes of both parties. Young females reported that they felt pressurised by males not only on the basis of their judgement of their oral sex performance but also on the basis of their ability to get an orgasm from oral sex. For
some of them, these pressures were reported to further transform into the feeling of being controlled by males, as they make them worry about their sexual performance.

As it emerged from the focus group discussion, most often reported by females, emotional ‘fear of self-exposure’ and ‘fear of judgement’ appeared to be linked to the way in which their self-appraisal processes functioned. At this point findings from quantitative SPSH and SMSC Surveys and qualitative Focus group study converged to emphasise the importance of cognitive appraisal processes involved in the perception of oral sex experiences for females.

10.4 Integration of findings

On all stages of investigation, findings from qualitative studies (SPSH Survey, part 2, and Focus group study) were informing findings from quantitative studies (NATSAL Study, SPSH Survey, part 2; SMSC Survey). These findings helped to improve my understanding of females’ experiences and females’ anxiety behind engagement in oral sex, providing me with explanations of their behaviour, and brought emphatic insight into females’ reasoning and cognitive processing involved in decision-making whether to engage in oral sex behaviour.

The following accounts provide the examples of integration of qualitative and quantitative data at the final stage of investigation.

Findings from NATSAL Study about the highest prevalence of oral sex behaviour amongst Catholics in the UK were confirmed by females in the Focus group study; moreover, qualitative research method allowed me to get the similar explanations from both non-Catholic and Catholic respondents. In the process of conversation, respondents from both sides not only agreed on the high prevalence of oral sex practice amongst Catholics but also were engaged in the process of common meaning making and understanding the reasoning behind this phenomenon.

Furthermore, this discussion provides me with an example of how cultural factors can influence self-regulation. Previous research argued that sub-culture can influence the point at which people believe it is appropriate to lose control over their impulsive behaviour (Anderson, 1994; Jankowski, 1991; Nisbett, 1993). The spread of oral sex
amongst Catholics adolescents who believe that oral sex is ‘not a real sex’ demonstrated that ‘it takes cultural norms to prescribe… in which settings’ (Baumeister & Heatherton, 1996, p.9) it is appropriate for the person to lose control of their impulses.

“The notion of irresistible impulses may be weak and dubious as a scientific hypothesis but as a social doctrine (and as a legal defence strategy) it may be powerful and influential. Once it becomes widely accepted, it is likely to operate as a self-fulfilling prophecy” (Baumeister & Heatherton, 1996, p. 9)

Narratives about the role of alcohol in oral sex engagement, taken from the Focus group study, informed quantitative findings from both Student Surveys (i.e. SPSH and SMSC). They explained why being ‘tipsy’ may improve female students’ psychological well-being by increasing their confidence that benefit them both at a personal level and social level. This provides me with an example of how the conscious strategies of ‘giving up’ self-control can to some extent improve the PWB of females.

At the same time, it also provides examples that demonstrate that an ‘uncontrollable’ degree of ‘giving up’ self-control can seriously affect not only females’ physical health but also their mental health. The narratives from the Focus group study further expanded our understanding of such consequences of alcohol intoxication for individual cases that cannot be spotted from the quantitative surveys. Focus group discussions offered an example of spiralling patterns of distress attached to both alcohol and sexual behaviour, as a form of lapse activated self-control misregulation. As it was described in research literature (Marlatt, 1985), an initial lapse (drinking heavily and having sex) occurred possibly because of suffering from some form of distress, maybe loneliness, and homesickness. The lapse may generate fear, guilt, anxiety; thereby making them feel worse; and then escalating distress may contribute to further abandoning self-control (i.e. vicious circle) and getting engaged in oral sex every time when got drunk.

Low PWB reported by females with low levels of self-control as related to their engagement in oral sex in the SPSH Survey, was supported by findings of embarrassment of this sexual behaviour for them from the qualitative part of this study. This effect was further informed by their reported lack of motivation to control their sexual behaviour under gender power pressure and by their body image issues in the quantitative SMSC Survey. Finally, it was explained in the Focus groups study by
females’ accounts of engagement in oral sex with the purpose to manipulate or be liked by a partner or lacking the self-confidence to say ‘no’. This provided me with examples of how self-regulation processes in oral sex behaviour can be compromised by relationship power pressure and how this can influence females’ PWB.

Students’ answers on the qualitative part of the SPSH Survey have drawn attention to the role of body image satisfaction and negative body image thinking habits, which was further investigated in the SMSC Survey. Feelings of being ashamed of her body, reported by one of the respondent in the SPSH Survey as the main reason for withdrawing from oral sex, was discussed in depth by participants in the Focus group study. The influence of body image satisfaction and negative body image thinking habits on engagement in oral sex behaviour was evident from the SMSC Survey. Focus groups discussions confirmed that girls’ feelings of body image consciousness provoked by the popular media standards and boys’ unrealistic expectations of ‘excellent performance’ in oral sex gained from watching ‘porno’ online were associated with amplifying females’ patterns of negative thinking, thereby affecting their oral sex behaviour. These provide me with examples of how media influences can contribute to lessening self-control by imposing the standards of sexual behaviour and standards of body image.

During conversations in focus groups respondents exchanged their own experiences and discussed the ways they overcome anxiety and worries attached to their body image issues in relation to engagement in and enjoyment of oral sex. These discussions demonstrated that on a peer and gender level a simple knowledge exchange could change a perception or negative experiences attached to oral sex practice by altering cognitive processes of self-appraisal (re-valuation) in females’ oral sex experiences.

Narratives from the Focus group study also contributed to understanding the types of societal, cultural and media influences concentrated around the practice of oral sex. They demonstrated that adolescent girls need to be better equipped with the knowledge and skills to face engagement in sexual behaviour, but at the same time they also indicated that for each individual girl, entering a sexual life is a highly personal process during which they could experience a range of difficulties that need to be resolved.
The step by step investigation of self-control through the course of this research that has been designed to look at different sides of its role in engagement in sexual behaviour has had an effect on my personal understanding of engagement in oral sex among adolescents. Each stage of investigation has brought different shades of meaning to understanding enjoyment or non-enjoyment of this engagement. Throughout this process, through respondents’ voices, positive experiences of oral sex for females were linked to self-confidence and self-efficacy, to the ability to take control over themselves and over the situation and to the ability to communicate and stand up to the pressure of relationship. Equally, anxiety and distress attached to the oral sex experience were attributed to young females’ inability to recognise and communicate their worries about engagement in oral sex on a personal and societal level, their lack of confidence and sexual self-efficacy, problems with application of available self-regulation resources to control themselves and control the situation, especially in context of relationship power pressure. These findings indicate that during their developmental periods many young females are going through the same pressures related to their entrance to adult sexual relationship, including pressure of being involved in oral sex. The majority of them manage to develop the strategies to deal with any possible distress attached to practicing oral sex by completing the process of cognitive re-appraisal of personal meaning and acceptance of oral sex practice. Some of them seem to struggle throughout this process.

Findings from all these studies pointed to the final conclusion that the cognitive self-appraisal processes, resulting from applying self-regulation to oral sex behaviour, appeared to be extremely important for the psychological well-being as related to performing oral sex behaviour in females. Negative emotional consequences of practising oral sex were found to be attached to females’ low sexual self-efficacy and deficiencies in their ability to apply self-regulation resources to control their behaviour in the context of relationship power imbalances, and to their personal negative attitudes and perception of oral sex. All these processes could be targeted and altered by cognitive-behavioural interventions at school and university level.

10.5 Implication of findings

The applications of self-regulation theory in previous work, although not related to sexual behaviour, provide good examples of how self-control and motivation can be promoted in modifications of health-related behaviour (e.g. Fadardi & Cox, 2007).
These include approaches such as facilitating a link between temptation and goal pursuit by repeatedly and successfully exerting self-control in tempting situations (Fishbach et al., 2003) and activation of the goal behaviour that allows for more motivational control over actions related to this behaviour (Aarts & Dijksterhuis, 2003; Bargh et al., 2005).

Based on previous research and on the findings from this research, two very different ways of training adolescent females to cope with the negative consequences of oral sex engagement and maintaining relatively high PWB are suggested. Firstly, it suggests that a useful approach to promote safe sexual behaviour may be in training to manage sexual behaviour in everyday situations. This could include the role play approach that is already incorporated in some sex education programmes in schools. This approach could provide adolescent females with an opportunity to exercise and strengthen their self-control that will be highly beneficial for them ‘here and now’ and when they move out of their ‘convenient group of friends’ later. Secondly, in the context of school sex education it may be useful to conduct a small same gender assertiveness training group for adolescent girls under the supervision of school counsellors which will purposefully engage girls along with their friends in activities that will challenge the Social Script Theory norms.

The results from this research indicate that motivation to control sexual behaviour in ego depletion states is as much important for non-engagement in oral sex as self-control, and negative effects of impulsivity on this engagement can be overcome by the strength of normative beliefs. As such, to improve any behavioural interventions to reduce risky sexual behaviour, a profitable approach may be through paying greater attention to facilitating the needs for strengthening normative beliefs and motivation to control sexual behaviour, as this may to some degree compensate for some deficiencies in self-control.

Finally, findings from this research indicate that for improving behavioural interventions to reduce anxiety and distress attached to practice of oral sex for adolescent females, the possible approaches could be in facilitating changes in their regulatory focus orientation and in helping girls to develop higher scores on promotion focus orientation.
In addition to supporting the call for these generic approaches, through linking engagement in oral sex behaviour to body image satisfaction and habitual negative thinking about body image, the present research suggests that for individuals reporting body dissatisfaction or habitual negative thinking, success in controlling their sexual behaviour may be further enhanced through interventions which could improve their self-confidence and sexual efficacy and distract them from these negative cognitions. Once identified, the patterns of negative cognitive reasoning behind engagement in oral sex and associated psychological distress could be targeted in future sexual health interventions to derive enduring health-related benefits for adolescent females.

10.6 Future research directions

Three main paths for future research have emerged from the findings of the present thesis viewed as a whole.

The first one will be in the further investigation of the role of self-control, motivation to control sexual behaviour and RFO on adolescents’ PWB. Better results may be achieved through studying a wider range of first year university students, by following them over a longer period of time, or through studying a purposive sample of only those who do report significant improvement or deterioration of their PWB. Due to the lack of previous research in the area of self-control and its influence on PWB amongst first year university students there is no previous work with which to contrast or compare findings from this research.

Secondly, a fruitful path for future research will be in exploring the mechanisms of engagement in oral sex behaviour in different types of ego depletion states (e.g. physical tiredness, cognitive load, alcohol intoxication and emotional rise). Each of these ego depletion states need to be investigated separately in order to understand the interplay between self-control and motivation processes in shaping sexual behaviour in each particular state, considering other important variables and controlling for gender.

Building on the findings from present research, future work would be useful in assessing the effect of self-control (i.e., trait self-control and situational self-control) on females’ confidence and sexual self-efficacy as applied to oral sex behaviour and, if
such effect exists, how self-control may therefore have the potential to lead to additional benefits in increasing females’ confidence in sexual behaviour.

Finally, future avenues of research could be in investigating the impact of females’ body image concerns and habitual negative body image thinking on their engagement in oral sex and its PWB consequences. Within the focus group sample in this research, body image issues appeared to serve a function of controlling oral sex behaviour through a different route than that presented by pure self-control processes. This function perhaps helps to prevent individual females’ involvement in oral sex at the beginning of a relationship. As such, body image concerns and negative body image thinking habits may have had a positive impact on their psychological health and non-engagement in oral sex behaviour. This presumption was supported by results from the SPSH Survey that demonstrated higher PWB in female-avoiders, and needs to be further developed and investigated in future research. Future work would be useful to explore the degree of consciousness in this behaviour by investigating the role of self-control and motivation to control sexual behaviour on outcomes, as habitual behaviour is argued to be highly automatic. However, more exact measures of psychological health in relation to engagement and non-engagement in oral sex behaviour and longer term studies to track the effect of body image concerns and negative body image thinking habits over time would be necessary to investigate these possibilities further.

10.7 Limitations

There are several limitations in the research presented in this thesis.

Firstly, this research used subjective measures of sexual behaviour. Self-reported measures were used in both quantitative surveys, and a likelihood approach was used in the SMSC Survey. While self-report measures in general and likelihood approaches, in particular (e.g. Armstrong & Welsman, 2002; Sallis & Saelens, 2000), have been shown to provide acceptable concurrent validity with objective instruments, they still provide far less accurate estimates of true sexual behaviour. In addition, methodological difficulties in measuring motivation to control sexual behaviour and compliance with societal pressure not to act as sexually preoccupied, resulted in the development of such instruments by the researcher, and thus the use of these non-validated instruments in this research.
Secondly, the influence of relationship power pressure on the likelihood of engagement in sexual behaviour was assessed by testing the likelihood of engagement in oral sex in tempting situations in ego depletion states. The presence of relationship power pressure was identified by females’ perception of being in a relationship with a partner. More advanced measures of relationship power pressure on engagement in sexual behaviour will greatly benefit future research in this area. As the use of experimental studies in such a sensitive area of research as sexual behaviour is highly problematic from an ethical perspective, the possible solution to experimental manipulation will be in studying oral sex behaviour in couples.

Next to these methodological limitations, the SPSH Survey was also limited in its longitudinal part. The following re-assessment period, although providing valuable and meaningful results, ideally needs to cover a longer period of time and possibly include a third point of assessment at the end of an academic year. Besides, a male sample in this survey was too small to make any valuable inferences about the reported effects of self-control on PWB and in relation to RFO. Further research need to explore these effects on a larger male sample and include a wider range of first year university male students.

A further limitation of this research was restricting the sample to female students, as only females were asked to take part in Study 3 (SMSC Survey) and Study 4 (Focus group study). This restriction was imposed partly because of gender differences as related to predictors of engagement in oral sex and in different PWB consequences of this behaviour. As the basis for part of the main hypothesis of the thesis rested on the role of self-regulation processes in oral sex behaviour and related to them anxiety and distress that were found to be reported predominantly by females, male students were not included in this sample. However, the inclusion of a male group in the SMSC Survey would have provided more comprehensive information relating to understanding of the self-regulation processes involved in sexual behaviour in ego depletion states and under relationship power pressure. Male students were also not included in focus group discussions and therefore were not able to express their views and their cognitive reasoning behind engagement in oral sex, and also their perceptions of oral sex behaviour. Without their views, the picture of self-regulation processes of engagement in oral sex rather applied to females’ accounts and, consequently, lacked a sufficient validity.
Finally, it is worth noting that the present set of studies did not aim to provide a comprehensive account of self-regulation processes involved in controlling oral sex behaviour and its PWB consequences. Studies presented in this research were primarily designed to test a model of predicted associations. As such, the findings from this research are still fit for purpose despite these limitations; however, the restricted gender range limits the degree to which the findings can be generalised.

10.8 Conclusions

By approaching the research question through the application of self-regulation theory, the present research is linked with and builds on previous research work. Measuring and reporting standardised constructs of self-control, and clarifying the independent effects of self-control and motivation processes on engagement/non-engagement in oral sex behaviour and on psychological well-being in the present research has the potential to be informative to future research in further developing the ideas and to future sexual health related behavioural intervention.

To our knowledge, this research is a first attempt to apply such a holistic approach to understanding the mechanisms involved in governing sexual behaviour, in terms of both physical health and mental health consequences. Findings from this research demonstrated that physical and mental consequences of risky sexual behaviour appeared to be bind together, and consequently, it is not enough try to change behaviour without trying to change cognitive appraisal processes that are involved in the evaluation of engagement in oral sex behaviour.

Overall, the present research provided evidence in favour of the importance of self-control and motivation to control sexual behaviour in regulating adolescents’ engagement in oral sex behaviour, in terms of both physical and mental health consequences. It also demonstrated the potential effects of body image satisfaction and negative thinking habits in the likelihood of engagement in oral sex and in controlling this engagement situationally and under relationship power pressure. The findings from this research emphasized the importance of cognitive self-appraisal processes of evaluation their oral sex experiences for females’ mental health, and the role of regulatory focus orientation in this process.
Results from psychology research and findings from this research point out that females’ appraisal of their oral sex experiences are different from males as there are more social and cultural pressures involved in them. Besides, for females the evaluation of their oral sex experiences is prone to emotional processing and relationship power pressure. Consequently, it makes young females to be more vulnerable to the immediate and short-term psychological consequences of engagement in oral sex, such as anxiety and depression. Findings from this research that young female-avoiders reported higher level of self-controls and better PWB than females who decided to engage in oral sex during the first semester of their university life provided evidence about the role of self-control in the empowerment of females in sexual relationships that contribute to their PWB.

The recently discovered link between oral sex and HPV-related oropharyngeal cancer in males suggests that males are more vulnerable to long-term health-related consequences of oral sex. According to medical reports, both males and females nowadays are also at risk of a ‘slow’ epidemic of HPV-related STIs and the transmission of these STIs is highly possible through unprotected oral sex practice. Findings from this present PhD thesis pointed out the need to consider the increased level of foreign students in the UK universities. As the focus groups revealed, many foreign female students have not been HPV vaccinated, therefore, they are vulnerable to getting a HPV infection and at the same time they could present the potential danger of spreading this infection amongst young British males. Although not fully confirmed, the implication of getting a HPV infection holds a real danger for obtaining oropharyngeal cancer by young white males. In this situation, promoting more knowledge about the possible psychological and health-related consequences of oral sex behaviour amongst young generation will increase their awareness and can be crucially important for their sexual and psychological health.


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Appendix 1

Questionnaires incorporated in Study 2
(Longitudinal Survey on Students’ Oral Sex Behaviour)

1.1 Survey Time 1 Questionnaires

Part 1. About you

Please circle the correct answer or fill in the space provided.

What is your gender? MALE / FEMALE
What is your age? __________
What is your ethnical background? White Caucasian
Mixed
Asian or Asian British
Black or Black British
Chinese
Any other ethnic group

What is your sexual orientation? Heterosexual (straight)
Homosexual (gay or lesbian)
Bisexual (attracted to both genders)
Not sure

1.1.1 Trait Self-Control Scale (Tangney et al, 2004)

Using the scale provided, please indicate how much each of the following statements reflects how you typically are

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Rarely</th>
<th>Some of the time</th>
<th>Often</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am good at resisting temptation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have a hard time breaking bad habits</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I am lazy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I say inappropriate things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I do certain things that are bad for me, if they are fun</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I refuse things that are bad for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I wish I had more self-discipline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. People would say that I have iron self-discipline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Pleasure and fun sometimes keep me from getting work done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have trouble concentrating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I am able to work effectively towards long-term goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Sometimes I can’t stop myself from doing something, even if I know it is wrong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I often act without thinking through all the alternatives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
1.1.2 Brief Sensation Seeking Scale (BSSS-8)

Please read each question carefully. Using the scale, write the number which best represents how much you agree with the following statement RIGHT NOW

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither disagree or agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would like to explore strange places</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I get restless when I spend too much time at home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I like to do frightening things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I like wild parties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I would like to take off on a trip with no pre-planned routes or timetables</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I prefer friends who are excitingly unpredictable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I would like to try bungee jumping</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I would love to have new and exciting experiences, even if they are illegal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1.1.3 Dispositional Abilities in Sexual Restraint Scale (Gailliot and Baumeister, 2007)

Please read each question and circle the number on the scale for each question that gives the best answer about you

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Moderately like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am very good at controlling my sexual urges</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I often go too far sexually than I want to go</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. If I want to engage in sexual behaviour, but I know that I should not, then I do not engage in that behaviour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Sometimes I lose control of my sexuality</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I have willingly engaged in sexual behaviours that I really had not intended to do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I often end up engaging in sexual acts earlier in a relationship than I hoped</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I am good in resisting my temptation to engage in sexual behaviours</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. When I am with a guy or a girl who wants to engage in some sexual behaviour and I do not, I still engage in that behaviour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I often give in to my sexual urges</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. When I set a limit on my sexual behaviours, I stick to what I had planned</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
1.1.4 Alcohol Consumption

*Please read each question carefully and circle the number on the scale that gives the best answer to you:

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the last year, how often did you drink alcohol on the average?</td>
<td>I did not drink</td>
</tr>
<tr>
<td>2. In the last year, when you drink alcohol, how many drinks did you consume, on the average, on one occasion?</td>
<td>I did not drink</td>
</tr>
<tr>
<td>3. In the last year, how many times have you gotten drunk or ‘very high’ on alcohol?</td>
<td>I did not drink</td>
</tr>
<tr>
<td>4. In the last year, how often did you go out for parties?</td>
<td>I did not drink any alcohol</td>
</tr>
<tr>
<td>5. In the last year, when you went to the parties, how many times have you gotten drunk or ‘very high’ on alcohol?</td>
<td>I did not drink any alcohol</td>
</tr>
</tbody>
</table>

1.1.5 Sexual practices

*Please read each question carefully and circle the number on the scale that gives the best answer to you:

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. During your lifetime, with how many partners have you had vaginal sex?</td>
<td>None</td>
</tr>
<tr>
<td>2. During your lifetime, with how many partners have you had oral sex?</td>
<td>None</td>
</tr>
<tr>
<td>3. How old were you at your first sexual intercourse?</td>
<td>Not happened yet</td>
</tr>
<tr>
<td>4. During your sexual career, which type of sex have you encountered first?</td>
<td>I did not have any sex yet</td>
</tr>
<tr>
<td></td>
<td>I did not have sex yet</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
</tr>
<tr>
<td>5.</td>
<td>Do you normally protect yourself while engaging in vaginal sex?</td>
</tr>
<tr>
<td>6.</td>
<td>Do you normally protect yourself while engaging in oral sex?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I did not have oral sex yet</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Have you ever given oral sex?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Have you ever received oral sex?</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

### 1.1.6 The Relationship Questionnaire (RQ) (Bartholomew and Horowitz, 1991)

*Following are descriptions of four general relationship styles that people often report.*

Please read each description and **CIRCLE** the letter corresponding to the style that best describes you or is closest to the way you generally are in your close relationships.

**A.** It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don’t worry about being alone or having others not accept me.

**B.** I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

**C.** I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them.

**D.** I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

*Please rate each of statements below (by circling the appropriate answer) to indicate how well or poorly each description corresponds to you:*

**A.** It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don’t worry about being alone or having others not accept me

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>Neutral/mixed</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

**B.** I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>Neutral/mixed</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

**C.** I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>Neutral/mixed</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
D. I am comfortable without close emotional relationships, it is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people  
2. In general, I feel I am in charge of the situation in which I live.  
3. I am not interested in activities that will expand my horizons  
4. Most people see me as loving and affectionate  
5. I live life one day at a time and don't really think about the future  
6. When I look at the story of my life, I am pleased with how things have turned out  
7. My decisions are not usually influenced by what everyone else is doing  
8. The demands of everyday life often get me down  
9. I think it is important to have new experiences that challenge how you think about yourself and the world  
10. Maintaining close relationships has been difficult and frustrating for me  
11. I have a sense of direction and purpose in life  
12. In general, I feel confident and positive about myself  
13. I tend to worry about what other people think of me  
14. I do not fit very well with the people and the community around me  
15. When I think about it, I haven't really improved much as a person over the years  
16. I often feel lonely because I have few close friends with whom to share my concerns  
17. My daily activities often seem trivial and unimportant to me  
18. I feel like many of the people I know have gotten more out of life than I have  
19. I tend to be influenced by people with strong opinions  
20. I am quite good at managing the many responsibilities of my daily life  
21. I have the sense that I have developed a lot as a person over time  
22. I enjoy personal and mutual conversations with family members or friends  
23. I don't have a good sense of what it is I'm trying to accomplish in life  
24. I like most aspects of my personality  
25. I have confidence in my opinions, even if they are contrary to the general consensus  
26. I often feel overwhelmed by my responsibilities  
27. I do not enjoy being in new situations that require me to change my old familiar ways of doing things

1.1.7 Part 2. Ryff's Psychological Well-Being Scale (PWBS-42)

Please read following statements carefully and indicate your degree of agreement (using a score ranging from 1- STRONGLY DISAGREE to 6- STRONGLY AGREE) with each of them by circling the appropriate answer

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people  
2. In general, I feel I am in charge of the situation in which I live.  
3. I am not interested in activities that will expand my horizons  
4. Most people see me as loving and affectionate  
5. I live life one day at a time and don't really think about the future  
6. When I look at the story of my life, I am pleased with how things have turned out  
7. My decisions are not usually influenced by what everyone else is doing  
8. The demands of everyday life often get me down  
9. I think it is important to have new experiences that challenge how you think about yourself and the world  
10. Maintaining close relationships has been difficult and frustrating for me  
11. I have a sense of direction and purpose in life  
12. In general, I feel confident and positive about myself  
13. I tend to worry about what other people think of me  
14. I do not fit very well with the people and the community around me  
15. When I think about it, I haven't really improved much as a person over the years  
16. I often feel lonely because I have few close friends with whom to share my concerns  
17. My daily activities often seem trivial and unimportant to me  
18. I feel like many of the people I know have gotten more out of life than I have  
19. I tend to be influenced by people with strong opinions  
20. I am quite good at managing the many responsibilities of my daily life  
21. I have the sense that I have developed a lot as a person over time  
22. I enjoy personal and mutual conversations with family members or friends  
23. I don't have a good sense of what it is I'm trying to accomplish in life  
24. I like most aspects of my personality  
25. I have confidence in my opinions, even if they are contrary to the general consensus  
26. I often feel overwhelmed by my responsibilities  
27. I do not enjoy being in new situations that require me to change my old familiar ways of doing things
28. People would describe me as a giving person, willing to share my time with others
1 2 3 4 5 6
29. I enjoy making plans for the future and working to make them a reality
1 2 3 4 5 6
30. In many ways, I feel disappointed about my achievements in life
1 2 3 4 5 6
31. It's difficult for me to voice my own opinions on controversial matters
1 2 3 4 5 6
32. I have difficulty arranging my life in a way that is satisfying to me
1 2 3 4 5 6
33. For me, life has been a continuous process of learning, changing, and growth
1 2 3 4 5 6
34. I have not experienced many warm and trusting relationships with others
1 2 3 4 5 6
35. Some people wander aimlessly through life, but I am not one of them
1 2 3 4 5 6
36. My attitude about myself is probably not as positive as most people feel about themselves
1 2 3 4 5 6
37. I judge myself by what I think is important, not by the values of what others think is important
1 2 3 4 5 6
38. I have been able to build a home and a lifestyle for myself that is much to my liking
1 2 3 4 5 6
39. I gave up trying to make big improvements or changes in my life a long time ago
1 2 3 4 5 6
40. I know that I can trust my friends, and they know they can trust me
1 2 3 4 5 6
41. I sometimes feel as if I've done all there is to do in life
1 2 3 4 5 6
42. When I compare myself to friends and acquaintances, it makes me feel good about who I am
1 2 3 4 5 6

1.2 Survey Time 2 Questionnaires

1.2.1 Transition Questions

The following questions will ask about the changes that happened in your life over the time since you last answer the survey. Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.

1.2.1.1 Since you last answered the survey, how did your overall psychological well-being changed?

<table>
<thead>
<tr>
<th>Very much worse</th>
<th>Moderately worse</th>
<th>Not much worse</th>
<th>Not at all</th>
<th>Not much better</th>
<th>Moderately better</th>
<th>Very much better</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1.2.1.2 If your overall psychological well-being changed, please explain why you think this is?
_____________________________________________________________________________________
________________________________________

How do you expect your psychological well-being continue to change in the next 6 month?

<table>
<thead>
<tr>
<th>Very much worse</th>
<th>Moderately worse</th>
<th>Not much worse</th>
<th>Not at all</th>
<th>Not much better</th>
<th>Moderately better</th>
<th>Very much better</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If you expect your psychological well-being to change, please explain why you think this is?
_____________________________________________________________________________________

1.2.1.3 Since you last answered the survey, have you received any oral sex? YES NO
1.2.1.4 Since you last answered the survey, have you given any oral sex?  

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>None</td>
<td>1 partner</td>
</tr>
<tr>
<td>1.</td>
<td>Since you last answered the survey, how many vaginal sex partners did you have?</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Since you last answered the survey, how many oral sex partners did you have?</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I did not have sex yet</th>
<th>Every time</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Since you last answered the survey, did you protect yourself while engaging in vaginal sex?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Since you last answered the survey, did you protect yourself while engaging in oral sex?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1.2.1.5 Since you last answered the survey, how much your sex life changed?

<table>
<thead>
<tr>
<th></th>
<th>Very much worse</th>
<th>Moderately worse</th>
<th>Not much worse</th>
<th>Not at all</th>
<th>Not much better</th>
<th>Moderately better</th>
<th>Very much better</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If your sex life changed, please explain why you think this is?

<table>
<thead>
<tr>
<th></th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

1.2.1.6 How do you expect your sex life continue to change in the next 6 month?

<table>
<thead>
<tr>
<th></th>
<th>Very much worse</th>
<th>Moderately worse</th>
<th>Not much worse</th>
<th>Not at all</th>
<th>Not much better</th>
<th>Moderately better</th>
<th>Very much better</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If you expect your sexual life to change, please explain why you think this is?

<table>
<thead>
<tr>
<th></th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

1.2.1.7 Since you last answered the survey, how much your alcohol consumption changed?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Much less</th>
<th>A little less</th>
<th>No change</th>
<th>A little more</th>
<th>Much more</th>
<th>Very much more</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If your alcohol consumption changed, please explain why you think this is?

<table>
<thead>
<tr>
<th></th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

1.2.2 Dispositional Abilities in Sexual Restraint Scale (Gailliot and Baumeister, 2007) and Ryff’s Psychological Well-Being Scale (PWBS-42)

We would like you to complete these questionnaires once again. However, this time we would like you to think about how your sex life and your PWB are changed in comparison with how it was before.
Appendix 2

Information Pack and Questionnaires for the students willing to participate in research (Study 2)

2.1 Letter to the university Year 1 Course Administrators

Dr Elena Sovetkina
PG Psychology Research Department

University of Bath
Bath BA2 7AY
Tel: 01225 385558
Fax: 01225 386366
Web: www.bath.ac.uk

Year 1 Course Administrator/Tutor/Lecturer
University of Bath
Bath Spa University
University of Bristol
University of Plymouth

Our Ref: Psychology Research 12-121

27st August 2012

Dear Sir/Madam,

Research Project:
Investigating oral sex behaviour in relation to HPV-related oropharyngeal (mouth and throat) cancer

I am writing to you to invite your first year students to participate in a longitudinal Sexual and Psychological Health Survey which is currently being conducted on adolescents in the South West area of the UK by the Psychology Department at the University of Bath. Your University/College was chosen for participating in this Survey as part of a scientifically selected sample of UK educational institutions. Your course has been randomly selected by us within the college for this survey.

This Sexual and Psychological Health Survey is an online survey and will be anonymous and strictly confidential.

The purpose of this survey is to investigate the practice of recreational oral sex among adolescents (18 to 21 years old) which may result in them acquiring STIs (Sexually Transmitted Infections) and HPV (Human Papillomavirus) infection of the oropharynx (back of mouth/throat including the base of tongue and tonsils). There is increasing medical concern that HPV infection of the mouth and throat is being acquired through unprotected oral sex and that the incidence of mouth and throat cancer related to human papillomavirus (HPV) has been increasing in recent years (Cancer Research UK). In order to better inform health-promotion and health prevention interventions as well as sex education in schools, we are looking for the
determinants of unprotected oral sex, a typical profile and the psychological characteristics of those who actively or passively engage in the practice of oral sex amongst the university/college population. This type of research has never been carried out in the UK before.

If you are happy to help out, I would ensure you had access to some blank questionnaire packs (containing the participant information sheet, consent form and a questionnaire) and I would be happy to meet with you personally to discuss these.

We already appreciate your interest, willingness and co-operation to take part in this study. Your response is important because findings from this Project have the potential to stimulate a whole new stream of research into the social, educational, religious and cultural backgrounds of processes underlying the ‘sex and gender’ culture of modern adolescent/student society and how this could adversely impact on their health and psychological well-being.

The results of this study will be written up in my PhD dissertation (supervisors: Prof. S. Skevington, Prof. M. Weiss). Results may also be published in scientific journals and at scientific conferences. Further to this, upon request, the general findings could be presented to staff and students once the research is complete.

This study is conducted in accordance with British Psychological Society ethical guidelines and has been reviewed and approved by a University of Bath (Department of Psychology) Research Ethics Committee (12-121).

If you have any additional questions, please do not hesitate to contact me, Dr Elena Sovetkina, between 8am and 4pm, PG Psychology Research Department, on 07794 215 997 or by e-mail on e.c.sovetkina@bath.ac.uk.

I look forward to hearing from you in due course. I will also contact you within two weeks to discuss possible cooperation about this matter.

Thank you for your help and cooperation.

Yours sincerely,

Dr E. C. Sovetkina
PhD researcher
PG Psychology Research Department
E-mail: e.c.sovetkina@bath.ac.uk
Tel: 07794215997

2.1 Participant’s Information Sheet

**Title of Project: Investigating oral sex behaviour in relation to HPV-related oropharyngeal (mouth and throat) cancer**

We would like to invite you to take part in a study that has been designed by researchers working in the Psychology Department at the University of Bath.

This study aims to investigate the practice of recreational oral sex among adolescents (18 to 21 years old) which may result in them acquiring STI’s (Sexually Transmitted Infections) and HPV (Human Papillomavirus) infection of the oropharynx (back of mouth/throat including the base
of tongue and tonsils). In order to understand the determinants of sexual health in a student population, we aim to explore the practice of unprotected oral sex, as part of the youth culture, amongst university students.

We are inviting you to participate in a longitudinal Sexual and Psychological Health Survey that needs to be completed twice: initially, after enrolling on the course (September-October 2012) and subsequently, after the Christmas / New Year 2012 vacation (January-February 2013). This Survey will be composed of several sets of questions relating to your personal lifestyle (including your sexual lifestyle); questions relating to certain features of your personality and questions measuring your perceived psychological and overall well-being. The initial survey will take you about 30 minutes to complete; the repeated survey will take you approximately 20 minutes. Participation in this research study is on a voluntary basis and you are free to withdraw at any time before the data is processed and becomes unidentifiable. You may decline to answer any questions if you are not comfortable with them. All information will be strictly confidential and anonymous.

This study is conducted in accordance with British Psychological Society ethical guidelines and has been reviewed and approved by the University of Bath Research Ethics Committee. If you have any queries feel free to contact the researcher, Dr Elena Sovetkina (email: e.c.sovetkina@bath.ac.uk).

2.2 Participants Consent Form

Title of Project: Investigating oral sex behaviour in relation to HPV-related oropharyngeal (mouth and throat) cancer

Name of Researcher: Dr Elena Sovetkina

1. I am a university student (I have passed my 18 birthday) and I understand that this research study may include content of a sexual nature.

2. I confirm that I have read and fully understand all the information provided about the above research study. I am satisfied with the instructions I have been given.

3. I have been informed that my responses are strictly anonymous.

4. I have not been coerced in any way to participate in this research study and I understand that I am free to withdraw my participation, up to the point I submit my responses, without giving any reasons.

5. Data protection: I agree to the University processing information that I have supplied. I understand that I will be unable to withdraw from this research study after submitting my responses, because my anonymised data will be unidentifiable.

6. I consent to participate in this research study and I agree with all the above statements.

_____________________                    ____________                          __________________
Name of participant                                      Date                                            Signature
2.3 Participants Debriefing Form

**Title of Project: Investigating oral sex behaviour in relation to HPV-related oropharyngeal (mouth and throat) cancer**

Thank you for consenting to be a participant in this research study on the University of Bath Campus, conducted by the Department of Psychology, and which is designed to investigate oral sex behaviour in relation to HPV (Human Papillomavirus)-related oropharyngeal (mouth and throat) cancer.

There is growing body of research which demonstrates that substantial numbers of students and adolescents have already been actively or passively involved in the practice of oral sex (Lindberg et al., 2008; Remez, 2000; Stone et al., 2006), and the incidence of engaging in oral sex increases both with age and after the commencement of penetrative vaginal sexual intercourse (Prinstein et al., 2003).

The main reason given for active or passive participation in this form of recreational sex is the perception that oral sex is a form of risk-free sexual intimacy (Schuster et al., 1996; Townsend, 2004) and it ensures the ‘preservation of virginity’.

Research indicates that adolescents apparently do not realise that Sexually Transmitted Infections (STIs) can infect the oropharynx (back of mouth/throat including the base of the tongue and tonsils) during unprotected oral sex with an infected partner and that subsequently oro-oral and oro-genital contact can spread this infection to other sexual partners (Samkange-Zeeb et al., 2011). British researchers determined that more than eighty percent (80%) of college and university students, aged from 16 to 21, failed to protect themselves with condoms during oral sex (Stone et al., 2006).

There is increasing medical concern that HPV infection of the mouth and throat is being acquired through unprotected oral sex (Heck et al., 2009) and that the incidence of mouth and throat cancer related to human papillomavirus (HPV) has been increasing in recent years (Cancer Research UK).

In order to better inform health-promotion and health prevention interventions as well as sex education in schools, we are looking for the determinants of unprotected oral sex, a typical profile and the psychological characteristics of those who actively or passively engage in the practice of oral sex amongst the university population.

Findings from this Project have the potential to stimulate a whole new stream of research into the social, educational, religious and cultural backgrounds of processes underlying the ‘sex and gender’ culture of modern adolescent/student society and how this could adversely impact on their health and psychological well-being.

Once again, we thank you for your participation in this research study. We greatly appreciate your cooperation and really hope that you will participate in our follow-up study (Time 2) in January/February 2013.

In the event, you feel emotionally or psychologically distressed by participation in this study, we encourage you to contact:

- Student Health & Well-Being Centre, University of Bath. Their telephone number is: 1225 385538, email: listening@bath.ac.uk, [http://www.bath.ac.uk/counselling/](http://www.bath.ac.uk/counselling/);

- ‘Mindmatters’ at the University of Bath: [http://www.bath.ac.uk/studentservices/mindmatters/mentalhealth.html](http://www.bath.ac.uk/studentservices/mindmatters/mentalhealth.html);

- University Medical Centre, Quarry House, North Road, Bath. BA2 7AY.
Their telephone number is: 01225 386655; fax: 01225 386489; http://www.umcbath.co.uk/site/index.aspx

➢ Riverside Youth Health Centre, CASH (Contraceptive and Sexual Health) at Bath for an advice or to make an appointment. Their telephone number is: 01225 474242.

You can get additional information on some related to STI’s and HPV issues by visiting the advice and support websites, such as:

CDC (Centres for Disease Control and Prevention):
http://www.cdc.gov/std/hpv/stdfact-hpv

BBC Health:
http://www.bbc.co.uk/health/physical_health/conditions/in_depth/cancer/typescancer_oral

STI’s NHS:
http://www.nhs.uk/Livewell/STIs/Pages/STIs-hub.aspx

Brook for Young people:
http://brook.org.uk/stis

We also are inviting you to participate in the Qualitative part of this study.

To those University of Bath students, who would like to talk to the researcher about their personal experiences of actively or passively engaging in oral sex, we can provide an option of participating in a personal, semi-structured, face-to-face interview of around 30 minutes. There is an option to do the interview using Skype.

Please be assured that your participation and all information acquired during personal interviews will be strictly confidential and anonymous.

If you have any questions regarding this study, please feel free to contact the researcher (email: e.c.sovetkina@bath.ac.uk; telephone: 07794215997).
2.5 Poster inviting students to participate in research

We invite you to participate in our Sexual and Psychological Health Survey. We will be asking you to complete this survey twice: initially after you enrol as an undergraduate at the University (October-November 2012) and then again after New Year 2012 (January-February 2013).

We would like to invite some of you to talk privately to our researcher about your own experiences of recreational sex.

All information about you will be strictly confidential and anonymous.

If you have any questions about this research study, please feel free to contact the researcher via:

email: eg299@bath.ac.uk or text: 07583 394892

To participate in this study please visit our website on:

www.bath.ac.uk/psychology/research/participate-in-projects

Thank you very much for your co-operation!
Appendix 3

Thematic maps and Data Extract Tables for Study 2 (part 2)

3.1 Thematic Maps for qualitative analysis in Study 2

Figure 1 Initial thematic map, showing four main themes.

Figure 2 Developed thematic map, showing three main themes.

Figure 3 Final thematic map, showing two main themes.
### 3.2 Example of data extract, with codes applied, for qualitative analysis in Study 2

<table>
<thead>
<tr>
<th>Data extract</th>
<th>Coded for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive answers</td>
<td>(1)</td>
</tr>
<tr>
<td>a. It took me a long time to allow it but with my boyfriend at the time it was because he wanted to show me that he didn’t care about doing it, in fact he really wanted to</td>
<td>My partner wanted/asked me to do it</td>
</tr>
<tr>
<td>b. It took me a long time to feel comfortable enough to let my partner pleasure me orally, but I did so because I thought it would feel nice, and my partner wanted to</td>
<td></td>
</tr>
<tr>
<td>c. Most of the time my partner wants me to. But sometimes I want to perform it myself</td>
<td></td>
</tr>
<tr>
<td>d. Both myself and my partner wanted to try it to see what it would feel like for one another giving and receiving. After trying it for the first time, we liked it and give each other oral sex when we are in the mood for it</td>
<td></td>
</tr>
<tr>
<td>Negative Answers</td>
<td>(5)</td>
</tr>
<tr>
<td>a. I wouldn’t do it outside a relationship because I would want to trust the other person before receiving it, and I haven’t been in a relationship</td>
<td>Not in relationship</td>
</tr>
<tr>
<td>b. I have not meet anyone whom I like enough</td>
<td>No love</td>
</tr>
<tr>
<td>c. Never been close with a girl in a liking sense or been drunk at a party and then doing... you know what with the girl (M)</td>
<td>No trust</td>
</tr>
<tr>
<td>d. Never been in a relationship that has got to that stage</td>
<td></td>
</tr>
<tr>
<td>e. Not being in a relationship with this person and therefore not being intimate enough with each other and not knowing if my partner has a STD</td>
<td></td>
</tr>
<tr>
<td>f. I will only give/ receive oral sex from a person I am in a relationship</td>
<td></td>
</tr>
<tr>
<td>g. I simply have never formed that deep an affectionate relationship or gotten drunk enough not to care</td>
<td></td>
</tr>
<tr>
<td>h. Bit of a prude. Have not reached that stage of trust/ intimacy with anyone yet. Think sex should be in relationships and I’m not in one</td>
<td></td>
</tr>
<tr>
<td>i. not being comfortable enough with that person</td>
<td></td>
</tr>
<tr>
<td>j. didn’t like person that much</td>
<td></td>
</tr>
<tr>
<td>k. I wouldn’t do it outside a relationship because I would want to trust the other person before ”engaging” in it, and I haven’t been in a relationship</td>
<td></td>
</tr>
<tr>
<td>l. The trust and love that I need to feel in order to allow myself to receive oral sex is more than the level of trust and love I need to experience to give oral sex</td>
<td></td>
</tr>
<tr>
<td>m. If I do not feel very strongly about the person or do not trust them, then I will not give oral sex</td>
<td></td>
</tr>
<tr>
<td>n. I will not engage in oral sex if I cannot trust that person on an emotional level or if I suspect that there is any chance that this person has an STI</td>
<td></td>
</tr>
</tbody>
</table>

**Notation:**

- **P** Positive Answers
- **N** Negative Answers
- **F** Female
- **M** Male

**Number** Theme number (e.g. 1)

**Low case letter** Location of data extract within the theme (e.g. n)

**Example:**

‘I will not engage in oral sex if I cannot trust that person on an emotional level or if I suspect that there is any chance that this person has an STI’ *(NF5n).*
Appendix 4

Questionnaires used in Study 3 (Motivation to control sexual behaviour)

4.1 Part 1 Questionnaire

4.1.1 Attitudes, Impulsive and Reactive Tendencies

Please read following statements carefully and indicate your degree of agreement (using a score ranging from 1- STRONGLY DISAGREE to 7- STRONGLY AGREE) with each of them by circling the appropriate answer

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Oral sex is:</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Pleasant</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acceptable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Exciting</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. I often end up engaging in oral sex without thinking (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. I find it difficult to turn off the offer to engage in oral sex (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4. I sometimes cannot suppress the feeling of wanting to be engaged in oral sex (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5. I wish I had more self-discipline when it comes to getting involved in oral sex (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6. Sometimes I cannot stop myself from being engaged in oral sex, even if I know it’s wrong to do so (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7. When I am with a guy or girl who I like and who wants to engage in oral sex and I do not, I still engage in that behaviour (R)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 Motivation to Control Sexual Reactions Scale

(Adapted from Fasio et al, 2004)

Please read following statements carefully and indicate your degree of agreement (using a score ranging from 1- STRONGLY DISAGREE to 5- STRONGLY AGREE) with each of them by circling the appropriate answer

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Don’t know</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In today’s society it is important that one is not perceived as being sexually preoccupied in any manner</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I always express my thoughts and feelings regardless of how controversial they might be (R)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I get angry with myself when I get thoughts or feelings that might be considered as sexually preoccupied</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. If I were participating in a class and a student who is sexually attractive to me expressed an opinion with which I disagreed, I would be hesitant to express my own point of view</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Going through life worrying about whether you might offend someone is just more trouble than it’s worth (R)
6. It is important to me that other people don’t think that I am sexually preoccupied
7. I feel it’s important to behave according to society standards
8. I am careful not to offend my friends, but I don’t worry about offending people whom I don’t know, or don’t like (R)
9. I think that it is important to speak one’s mind rather than to worry about offending someone (R)
10. It is never acceptable to express one’s sexual preoccupation
11. I feel guilty when I have sexual thoughts or feelings about the person that I like
12. When speaking with a person who is sexually attractive to me, it’s important to me that she doesn’t think that I am sexually preoccupied
13. It bothers me a great deal when I think I’ve offended someone, so I’m always careful to consider other people’s feelings
14. If I have sexual thoughts or feelings, I keep it to myself
15. I would never tell jokes that might offend others
16. I am not afraid to tell others what I think, even when I know they disagree with me (R)
17. If someone who made me feel uncomfortable sat next to me on a bus, I would not hesitate to move to another seat (R)

4.1.3 Trait Self-Control Scale (Tangney et al, 2004)

Using the scale provided, please indicate how much each of the following statements reflects how you typically are

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Rarely</th>
<th>Some of the time</th>
<th>Often</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am good at resisting temptation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have a hard time breaking bad habits (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I am lazy (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I say inappropriate things (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I do certain things that are bad for me, if they are fun (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I refuse things that are bad for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I wish I had more self-discipline (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. People would say that I have iron self-discipline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Pleasure and fun sometimes keep me from getting work done (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have trouble concentrating (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I am able to work effectively towards long-term goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Sometimes I can’t stop myself from doing something, even if I know it is wrong (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I often act without thinking through all the alternatives (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
4.1.4. Body Image Questionnaire (adapted from Cash, 2000)

How satisfied are you with the following features of your body?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very dissatisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face (facial features, complexion)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Hair (colour, thickness, texture)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Lower torso (buttocks, hips, things, legs)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Mid torso (waist, stomach)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Upper torso (breasts, shoulders, arms)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Muscle tone</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Overall appearance</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

4.1.5 HINT (adapted from Verplanken and Orbell, 2003)

INSTRUCTIONS: Occasionally we think about our own body or appearances. Such thoughts may be positive, but may also be negative. In this study we are interested in negative thoughts you may have about yourself.

On this page, please write up NEGATIVE thoughts that you may sometimes have about your body. Use one box for one thought. Write up as few or as many negative thoughts as you can remember having sometimes. Just use a few words to describe each thought is enough.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10.

Please indicate, on average, HOW NEGATIVE you rate the thoughts you wrote down above

<table>
<thead>
<tr>
<th>Slightly negative</th>
<th>Extremely negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your response</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

Please indicate how much you agree or disagree with the following statements:

Thinking negative about my body is something …

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I do frequently</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I do automatically</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I do unintentionally</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. That feels sort of natural to me</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. I do without further thinking
6. that would require mental effort to leave
7. I do every day
8. I start doing before I realize I’m doing it
9. I would find hard not to do
10. I don’t do on purpose
11. That’s typically “me”
12. I have been doing for a long time
13. I have no control over

4.1.6 Rosenberg’s Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle 1. If you agree with the statement, circle 2. If you disagree, circle 3. If you strongly disagree, circle 4.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that I am a person of worth, at least on an equal plane with others (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I feel that I have a number of good qualities (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. All in all, I am inclined to feel that I am a failure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I am able to do things as well as most other people (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I feel I do not have much to be proud of</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I take a positive attitude towards myself (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. On the whole, I am satisfied with myself (R)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I wish I could have more respect for myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I certainly feel useless at times</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. At times I think I am no good at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

4.2 Part 2 Vignettes

4.2.1 Pilot study

Instructions: On the sheets that follow, you will find 10 brief scenarios that describe 10 different interactions between male and female students. In each case you will be asked to imagine that you are a main female character in the scenario. Please try to answer the following questions as honestly as you can and then rate each scenario as instructed below. Your answers will be completely anonymous. No one will ever try to discover your identity, no matter what you say in the questionnaire.

Questions (apply to each of the following scenarios):

1. From your perspective, what would be the right thing to do in this situation?
   a. Say no and leave
   b. Say no and stay
   c. Agree to have oral sex with him
   d. Agree to have full sex with him
   e. Other (please specify)
2. How hard will you need to motivate yourself to make the conventional choice in this situation?

1. very much  
2. moderately  
3. slightly  
4. not hard at all  
5. just a natural choice for me

4. Please rate this scenario on a 7-point scale (with 7=most and 1=least):

a. How realistic is this scenario?  
   1  
   2  
   3  
   4  
   5  
   6  
   7

b. How pleasant is this scenario?  
   1  
   2  
   3  
   4  
   5  
   6  
   7

c. How positive is this scenario?  
   1  
   2  
   3  
   4  
   5  
   6  
   7

Any comments that you have about this scenario

NOTE: Each following scenario is presented in two versions (e.g. versions A and B): with or without gendered power imbalance. Participants will be given only one version of this scenario which will be assigned to each of them randomly, in order of their participation (e.g. participant 1 will be given scenario version A, participant 2 will be given scenario version B, and then again following this order).

**Scenario 1**

This is a Friday night. You went to your local university nightclub to have a couple of drinks with your friends. It’s just so happens that you drunk more than you expected. While you are enjoying your time in the club, you suddenly bump into a boy that you like. He lets you know that he likes you, too. You stick together and he keeps buying you drinks. You are having a nice time with him. At the end of the night you find yourself at his place.

(Continue following option A or option B):

(A) He seems to be nice and reasonable and he asks you to have sex with him or, alternatively, give him oral sex.

(B) He stumbles to the door and locks it. He threatens that he will not let you go until you have sex with him. He gives you the choice to have oral sex instead of full sex as an alternative.

**Scenario 2**

You had a very tiring week at the university and feel that you are really exhausted. Today you also went to gym and have been doing a lot of exercise for couple of hours. When you are about to leave the gym, you see the guy from your course that you have fancied for some time. He offers to walk you back to your residence. You agree and you spend some time slowly walking and chatting. Before he leaves, he suddenly confesses that he fancies you and gives you a clear hint that he wishes to stay with you for the night.

(Continue following option A or option B):

(A) He lets you know that he does not mind having have oral sex if you are not ready for full sex yet.

(B) You are feeling very tired and try to explain it to him but he keeps insisting saying that you can just have oral sex that night. He lets you know that if you refuse him now he will think that you do not like him and nothing will happen between you again.

**Scenario 3**

You are preparing for your end of the year exams. It is the last day before the exam and you know you have to work hard all day in order to catch up with your studies to get a good grade. Your brain is overwhelmed with studying. When you are having a lunch break at the crowded student’s café, you place your books beside you on top of the table. As you are finishing your sandwich, a boy approaches you and asks permission to sit at your table explaining that there is no other room available at the café. You welcome him to sit at your table. While you both eat your lunch, you start to talk and you find out that the boy is a year older than you, and he is studying the same course as you at the uni. He offers you some help with your exam preparations and invites you for coffee at his place. You agree. During the time he was explaining you the difficult course material, you cannot stop yourself thinking that he is quite attractive to you. When you have finished studying,
(Continue following option A or option B):
(A) he admits to liking you very much and suggests you to go out together. You refuse motivating this as you are having exam next day. Then he suggests you to have oral sex as a safe way to get to know each other better.
(B) he jokingly lets you know that you owe him sex as a payment for his time otherwise he will report you for cheating on your exams. His option for you is to give him oral sex.

Scenario 4
You have just seen your boyfriend kissing another girl at the nightclub. After confronting him, you storm out of the nightclub in tears. As you are about to call a taxi, a boy approaches you asking if you are OK. He offers you to go for a walk and you suddenly tell him what happened to you. He seems to be very understanding and now, looking closer, you realised that he is quite attractive. He comforts you saying that not all the boys are like your ex, and he confesses to liking you. He tells you that he also has had a mistrusting relationship in the past and that, in his opinion, the best way to get over one guy is to get another one as soon as possible. Before you realise what is going on,

(Continue following option A or option B):
(A) he gives you a clear hint that he is interested in you and in having sex with you right now, just to show your ex-boyfriend how stupid he was to cheat on you. He is offering you to go with him to his place or to your place. He suggests giving you oral sex as a safe option for a first date.
(B) he is kissing you saying that you are a very beautiful girl, that he dreamt about a girlfriend like you for ages and you must have sex with him right then. He is asking for oral sex at the first chance, motivating this as the way to get know each other better. There is no one around to call for help, and he seems to be determined to get what he wants.

Scenario 5
You just found out that you scored the highest grades for your end of year exams. You are very happy and overwhelmed with joy. You went to celebrate your success with your classmates at the local adventure park. While waiting for one of the rides, you end up chatting with a good-looking guy who is beside you in the queue. You enjoy each other’s company and he spends the rest of the day with you and your friends enjoying time at the park. At the end of the day,

(Continue following option A or option B):
(A) he confesses that he likes you and invites you to his place. You think that you like him too. You still are very excited about your exam results and about the fact he likes you. You don’t mind if you have full sex with him but he insists on you giving oral sex to him.
(B) he confesses that he likes you and invites you to go out to the party with him and his friends that night. You agree and take a friend of yours (a girl) with you. At the end of the night, you realise that everyone on this party are going to have sex, and the boys expect you and your friend to do the same. Your friend seems to not mind, as she likes a boy that she met at this party. Boys suggest you the option to give them oral sex instead of full one.

Scenario 6
It is your birthday. Everyone is buying you drinks and you are overly excited about the amount of attention that you receive from everyone, including your boyfriend. You see your mates making out with their boyfriends. You also see that your boyfriend is watching them. Close to the end of the evening, you feel drunk and eager to dance away with your friends. Your boyfriend has been giving you hints most of the night and you are happy to hear them. This night he keeps insisting on leaving the party and having oral sex. You are not particularly keen on oral sex but you know that your boyfriend likes it.

(Continue following option A or option B):
(A) you personally would prefer to spend the night with the whole group of your friends. But you don’t want to upset your boyfriend with whom you are really in love with. You can clearly see that he is not happy with your behaviour.
(B) although you don’t want to upset your boyfriend, you would prefer to spend the night with the whole group of your friends and you are too drunk to hide it. As your boyfriend notices this,
he becomes angry. He says you that if you are not ready to do what he ask you to do, he will leave your party and find someone else to give him oral sex that night.

Scenario 7
You have just finished “The Race for Life” for your university. Your boyfriend greets you at the finish with congratulations. He takes you home. You are very tired and want to sleep. As you are finishing the lovely omelette that your boyfriend made for you, you suddenly realise where this is going. Your boyfriend lets you know that he understands that you are tired and suggests that you have oral sex with him instead of full sex as a more easy option. When you refuse it, 

(Continue following option A or option B):

(A) he gets upset and is about to leave your place.
(B) he gets really angry and threatens to leave you and have sex with someone else instead.

Scenario 8
At the request of one of your tutors you have just finished writing a long speech to welcome new students to Fresher’s week. You have been sitting in your room writing and editing this speech for the whole day. You feel mentally exhausted and want to have a quiet evening curling up on the sofa watching TV with your boyfriend. But your boyfriend who is older than you wants to take you out for a romantic dinner to a posh hotel. You know that this will most likely end with you having sex. Normally you would be happy to go but today you feel overworked and you do not want to have sex.

(Continue following option A or option B):

(A) you say that to your boyfriend. He seems to be understanding. As alternative, he suggests you to have a quiet evening at home providing that you will give him oral sex.
(B) your boyfriend says that you never spend enough time with him and insists on oral sex now or he will break up with you.

Scenario 9
You just found out that your sister has cancer. You are very upset about it, as you are very close with your sister. You share the bad news with your boyfriend when you get into his car, he comforts you, takes you home, cooks you a nice dinner and then tells you that having sex will make you feel better.

(Continue following option A or option B):

(A) as alternative to full sex, he suggests just having oral sex.
(B) you are really not in the mood for it, but he insists and almost forcefully taking you to bed.

Scenario 10
You just have won £1,000 in the lottery. You are very excited and want to celebrate it by going shopping. Your boyfriend is very happy for you too and offers to join your shopping trip despite him not ever liking to go shopping for clothes with you. When you get home with plenty of shopping bags, he wants to conclude this very lucky day with a romantic evening by the fireplace. You don’t mind if the evening ends with full sex but you normally are not very keen on oral sex and don’t want to do it that particular evening.

(Continue following option A or option B):

(A) but your boyfriend insists on it as a part of special treat for both of you.
(B) as you say this to your boyfriend, he becomes angry and threatens to leave your place if you do not want to do what he likes you to do.

Scenario 11
You found out that you failed your last exam, went to the club and got drunk. You feel physically and emotionally exhausted because you have been studying hard and preparing for all your exams for the last month. In addition to it, you suddenly see your boyfriend entering the club with your best friend who is a top grade student. You get very angry and accept an offer from one of your classmates, who happened to be in the club, to go home with him. When you get to his place, you realise that you have over-reacted and think that it was stupid to go home
with this guy who you do not know very well. As you have already told this guy your life story
earlier that night, he starts to insist that he is a much better person and a much better lover than
your boyfriend. He tries to convince you that you have to teach your boyfriend a lesson to
appreciate you more and insists on having sex with you. While you like this guy, you still have
feelings for your boyfriend. When you tell this to him,

(Continue following option A or option B):

(A) he suggests that you just have oral sex with him as it is not ‘real’ sex and you won’t be
cheating on your boyfriend.

(B) he suggests that you just have oral sex with him as it is not ‘real’ sex and you won’t be
cheating on your boyfriend. As you refuse, he becomes very angry and threatens to tell your
boyfriend that you have been cheating on him if you do not give him what he wants.

4.2.2 Actual survey questions

Instructions: On the sheets that follow you will find 10 brief scenarios that describe 10 different
interactions between male and female student. In each case you will be asked to imagine that you are a
main female character in the scenario. Then you will be asked to rate how likely it is that you would
perform each of several different behaviours in the described social context. Try to answer each question
as honestly as you can.

Your answers will be completely anonymous. No one will ever try to discover your identity, no matter
what you say in the questionnaire.

Questions (apply to each of the following scenarios):

1. How likely would you do the following things? (Rate them on a 7 point scale, with 7=most
likely and 1=least likely):

   a. Say no and leave  1  2  3  4  5  6  7
   b. Say no and stay    1  2  3  4  5  6  7
   c. Agree to have oral sex with him  1  2  3  4  5  6  7
   d. Agree to have full sex with him  1  2  3  4  5  6  7
   e. Other

2. From your perspective, what would be the right thing (e.g. conventional choice) to do in this
situation?

3. How hard will you need to motivate yourself to make your choice of action in this situation?

   1  2  3  4  5
   very much  moderately  slightly  not hard at all  just a natural choice for me
Appendix 5

Information pack for the university students willing to participate in research (Study 3)

5.1 Participants Information

We would like to introduce to you a study that aims to investigate the processes that are involved in shaping sexual behaviour on the university campus.

Research indicates that there are gender differences in the reasons for being involved in oral sex and in perception of intimacy attached to oral sex. The motives behind engagement in sexual activity and motivation to withdraw from it have been linked to various affective, behavioural, and relational outcomes. It was found that girls are more likely to experience different social and emotional consequences of having oral sex, in comparison with boys. In order to better inform health care counsellors and sex education in schools, we are investigating the factors involved in young females’ experience of oral sex, the typical situations and the psychological characteristics of those female students who actively or passively engage in the practice of oral sex and may suffer from any type of consequences related to this sexual activity.

As a part of this study, we are inviting you to participate in an online survey that needs to be completed on one occasion. This survey is composed of several sets of questions relating to your personal lifestyle (including your sexual lifestyle) and questions relating to certain features of your personality. This survey will also include responses to a series of scenarios about particular situations.

This survey will take you about 20 minutes to complete.

Participation in this research study is on a voluntary basis and you are free to withdraw at any time before the data is processed and becomes unidentifiable. You may decline to answer any questions if you are not comfortable with them. All information will be strictly confidential and anonymous.

This study is conducted in accordance with British Psychological Society ethical guidelines and has been reviewed and approved by the University of Bath Research Ethics Committee. If you have any queries feel free to contact the researcher by email: es299@bath.ac.uk.

5.2 Participants Consent Form

7. I am a university student (I have passed my 18th birthday) and I understand that this research study may include content of a sexual nature.

8. I confirm that I have read and fully understand all the information provided about the above research study. I am satisfied with the instructions I have been given.

9. I have been informed that my responses are strictly anonymous.

10. I have not been coerced in any way to participate in this research study and I understand that I am free to withdraw my participation, up to the point when I submit my responses, without giving any reasons.

11. Data protection: I agree to the university processing information that I have supplied. I understand that I will be unable to withdraw from this research study after submitting my responses, because my anonymised data will be unidentifiable.

12. I consent to participate in this research study and I agree with all the above statements.
If you agree with the above statements and willing to participate in the above-mentioned study, please indicate your decision by pressing the CONSENT button. Thank you!

NOTE: Note that by pressing the CONSENT button you will give your consent to participate in this study.

5.3 Participants Debriefing Form

Thank you for consenting to be a participant in this research study on the University of Bath campus, which is designed to investigate oral sex behaviour amongst university students.

Findings from this study will have the potential to stimulate a whole new stream of research into the social, educational, religious and cultural backgrounds of processes underlying the ‘sex and gender’ culture of modern adolescent/student society and how this could adversely impact on their health and psychological well-being.

We hope that your participation in this study was a pleasant experience.

In the event, you feel emotionally or psychologically distressed by participation in this study, we encourage you to contact:

- Student Health & Well-Being Centre, University of Bath. Their telephone number is: 1225 385538, email: listening@bath.ac.uk, http://www.bath.ac.uk/counselling/;
- ‘Mindmatters’ at the University of Bath: http://www.bath.ac.uk/studentservices/mindmatters/mentalhealth.html;
- University Medical Centre, Quarry House, North Road, Bath. BA2 7AY. Their telephone number is: 01225 386655; fax: 01225 386489; http://www.umcbath.co.uk/site/index.aspx
- Riverside Youth Health Centre, CASH (Contraceptive and Sexual Health) at Bath for an advice or to make an appointment. Their telephone number is: 01225 474242.

We also are inviting you to participate in focus group talks on oral sex.

For those University of Bath female students, who would like to share their experiences and concerns related to active or passive engagement in oral sex, we are inviting to take part in focus groups on issues related to young females’ oral sex experience. The researcher will be happy to consider your suggestions for the topic of talks on the matters that are concerning you.

Please be assured that your participation and all information acquired during focus group discussions will be strictly confidential and anonymous.

If you have any questions regarding this study, please feel free to contact the researcher (email: es299@bath.ac.uk; mobile: 07794215997).
What is this project about?

The motives behind engagement in sexual activity and motivation to withdraw from it have been linked to various affective, behavioural, and relational outcomes. Previous research found that female students are more likely to experience different social and emotional consequences of having sex, in comparison with boys.

This research aims to investigate the processes that are involved in shaping sexual behaviour on the university campus.

We are interested in opinion of female students 18-24 years old.

What does taking part involve?

This is an online survey that needs to be completed on one occasion. This survey is composed of several sets of questions relating to your personal lifestyle (including your sexual lifestyle) and questions relating to certain features of your personality. Participation in this research study is on a voluntary basis and you are free to withdraw at any time before the data is processed and becomes unidentifiable. You may decline to answer any questions if you are not comfortable with them.

This survey will take you about 20 minutes to complete.

Is it confidential?

Yes. All information will be strictly confidential and anonymous.

If you are interested in taking part in this study you can fill in the online questionnaire following the link: https://www.survey.bath.ac.uk/sexcontrol/

If you have any questions regarding this study, please feel free to contact the researcher Elena Sovetkina (e-mail: es299@bath.ac.uk; mobile: 07794215997).

Many thanks for your help!
6.1 Concern with Acting Sexually Preoccupied (CASP) Scale

The baseline model of CASP was specified as a single factor model with the eight items loading on this single latent variable. (See figure 1).

Figure 1 CASP Model

A principal-axis factor analysis (with Varimax rotation) was performed on the 8 items of proposed CASP scale. Two factors with eigenvalues greater than 1.0 were found; they accounted for 60.5% of total item variance. Figure 1 presents the scree plot on the number of factors.

Figure 2 Scree plot on the number of factors

Means, standard deviations, factor loadings, and communalities of each item of the CASP are reported in Table 8. The full-scale mean was 19.43 (SD=5.92). Factor 1(eigenvalue = 3.89) had 7 items, which accounted for 48.6% of the common variance. This factor represents compliance with social norms (largely reflecting normative beliefs). Factor 2 (eigenvalue = 0.96) had 3 items and accounted for 11.98% of the common variance. This factor represents personal reactions (largely attributed to the emotional component of compliance). Two items were loaded on Factor 1 and Factor 2 at the same time.
**Table 1** *Items, Factor Loadings, Item Means, Standard Deviations, and Communalities for the CASP*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
<th>M</th>
<th>SD</th>
<th>$h^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In today’s society it is important that one is not perceived as being sexually preoccupied in any manner</td>
<td>.73</td>
<td>2.16</td>
<td>1.04</td>
<td>.55</td>
</tr>
<tr>
<td>2. I get angry with myself when I get thoughts or feelings that might be considered as sexually preoccupied</td>
<td>.66</td>
<td>.46</td>
<td>1.73</td>
<td>1.00</td>
</tr>
<tr>
<td>3. If I was participating in a class and a student who is sexually attractive to me expressed an opinion with which I disagreed, I would be hesitant to express my own point of view</td>
<td>.92</td>
<td>2.67</td>
<td>1.12</td>
<td>.85</td>
</tr>
<tr>
<td>4. It is important for me that other people don’t think that I am sexually preoccupied</td>
<td>.77</td>
<td>3.28</td>
<td>1.12</td>
<td>.68</td>
</tr>
<tr>
<td>5. It is never acceptable to express one’s sexual preoccupation</td>
<td>.73</td>
<td>2.65</td>
<td>.98</td>
<td>.57</td>
</tr>
<tr>
<td>6. I feel guilty when I have sexual thoughts or feelings about the person that I like</td>
<td>.62</td>
<td>.45</td>
<td>2.08</td>
<td>1.04</td>
</tr>
<tr>
<td>7. When speaking with a person who is sexually attractive to me, it’s important to me that s/he doesn’t think that I am sexually preoccupied</td>
<td>.70</td>
<td>2.24</td>
<td>1.11</td>
<td>.60</td>
</tr>
<tr>
<td>8. If I have sexual thoughts or feelings, I keep it to myself</td>
<td>.61</td>
<td>2.62</td>
<td>1.19</td>
<td>.38</td>
</tr>
</tbody>
</table>

The coefficient alpha for the proposed CASP scale was .84.

To establish the structural validity, these 8 items were subjected to a confirmatory factor analysis using AMOS. In the descriptive analysis of the 8 items of the proposed model, and taking into account the skewness and kurtosis indexes, the dataset is similar to the normal distribution which permits the use of maximum likelihood factor tests.

**Table 2** *Descriptive statistic for CASP Scale (N=248)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Skew</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In today’s society it is important that one is not perceived as being sexually preoccupied in any manner</td>
<td>2.65</td>
<td>.206</td>
<td>-.321</td>
</tr>
<tr>
<td>2. I get angry with myself when I get thoughts or feelings that might be considered as sexually preoccupied</td>
<td>2.09</td>
<td>.869</td>
<td>.196</td>
</tr>
<tr>
<td>3. If I was participating in a class and a student who is sexually attractive to me expressed an opinion with which I disagreed, I would be hesitant to express my own point of view</td>
<td>2.24</td>
<td>.674</td>
<td>-.405</td>
</tr>
<tr>
<td>4. It is important for me that other people don’t think that I am sexually preoccupied</td>
<td>2.62</td>
<td>.270</td>
<td>-.925</td>
</tr>
<tr>
<td>5. It is never acceptable to express one’s sexual preoccupation</td>
<td>2.16</td>
<td>.927</td>
<td>.554</td>
</tr>
<tr>
<td>6. I feel guilty when I have sexual thoughts or feelings about the person that I like</td>
<td>1.73</td>
<td>1.492</td>
<td>1.691</td>
</tr>
<tr>
<td>7. When speaking with a person who is sexually attractive to me, it’s important to me that s/he doesn’t think that I am sexually preoccupied</td>
<td>2.67</td>
<td>.167</td>
<td>-.883</td>
</tr>
<tr>
<td>8. If I have sexual thoughts or feelings, I keep it to myself</td>
<td>3.29</td>
<td>-.116</td>
<td>-.822</td>
</tr>
</tbody>
</table>

Table 3 demonstrate the factor loadings for two models.

**Table 3** *Standardized Loadings of the Items on Factor Model in the Total Sample*

<table>
<thead>
<tr>
<th>Factor loading</th>
<th>Item1</th>
<th>Item2</th>
<th>Item3</th>
<th>Item4</th>
<th>Item5</th>
<th>Item6</th>
<th>Item7</th>
<th>Item8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.54*</td>
<td>.72*</td>
<td>.37*</td>
<td>.82*</td>
<td>.67*</td>
<td>.66*</td>
<td>.75*</td>
<td>.51*</td>
</tr>
</tbody>
</table>

NOTE: * $p < .01$. 
The goodness of fit given by the Chi-square was $\chi^2 = 31.66$, DF=19, p= .03; NFI=.95; IFI=.98; CFI=.98; RMSEA=.052.

The fit values suggested that the model provides a good fit for the data.

6.2 Likelihood of Non-Engagement in Sex behaviour (LNESB) Scale and Engagement in Sex behaviour (LESB) Scale

LNESB and LESB models were specified as two factors models with the eight items loading on each of these factors for each model. Additionally, these two factors were allowed to covary (specifically, the four items for behaviour choice outside relationship and the four items for behaviour choice inside relationship (See figure 3)

Figure 3 LNESB and LESB models

Scores on all proposed items of the initial administration of the LNESB Scale were analysed by using principal-axis factor analysis with an orthogonal (varimax) rotation. For each response option, the principal-axis factor analysis indicated two factors with eigenvalues greater than 1.0.

Means, standard deviations, factor loadings, communalities, eigenvalues, common variances of each item and Cronbach’s alphas for each subscales of the LNESB Scale are reported in Table 4.

Table 4 Items, Factor Loadings, Item Means, Standard Deviations, Communalities, Eigenvalues, and Common Variances of each item and Cronbach’s Alphas for each subscales of the LNESB Scale and LEB Scale
<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
<th>Eigen Value</th>
<th>% variance</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Choice A: Say no and leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say no and leave: tiredness</td>
<td>.82</td>
<td></td>
<td>4.39</td>
<td>2.22</td>
</tr>
<tr>
<td>Say no and leave: drink</td>
<td>.79</td>
<td></td>
<td>4.24</td>
<td>2.31</td>
</tr>
<tr>
<td>Say no and leave cognitive load</td>
<td>.72</td>
<td></td>
<td>6.09</td>
<td>1.55</td>
</tr>
<tr>
<td>Say no and leave: emotional rise</td>
<td>.72</td>
<td></td>
<td>4.63</td>
<td>2.24</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>19.35</td>
<td>6.56</td>
</tr>
<tr>
<td>Inside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say no and leave: tiredness</td>
<td>.74</td>
<td></td>
<td>3.96</td>
<td>2.29</td>
</tr>
<tr>
<td>Say no and leave: drink</td>
<td>.79</td>
<td></td>
<td>3.32</td>
<td>1.99</td>
</tr>
<tr>
<td>Say no and leave: cognitive load</td>
<td>.81</td>
<td></td>
<td>3.36</td>
<td>2.21</td>
</tr>
<tr>
<td>Say no and leave: emotional rise</td>
<td>.79</td>
<td></td>
<td>2.50</td>
<td>1.91</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>13.4</td>
<td>6.75</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>32.49</td>
<td>11.25</td>
</tr>
<tr>
<td>Choice B: Say no and stay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say no and stay: tiredness</td>
<td>.69</td>
<td></td>
<td>4.42</td>
<td>1.91</td>
</tr>
<tr>
<td>Say no and stay: drink</td>
<td>.68</td>
<td></td>
<td>3.95</td>
<td>1.92</td>
</tr>
<tr>
<td>Say no and stay: cognitive load</td>
<td>.74</td>
<td></td>
<td>3.40</td>
<td>2.03</td>
</tr>
<tr>
<td>Say no and stay: emotional rise</td>
<td>.69</td>
<td></td>
<td>3.60</td>
<td>2.04</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>15.38</td>
<td>5.75</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>32.54</td>
<td>10.47</td>
</tr>
<tr>
<td>LHESB-SCALE</td>
<td></td>
<td></td>
<td>23.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Choice C: Agree to have oral sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral sex choice: tiredness</td>
<td>.84</td>
<td></td>
<td>2.52</td>
<td>1.75</td>
</tr>
<tr>
<td>Oral sex choice: drink</td>
<td>.83</td>
<td></td>
<td>2.93</td>
<td>1.91</td>
</tr>
<tr>
<td>Oral sex choice: cognitive load</td>
<td>.78</td>
<td></td>
<td>1.62</td>
<td>1.17</td>
</tr>
<tr>
<td>Oral sex choice: emotional rise</td>
<td>.76</td>
<td></td>
<td>2.69</td>
<td>1.96</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>9.77</td>
<td>5.57</td>
</tr>
<tr>
<td>Inside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral sex choice: tiredness</td>
<td>.79</td>
<td></td>
<td>3.09</td>
<td>2.09</td>
</tr>
<tr>
<td>Oral sex choice: drink</td>
<td>.83</td>
<td></td>
<td>3.48</td>
<td>2.10</td>
</tr>
<tr>
<td>Oral sex choice: cognitive load</td>
<td>.80</td>
<td></td>
<td>3.60</td>
<td>2.22</td>
</tr>
<tr>
<td>Oral sex choice: emotional rise</td>
<td>.79</td>
<td></td>
<td>3.87</td>
<td>2.15</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>14.03</td>
<td>7.01</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>23.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Choice D: Agree to have full sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full sex choice: tiredness</td>
<td>.84</td>
<td></td>
<td>2.22</td>
<td>1.85</td>
</tr>
<tr>
<td>Full sex choice: drink</td>
<td>.82</td>
<td></td>
<td>2.96</td>
<td>2.20</td>
</tr>
<tr>
<td>Full sex choice: cognitive load</td>
<td>.71</td>
<td></td>
<td>1.38</td>
<td>.98</td>
</tr>
<tr>
<td>Full sex choice: emotional rise</td>
<td>.73</td>
<td></td>
<td>2.95</td>
<td>2.18</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td></td>
<td></td>
<td>9.50</td>
<td>5.83</td>
</tr>
<tr>
<td>Inside relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inside each sub-scale of **LNESB Scale and LESB Scale** there was a clear distinction between response options in relation to outside/inside relationship condition.

To establish the structural validity, the **LNESB Scale and LESB Scale** items were subjected to a confirmatory factor analysis using AMOS. In the descriptive analysis of the items of the proposed model, and taking into account the skewness and curtosis indexes, the dataset could be considered similar to the normal distribution which permits the use of maximum likelihood factor tests. There was a problem with kurtosis and skewness for LESB scale (e.g. cognitive load scores outside relationship for oral and full sex).

### Table 5 Descriptive statistic for LNESB Scale (on the left) and LESB Scale (on the right) (N=248)

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>M</th>
<th>Skew</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside. No and leave: tiredness</td>
<td>4.39</td>
<td>-0.21</td>
<td>-1.42</td>
<td>2.52</td>
<td>.97</td>
<td>-0.15</td>
</tr>
<tr>
<td>No and leave: alcohol</td>
<td>4.24</td>
<td>-0.09</td>
<td>-1.53</td>
<td>2.93</td>
<td>.61</td>
<td>-0.87</td>
</tr>
<tr>
<td>No and leave: cognitive load</td>
<td>6.09</td>
<td>-1.95</td>
<td>3.11</td>
<td>1.62</td>
<td>2.60</td>
<td>7.58</td>
</tr>
<tr>
<td>No and leave: emotional rise</td>
<td>4.63</td>
<td>-3.33</td>
<td>-1.39</td>
<td>2.69</td>
<td>.79</td>
<td>-0.69</td>
</tr>
<tr>
<td>Inside. No and leave: tiredness</td>
<td>3.96</td>
<td>0.01</td>
<td>-1.52</td>
<td>3.09</td>
<td>.55</td>
<td>-1.11</td>
</tr>
<tr>
<td>No and leave: alcohol</td>
<td>3.32</td>
<td>-0.44</td>
<td>-1.03</td>
<td>3.48</td>
<td>.24</td>
<td>-1.29</td>
</tr>
<tr>
<td>No and leave: cognitive load</td>
<td>3.36</td>
<td>0.47</td>
<td>-1.22</td>
<td>3.39</td>
<td>.18</td>
<td>-1.44</td>
</tr>
<tr>
<td>No and leave: emotional rise</td>
<td>2.50</td>
<td>1.13</td>
<td>.06</td>
<td>3.87</td>
<td>.03</td>
<td>-1.39</td>
</tr>
<tr>
<td>Outside. No and stay: tiredness</td>
<td>4.42</td>
<td>-0.42</td>
<td>-0.95</td>
<td>2.22</td>
<td>1.43</td>
<td>.73</td>
</tr>
<tr>
<td>No and stay: alcohol</td>
<td>3.94</td>
<td>-0.06</td>
<td>-1.09</td>
<td>2.96</td>
<td>.63</td>
<td>-1.13</td>
</tr>
<tr>
<td>No and stay: cognitive load</td>
<td>3.39</td>
<td>-0.27</td>
<td>-1.22</td>
<td>1.38</td>
<td>3.88</td>
<td>17.06</td>
</tr>
<tr>
<td>No and stay: emotional rise</td>
<td>3.61</td>
<td>0.13</td>
<td>-1.29</td>
<td>2.95</td>
<td>.61</td>
<td>-1.18</td>
</tr>
<tr>
<td>Inside. No and stay: tiredness</td>
<td>4.61</td>
<td>-0.47</td>
<td>-1.23</td>
<td>2.63</td>
<td>.99</td>
<td>-0.44</td>
</tr>
<tr>
<td>No and stay: alcohol</td>
<td>4.49</td>
<td>-0.37</td>
<td>-1.16</td>
<td>3.21</td>
<td>.45</td>
<td>-1.24</td>
</tr>
<tr>
<td>No and stay: cognitive load</td>
<td>4.27</td>
<td>-0.31</td>
<td>-1.22</td>
<td>2.80</td>
<td>.82</td>
<td>-0.74</td>
</tr>
<tr>
<td>No and stay: emotional rise</td>
<td>3.79</td>
<td>0.15</td>
<td>-1.44</td>
<td>5.14</td>
<td>-0.92</td>
<td>-0.69</td>
</tr>
</tbody>
</table>

The CFA for the latent variable of LESB showed a less than adequate fit to the data in the unconstrained model. Therefore modification indices were considered to suggest additional pathways to improve the fit of the data to the model. As SEM relies on the re-specification of models to be based on theory, and not purely data driven, modifications that theoretically justifiable are considered to be acceptable. The disturbance terms for latent variable choices were allowed to covary: the items of oral sex with the items of full sex. A link between engagement in oral sex and engagement in full sex was proved to be strong, in previous research as in this present study. The alternative solution of this problem would be to apply the same 8 factors model to each type of sex behaviour, e.g. oral sex behaviour and full sex behaviour.

The goodness-of-fit statistic for both models presented in Table 6.
Table 6 Goodness of fit statistic for LNESB and LEB models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>DF</th>
<th>p-value</th>
<th>NFI</th>
<th>IFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>CMIN/DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNEBS</td>
<td>133.78</td>
<td>93</td>
<td>.004</td>
<td>.90</td>
<td>.97</td>
<td>.97</td>
<td>.04 (CI: .025-.057)</td>
<td>1.44</td>
</tr>
<tr>
<td>LEB</td>
<td>140.31</td>
<td>90</td>
<td>.001</td>
<td>.94</td>
<td>.97</td>
<td>.98</td>
<td>.05 (CI: .032-.062)</td>
<td>1.56</td>
</tr>
</tbody>
</table>

Table 7 demonstrate the factor loadings for two models.

Table 7 Standardized Loadings of the Items on Factor Model in the Total Sample

<table>
<thead>
<tr>
<th>Item</th>
<th>LNESB</th>
<th>LEB</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside. No and leave: tiredness</td>
<td>.82*</td>
<td>.82*</td>
<td>Outside. Oral sex choice: tiredness</td>
</tr>
<tr>
<td>Outside. No and leave: alcohol</td>
<td>.73*</td>
<td>.79*</td>
<td>Outside. Oral sex choice: alcohol</td>
</tr>
<tr>
<td>Outside. No and leave: emotional rise</td>
<td>.69*</td>
<td>.68*</td>
<td>Outside. Oral sex choice: emotional rise</td>
</tr>
<tr>
<td>Inside. No and leave: cognitive load</td>
<td>.82*</td>
<td>.80*</td>
<td>Inside. Oral sex choice: cognitive load</td>
</tr>
<tr>
<td>Inside. No and leave: emotional rise</td>
<td>.75*</td>
<td>.73*</td>
<td>Inside. Oral sex choice: emotional rise</td>
</tr>
<tr>
<td>Outside. No and stay: tiredness</td>
<td>.74*</td>
<td>.81*</td>
<td>Outside. Full sex choice: tiredness</td>
</tr>
<tr>
<td>Outside. No and stay: alcohol</td>
<td>.61*</td>
<td>.81*</td>
<td>Outside. Full sex choice: alcohol</td>
</tr>
<tr>
<td>Outside. No and stay: cognitive load</td>
<td>.53*</td>
<td>.61*</td>
<td>Outside. Full sex choice: cognitive load</td>
</tr>
<tr>
<td>Outside. No and stay: emotional rise</td>
<td>.55*</td>
<td>.63*</td>
<td>Outside. Full sex choice: emotional rise</td>
</tr>
<tr>
<td>Inside. No and stay: tiredness</td>
<td>.79*</td>
<td>.66*</td>
<td>Inside. Full sex choice: tiredness</td>
</tr>
<tr>
<td>Inside. No and stay: cognitive load</td>
<td>.69*</td>
<td>.77*</td>
<td>Inside. Full sex choice: cognitive load</td>
</tr>
<tr>
<td>Inside. No and stay: emotional rise</td>
<td>.65*</td>
<td>.61*</td>
<td>Inside. Full sex choice: emotional rise</td>
</tr>
</tbody>
</table>

NOTE: * p < .01.

Overall, the goodness of fit values suggested that the two-factor model provides a good fit of the data for both models.
Appendix 7

Focus Group Interview schedule (Study 4)

7.1 Focus Group Topic Guide

Focus Groups Discussion –
Differences in perception of oral sex amongst female university students

1. Introduction

Purpose
Confidentiality of the discussion
Introductions

Vignette story about experience of oral sex. Probe:
- Girl’s view vs. boy’s view on giving/receiving oral sex

1. Is giving/receiving oral sex in relationship a good idea?

Advantages – what do you see as? Probe:
- Sign of intimacy and trust vs. alternative to full sex
- Oral sex gives me power in sexual life
- Keep relationship going
- Way of keeping holds on your boyfriend

Concerns – any concerns? Probe:
- Personal issues – oral sex is disgusting!
- I feel used by him as he makes me to give him oral sex
- I feel/my boyfriend told me that I am not clean enough so I do not like to receive oral sex

2. Is it hard to say ‘NO’ to oral sex to your boyfriend? Probe:
- Relationship pressure – he will be upset, as he likes it
- Personal pressure – I will be upset, as I am not very keen on it
- Should we compromise? And how?
- Is it easy just to give it to him and move forward? Does it require much effort?

3. Oral sex and alcohol – the way to accept oral sex for girls? Probe:
- It doesn’t seem so bad when I drink
- I feel more adventurous when I drink
- I do not care about how I might look like when I drink

Further comments or issues they’d like to rise

Thank you for your time!
7.2 Focus Group Information Sheet and Instructions to participants

7.2.1 Information about the research study

RESEARCH STUDY

*Differences in perception of oral sex amongst heterosexual female University students*

We would like to invite you to take part in this research study. Please take time to carefully read the information about this study and what it would involve before you decide about your participation.

Part 1 will tell you about the purpose of this study and what will happen to you if you take part. Part 2 will give you more detailed information about the conduct of the study. Ask us if there is anything that is not clear or you would like to have more information. Take time to decide whether or not you wish to participate.

Thank you.

Part 1

What is the purpose of the study?

Research tells us that society has different ‘rules’ about what is acceptable in oral sex for men and for women. This study aims to investigate differences in perceptions about oral sex amongst heterosexual female university students. We want to look at the different kind of heterosexual female’s perception of oral sex and to explore how the interactions in which female students try to make sense of each other’s’ experiences have importance and meaning for their perception of oral sex. Our main interest here is to find out what kind of interactions on this topic will be more influential for those heterosexual female students who have some uncertainties or concerns about oral sex and how the knowledge of those experiences could be applied to possible future sexual and psychological health interventions.

To do this we would like to interview you, as a part of focus group which will consist of 3-6 female members. Within this focus group you will discuss oral sex experiences that you would like to share and the possible ways of making sense of them. If you agree to participate, the researcher will arrange a time for you to come and take part in the discussion. During the focus group, the researcher will do audio-recording of this discussion.

You have been invited to participate in the study because you are university of Bath student who satisfies to this research study inclusion criteria.

Do I have to take part?

It is up to you to decide. You can read through this information sheet and if you are interested in participating, please let the researcher know of your interest. The researcher is currently based on the university of Bath campus. You can discuss your possible participation with the researcher and could then decide whether or not you want to participate. If you decide to participate, we will ask you to sign a consent form to show that you have agreed to take part. Before focus group, we will also ask you to complete a short demographic questionnaire which will be sent to you by an e-mail. You will also be asked to come to the focus group with your own story of any oral sex experience, whether it relates to
anyone you know, or it was what you heard or read about. We would ask you to share this story with a group. You will be free to withdraw from this study at any time, without giving a reason.

**What will happen to me if I take part?**

If you decide to participate, the researcher will arrange a convenient time and place for the focus group to take place. This focus group will take place at a quiet and private location on the University of Bath campus. We would like to audio-record this focus group. All your personal information will be kept confidential and anonymised. Your participation in the study will only last as long as the focus group takes.

**What will I have to do?**

Contact the researcher by an e-mail to discuss your participation. You can then decide if you want to take part.

**What are the possible risks or disadvantages to taking part?**

There are no risks to you in taking part. However if you feel uncomfortable at any point during the focus group, you can leave the focus group and discontinue your participation in the research. If after completing the focus group you change your mind, you can contact the researcher.

**What are the possible benefits of taking part?**

We cannot promise this study will help you but the information we get from it will help to increase the understanding of how possible future sexual and psychological health interventions could be provided across the different types of settings.

**What if there is a problem?**

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

**Will my taking part in the study be kept confidential?**

Yes. We will follow legal and ethical practice and all information about you will be handled in confidence. The details are included in Part 2.

*If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.*

**Part 2**

**What will happen if I don’t want to carry on with the study?**

If you withdraw from the study after initially agreeing, you will need to let us know and we will destroy any data about you that we have already collected and not use them in the research. If you change your mind at any later point (during or after the researcher has conducted focus group), please contact the researcher.

**What if there is a problem?**

If you have a concern about any aspect of this study, you should ask to speak to the researcher Dr Elena Sovetkina (07849815071, email: es299@bath.ac.uk).

If you remain unhappy and wish to complain formally, you can do this through the University of Bath Complaints procedure: [http://www.bath.ac.uk/equalities/resources/pdf/dignityleaflet09.pdf](http://www.bath.ac.uk/equalities/resources/pdf/dignityleaflet09.pdf)

**Will my taking part in this study be kept confidential?**
All information which is collected about you in the course of the research will be kept strictly confidential. All data will be stored securely on the researcher computer. Only researcher and supervisor will have access to this information.

The audio-recordings of the focus group will be transcribed by the researcher and anonymised so that none of your information will be identifiable. The transcriptions of the interviews will be looked at only by the researcher in order to analyse them in qualitative report. Anonymised information from this study will be used to develop recommendations for possible future health interventions or set of measures which could be applied to sexual and psychological services provided by both counsellors and healthcare professionals. Data collected from this research will be stored until this PhD will be completed and then destroyed.

**What will happen to the results of the research study?**

The results from this research could be published as a report and in scientific journals. There is no chance that any of your personal information will be identified in any of the published materials, any reports or publications. If you would like a copy of the research findings, please contact Dr Elena Sovetkina (07849815071).

**Who is organising this research?**

The current study is a sufficient part of researcher’s PhD project.

**Who has reviewed the study?**

This study has been reviewed by Psychology Research Ethics Committee (14-020).

**Further information and contact details**

If you would like further information about the research, please contact the researcher Dr Elena Sovetkina (07849815071, email: es299@bath.ac.uk).

**7.2.2 Instructions to participants and a short Demographic Questionnaire**

Dear Participant,

Thank you very much for willing to take part in the research focus group on oral sex experiences amongst female university students. Your co-operation is highly appreciated.

On the day of focus group I would like you to come with a prepared story about any case of giving or receiving oral sex. It could be the story that you heard from your friend, your own story, or the story that you read about. There need to be something in this story that you would like to share or discuss with others.

Please also fill in a short demographic questionnaire below and return this page to me by the e-mail. Many thanks.

**Demographic questionnaire**

What is your gender? 

[ ] Male  [ ] Female

How old are you at the moment? 

[ ] xxxix
What is your department?

Please read following questions carefully and indicate your agreement with each of them by ticking the appropriate box:

Do you have experience of oral sex:

a) in relationship
b) outside relationship
c) both

Do you consider your oral sex experience to be:

a) extensive
b) moderate
c) modest

Do you consider you oral sex experience to be rather:

a) negative;
b) positive;
c) neutral; or
d) all of the above

Have you ever participated in any of my studies on students’ sexual behaviour?

Yes  [ ]  No  [ ]

THANK YOU!

7.2.3 Introducing Focus Groups

Good evening, and welcome to our session tonight. Thank you for taking the time to join our discussion of oral sex experiences. My name is Elena Sovetkina, and I represent the Psychology Department at the University of Bath. Assisting me is Nicole Courtney, a first year Finances and Accounting student.

Today we want to hear how female university students think and feel about their oral sex experiences. We’ve invited female students who study in different departments to share their thoughts and ideas. You were selected because you are all University of Bath students and you had reported to have experiences of oral sex in recent 6 month. We are particularly interested in your views because of these experiences, and we want to tap into these experiences.

Today we will be discussing your thoughts and opinions about oral sex. We basically want to know what you like and what you do not like about oral sex and what might be done to improve your experiences. There are no wrong answers, rather differing points of view. Please feel free to share your point of view even if it is differ from what others have said. Keep in mind that we’re just as interested in negative comments as positive comments, and all times the negative comments are the most helpful.

Before we begin, let me suggest some things that will make our discussion more productive.

Please speak up – only one person should talk at a time.

We’re tape-recording the session because we do not want to miss any of your comments.

We’ll be on the first-name basis, and in our later reports there will not be any names attached to comments.

You may be assured of confidentiality from my side. I have to ask all members of the focus group today to keep all what they are going to hear strictly confidential. Do all of you agree with this? Good.
My role here is to ask questions and listen. I won’t be participating in the conversation, but I want you to feel free to talk with one another. I’ll be asking about a dozen questions, and I’ll be moving the discussion from the one question to the next. To assist you to keep an eye of the relevant question, there is PP presentation on the screen with this discussion agenda and the actual questions. Also, each of you has hand-out of PPP and a printed page with a Topics Guide in front of you. Please feel free to write anything on your comments on the hand-outs provided, even if you do not want to discuss them in group. I will ask you to leave your hand-outs with any written comments on them at the end of discussion.

There is a tendency in these discussions for some people to talk a lot and some people not to say much. But it is important for us to hear from each of you tonight because you have different experiences. So if one of you is sharing a lot, I may ask you to let others talk. And if you aren’t saying much, I may ask for your opinion.

We’ve placed name cards on the table in front of you to help us remember each other’s names. Would you stick it on the front of your clothes please, to let others see it clearly? Thank you.

Shall we begin? I am switching on a microphone now.

Let’s find more about each other by going around the table. Tell us about what you like doing and what makes you like it.

Now, when we all introduce each other to the group, I would like to start our discussion firstly by looking at some students’ answer on my survey questions about their reasons to be involved in oral sex.

(PRESENTATION)

Do you think there is a so-called difference in girls’ vs. perspectives on and reasons for giving/receiving oral sex? Is there anything appealing or anything strange for you in these answers? Anything you would like to discuss in due course?

Shall we look at our first question from the Topic Guide now?

If any of you prepared for this discussion stories, are related to one of the topics, coming into view, please feel free to reveal this story to us.

(DISCUSSION)
Appendix 8

Thematic Maps on discussions from Focus Groups (Study 4)

a) The social expectancy issues in oral sex

b) The nature of oral sex
Appendix 9

Example Transcription, Coding and Key

**Transcription Notation**

INT: Interviewer

- Standard breath pause when speaking (less than 0.5 seconds), indicated by a comma
- Pauses of 1-2 seconds
- Pauses more than 2 seconds

[Laughter] Indicates laughter

[Common talk] Indicates the occasions when participants all talk at the same time

[Agreement] Indicates the occasions when participants make a noise of support to other’s statements

PG Focus Group

**Example:**

**Coded as ‘the nature’ of oral sex (intimate/not intimate at all)**

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<tbody>
<tr>
<td>105</td>
<td>P3: I think that from one side if you are receiving it then it’s very intimate, I mean</td>
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<td>106</td>
<td>personally I don’t know what its like for guys, but actual sex is actually more intimate</td>
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<td>107</td>
<td>because you are seeing normally their face and you are touching more of their body and</td>
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<td>108</td>
<td>you feel it more, and I think that when for instance you are giving oral sex your head is</td>
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<td>109</td>
<td>really far away from their face and you are not really seeing them much [agreement]</td>
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<td>110</td>
<td>P2: I think that with vaginal sex it can be really intimate or it can really not be</td>
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<td>111</td>
<td>depending on what you do him, but I think that with oral sex because you are facing</td>
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<td>112</td>
<td>them, I think that it’s a lot more intimate just because of the like position and what not.</td>
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<td>113</td>
<td>P1: I think that its intimate in the way that I know a lot of guys enjoy looking at girls</td>
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<td>114</td>
<td>when actually giving them oral sex because a it feels good and they feel empowered,</td>
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<td>115</td>
<td>and they like, well, their penis, you know they are very proud of it [laughter] and they</td>
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<td>116</td>
<td>are proud of seeing someone have it in their mouth [laughter], but that is what most</td>
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<td>117</td>
<td>guys are like and they are and I think that is more intimate in the sense that you know</td>
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<td>118</td>
<td>that yes the guy is going to be looking at you and it can be intimate when, for example,</td>
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<td>119</td>
<td>guys can get really turned off for example if the girl actually looks at them in the eye</td>
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<td>120</td>
<td>while she is doing it, and I mean yes its intimate because then you both kind of have a</td>
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<td>121</td>
<td>connection where you are kind of looking at each other, whereas in sex your body is</td>
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<td>122</td>
<td>joined but you don’t necessarily have to be facing the person and or looking at the</td>
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<td>123</td>
<td>person so it is intimate obviously but you could be imagining have sex with anyone else</td>
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<td>124</td>
<td>P4: I think that there is a range of intimacy with actual sex and oral sex, can just be in</td>
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<td>125</td>
<td>mouth but with intercourse it can be either really intimate or not, there is a bigger range</td>
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<td>126</td>
<td>P2: you can either work together in a rhythm so that you both like get pleasure at the</td>
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<td>127</td>
<td>same time or it really does not work</td>
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<td>128</td>
<td>P4: I think that it really depends on whom you are with I think [agreement by others]</td>
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<td>129</td>
<td>P2: I think that it also depends on the situation as well, because if you are with like a</td>
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<td>130</td>
<td>partner then it’s going to be a lot more intimate then if you just have a one night stand</td>
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<td>131</td>
<td>P4 : with me and my partner intercourse is a lot more intimate than oral sex, we take it</td>
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<td>132</td>
<td>like doing the other person a favour but we know that the other person really likes it</td>
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<td>133</td>
<td>so when we are having normal sex we are both really, really enjoying it.</td>
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FG3, 105-133 [Participants 1, 2, 3, 4]
Coded as a ‘power’ theme (taking control)

P3: I do a lot of control you know when im in that mood
INT: so what do you do?
P3 : Maybe now that I think about it I might be self-conscious but I will say its….kind of like a balance because if I do it to him he does it back to me so again its just the, whole adding one its not just oh women just do it to him and then im not like its not the truth but its just like if I tease him I kind of expect him to tease me back in that sense there is a balance and I don't think that im in any more control, so yeah.
P4: I think it’s an interesting thing, it’s like you can kind of tell when the guy had had an orgasm but you can’t really tell when a girl had had an orgasm so I think that in that way that kind of gives us more power because you know that you have done it whereas for them, they have to rely on what you tell them.
P3: Its harder for them though
P4: Its like one of the reasons why guys don’t want to give it to girls like because they have to work harder [agreement amongst members] to give a girl an orgasm
P6: it takes longer and stuff
P4: whereas for guys its just there you know, when its just the motions of doing it but for a girl is more complicated and more complex than for a guy [agreement]
P3: yeah i’ve had it when it’s like I only reached an orgasm couple of times because like sometimes you know its not going to happen like it will be an illusion because you know its not going to happen but they are still going and you are like ssh*#t * imitates sounds of pleasure* and then ‘NO!!!’ [laugher]
P2: it’s kind of like a curse really between a guy whom does care about your pleasure [agreement] and it’s like you kind of know that you are not going to get there and you just don’t want to hurt their feelings and feel like he knows like to stop like its not going to happen so you try to consider that [others: yeah] so its just like to spare us both so that is a bit of power as well in a way I think because you are….faking it to get some fun so you are making them think other things….yeah so that the power that one day you can be like ‘you know all them times? I faked it!’ [laughter] so that is kind of power I guess, isn’t it?
P4: I do it [silently in background as participant 2 continues to speak]
INT: So, you think that we are finished with this topic? [slight silence]
P3: I would say that girls sort of be like manipulative in a way that could be a way of keeping your boyfriend using sex as a weapon to like them but I would never use that [sex] anyway at least in my relationship

FG1, 243-300 [Interviewer and Participants 2, 3, 4, 6]

Coded as a ‘power’ theme (delegating control)

P1: well I would say that its two different types of people, it’s either the people that enjoy being in control and it do not mean however that you are powerless in real life, in any situation in real life, and you are pretty outspoken, and you don’t mind talking about things. I don’t know but I found this pretty funny I was reading something about dying old prostitute, and she was saying it was more like bankers and people like that, they preferred to be more submissive, and I am like not to the point where I am completely submissive, but it excites me more when someone takes control whereas…well I don’t mind taking control but that is kind of my type of personality
P4: in terms of oral sex I prefer to be the one giving oral sex, then in actual intercourse I prefer to be submissive and prefer for him to take control which is what it comes to intercourse or actually receiving oral sex, so I perceive it more, that it suits my character
INT: because you do not like to take control?
P4: in certain times I feel like its enjoyable just to let the man take the control for me [laughter]
INT: you are saying you prefer that?
P4: yeah [lots of laughter], it kind of makes the intimacy better because if you are
letting them be intimate with you I feel like that has already given a little power for
them over me and that is what I feel like in any sort of sexual act not just oral sex

FG3, 475-492 [Interviewer and Participants 1, 4]

Coded as ‘female worries’ (vulnerability)

P3: but what you said if whether oral sex is more intimate than penetrative sex I am not
quite sure, for me in some ways, it is more intimate because I am quite sensitive down
there so if it is too rough it's more painful for me, the oral sex I mean, so its more
intimate, if the person does not really know me I worry that the person might be too
rough for me and I might not enjoy it, so it puts me in a vulnerable position whereas
penetrative sex is not, it does not make me so vulnerable, so its not as intimate, I mean
that in some cases its more intimate like being close to the other person but in other
cases oral sex is more intimate because you are less vulnerable
INT: vulnerable…. what do you mean?
P3: I mean it is a kind of bad way because as I said I am really sensitive down there and
sometimes during oral sex sometimes it's painful that is what I meant by vulnerable so
they have to be really gentle for me to be able to enjoy it and not feel any pain
INT: painful in a physical sense?
P3: yeah
INT: did one of you have had mentioned some feelings attached to this, as well?
P1: yeah mine are quite heavily based on feelings, so for me it can be painful not in a
physical sense but in an emotional sense because what they are going to be looking at
me down there and what if they find that I am unattractive down there? They are going
to be right up against my vagina and look at other parts too, like they might find my
stomach a bit too flabby for them at that angle? You know, it’s more like vulnerable,
like that kind of vulnerable so their opinion of me.

FG4, 122-142 [Interviewer and Participants 1, 3]

Coded as ‘expectancy issues’ in oral sex (influence of porn on boys perception and girls
experiences of oral sex)

P2: usually this kind of thing would come up when I was young, and then maybe when
I was 17 or 18 with idiots whom thought that porn was normal sex and they would
expect it of me but obviously now that I am a little bit older it is certainly not expected
of me and I would think that it would be by my choice, but I think that it’s a belief
among 18 year old males and I kind of think that they think that is normal practice
P3: I think its all because of all the porn out there [agreement by others] exposed to
because the first guy that I had was he had never done anything sexual, even with regards to oral sex and he had given me oral sex and it felt so weird and it was exactly
like porn which is not what you are supposed to do
P1: yes
P3: it felt weird and painful for me because as I said I am really sensitive down there
and he was being really ruff and he was sorry for being ruff, but he was sucking on my
vagina and it felt so weird and it was not pleasurable, it was rather painful and since he
was my friend but not in that bond emotionally and I did not feel comfortable enough to
say like ‘hey, what are you doing?’ but it was a really negative experience because it
was exactly as to what you would see in a porn movie
P1: I think there is a confusion between porn being a film that is sort of exaggerated to
make you feel turned on before you do your thing and people feel like that is what they
should do in real life when its not
P3: yeah I think that like as with any other movie that porn should be regarded as
entertainment and not real, because it’s not real
P1: because when you are 17, everything is real though and you have only ever
experienced sex by watching a film and you can’t really see what is real and what is not,
its like a 17 year old man does that really?
P3: I think that some more naïve 17 year old might think that this is what sex is but that
is not what is most normal and its not what women like sometimes, that is all they think
that this is what a woman wants and they see this woman orgasm like 10 times in a
movie and they think, oh they must really like this and that they should do this since
women like this
P1: and that puts pressure on women to orgasm like 10 times
P3: yeah exactly, for me like from oral sex I can only barely orgasm because I do enjoy
it but its just not that awesome for me so for me its actually a big accomplishment for
me to orgasm from oral sex, but in porn movie they like orgasm like 5 times from it and
I think that is what younger boys think that its supposed to be like that and when its not
INT: so this is a kind of sex education that they have got from the…
P3: yeah from the porn movies!

FG4, 417-452 [Interviewer and Participants 1, 2, 3]

Coded as ‘positive effects’ of alcohol (adventureousness, confidence, acceptance of appearance, more enjoyment of social and sexual life)

P4: I definatelly feel more adventurous when I drink
P3: alcohol increases your arosability you know that I am more flirty when I am drunk
and I think it just decreases your awareness like you are more willing to do it,
everything looks wonderful when you are drunk, it’s like oh you look amazing!
P3: I think I am very like if I had gone on a night out and I had gone home with
someone and it comes to that I don’t think I would have wanted to receive it well I
suppose it depends on how drunk I was so If I was gone I probably would not care as
such but if I was in that stage where I still know what I am doing then I would not
probably but then if I had gone out for drinks with my boyfriend then probably be 100
percent more likely to do it
P4: ummm I think I would just forget the reasons why I don’t like it
P6: I think that you would get a lot more relaxed
P3 and 4: get a lot more confident
P4: and if it was bad you could always be like well I was drunk so you have always got
an excuse haven’t you?
P6: I tend to say that after a night out I am more likely to have sex than to like have
oral sex I don’t know why its just like you want a mutual kind of thing
P4 : yeah I think that one of the best times that I have ever had was like when me and
this guy came back from a night out like it was really, really good for some reason
maybe it was because we were just so much more relaxed and stuff and perhaps more
willing to do oral sex with each other and maybe that intensified the pleasure?
P3: I find it really bizarre actually so you are saying that accepting oral sex did go
up when you were drunk?
P4: that is what I find quite shocking because like when you are drunk you accept oral
sex a lot more than in a relationship and I think that it is much rarer for couples to get
drunken together, really student life?
P2: well I think giving for a girl when they are drunk on a night out 100 percent more
likely [agreement] but receiving? I would be really surprised [agreement]
P6: umm yeah people that are maybe not that happy with the way which they look feel
much better about themselves so maybe they would be more willing to sort of do stuff
cause I don’t know they feel more accepting about themselves, kind of things?
INT: do you girls accept yourself more when you drink?
P6: yeah I think so
INT: in what sense?

P4: yeah less self-conscious [agreement] so when you are drunk you are not focusing as alcohol is a stimulant so if you are not focusing on the bad things about yourself you are just there because you feel happy about yourself, its like you know happy people generally don’t really care as much about the way they look and stuff so when you are an alcoholic you are generally on a happy level so those kind of things don’t really come to mind, you know like the negative and all

FG1, 870-955 [Interviewer and Participants 2, 3, 4, 6]

Coded as ‘negative effects’ of alcohol (depression, low self-esteem, problems with social life)

P4: when you are slightly drunk and adventurous but you are still there and you still know what is going on and I would be so annoyed at any guy that would take advantage of you, if I were in that state I would not even let myself do it if I knew I was that bad I hope my friend whom is always with me would not let me go out but I guess some people do

P3: well I do have a friend whom does this kind of thing, gets quite drunk heavily drunk and then like does have sex, any types of sex and then she is so terrible about it the next day and she puts on having sex even more then I’m like why are you doing it? You know? Why do you continue to do it? And she is just like well it’s just like a cycle just when I am really, really drunk its just, I cant say no [INT: yeah] and then she just gets herself in a situation where it just makes her feel awful after that so, you know

P6: I know one of my friends whom is like she had been with her boyfriend but she hasn’t actually slept with him yet and when she was ridiculously drunk he had to come and pick her up because she couldent even like we could not even get her to the club and that was the first time she had sex with him and stuff and I feel like how would a guy personally ever have sex the first time. In that relationship, have oral sex and stuff with her when she is sort off not in the state to understand

P4: we ll its like taking advantage really, it’s like the only time he would get it

P3: I don’t know maybe its just human nature I think that, like the females just tend to care more about what they look like and if their partner likes what they look like whereas men don’t tend to pay that much attention to these things, especially if they are not emotionally involved with the other person

P1: I think the media plays a huge role in this because personally I suffer from really bad self-esteem issues and when you see a model, you can obviously see that she has shaved her [laughter] her area and when you look at yourself you are like, oh my gosh, like do I look like that? And she could just do it and it would not really matter whereas you have to think about how you look not just that area but like flabby tummies and everything else [lots of laughter] so it’s not just that but it’s the image on the whole

P2: yeah I feel really put off by receiving oral sex because I am like, what kind of angle are they getting down there from my face? [Laughter] you know like double chin

PG4, 68-98 [Interviewer and Participants 1, 2, 3]