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Lawal Olorunfunmi Yesufu

A thesis submitted for the degree of
Doctor of Business Administration (Higher Education Management)

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School of Management

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List of Abbreviations

ANOVA Analysis of Variance
CASL Canada’s Anti-Spam Legislation
CIHR Canadian Institute for Health Research
CIP Canadian Classification of Instructional Programs
EFA Exploratory Factor Analysis
FT Full-time
H# Hypothesis (Number)
HEI Higher Education Institution
HR Human Resource
HRM Human Resource Management
HRP Human Resource Practice
KMO Kaiser-Meyer-Olkin
M Mean
MRA Multiple Regression Analysis
N Number (Frequency)
NAPCS North American Product Classification System
NSERC Natural Sciences and Engineering Research Council
OCB Organisational Citizen Behaviour
OECD Organisation for Economic Co-operation and Development
PC Psychological Contract
PCB Balanced Psychological Contract
PCI Psychological Content Inventory
PCR Relational Psychological Contract
PCS Psychological Contract Scale
PCT Transactional Psychological Contract
PT Part-time
REB Research Ethics Board
RQ# Research Question (Number)
SD Standard Deviation
SPSS Statistical Package for the Social Sciences
SSHRC Social Sciences and Humanities Research Council
Statistics Canada Canadian Federal Ministry of Statistics
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Abstract
The psychological contract provides a framework for understanding the relationship between employees and employers. The objective of the research was to determine the type of psychological contract developed by higher education academics. In addition, the research objective was to examine the effect of employees’ perception of the human resource practices of their employers on their psychological contract.

There have been a number of conceptual and empirical studies on the psychological contract of employees and its relationships to other organisational variables such as human resource practices. However, there has been minimal research on the psychological contracts of academics in higher education and the effect of human resource practices on their psychological contracts.

The research was based on a cross-sectional survey that comprised the Psychological Contract Inventory (Rousseau, 2000), the Human Resource Practice Scale (Geringer et al., 2002), and questions on the demographic and job characteristics of academics as employees in the higher education sector in Canada. The research involved 405 academics from Canadian higher education institutions. The response rate was 70%.

The research found that employees’ perception of the recruitment and selection, training and development and compensation and benefits HR practices had significant and positive effects on the relational and balanced psychological contracts of academics, thereby building commitment, loyalty and the desire for professional and career development. The training and development HR practices were found to have the strongest positive effect on the relational and balanced types of psychological contracts.

The research indicated that the psychological contract theory should be researched using newer and a combination of approaches. The research made several theoretical and practical contributions to the psychological contract theory and human resource management in the higher education sector.
Chapter 1 – INTRODUCTION
This chapter provides a background to the research, outlining the main construct of this research; Human Resource (HR) practices and the psychological contract theory. The chapter includes an overview of the research context, the relevance of the research, the research objectives and research questions. The chapter details the expected contributions of the study as well as the structure of the entire thesis.

1.1 Research Background
Economic, technological and organisational changes in the public and private sectors have led organisations to struggle to recruit and retain an adequate combination of human resources needed to fulfil their organisational objectives (Khasawneh, 2011). Researchers have considered human resources to be the most important of all resources invested in an organisation and its availability and productivity is the most crucial element to organisational success (Zidan, 2001; Khasawneh, 2011). An investment in human capital means the investment in human resources through investment in the development of skills, knowledge, health benefits, education and training (Zidan, 2001). Hence, human resource development involves the acquisition and development of human resources to ensure that they have the skills, knowledge and motivation to be productive and efficient (Zidan, 2001). Human capital development contributes to an improvement in knowledge, the creation of new products and the enhancement of existing products and services (OECD, 2012).

As Canada moves closer to becoming a knowledge-based economy, the development of human resources continues to create opportunities for greater innovation, increased opportunities for productivity, and improved living standards (OECD, 2012). Over the last decade, Canada has experienced skill shortages in certain professions and across specific regions, primarily in the oil and gas sector and in the Prairie Provinces (OECD, 2014). Global and regional economic crises affect the Canadian economy. In curtailing the effects of the economic challenges, provincial and territorial governments in Canada increasingly get involved in decision-making and financial planning in Canadian Higher Education Institutions (HEI). The HEI have pushed back and have a strong desire to continue to maintain their autonomy (Jones et al., 2001; Smith, 2014). In managing the ever-limiting financial resources HEI receive from the provincial and territorial governments, HEI continue to seek ways of reducing the cost of human
resources while ensuring that they maintain high research and teaching quality. One common approach has been the reduction of the numbers of full-time academic staff and increasing the use of part-time academic staff to cope with the financial constraints (Puplampu, 2004).

As a result of the increasing need to restructure the finances of HEI in Canada, there has been a lot of effort in finding new sources of funds, reduction in government spending and the development of new approaches to managing staff in Canadian HEI (Puplampu, 2004). HR practices are tools and techniques, which managers use to obtain and sustain the productive value of their employees (Balatbat, 2010; Schultz, 2010) while the psychological contract theory provides significant input in understanding the employee-employer relationship (Guest and Conway, 2002; Conway and Briner, 2002a). Human Resource (HR) managers can maintain the commitment and productivity by effectively managing employee perceptions through the management of aspects of the psychological contract such as perceived breaches and the adverse effect of the breach on employees’ commitment.

1.2 Research Context
The human reasoning process is considered universally similar; however, the characteristics of the psychological contract are not universal, rather they depend on several factors including the social context in which the psychological contract is observed (Rousseau and Schalk, 2000). The psychological contract should be studied within a specific context and not from a universal approach (Rousseau, 1995; Rousseau and Schalk, 2000). The context in which the psychological contract is studied is important for the following three reasons. The context around the psychological contract study shapes the study and provides boundaries, the context makes it possible to have comparative studies across contexts, and research of the psychological contract across different contexts helps to develop more knowledge of the contract (Cassar and Briner, 2009). As a result, the aim of this research is to study the psychological contract within the context of the Canadian higher education sector.

The Canadian higher education sector includes a combination of three to four year university undergraduate and master’s degree programmes, which lead to entry qualifications for doctorate degree programmes, including high-skilled professional
programmes in dentistry, law and medicine (OECD, 2012). Other higher education programmes focus more on technical and occupational professional skills for direct entry into the labour market; these are career development programmes which do not lead to further academic studies (OECD, 2012). Canadian HEI comprise of universities, university-colleges, polytechnics and community colleges. University-Colleges are usually universities that focus primarily on teaching and not on research (OECD, 2012). While colleges are usually professional skilled colleges, there are also colleges that award certificates and diplomas, both for professional skills and as a pre-requisite to further undergraduate university education. Conversely, polytechnics focus on applied knowledge through teaching and applied research with the primary focus on developing industry-specific skills and awarding certificates, diplomas and more recently also awarding applied bachelor degrees (OECD, 2012).

As at 2012, Canada had 163 registered public and private universities, including HEI awarding both professional and academic exit qualifications (OECD, 2012; Jones, 2014). Private HEI in Canada usually comprises of religious, online and career development colleges. In Canada, there is no central authority for managing HEI. HEI are managed by the 10 provincial and 3 territorial governments. In addition each HEI offers the level of education, training and research to meet the needs of their students and academic community (Hunt et al., 2008).

Eighty percent (80%) of higher education funding in Canada comes from provincial and territorial governments (OECD, 2012); the remaining 20% comes from tuition fees, donations and private sector investments (Miliotis, 2014). Although there is no federal ministry of education, the Canadian Federal Government provides social, financial funding for aboriginal students and supports some educational initiatives across the regions (OECD, 2012). In addition, the Canadian Federal Government provides funding to the provincial and territorial governments to invest in higher education as they wish (Miliotis, 2014). Hence, provincial and territorial governments manage HEI within their geographic jurisdictions (OECD, 2012). Private donors and government initiatives primarily fund research in Canadian HEI. Research funding also comes from a coalition of research councils called the Tri-Council - these are the Canadian Institute for Health Research (CIHR), the Natural Sciences and Engineering Research Council
(NSERC) and Social Sciences and Humanities Research Council (SSHRC) (Miliotis, 2014). The OECD economic survey report on Canadian Higher Education states:

"The tertiary education system in Canada performs well in fostering a skilled workforce with generally good labour-market outcomes and is internationally recognised for its research contributions (p. 87)" (OECD, 2012).

The faculty members of Canadian universities are employees of their respective institutions; they agree their terms of employment at the institutional level. Faculty members of Canadian universities are involved primarily in teaching, research and administrative duties. The ranking of full-time faculty members is assistant professors, associate professors and professors. There are other ranks of faculty members that are below the assistant professor (Jones, 2014). University-Colleges and polytechnics regularly refer to their academic staff as Instructors; this term is a common colloquial, which applies in some universities. The most current statistics on the population of full-time academics in Canada puts the number at approximately 45,000 full-time faculty (Statistics Canada, 2011; Jones, 2014). The most recent data on the population of part-time academics (working less than 30 hours per week) indicates that as at 2005 31.7% of Canadian academics worked on a part-time basis (Lin, 2008). However, there are no reliable statistics on the population of part-time faculty members as well as academic staff of colleges, either full-time or part-time (Jones, 2014). The scope of this research is full-time and part-time faculty members within degree-awarding HEI in Canada (i.e. universities, university-colleges and polytechnics). Hence, community colleges and professional career colleges are out of scope of this research.

The contractual relationship is legally binding and enforceable while the contract based on individual perceptions of mutual obligation, the psychological contract, is neither legally binding nor enforceable (Dabos and Rousseau, 2004). However, the psychological contract plays a fundamental role in employment relationships (O’Neill et al., 2010). The studies in the psychological contract have applied generalised definitions of the construct while studying the psychological contract within specific contexts and environments shape the outcome of the study, depending on the social context of the study (Rousseau and Schalk, 2000; Cassar and Briner, 2009). This
research aims to address the topic of the psychological contract in the context of the Canadian HEI. The coordination of HR practices towards achieving organisational objectives is a challenging process across all industries. Hence, the research will explore the effect employees’ perception of HR practices have on employees’ psychological contract in the Canadian higher education sector. The HR practices within the scope of this research are recruitment and selection, training and development, performance appraisals, and compensation and benefits.

1.3 Relevance of Research
The relevance of this research and the facets that comprise the research are discussed herewith.

Relevance of Human Resource Practices
To develop and ensure that employees fulfil their individual roles and collectively achieve the organisational objectives, Human Resource (HR) managers apply specific HR practices to achieve this. The existing literature on HR practices indicate that organisations apply a broad range of tools and approaches, including resourcing, recruitment and selection, (Armstrong, 2003; Katou and Budhwar, 2012) training and development, and compensation and benefits (Cordova, 2012; Katou and Budhwar, 2012). These tools and approaches are designed and implemented to build, maintain, develop and compensate their professional workforce. The exact HR practices and the methods of applying them depend on the age, size and nature of the organisation (Budhwar and Khatri, 2001). In higher education, like other sectors, HR managers seek out and apply a combination of HR practices to improve the quality of the teaching and research of their employees generally and academic staff specifically (Khasawneh, 2011).

In trying to remain productive, organisations have varied employment benefits, job security, training and other incentives, which were traditionally used to attract and retain their workforce (Coyle-Shapiro and Kessler, 2000). This research considered four HR practices; recruitment and selection, training and development, performance appraisals and compensation and benefits. These HR practices were derived from the application of the HR lifecycle in the Michigan model (Armstrong, 2003). The literature
indicates that each of the HR practices are aimed at achieving specific objectives among an organisation’s workforce. HR practices have been found to influence employee performance in the organisation (Raeder et al., 2012). Hence, this research focuses on human resource practices, as they apply to recruitment, commitment, loyalty and influence the behaviour of employees into fulfilling the organisations’ objectives.

The objective of HR practices is to improve employee commitment and productivity which in turn would improve customer products and services (Schultz, 2010). Each HR practices is aimed at achieving specific objectives and prior research have shown that the HR practices such as recruitment and selection could influence employees into having perceptions of long-term relationships with their employers (Aggarwal and Bhargava, 2009; Suazo et al., 2009). Existing research on HR practices indicate that training and development builds perceptions of autonomy, independence and loyalty to employers (Marescaux et al., 2012). While prior research has found that specific HR practices influence employee perceptions and the psychological contract, there are limited research on the role of HR practices in influencing employee perception within higher education and academic staff as employees. Hence, this research is aimed at testing the existing knowledge on the role on HR in the development of the psychological contract of employees and determining if the same findings would apply among academics.

Relevance of Psychological Contract Theory

In the theoretical and practical application of human resource management practices there are distinctive factors that relate to employee productivity, commitment and maintaining good employee-employer relationships. These factors include the explicit and implicit contractual employment relationships between employees and employers. The implicit contractual relationship- the psychological contract - is a non-legally binding and very broad contract that exists between employees and employers (O’Neill et al., 2010). Organisations, as well as researchers, have always sought better ways of understanding the dynamics of HR management within the production process, especially in retaining commitment and productivity among employees (Erkutlu and Chafra, 2013). The psychological contract theory provides the framework to better understand and manage the employment relationship and to understand how this
relationship affects organisations, especially in achieving their objectives (Guest and Conway, 2002; Cassar and Briner, 2009).

The psychological contract has been found to impact employee attitude, behaviour and commitment at work (Bal and Vink, 2011). The psychological contract provides the opportunity to predict employee behaviour, to plan to effectively and efficiently and manage employee perceptions (Aggarwal and Bhargava, 2009). Recent studies have found that there are negative results when there is a perceived breach of the psychological contract (Rayton and Yalabik, 2014) and positive outcomes when there is a perceived fulfilment of the contract (Bal and Vink, 2011). The aim of adequately managing employee perceptions is to prevent a violation of employees’ psychological contract which, in turn, could adversely impact employee commitment, trust and productivity (Katou and Budhwar, 2012).

Prior research has classified the psychological contract into types, mostly defining these as relational psychological contracts, which defines employees’ perceptions within a reciprocal social relationship with their employers (Rousseau, 1990; Robinson et al., 1994; Guzzo and Noonan, 1994; Suazo et al., 2009). Employees with relational psychological contracts seek long-term employment, have greater commitments and loyalty to their employers (Conway and Briner, 2005). The psychological contract types include the transactional psychological contract, which define employees’ perceptions within an economic exchange relationship (McInnis et al., 2009). Employees with mostly transactional psychological contracts have transactional perceptions, such as monetary compensation, short-term employment and focus on time spent working and the financial benefit of the work done. The third psychological contract type addressed in this research is the balanced psychological contract (O'Donohue et al., 2007; Scheepers and Shuping, 2011), also known as the hybrid psychological contract. Employees with mostly balanced contracts have perceptions from both a social relationship and an economic exchange.

Research in the psychological contract have shown that the psychological contract type of an employee impacts employees’ reactions to perceived fulfilment and perceived breach of the psychological contract and employment relationship (Rayton and Yalabik, 2014). Employees with mostly relational psychological contracts could be
more understanding and retain their commitment to their employers despite a perceived breach in the psychological contracts. Conversely, employees with mostly transactional psychological contracts are more likely to lose confidence in their employers, withdraw their commitment and loyalty and even seek alternative employment in cases of perceived breach in the psychological contract. Employees with mostly balanced psychological contracts are regularly seeking career development opportunities both within their current employment and externally to the organisation (Rousseau, 2000). Hence, their reaction to a breach in the contract could trigger greater internal commitment to their existing employer or reducing commitment to their employers.

The existing research on the psychological contract of have mostly addressed the types of the contracts, the measurements of the contract, the content of the psychological contracts and employees’ reaction to perceived breach and fulfilment of the psychological contracts. These research have indicated that the breach and fulfilment of the psychological contracts influence employee commitment and productivity. However, there has been limited research on the psychological contract in professional service organisations as well as in higher education among academics.

Majority of the psychological contract research on academics have studied the content of the psychological contract of academics (Tipples and Krivokapic-Skoko, 1997; Tipples et al., 2007; Krivokapic-Skoko and O'Neill, 2008; Krivokapic-Skoko et al., 2009; O'Neill et al., 2010). There has been very limited research on factors that influence the psychological contract of academics, including the effect of HR practices on influencing the psychological contract of academics. This research aims at bridging that gap and applying the knowledge within higher education and other professional service organisations. In addition, prior research state the psychological contract of academics are either relational (Krivokapic-Skoko et al., 2009; Shen, 2010) or balanced (Hrabok, 2003), therefore, there is the need to have better knowledge of the types of psychological contracts and perceptions of higher education academics. This would further reduce the gap on the theory of the psychological contract in the higher education context as well as provide practical knowledge relevant in managing the perceptions of academics using tools such as HR practices.
Existing research has shown that there are other factors that could affect the psychological contract of employees. These include demographic factors, such as age and gender, as well as job characteristics (Guzzo and Noonan, 1994; Kickul and Liao-Troth, 2000) such as the temporary or permanent nature of the employment contract (Rousseau and Wade-Benzoni, 1994). These factors have relationships with employee attitudes, commitment and productivity (Conway and Briner, 2002b; Conway and Briner, 2009). This research will explore the effect of demographic and job characteristics on the psychological contract of academics and compare the findings to existing literature on the psychological contract outside the higher education sector.

Relevance of HR Practices on the Psychological Contract
The variations in the benefits and conditions of employment relate to the commitment and trust employees have for their employers, thereby leading to a shift in employee perception, hence the contents of their psychological contract. These changes in employee perceptions are responses to the HR practices of their employers (Aggarwal and Bhargava, 2009). While HR practices are aimed at influencing employees’ commitment and productivity, the study of the psychological contract enables researchers and HR managers predict the outcome of applying specific HR practices.

Previous research (Aggarwal and Bhargava, 2009; Suazo et al., 2009; Raeder et al., 2012) has proven that HR resource practices influence employee productivity. However, the key factor in the relationship between HR practices and performance is the psychological contract. The fulfilment of the psychological contract leads to increased commitment and subsequently increased productivity (Raeder et al., 2012). Hence, the psychological contract is an intermediary between HR practices and organisational productivity. Existing research on HR practices and the psychological contract, indicate that HR practices model the psychological contract and types of psychological contract of employees (Aggarwal and Bhargava, 2009; Suazo et al., 2009; Raeder et al., 2012). Hence, this research aims to validate these findings in the higher education sector with academics as employees.

There is a need to know the nature and content of the psychological contract of academics in more detail, this would increase the existing knowledge as there have
been minimal research in this area. A better theoretical understanding will create opportunities to better understand what factors influence the psychological contract of academics, to determine to what extent demographics, job characteristics and factors such as HR practices influence the content and perceptions in the psychological contract of academics.

This research is aimed at providing knowledge, on the psychological contract of academics, that will be relevant to human resource management practice. Since there is existing knowledge on the consequences of the psychological contracts types of academics, there is the need to know what drives their psychological contract types. This would provide information on how to manage the psychological contract and therefore provide practical information on how to manage the consequences of the psychological contract of academics in the workplace. This research would provide theoretical and practical knowledge on the factors that drive the development of the psychological contract of academics and would elaborate on how the psychological contract is influenced by demographic factors, job characteristics and by human resource practices of employers. In addition, the research would highlight specific HR practices and the effect these practices have on the development or the psychological contract of academics. Prior research has shown how the psychological contract influences behaviour at work, however, this knowledge is lacking in the research on higher education academics.

There are significant benefits in furthering the knowledge on the effect of HR practices on the psychological contract of employees, with a focus on academic staff as higher education employees. The management of organisations apply HR practices with the objective of influencing the behaviour, attitudes and commitments of their employees. While the types of the psychological contract of employees influences their behaviour, attitudes and commitments, HR practices are known to influence the psychological contract of academics which in turn affects productivity. There is existing research in the role of HR practices in influencing the psychological contract, however there is minimal research in higher education focusing on academics as employees.
Relevance of HR Practices on the Psychological Contract of academics

Higher education institutions play a key role in transforming economies by building up skills and knowledge in new and existing workforce. Various governments rely on higher education institutions to develop high-performing and technology-based economies (Alexander, 2000). In the last few decades, there have been significant changes in the higher education sector in the developed world. These changes have mostly related to an increase in competition for limited resources, a struggle to increase student enrolment, develop institutional autonomy and remain competitive in the higher education global market.

Higher education academics differ in many ways from employees in other professions, including other highly educated professional environments (Bozeman and Gaughan, 2011). Academics have direct access to education and learning opportunities, academics take longer time to qualify to become professionals, they generally have longer working careers than employees outside the academia and they control the knowledge creation and production process.

Outside the academic sector, the investment and production process is managed by the entrepreneurs which are also the employers in the employment relationship. However, in the academia the creation and production of knowledge, which is the main output of the institution, is controlled by academics which are employees in the employment relationship. Hence productivity in the higher education sector depends significantly on the contributions of academics and other knowledge workers, like research based scientist. The role of knowledge creation and dissemination is unique to academics and knowledge professionals. Hence, it is important for the management of higher education institutions to have an interest in reducing work stress among higher education academics, seek better ways to understand academics in the work environment and motivate them for increased productivity and job satisfaction (Shen, 2010).

The psychological contract is increasingly being used to understand and manage the employment relationship between employees and employers, as it drives employees’ perceptions, behaviour, commitment and productivity. Despite the benefits of the psychological contract in human resource management there has not been much
studies on the psychological contract in higher education (Koskina, 2011) and specifically among academics (Shen, 2010). There is little knowledge about the contents, perceptions and fulfilment of the psychological contract of academics. It is noteworthy that the psychological contract differs among different professionals and among organisations. Hence, the context in which the psychological contract is studied has significant impacts on the outcome (Rousseau and Schalk, 2000; Cassar and Briner, 2009).

Existing research on the content of the psychological contract of academics indicate that academics have perceptions that are different from non-academic workplace environments. Academics’ perceptions include their contribution to teaching, student development, contribution to their academic discipline and the university’s development (Krivokapic-Skoko and O'Neill, 2008; O'Neill et al., 2010). Hence, it is imperative that the factors that drive the psychological contract of academics and the influences of HR practices on the psychological contract of academics should be studied separately from the non-academic professions. This research aims at contributing to the theory to bridge that knowledge gap and investigating specific HR practices and how they affect the psychological contract of academics generally and the types of the psychological contracts specifically. The findings in this research are expected to be applicable to other highly skilled professional and knowledge service professions.

This study will investigate the current state of employment relationships by understanding the types of the psychological contracts that exist between academics as employees and their higher education employers. In addition, this research will investigate the effect employees’ perception of the HR practices have on employees’ psychological contract types. This study will investigate the effect of employees’ perceptions of four HR practices (recruitment and selection, training and development, performance appraisals, and compensation and benefits) on the psychological contract of academics as employees in higher education. The psychological contract theory, the typology of the psychological contract, the detailed analysis of HR practices and their effect on the psychological contract of employees are analysed in the Chapter 2.
1.4 Research Objectives
The objective of this research is to reduce the knowledge gap by investigating the effect of employees’ perception of the HR practices of their employers on the psychological contract of higher education academics. The goal of this empirical research is to study different groups of academics who differ in their employment perceptions, their psychological contract, but share other characteristics such as their academic profession in the higher education sector. This research aims at contributing to the theory on both human resource practices and the psychological contract theory. This research will compare its’ findings to existing research on the effect of HR practices on employees outside the higher education context. In addition, this research will compare the findings on the psychological contract types of academics to the prior research on psychological contract of academics.

Most of the existing literature on the psychological contract address the relational and transactional types of the contract. Hence, this research will adopt a balanced approach in the analysis of the psychological contract and investigate the relational, transactional and balanced psychological contract types. In addition, existing research on the effect of HR practices on the psychological contract of employees have been restricted to investigating one or two HR practices. Hence, this research is aimed at investigating the four HR practices within the human resource development lifecycle. The research will apply a comprehensive approach and investigate the effect of the four HR practices within the HR lifecycle (recruitment and selection, training and development, performance appraisals and compensation and benefits) on the three psychological contract types (relational, transactional and balanced), all within the same research.

In answering the research questions, the research will apply two previously validated surveys. The Psychological Contract Inventory (PCI) (Rousseau, 2000) will be applied to collect data on the types of the psychological contract of employees and the HR Practice scale (Geringer et al., 2002) will be applied to collect data on employees’ perception of the HR practices of their employers. This research will be one of the few research that combines both the Psychological Contract Inventory and HR Practice scale within the same research. The research will also gather data on the demographics (age, gender and education) and job characteristics (employment type,
professional experience and academic discipline) of academics as control variables. Hence, the research will make a theoretical contribution of the effect of demographics and job characteristics on the psychological contract of academics.

1.5 Research Questions and Hypotheses

There have been significant contributions to the knowledge on the effect of human resource practices on the psychological contract of employees. However, there has been little research within the context of higher education and similar specialised industries. Hence, the research questions and hypotheses have been derived from the gaps in the literature with the objective of investigating the variables. While the research questions investigate a broader relationship between the variables, the hypotheses indicate a more specific relationship. Hence, based on critical analysis of the literature, the Research Questions (RQ) and their related Hypotheses (H) are tabulated below:

Table 1: Research Questions and Hypotheses

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Hypotheses</th>
</tr>
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<tbody>
<tr>
<td>RQ1 – What type of psychological contracts are developed by academics and what is the effect of HR practices and on the development of these contracts?</td>
<td>H1: Academics are more likely to develop balanced psychological contracts rather than transactional or relational psychological contracts.</td>
</tr>
<tr>
<td>RQ2 - What is the effect of recruitment and selection on the development of the psychological contract types of academics?</td>
<td>H2: Employees’ perception of recruitment and selection has a positive effect on the development of a relational type of psychological contract.</td>
</tr>
<tr>
<td>RQ3 - What is the effect of training and development on the development of the psychological contract types of academics?</td>
<td>H3: Employees’ perception of training and development has a positive effect on the development of a transactional type of psychological contract.</td>
</tr>
<tr>
<td>RQ4 - What is the effect of performance appraisals on the development of the psychological contract types of academics?</td>
<td>H4: Employees’ perception of training and development has a positive effect on the development of a relational type of psychological contract.</td>
</tr>
<tr>
<td></td>
<td>H5: Employees’ perception of performance appraisals has a positive effect on the development of a relational type of psychological contract.</td>
</tr>
</tbody>
</table>
H6: Employees’ perception of performance appraisals has a positive effect on the development of a transactional type of psychological contract.

RQ5 – What is the effect of compensation and benefits on the development of the psychological contract types of academics?

H7: Employees’ perception of compensation and benefits has a positive effect on the development of a relational type of psychological contract.

Overall, the research aims at improving and building the existing knowledge of the employment relationship and investigates the types of the psychological contract developed by academics and the effect of employees’ perception of HR practices have on their psychological contract.

### 1.6 Research Contribution

The aim of this study is to contribute both to the literature on human resource practices and the psychological contract theory. First, existing studies on the relationships between human resource practices and the psychological contract have focused on the effect of a limited number of HR practices on the relational and transactional types of psychological contract. By investigating the four HR practices in the HR lifecycle and investigating the psychological contract from a balanced perspective, this research will develop current theories on the impact of each HR practice on each of the psychological contract types.

Second, the existing studies that have included the classification of the psychological contract, have mostly investigated only the relational and transactional contract. There have been calls for further research on the psychological contract types that do not limit the typology to relational and transactional (Conway and Briner, 2005). This is to point out that the relational and transactional contracts are not necessarily two end of a spectrum and expanding the research on psychological contract types would further expanding the existing knowledge on the psychological contract. Hence, the research will investigate the relational, transactional and balanced types of the psychological contract.
Third, while higher education institutions contribute directly to economic and social development, academic faculty within these institutions play a significant role in the creation and dissemination of knowledge. The psychological contract theory provides a framework for understanding factors that motivate academic staff, understand their expectations in the employment relationship and factors that could impact their commitment and productivity. Hence, this research contributes to the theory on the psychological contract and human resource management by identifying the types of the psychological contract of academics and investigating what HR practices could be applied in building productivity and commitment among higher education academics.

Forth, current studies on the relationships between demographics and the psychological contract as well as between job characteristics and the psychological contract, have mostly been inconclusive. This research contributes to the theory, by analysing the impact of demographics (gender, age, education) on psychological contract of academics. In addition, the research will investigate the impact of job characteristics (employment type, professional experience, academic discipline) on the psychological contract. The research will identify the direction and strength of the impact of these demographics and job characteristics on the psychological contract of academics.

This research will contribute to the theories on human resource practices and the psychological contract by investigating academics within the higher education context. The research participants and data will be collected from Canadian higher education institutions. However, the aim of the research is to apply the theoretical contribution to the employment relationship generally and to higher education management specifically. The context in which the psychological contract is studied would usually impact the outcome of the research (Rousseau and Schalk, 2000; Cassar and Briner, 2009).

1.7 Structure of the Thesis
The structure of this thesis is in eight chapters. After this introductory chapter, the next chapter (chapter 2) reviews the existing literature that address the main concepts of this research; the psychological contract theory and the types of the psychological contracts. The conceptual overview includes a review of human resource practices.
Chapter 3 starts with an overview of the research gaps and comprises of a review of the literature on the psychological contract in higher education and the effect of HR practices on the psychological contract. The critical analysis of the literature also addresses the types of psychological contract developed by academics and investigates four human resource practices within the scope of this research; recruitment and selection, training and development, performance appraisals and compensation and benefits. The chapter 3 aligns with the research questions and includes research hypotheses as they apply to the analysis of the theory. The chapter ends with an overview of the theoretical framework that guides the study, the expected research contribution and shows how the hypotheses were formed on the basis of the literature.

The fourth chapter, research methods, discusses the research methodology that guides this study. The chapter discusses the research philosophy, epistemology and methodology that set the pace for the approach taken to execute the research. The chapter includes explanations and justifications for the research design, sampling, data collection, analytical strategies, measurement instruments, and the ethical issues the research has dealt with. Chapter 4 includes a mapping of the research questions to the data collection, data analysis tools and methods to justify the chosen methodology. The chapter includes an analysis of the reliability scales, descriptive statistics and summary of the outcome of the chosen methods. The chapter concludes with discussion on the validity and reliability of this research.

Chapter 5 is the analysis and results; it comprises of a presentation of the structure of the sample of the research. The chapter applies the quantitative analytical strategies within the scope of this research and presents the results of these analyses. The analytical strategies included the use of the psychological contract type calculation to test hypothesis one. While, the multiple regression analysis was applied to test hypotheses two to seven, with the aim of showing the effect of employees' perception of the HR practices on the psychological contract types; relational, transactional and balanced. The analysis and result chapter concludes with a summary of the results, mentioning the hypotheses that support the quantitative results.
Chapter 6 is the discussions chapter; the chapter includes the discussions of the quantitative findings in this research with the aim of deriving meaning from the research results. The discussion includes a comparison of the research results to the applicable existing research on the psychological contract, psychological contract in HEI and HR practices. The chapter discusses the findings based on the demographic data collected, the conceptual framework of the psychological contract types and HR practices. In addition, the chapter includes a discussion of the theoretical framework; thereby discussing the results of the effect of employees’ perception of the HR practices on the psychological contract of academics.

Chapter 7 comprises of an overview of the research objectives and methodology; the contribution to theory, practical implications of the research are examined and the limitations of the research are presented. The chapter concludes with directions for future research as well as the overall summary and conclusions of the entire research.

The final chapter, chapter 8, reflects the researcher’s journey and experience on the Doctor of Business Administration (DBA) in Higher Education Management programme.
Chapter 2 – PSYCHOLOGICAL CONTRACT AND HR PRACTICES

2.1 Introduction
This chapter comprises of a review of the main concepts of this research; the psychological contract theory, psychological contract types, psychological contract in higher education and human resource practices.

2.2 Psychological Contract Theory
The knowledge and understanding of the psychological contract was developed over the last five decades (McInnis et al., 2009) and in the last two decades it has formed the basis for defining the relationship between employees and employers (Cassar and Briner, 2009). Research into the psychological contract is still in its early stages as most research has focused on the violation of the contract and its impact from the employees’ perspective (Kickul and Liao-Troth, 2000). In addition to the focus on violation and its impact, the third most addressed issue in the psychological contract theory is the issue of the content of the psychological contract (Conway and Briner, 2005; Suazo et al., 2009). Regularly the psychological contract is used to understand the exchange relationship between employees and their employers (Bal and Vink, 2011).

2.2.1 Definition of the Psychological Contract
There is no agreed definition of the Psychological Contract (PC); various studies have given varying definitions (Conway and Briner, 2005). Rousseau (1989)’s definition of the psychological contract lays emphasis on the individuality of the contract, being a belief an individual holds relating to the “the terms and conditions of a reciprocal exchange agreement between that focal person and another party (p.123)”. Rousseau (1989) further defines the psychological contract using the same principles of a legal contract, that a promise has been made by one party and consideration has been offered by the other party in exchange of that promise. This is similar to the structure of an explicit legal contract which is a legally enforceable agreement between parties for which three conditions must be fulfilled; an offer, acceptance and furnishing consideration (Suazo et al., 2009). The psychological contract relies on the individual’s belief, a belief that results out of the individual’s interaction with an organisation (Rousseau, 1995). This ties in with the definition of Herriot et al. (1997) which explains that the psychological contract comprises of perceptions of both parties to the
employment relationship; the individual and the organisation. Several other authors emphasise that the psychological contract comprises of the relationship between individuals and their employing organisations (Guest and Conway, 2002; Guest, 2004; Conway and Briner, 2005; Conway and Briner, 2009; Richard et al., 2009).

The definitions of the psychological contract include some common themes, that the psychological contract involves an exchange agreement (Rousseau, 1989; Rousseau, 1995) made out of obligations and promises (Roehling, 1997; Guest and Conway, 2002; Guest, 2004; Richard et al., 2009) made and believed to have been made “between an organization and an individual (p. 819)” (Richard et al., 2009). While there are multiple definitions of the psychological contract, there are also significant similarities (Conway and Briner, 2005). The psychological contract, as explained by Rousseau (1989), is the contractual relationship that exists between employees and employers, that goes beyond the content of the legal contract. The psychological contract comprises of the in-depth feelings and perceptions of both parties (Rousseau, 1989). The psychological contract is the perception of mutual obligation between organisations and their employees (Erkutlu and Chafra, 2013). The psychological contract is based on the assumptions both employees and employers have about their reciprocal relationship (Bal and Vink, 2011).

The key factors that are drawn from the various definitions of the psychological contract are that the psychological contract constitutes of beliefs (Rousseau, 1989; Robinson et al., 1994; Rousseau, 1995), is implicit in nature (MacNeil, 1985; Anderson and Schalk, 1998; O'Neill et al., 2010), is subjective (Rousseau, 1995), comprises of perceived agreements (MacNeil, 1985; Anderson and Schalk, 1998; Aggarwal and Bhargava, 2009), its existence is based on an employment relationship (Guest and Conway, 2002; Guest, 2004; Conway and Briner, 2005; Conway and Briner, 2009; Richard et al., 2009), it relates to an exchange between two parties and shaped by an organisation (Guest and Conway, 2002; Conway and Briner, 2005; Bal and Vink, 2011).

The psychological contract theory provides opportunities for researchers to gain a better understanding of employment relationships and their changes over time (Cassar and Briner, 2011). The psychological contract provides insights into the employees’
response to organisational changes and perceived breaches in the psychological contract (Cassar and Briner, 2011). Hence, the psychological contract theory provides a theoretical framework for understanding and studying employment exchange relationships (Guest and Conway, 2002; Conway and Briner, 2002a). The psychological contract enables employees to compare their perceived obligations towards their employers to what they perceive as their employers’ obligations towards them (Shore and Tetrick, 1994). The outcome of this comparison is either the perception of a psychological contract fulfilment (Katou and Budhwar, 2012; Bal and Vink, 2011) or psychological contract breach (Rayton and Yalabik, 2014).

The legal employment contract includes the mutual obligation of both parties, but most of these mutual obligations are implicit, hence concealed (Anderson and Schalk, 1998). Despite the implicit and concealed nature of the psychological contract, it is still very fundamental as it helps determine behaviour and commitment (Schein, 1980; Aggarwal and Bhargava, 2009). Making the content of the psychological contract explicit does not imply that the psychological contract is no longer in existence (Anderson and Schalk, 1998). Since, explicit promises by a prospective employer can create both a perception of establishing a legal contract and a perception of promises within the psychological contract (Aggarwal and Bhargava, 2009; Suazo et al., 2009).

There are two major perspectives in understanding the psychological contract relationship, unilateral and bilateral perspectives. The unilateral perspective states that the contents of the psychological contract are created out of the individual employee’s perspective only (Rousseau, 1995). The bilateral perspective states that a psychological contract is created out of a relationship between employees and employers and the mutual perceived obligations they have of each other (Herriot et al., 1997; Guest and Conway, 2002; Conway and Briner, 2005).

These two different concepts, unilateral psychological contract and bilateral psychological contract respectively impact on the outcome of research on psychological contract and could create confusions if not addressed appropriately (Anderson and Schalk, 1998). In addressing this in more detail, Herriot et al. (1997) states that the psychological contract which exists between an individual employee and an organisation is actually a relationship between individual employees and the
individuals in the organisation that represent the employers in the employment relationship. Most researchers agree that the psychological contract comprises a two-way relationship between the employee and the employer based on perceived promises and obligations (Guest and Conway, 2002). Hence, this study adopts the principle that psychological contracts are a bilateral relationship between employees and employers and does not exist based on only the employee’s perception.

2.2.2 Promise, Expectation and Obligation
There is a challenge in drawing a distinction in the definition of promise, expectation and obligation (Guest and Conway, 2002). Very few empirical studies have examined the difference between these terms and two such studies include Roehling (1997) who examined promise, expectation and obligation to determine if there was a distinction between these concepts. The second study was done by Cassar and Briner (2009), they executed an empirical study with one of its aims being to possibly draw a distinction between promise and obligations in the psychological contract. Researchers tend to define these concepts in manners that best fit the contextual nature of their studies (McInnis et al., 2009).

It is important to understand that promises could be perceptions created in the mind of employees as a translation of the verbal or non-verbal words or actions of employers (Rousseau, 2001). However, promises that are neither verbal nor written are implicit or implied promise (Rousseau, 2001). Promises in the psychological contract theory are perceptions on the part of employees. Employees may perceive employers have made a promise irrespective of whether or not an actual promise was made (Rousseau, 2001; Suazo et al., 2009). The promises made in a legal contract are part of the agreement between the parties. So, for a promise to be binding, the parties must mutually agree to the content of the promise (Cassar and Briner, 2009). However, this mutual acceptance of the promise creates enforceable obligations only in legal contracts and not in the psychological contract. The promise in the psychological contract becomes a perceived obligation when an employment relationship is in existence between the parties (Morrison and Robinson, 1997; Cassar and Briner, 2009).
Perceptions are mental models in the minds of employees; these mental models show the relationship between them and their employers (Robinson et al., 1994; Rousseau, 2001). In addition, the mental model of the employee-employer relationship is formed out of pre-employment, social interaction with the prospective employer and is further built by post-employment, social interactions and experiences on the job (Rousseau, 2001). Conversely, obligations are beliefs employees have because of written or unwritten promises that they received from their employers (Robinson et al., 1994). Both employees and employers have perceived obligations of what the other parties’ role is, hence obligations are mutual beliefs, parties have on their own roles and the roles of others in their contractual relationship (Robinson et al., 1994). Conversely, obligations that are not preceded by promises are not considered as part of the psychological contract (Morrison and Robinson, 1997). This implies that employee expectations that are not drawn from their current employment relationship are not part of the psychological contract (Cassar and Briner, 2009).

Cassar and Briner (2009) empirically prove that “a promise becomes an obligation if endorsed in a mutual agreement (p.687)”, implying that the mutual relationship makes a promise become an obligation. Promises are either explicitly made in writing, spoken or understood from behaviour, regular practices and deeds (Rousseau, 2001). The relationship between promises and obligation is not a clear and direct relationship, despite using the terms interchangeably (Cassar and Briner, 2009). Hence, only obligations that arise following a promise are considered as functions of the psychological contract (Cassar and Briner, 2009).

The psychological contract consists of the perceived obligations employees and employers have about each other, these do not include expectations (Robinson, 1996). Expectations are general beliefs employees have about what they will meet in their employment. Hence, expectations are not a perceived obligation (Robinson, 1996) and do not form part of the psychological contract. Although, Conway and Briner (2005) state that expectations are drawn from the mutual employment relationship between employees and employers, they are mostly implicit and formed outside an employee’s current employment (Conway and Briner, 2005). However, Conway and Briner (2005) elaborate that expectations that fall within the construct of the psychological contract are those that consist of “obligatory quality” (p.10) where one
party believes the other party has an obligation to fulfil the expectations. This supports
the position of Roehling (1997) who gives two criteria for expectations to fall within the
concept of the psychological contract. First, the expectations must be unspoken and
implicit and, second, that the expectations result from an individual’s employment
relationship with an organisation.

The psychological contract comprises of perceived obligations resulting out of implicit
or explicit promises within a current employee-employer relationship (Morrison and
Robinson, 1997; Rousseau, 2001; Cassar and Briner, 2009). Despite the position that
expectations differ from perceptions, the terms are largely used interchangeably in
psychological contract studies. Hence, this study adopts the position that expectations
that result from an employment relationship following promises and perceived
obligations are within the scope of the psychological contract.

The context in which the psychological contract is studied could impact the outcome
of the study (Rousseau, 1995; Cassar and Briner, 2009). The relationship between
promises and obligations is not always a direct relationship as they could depend on
the context in which they are studied (Rousseau, 1995; Rousseau and Schalk, 2000).
Cassar and Briner (2009) agree that the context in which the psychological contract is
studied could have an impact on the outcome of the employee-employer relationship.
While, promises would lead to legally enforceable obligations in the United States
(Rousseau, 1995; Suazo et al., 2009), this is not applicable globally (Cassar and
Briner, 2009). The aim of this research is to study the psychological contract within the
context of higher education.

2.2.3 Dynamics of the Psychological Contract
There are several issues relating to changes in the psychological contract, the creation
of the contract, the breach and the effects of the breach of the psychological contract,
and finally the changes in the psychological contract that result from changes in
experience and time. The literature analysis on the breach of the psychological
contract below will include an analysis using the types of the psychological contract.
The typology of the psychological contract used by the research is addressed under
the sub-section classification of psychological contract.
Creation of the Psychological Contract

There have been various views on the creation of the psychological contract. Herriot and Pemberton (1997) state that the creation of an employee’s psychological contract is in four stages. First, the interaction and communication between the prospective employee and organisation during the recruitment phase. Second, the negotiation of the terms of employment between the employee and the employer. The third stage is the employee monitoring the employer to ensure that the organisation fulfils its promises in the employment contract and that the content of the contract is fair. In the final stage, the organisation and the prospective employee negotiate the final terms of the contract. These stages either create a new psychological contract or renew an existing psychological contract as a result of renewing an existing employment contract (Herriot and Pemberton, 1997).

Rousseau (2001)’s model on the psychological contract formation addresses pre- and post-employment relationships in the formation of the psychological contract. Rousseau (2001) states that there are four stages in the formation of the psychological contract: the pre-employment social relationship between employees and employers, the recruitment process and activities such as interviews and correspondence between parties, post-employment early socialisation, and later employee experiences. Tomprou and Nikolaou (2011) agree that the creation of the psychological contract starts during recruitment and further develops during the interaction between the new employee and their employer.

The aforementioned three studies, by Herriot and Pemberton (1997), Rousseau (2001) and Tomprou and Nikolaou (2011), that discuss the creation of the psychological contract are not based on empirical data. However, this study adopts the position of Rousseau (2001) that the psychological contract is created from the schema (mental model), promises and mutual and reciprocal exchange relationships between an employee and their employer. Hence, this research neither includes the creation of the psychological contract nor the phases in the creation of the psychological contract. Rather, this research is interested in the effect of HR practices on the psychological contract of employees in the higher education context.
Breach of the Psychological Contract

A breach of the psychological contract is the difference between the obligation the employer owes the employee and the obligation the employee owes the employer; breaches are unfulfilled obligations (Anderson and Schalk, 1998). A further explanation states that a breach in the psychological contract occurs at the time an employee realises that their employer has not fulfilled one or more of its promises (Rayton and Yalabik, 2014). Understanding the psychological contract breach is important in determining how employees react when they perceive that there is a breach in their contract, as the consequence of the breach can result in an employee withdrawing their own side of the exchange relationship that comprises the employee-employer relationship (Rayton and Yalabik, 2014). The impacts of this withdrawal are regarded as the consequences of the breach in the psychological contract.

The employees’ perception of a breach of their psychological contract cannot be enforced legally; however, it can adversely impact their commitment to the organisation, productivity and create the need to leave the job (Guzzo and Noonan, 1994). The consequences of the breach of the psychological contract among employees are the feelings of broken trust and betrayal (Anderson and Schalk, 1998), high turnover rate (Zhang et al., 2010) and reduction in Organisational Citizen Behaviour (OCB) (Jafri, 2012). The OCB enables individual employees to contribute to the collective success and effectiveness of an organisation (Jafri, 2012). Employees are willing to exhibit behaviours that show commitment to the organisation, they are willing to sacrifice themselves, put in extra hours into their job and work over and above the expectations of their employers (Jafri, 2012). However, in cases of a breach in the psychological contract, when the employees perceive that, their employers have failed to fulfil one or more promises (Robinson et al., 1994; Jafri, 2012), then employees withdraw and reduce the level of commitment and self-sacrifice they usually put into the organisation. In contrast, employers do not react to the perceived breach; they continue to expect the employee to fulfil both contractual and perceived obligations (Robinson et al., 1994).

Several researchers (Robinson et al., 1994; Shore and Tetrick, 1994; Jafri, 2012; Rayton and Yalabik, 2014) have written about the link between the type of psychological contract an employee has and how they react to a breach in the
psychological contract. Robinson et al. (1994) state that when an employee perceives a breach of the psychological contract, their relational perceptions decrease and the transactional content increases. This position is in agreement with Shore and Tetrick (1994) who state that the employee will expect more monetary and compensational rewards when there is a perceived breach in the psychological contract. Hence, the extent of the employee’s reaction depends on the type of psychological contract that has been breached, and if employers are held accountable for the breach of the psychological contract (Shore and Tetrick, 1994).

If an employee perceives a violation of the relational obligations, the transactional obligations increase while relational perceptions reduce. For instance, if an employee does not get recognition, which is a relational obligation, the employee will increase their perception for transactional obligations such as increased salary (Anderson and Schalk, 1998). Breach of the transactional psychological contract obligations creates the perception of economic inequality (Robinson et al., 1994). This is supported by Shore and Tetrick (1994) who explain the nature of transactional obligations, stating the absence of equity in transactional obligations leads to economic disparity among employees. On the contrary, the empirical research by Zhang et al. (2010) finds that employees with relational and those with transactional psychological contracts react the same way to a perceived breach in the psychological contract.

If an employee feels that they have been deceived and treated unfairly, they try to get compensation for the psychological contract breach by increasing their perceived employers’ obligation to them and reducing their perceived obligations, actual output and commitment to their employers (Robinson et al., 1994). Katou and Budhwar (2012) support this position and add that a perceived breach in the psychological contract of an employee could in-turn adversely affect employees’ commitment, trust and productivity. The approaches to the study of a breach in the psychological contract have focused on the individual reactions to perceived breaches and not focused on the events that led to the breach (Conway and Briner, 2005). The breach of the psychological contract and changes from the perceived breach are not within the scope of this research. However, the outcome of a breach in the psychological contract and the impact it could have on commitment and productivity is a further indication of
the importance of understanding the psychological contract, the contents and types of the psychological contract.

**Experience and Social Interactions**

The psychological contract is strictly individualised (Herriot et al., 1997; Rousseau, 2001); hence, two individuals on the same job can have two different perceived obligations. There have been various reasons stated for changes in the psychological contract. Rousseau (2001) states that the changes in the psychological contract are a result of changes in individual perceptions and experiences over time. Then again, Anderson and Schalk (1998) explain that the dynamism of the psychological contract depends on the fulfilment or breach of the perception of employees. Robinson et al. (1994) posit that the alterations in the psychological contract are a consequence of the impact of socialisation in the workspace. During early socialisation, in the recruitment phase of the employment, the employees’ perceptions either become more relational or more transactional, depending on their experiences and communications from the new employers, early in the employment process (Robinson et al., 1994). The position is supported by Tomprou and Nikolaou (2011) who state that the psychological contract of new employees is affected by the written and unwritten messages they receive during the recruitment phase. Shore and Tetrick (1994) and Rousseau (1995) support this position, while Tomprou and Nikolaou (2011) further state that even in the absence of clear communication, the prospective employee creates perceptions about the organisation from images, corporate identity and the recruitment process.

Tomprou and Nikolaou (2011) state that employees’ experience from previous work, economic climate, individual differences and social environments affect the creation of new employees’ psychological contract (Tomprou and Nikolaou, 2011). However, these factors are external to the employee-employer exchange relationship and hence considered out of the scope of the psychological contract (Conway and Briner, 2005). Rousseau (2001) supports the social interaction view of Robinson et al. (1994) and states that the changes in obligations occur because of post-employment social interactions that employees have with their employers. The early social interaction causes significant changes in the psychological contract of new employees (Robinson et al., 1994; Tomprou and Nikolaou, 2011) resulting from changes in the employees’ perceptions of their new employers (MacNeil, 1985; Rousseau, 2001; Tomprou and
Nikolaou, 2011). Gradually, this position changes and the employees’ expected perceived obligations towards their employers reduce while the expected perceived obligations owed them by the employers increase (Robinson et al., 1994).

2.2.4 Contents of the Psychological Contract
The contents of the psychological contract refer to the perceived promises that employees and employers believe the other party owes them; this forms the ‘deal’ between employees and employers in their relationship (Conway and Briner, 2005; O’Neill et al., 2010). The contents of the psychological contract refer to what employees perceive they will receive from their employers and what they perceive they owe their employers in return (Conway and Briner, 2005). Likewise, Rousseau (1990) defines the content of the psychological contract as what employees and employers feel they owe each other in the employment relationship. Conway and Briner (2005) emphasise that the contents are not what employees and employers actually give each other, but are the content of perceptions created out of implicit and explicit promises.

Reciprocity and Exchange
A key factor in determining the content of the psychological contract is the reciprocity in the transaction between employees and employers. The contents of the employees’ psychological contract are based on what they give their employers and what they expect in return (Conway and Briner, 2005). There have been empirical limitations in the ways in which the contents of the psychological contract have been determined, Herriot et al. (1997) argues that the contents of the psychological contract are individualised and specific to each individual. Hence, Rousseau (1990) use of rating scales to request respondents to rate the content of the psychological contract does not allow for individualism in the psychological contract, rather the respondents are made to choose from the limited content in the rating scale (Herriot et al., 1997). Conway and Briner (2005) also, emphasise another limitation in identifying the content of the psychological contract, in cases where respondents are asked what they expect from their employers without identifying what they give their employers in return. This approach excludes the concept that the psychological contract is based on a reciprocal relationship (Conway and Briner, 2005).
Determining the Contents

There have been several approaches to determine the contents of the psychological contract. Herriot et al. (1997) document the content of the psychological contract by interviewing two sets of respondents, one each to represent the employees and the organizations. Herriot et al. (1997) approached respondents in the course of their daily work and used critical incident technique to elicit information on incidents when employees or employers acted beyond or fell short of their expectations. The research identified 547 organisational obligations and 479 employee obligations and simplified the obligations through thematic analysis to get 7 employee obligations to the organisation and 12 organisational obligations towards employees. Employees perceived that the organisation’s obligation towards them were to provide training, fairness in selection, promotions, allowing time for personal needs, consulting employees in matters that affect them, minimal interference in how employees do their work. Other perceived obligations were for the organisation to act in a socially responsible manner, recognise contribution and long service, provide a safe work environment, fairness, job security, equitable pay and benefits (Herriot et al., 1997). Conversely, organisations perceived the employee obligations to them to be to work to contracted hours and more in cases of emergencies, to do a quality job as required, be honest, loyal, care for the organisation’s property and reputation and act well towards clients and other employees (Herriot et al., 1997).

Conway and Briner (2005) consider the study by Herriot et al. (1997) as one of the most comprehensive studies on the content of the psychological contract. However, Conway and Briner (2005) state that the approach by Herriot et al. (1997) entailed perceived deviation from the expectations of both employees and employers. This approach is contrary to the position that expectations do not form part of the psychological contract, except where there is evidence to show that these perceptions are preceded by promises and obligations within the context of the employment relationship (Robinson, 1996; Morrison and Robinson, 1997; Cassar and Briner, 2009). Conway and Briner (2005) argue that the study by Herriot et al. (1997) approaches the content of the psychological contract by first enquiring how the employees and the organisations fell short or exceeded expectations. Hence, the
research by Herriot et al. (1997) provides more information on the content of violations than on the content of the psychological contract (Conway and Briner, 2005).

2.2.5 Demographics and the Psychological Contract
The psychological contract is the subjective perception of an individual; hence, it differs from person to person (Rousseau, 1995; Herriot et al., 1997; Rousseau, 2001). Since the psychological contract is based on an individual’s perception of their employer, the contract is dynamic in nature; it changes over time as the individual experiences change (Rousseau, 1995) and differs from person to person (Guzzo and Noonan, 1994; Rousseau, 2001). Shen (2010) states that individual demographic factors (such as age, education, and gender of employees) affect the perceptions and contents of psychological contracts. This position is agreed by Lub et al. (2015) who state that the individual characteristics that influence the psychological contract include the age of the employee and the generation that they belong to. The research by Lub et al. (2015) states that employees from different generations have different types of psychological contracts as well as react differently to perceived breaches in the psychological contract.

Conway and Briner (2009) explain that demographic factors such as age, gender and nationality are not factors that affect the creation or dynamism of the psychological contract. Conway and Briner (2009) elaborate that the psychological contract results from factors that emanate from the relationship between employees and employers. One of the fundamental concepts of the psychological contract is that the psychological contract is based on an exchange relationship between employees and employers (Robinson et al., 1994; Bathmaker, 1999; Raja et al., 2004; Conway and Briner, 2005). As a result, Robinson (1996) posits that age, gender, nationality, professional achievements are factors that are not a result of the employment relations; hence they create expectations from factors that are external to the employment relationship. Expectations that exclude promises and obligations that are external to the employment relation are not part of the psychological contract (Conway and Briner, 2009). This research considers the age, gender and educational qualification of respondents as factors that are independent of the employment relationship and not within the scope of the psychological contract.
2.2.6 Job Characteristics and the Psychological Contract

The contents of the psychological contract differ and depend on the employment type, employment level, years of experience and duration on current job (Guzzo and Noonan, 1994). Bal and Vink (2011) state that an increasing number of studies are elaborating on the job characteristics and organisational moderators that affect the psychological contract of employees. Job characteristics such as professional experience (Kickul and Liao-Troth, 2000), level of employment and employment type (full-time, part time, contingent) have a direct impact on the content and changes in the psychological contract (Conway and Briner, 2009). For instance, contingent employees have a short-term contract with their employers and receive no employee benefits; hence, their psychological contract is mainly transactional, such as timely and accurate payment for work done (Guzzo and Noonan, 1994). While full-time employees receive benefits, professional development training, therefore, they have perceptions of job security, lengthy professional experience (Kickul and Liao-Troth, 2000) and long-term employment (Guest and Conway, 2002).

Employment Type

The psychological contract is a framework to understand the differences in the content of the psychological contract among different employment types (Conway and Briner, 2002b). Conway and Briner (2002b) explain that there are number of reasons why there will be differences in the psychological contract of full-time and part-time employees. First, organisations treat full-time and part-time employees differently in terms of workload, assigning tasks, benefits and future prospects with the organisation. Second, there is a difference in the career orientation of full-time and part-time employees. While full-time employees expect compensation, reward and employment benefits, part-time employees focus more on compensation for work done and varying the hours, they put into their jobs. Finally, the promises made by employers to part-time employees are not as clear as those made to full-time employees are. There is usually a major difference in the implicit and explicit communication between organisations and their full-time and part-time employees. Conway and Briner (2002b) state that psychological contract fulfilment explains some attitude differences between full-time and part-time employees. However, employees’ perception of the contractual relationship with their employer is not significantly impacted by their employment status. This position is supported by Bal et al. (2013)
who state that employees’ employment type, such as full-time and part-time, does not impact on the employees’ psychological contract. However, Conway and Briner (2002b) find that part-time employees have greater job satisfaction and more positive work attitudes than full-time employees.

Rousseau and Wade-Benzoni (1994) state that contingent employees, usually on a temporary employment contract, have transactional psychological contracts, primarily because the explicit contract clearly states that the employees are paid for work done and nothing else. Employment contracts that explicitly provide for open-ended employment relationship based on long-term employment usually lead to relational psychological contracts (Rousseau and Wade-Benzoni, 1994). Guzzo and Noonan (1994) explain that part-time and temporary employees have higher transactional perceptions, the same way full-time and permanent employees have more relational perceptions than transactional perceptions. This position is supported by the empirical research on the role of job security in understanding the relationship between temporary employees’ perceptions and performance (Kraimer et al., 2005). Kraimer et al. (2005) find that job security has an impact on the employees’ perceptions of benefits and job performance. They explain that employees with high level of job security increased their performance at work and had a high perception of accepting the benefits they received at work. In contrast, employees with low job security, such as temporary employees, had a negative perception on how adequate their employment benefits were and they were less committed to performance at work (Kraimer et al., 2005).

Employment contracts explicitly state the contractual obligations between employers and contingent employees, such as independent contractors. Contingent work does not include employment benefits, long-term employment and job security and the employment relationship is usually based on work and payment for work done (Guzzo and Noonan, 1994). Kraimer et al. (2005) support this and state that contingent work is non-permanent and non-standard employment, or work with neither an implicit nor explicit contract of continuous employment for which payments vary as working hours vary. The psychological contracts of contingent employees, temporary employees and commission-based workers are transactional contracts, while full-time employees, have relational psychological contracts (Guzzo and Noonan, 1994). Part-time and
temporary employees have greater satisfaction rates because their perceptions are entirely transactional based on financial compensation, they do not expect things like recognition, skill-based training and promotions; hence there is minimal possibility of a breach in their psychological contract (Conway and Briner, 2002b).

The existing research on the similarities and differences between full-time and part-time employees, their job satisfaction and commitment has mostly been without a conceptual framework. Hence, the findings have been mostly inconclusive or contradictory (Conway and Briner, 2002b). There has been a recognisable absence of theoretical design and analysis to differentiate between full-time and part-time employees of research findings and justification of findings using partial theoretical frameworks (Conway and Briner, 2002b). However, Isaksson et al. (2010) empirical research posits that employees on full-time employment contracts tend to have longer-term experience on the jobs than part-time employees, which implies that full-time employees have better opportunities to negotiate the terms of their employment contract, receive more training and employers invest more on them than on part-time employees. These greater benefits received by full-time employees over part-time employees have an effect on the relational content of the psychological contract of full-time employees. While part-time employees have transactional perceptions because they have less opportunities to negotiate terms of employment and they receive less investments from their employers. Hence, part-time employees focus on the economic compensation of the work and their transactional benefits (Isaksson et al., 2010).

Weekly hours worked is a feature in the employment relationship that might affect the psychological contract (Isaksson et al., 2010). Hence, in this research full-time employees are persons that work 30 hours or more weekly at their main or only job. While part-time employees are persons that work less than 30 hours a week at their main or only job (Statistics Canada, 2012).

**Professional Experience**

Professional experience is defined as the quantity of time an individual has spent on related job roles (Ng and Feldman, 2009). Professional experience could either be the experienced gained before the current job, the duration on the current job or a combination of both. There have been several research studies on the role and links
between job tenure and human resource management as the length of an employee’s experience with an organisation is a significant factor in determining the earnings of the employee (Dobbie et al., 2014). New employees have different motives, needs and aspirations of their professional lives and these individual predispositions determine the perceptions they have upon entering a new job (Kickul and Liao-Troth, 2000). The contents of the psychological contract of employees’ become relational as their work experience increases (Guzzo and Noonan, 1994; Rousseau, 2001).

Employees that have long-term desires to be in an organisation will have a different set of perceived obligations than employees with short-term goals or employees who consider their jobs as a stepping stone to other jobs and careers (Rousseau, 1990). Kickul and Liao-Troth (2000) concur and state that employees with long-term career ambitions have more relational perceptions and employees that see their roles as steps to other careers and other jobs have obligations that are more transactional. Rousseau (1990) reiterates that the pre-employment expectations of an employee are not part of the psychological contract. These are expectations that the individual has as a result of experiences, personal ambitions and other external factors (Robinson, 1996). Unfulfilled expectations, not relating to the employment relationship, do not have the same effect as violated psychological contracts. Unfulfilled expectations, not existing within the employment relationship, may lead to disappointments, but they are not like violating psychological contracts that lead to greater emotional response such as a change in the feelings or trust and commitment to their employers (Rousseau, 1990). This supports the statement by Conway and Briner (2009), where they emphasise that the psychological contract is formed and exists based on a relationship between an employee and their employer and not formed from anywhere else.

The professional experience of employee could affect the perceptions and the contents of their psychological contract (Guzzo and Noonan, 1994). The longer an employee has spent on their profession, the greater the relational perceived obligations and the smaller the transactional perceived obligations (Guzzo and Noonan, 1994). Isaksson et al. (2010) explain that employees with longer work experience usually have more opportunities to negotiate the terms of their employment and attain greater relational fulfillment on their jobs than employees with shorter experience. Von Glinow et al. (2002) disagree with the relevance of seniority in
organisations, stating that even though it is a significant consideration in some countries, including the United States, less emphasis should be placed on seniority. On the contrary, Ng and Feldman (2009) state that the job attitudes of employees change as their work experience increases, explaining that seniority makes employees consider their work environments to be more acceptable and over time more experience leads employees to a greater feeling of professional fulfilment. In addition, as professional experiences increase employees become more realistic to situations in the work environment, they feel less disappointed and they react more positively to changes; their tolerance levels increase (McInnis et al., 2009).

In a research on job experience and earnings in the higher education sector, Monks and Robinson (2001) state that the average length of career experience in the United States is 15.8 years, while the average work experience on an employees’ current job is 11.7 years. In a research on current work experience and career experience and how experience could determine employee compensation and benefits, Dobbie et al. (2014) state that the average career experience in Austria is 9.1 years while the average work experience on employees current job is 6.6 years. The aforementioned research indicates that the average work experience on an employees current job is approximately 73.5% of the average career experience of employees.

The professional experience of employees is usually defined in three parts, the early career, mid career and late career phases (Lusty, 2011; Ashe-Edmunds, 2016). The early career phase is considered to be the first third of an employees’ work experience, mid-career refers to the second third and late career refers to the third part of the work life (Lusty, 2011; Ashe-Edmunds, 2016). In addition, Kokemuller (2016) opines that the middle phase of an employees work career is between 10 and 15 years of work experience.

In Canada, academic staff on average have longer job experiences than any other occupation. As at 2015, the average length of experience across all demographics and occupations was approximately 7.8 years, while the average length of experience across all demographics of academic staff was approximately 10.9 years (Statistics Canada, 2015). However, the available statistics on academic staff is not restricted to academic staff in higher education, and includes teaching staff in secondary,
elementary and professional teaching services. There are no specific data on the professional experience of Canadian academics. However, applying Statistics Canada’s (Statistics Canada, 2015) data as a guide, this research defines long-term experience as academics that have 9 and over years of experience in their current jobs. Medium-term experience are academics with 5 years and over, but less than 9 years academic experience, while academics with short-term experience are academics with less than 5 years academic experience on their current jobs.

*Academic Discipline*

This research has been unable to identify any prior research on the psychological contract and its relationship to academic disciplines. However, studies on job satisfaction among academics indicate a similar shortage of work on academic discipline and job satisfaction. Bozeman and Gaughan (2011) state that academics focus on different aspects of their jobs; economists focus on pay and pay equity, psychologist on intrinsic and extrinsic motivation (Ryan and Deci, 2000), sociologist on demographics such as age, gender and social structure. However, Terpstra and Honoree (2004) empirical research on job satisfaction among academics finds that, although there are differences in the job satisfaction among academics from different academic disciplines, there is no evidence of a relationship between academic disciplines and job satisfaction among academics. Kenney (2010) provides empirical evidence to show that academics of different backgrounds have similar responses to job satisfaction and supports the position of Terpstra and Honoree (2004).

Among other factors, Hemmasi et al. (1992) state that academics in education, social sciences and humanities are more likely to be less satisfied with compensation and benefits. Unlike academics in medical sciences, applied sciences and professional disciplines, most academics in education, social sciences and humanities are confined to the academic sector and do not have as much career choice outside of academia (Hemmasi et al., 1992). Furthermore, research into job satisfaction among academics in HEI has shown that overall academics have a high job satisfaction rate and that the only aspect that academics have not been satisfied with has been their compensation and benefits (Kenney, 2010). The existing research is grossly inadequate to draw any real conclusions on the academic discipline of academic staff and their psychological contract.
There have been a number of approaches to the definitions and classification of academic disciplines in the higher education sector (Krishnan, 2009). One prominent approach has been Biglan’s Classification of Academic Disciplines (Schommer-Aikins et al., 2003). Based on an approach for the creation of knowledge, research approach and an overall view of academic disciplines, Biglan classified academic disciplines into two dimensions of pure/applied and hard/soft academic disciplines. ‘Hard’ and ‘soft’ disciplines referred to the division between natural sciences and social sciences, while the ‘pure’ and ‘applied’ disciplines referred to theoretical disciplines, life sciences and non-life systems such as history (Schommer-Aikins et al., 2003; Krishnan, 2009).

Various national and regional governments classify academic disciplines; the North American Product Classification System (NAPCS) agreed by Canada, the United States and Mexico serves as the official classification of academic disciplines across the three North American countries. The Canadian Classification of Instructional Programs (CIP) is the Canadian version of the NAPCS (CIP, 2011) and has been restructured to match the American version with the aim of creating cohesion between Canadian and American educational data (Prévost and Beaud, 2011). Hence, this research studies academic disciplines within the context of the Canadian higher education sector and adopts the CIP classification. The CIP classifies academic programmes in Canada as follows (CIP, 2011):

- Personal improvement and leisure
- Education
- Visual and performing arts and communications technologies
- Humanities
- Social and behavioural sciences and law
- Business, management and public administration
- Physical and life sciences and technologies
- Mathematics, computer and information sciences
- Architecture, engineering, and related technologies
- Agriculture, natural resources and conservation
The aforementioned academic classifications could be grouped into three areas: education, social sciences and sciences.

2.2.7 Classification of the Psychological Contract
There have been several approaches to the classification of the psychological contract. These include studying the degree to which a psychological contract is individualised or standardised (Shore and Tetrick, 1994), the extent to which the contract is part of a social exchange or an economic exchange (Rousseau, 1989; Millward and Hopkins, 1998). Rousseau (1990 and 1995) developed a typology of defining the psychological contract as being either a transactional contract resulting from economic perceptions or a relational contract resulting from social exchange perceptions. This typology was later expanded to include the balanced psychological contract (Rousseau and Wade-Benzoni, 1994; Jamil et al., 2013) with overlapping features of both the relational and transactional types of the contract. Also, the transitional contract was defined as the contract that an employee has in an unstable work environment (Rousseau and Wade-Benzoni, 1994; Jamil et al., 2013). There are other authors that have also classified the psychological contract in a third dimension; where employees’ perception comprises of ideological rewards. This refers to an employees’ interest in pursuing a cause or principle (Thompson and Bunderson, 2003; Koskina, 2011).

There are inherent weaknesses in the classification of the psychological contract into types. First, there are no clear distinctions between the types of the psychological contract. Janssens et al. (2003) state that there have been inconsistencies in the definition of the contents of the types of psychological contract. While Rousseau (1990) states that items such as training and career development opportunities were interpreted as elements of transactional contracts, they were also classified as elements of relational contracts (Robinson et al., 1994; Coyle-Shapiro and Kessler, 2000). This inconsistent classification of the types of the psychological contract has
been elaborated on by Raja et al. (2004) who analysed the Psychological Contract Scale (PCS) of Millward and Hopkins (1998) and found that several items on the PCS were considered to be transactional content instead of relational content of the psychological contract (Raja et al., 2004). Second, Janssens et al. (2003) criticize the Rousseau (1995) and Rousseau and Wade-Benzoni (1994) classification of the psychological contract into four types (relational, transactional, balanced and transitional), stating that these types address only duration and performance and do not address the scope, focus and stability of the psychological contract (Janssens et al., 2003). Conway and Briner (2005) posit that the psychological contract should not be strictly defined within these classifications; a balance must be drawn, based on the understanding that there is not a clear distinction between the types of psychological contract.

Despite the lack of distinction among the types of the psychological contracts, Coyle-Shapiro and Kessler (2000) explain that in empirical research the distinctions between the types of the psychological contract have been used to create scales to study the content of the psychological contract. Jamil et al. (2013) support the view that categorising the psychological contract into types makes it possible to study the content of the perceptions. Coyle-Shapiro and Kessler (2000) also posit that the categorisation of the psychological contracts into types may be useful in providing insights into the different ways employees relate to their employers. The psychological contract types may be used to explain employees commitment to transactional obligations such as financial compensation for loyalty and employees commitment to their employers based on non-compensational factors, such as the willingness to belong to a team (Coyle-Shapiro and Kessler, 2000; Raja et al., 2004).

Jamil et al. (2013) explain that there are benefits in researching the distinct elements of the psychological contract by using the types of psychological contract to define those elements within the contract. The psychological contract types can be used to measure contents of employee perceptions and how different employees react to perceptions (Jamil et al., 2013). This research aims to leverage the benefits of classifying the psychological contracts into types, with the objective of applying a scale, the Psychological Contract Inventory (PCI) of Rousseau (2000). The PCI
classifies employees’ responses to a series of questions to determine the types of employees’ psychological contract. Hence, this research will be drawing on the aforementioned benefits, that the psychological contract can be studied using a scale to identify the differences in the psychological contract among employees.

Millward and Hopkins (1998) support the position of Rousseau (1989) that the economic exchange in the employment relationship leads to transactional content of the psychological contract, while the social exchange leads to the relational content of the psychological contract. An employee that expects only monetary compensation is considered as having an exchange relationship with their employer (Kickul and Liao-Troth, 2000). Although exchange personalities have transactional expectations and communal personalities have relational expectations, Kickul and Liao-Troth (2000) argue that these personality traits do not have an impact on the relational or transactional content of the psychological contract.

MacNeil (1985) states that the exchange relationship between parties creates relational and transactional perceptions between employees and employers. This division of the psychological contract into either relational or transactional psychological contract is in agreement with Robinson et al. (1994) who opine that the exchange relationship between parties is either a social exchange or an economic exchange. Hence, the social and economic exchange interactions lead to the creation of relational and transactional psychological contracts respectively. O'Donohue et al. (2007) describe this relational-transactional classification of the psychological contract as the primary classification of the content of the psychological contract. Rousseau (1995) developed the classification of the psychological contract into being either relational or transaction, later research expanded the classifications further to include a balanced contract, which was a combination of relational and transactional, as well as the transitional contract which is the contract a person has in an unstable work environment (Rousseau, 1995; Jamil et al., 2013).

Several authors (MacNeil, 1985; Guzzo and Noonan, 1994; Anderson and Schalk, 1998; Conway and Briner, 2005; Patrick, 2008) have written papers and carried out empirical research referring to the types of psychological contract. Hence, this study adopts the typology of the psychological contract with the aim of applying a scale to
measure the psychological contract of employees. This research excludes the transitional contract since it represents a situation where there is no form of obligation from either party (Hui et al., 2004). It is noteworthy that the psychological contract of a person does not only comprise of one type of perceptions. Hence, all individuals have multiple types of psychological contracts, the typology only refers to the prevalent perceptions in that person (Guzzo and Noonan, 1994). So if a perception has mostly transactional perceptions, they could also have some relational or balanced perceptions. The study also adopts the classification of the psychological contract into three types: relational, transactional and balanced.

2.3 Psychological Contract Types
The following is a detailed analysis of the types of psychological contract - relational, transactional and balanced. However, the research acknowledges that there are no absolute distinctions between the types of the psychological contract.

2.3.1 Relational Contracts
Relational contracts are broad in scope, have social and emotional elements and are mostly immeasurable, such as commitment and respect (Rousseau, 1990; Robinson et al., 1994; Guzzo and Noonan, 1994; Suazo et al., 2009). In the same vein, Shore and Tetrick (1994) state that the relational psychological contract is built on socio-emotional concerns, such as trust and fair dealing, and comprises of intangible perceived obligations. Relational contracts are open-ended, not time-bound (Millward and Hopkins, 1998), exceed a specific duration and require long-term commitment from both employers and employees (Bathmaker, 1999). Cavanaugh and Noe (1999) state that relational contracts rely on socio-emotional content such as trust and commitment. Likewise, Conway and Briner (2005) state that relational contracts focus primarily on "personal, socio-emotional and value-based economic resources" (p. 43). Conway and Briner (2005) state that, relational contracts involve trust, fairness, commitment, and perceptions of long-term mutually beneficial relationships. Millward and Hopkins (1998) posit that individuals with relational psychological contracts identify with and wholeheartedly accept the values of the organisation. In contrast, employees with transactional contracts identify with their knowledge, skill and experience, factors that make up the basis of their exchange relationship (Millward
Relational contracts are positively associated with job commitment, organisational commitment and expected job tenure (Rousseau, 1990; Millward and Hopkins, 1998; Raja et al., 2004).

2.3.2 Transactional Contracts
Transactional contracts are defined as contracts that have specific exchange terms that focus on the economic transaction between the employees and employers (McInnis et al., 2009). Transactional contracts have a specified and limited duration with known and specific outcomes (Bathmaker, 1999). A further explanation is that the transactional contracts comprise of perceived obligations that are specific, have a finite duration and are measurable in transactional terms, such as economic terms (Bathmaker, 1999; Conway and Briner, 2005). Transactional psychological contracts comprise tangible, measurable perceived obligations, the absence of which can create economic inequality (Shore and Tetrick, 1994). They are measurable in economic terms, can be monetized (Robinson et al., 1994) and given specific value. Transactional psychological contracts have specific values and usually result from the content of the legal contract (Conway and Briner, 2005). The individual with a transactional contract does not have job commitment, organisational commitment and is not usually interested in developing a long-term experience with the organisation (Rousseau, 1990; Millward and Hopkins, 1998; Raja et al., 2004). Hence, individuals with short-terms on their job contracts have transactional contracts, with the primary focus on the financial compensation received for the work done (Patrick, 2008). Rousseau (1990) summarises the characteristics of the transactional and relational psychological contracts, in the psychological contract continuum, in the Table below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Transactional Contract</th>
<th>Relational Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Economic, Extrinsic</td>
<td>Non-economic, socio-emotional, intrinsic</td>
</tr>
<tr>
<td>Timeframe</td>
<td>Closed-ended, specific</td>
<td>Open-minded, indefinite</td>
</tr>
<tr>
<td>Stability</td>
<td>Static</td>
<td>Dynamic</td>
</tr>
<tr>
<td>Scope</td>
<td>Narrow</td>
<td>Pervasive</td>
</tr>
<tr>
<td>Tangibility</td>
<td>Public, observable</td>
<td>Subjective, understood</td>
</tr>
</tbody>
</table>
2.3.3 Balanced Contracts

The classification of psychological contracts into relational and transactional have dominated most research since the mid-1970s (Conway and Briner, 2005). However, there are confusions as to the exact nature of the dichotomy between transactional and relational contracts (Raja et al., 2004). Despite the fact that the categorisation of the psychological contract into relational and transactional content has been largely based on empirical evidence, there are several factors that indicate that other categories of the psychological contract exist (Conway and Briner, 2005). Psychological contracts are neither wholly relational nor transactional, but are usually a combination of both, and the content of each is dependent on the individual, their experiences and changes over time (MacNeil, 1985; Guzzo and Noonan, 1994; Rousseau, 2001). Conway and Briner (2005) agree that psychological contracts comprise of both relational and transactional contents. However, the more a psychological contract is transactional the less relational it will be and vis-à-vis (Conway and Briner, 2005). There are several relational items in the contract that could also be classified as transactional and vis-à-vis, there is no certainty as to whether transactional and relational contracts are exclusively opposites of each other (Conway and Briner, 2005; Koskina, 2011).

Millward and Hopkins (1998) created the psychological contract scale (PCS) as a measure of the transactional and relational content of the psychological contract. In analysing the PCS content, Raja et al. (2004) derived a summarised version of the PCS as well as identified that several items in the PCS could be presented as both transactional and relational items in the psychological contract. Likewise, Conway and Briner (2005) state that some items in the PCS list of transactional items could be classified as relational items depending on the circumstances and time. Empirical evidence from Rousseau (2000) Psychological Contract Inventory indicates that the content of the contract includes a third type of the psychological contract called the ‘balance contract’. O'Donohue et al. (2007) elaborate that the balanced contract, also known as hybrid, is a “uniquely complex combination of transactional and relational terms” (p. 74) that focuses on a long-term employment relationship and is related to performance expectations. Conversely, Scheepers and Shuping (2011) state that the balanced psychological contract comprises of both specific and open ended
employment arrangements that is based on the economic condition of the employer organisation.

Rousseau and Wade-Benzoni (1994) explain that the content of the psychological contract depends on the employees’ perception of the “timeframe and performance requirements (p.4)” of their role. Hence, contracts with short-terms and specific performance measures are transactional contracts and contracts with short-terms and weak performance measures are transitional contracts. Also, contracts with open-ended timeframes and specific performance measures are balanced contracts while contracts with long-term timeframes and weak performance measures are relational contracts (Rousseau and Wade-Benzoni, 1994). Rousseau and Wade-Benzoni (1994) explain that the types of the psychological contract are not limited to the transactional and relational types.

The psychological contract types are dependent on the performance and duration of the employment. The transitional psychological contracts are reflective of a failed contract relationship, whereby there are no commitments for a long-term relationship and performance expectations and incentives are unknown (Rousseau and Wade-Benzoni, 1994). The transitional psychological contract is not actually a type of the contract, but is a contract that exists as a result of a changing work environment, where the employment relationship is coming to an end (Rousseau, 1995; Rousseau, 2000) and where there is no obligation from either party in the employment relationship (Hui et al., 2004). In the same vein, O'Donohue et al. (2007) state that transitional contracts are perceptions that exist because of an unstable work environment. This is supported by Jamil et al. (2013) who state that the transitional contract exist as a result of a breakdown in the employment relationship between employees and employers, such as in organisations that are downsizing staff, where trust and commitment have been eroded (Jamil et al., 2013).

The research design investigates the relationship between impact of employees’ perception of HR practices on the psychological contract types. The research controls for job characteristics and demographics of academics and explores the relationship between psychological contract types of academics and their employment type (full-
time and part-time), professional experience (long-term, medium-term and short-term experience on their current job) and their academic disciplines. This research adopts the typology of the Psychological Contract (PC) and studies three types of the psychological contract; relational, transactional and balanced contracts.

2.4 Human Resource Practices
The primary objective of human resource management is to design and implement ways of obtaining and maintaining employees that will aid in the success of the organisation (McDermott et al., 2013). Hence, “Human Resource Management (HRM) is a strategic, integrated and coherent approach to the employment, development and welfare of the people operating in organisations (p.4)” (Armstrong, 2003). HRM entails the management of people using specific predetermined practices to influence employees into fulfilling the organisation’s objectives (Balatbat, 2010). HRM involves the strategic coordination of policies, principles and practices aimed at eliciting, developing and managing the welfare of employees in an organisation (Armstrong, 2003).

The activities involved in implementing HRM strategies are referred to as HR practices (Marescaux et al., 2012). The aim of HR practices is to add value to the organisation through its employees using activities such as recruitment and selection and employee training (Marescaux et al., 2012). The essence of HR practices is to build and maintain the mutual relationship between employees and employers (Scheepers and Shuping, 2011). In the same vein, effective HR practices influence the interrelationship between employees and employers; this interrelationship is based on the principles of reciprocity and social exchange (Katou and Budhwar, 2012). HR practices send a clear message to employees about what employers expect of their employees and what the employees should expect in return from the employers (Scheepers and Shuping, 2011).

HR practices result in improved management service and improved benefits for employees, managers and customers (Schultz, 2010). Various authors (Armstrong, 2003; Suazo et al., 2009; Balatbat, 2010; Cordova, 2012; Katou and Budhwar, 2012; Marescaux et al., 2012) have defined the domains that comprise HR practices. Career
development, training, direct employee participation, development appraisals and mentoring are soft HR practices; because they help build employee’ perceptions that their employers are highly committed to the employment relationship (Marescaux et al., 2012). HR practices comprise of human and administrative practices; the human practices include the pre-employment activities of recruiters, hiring managers, fellow workers and senior managers (Suazo et al., 2009). While administrative HR practices include the implicit and explicit communications of promises that employees receive post-employment. These post-employment communication includes benefit package, training, personal guides and mission statements (Suazo et al., 2009).

HR practices are classified under four key areas: resourcing, development, reward and relations (Armstrong, 2003). These four key areas were adopted by Katou and Budhwar (2012) as an adequate classification of HR practices. HR practices are also classified into five; recruitment and selection, training and development, performance appraisal, compensation and benefits, and employee relations (Balatbat, 2010; Cordova, 2012). HR practices could comprise of 12 articles: communication, compensation, flexible work arrangements, incentives, involvement, participation, performance appraisal, promotion, recruitment, selection, training and development, and work design (Katou and Budhwar, 2012). Organisations apply HR practices before and after recruiting the employee. Pre-employment HR practices have to do with communication, recruitment and selection as well as compensation and benefits. While, post-employment HR practices comprise of selection, training and development, and compensation and benefits (Aggarwal and Bhargava, 2009).

HR practices form a significant part of an organisation’s business strategy and play a key role in the formation of employees’ psychological contract (Conway and Briner, 2005; Aggarwal and Bhargava, 2009). Various models of human resource practices have been created, including the matching model of human resource management, which is formed based on the dynamic nature of organisations, since they experience regular change. The matching model, also known as the Michigan model, states that organisation of human resource practices should be based on the organisational strategy and include the full human resource lifecycle. The human resource lifecycle comprises of four HR practices; selection, appraisals, development and reward (Armstrong, 2003). Hence, this study adopts the following four classifications of HR
practices: recruitment and selection, training and development, performance appraisal, and compensation and benefits. The research will investigate the effect of these HR practices on the psychological contracts types of academics as higher education employees.
Chapter 3 – PSYCHOLOGICAL CONTRACT IN HIGHER EDUCATION

3.1 Introduction
This chapter is a review of the existing literature, the development of the main concepts in this research, and the advancement of the theory that will lead to the research hypotheses. The first part of this chapter addresses the research gaps that this research aims to address, by showing a summary of the existing literature and elaborating on the gaps. The second part of this chapter is a detailed review of the main construct of the research, the effect of human resource practices on the psychological contract. Finally, this chapter concludes by showing how the hypotheses were formed on the basis of the literature.

3.2 Research Gap

3.2.1 Psychological Contracts in Higher Education
The existing research on the psychological contract in higher education primarily consist of research on the content of the psychological contract of academics, knowledge workers in scientific research and the psychological contract of students. Majority of the existing research adopt the classification of the psychological contract into relational and transactional contracts. While a few research take a balanced approach by accessing a third psychological contract type such as the balanced contract (Hrabok, 2003; O'Donohue et al., 2007) and the ideological contract (Koskina, 2011). The following table details a collection of research on the psychological contract (PC) in higher education.
<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Title</th>
<th>Context</th>
<th>PC Types</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| 1.  | Bordia et al. (2013)     | Promises from afar: a model of international student psychological contract in business education | International Students in Business Education | Relational and Transactional     | • Content of PC  
• Fulfilment and breach of PC  
• Lifecycle of PC formation                                                   |
• Content of the PC  
• Effect of the passage of time  
• Nature of the PC  
• Higher education context                                                   |
• Nature of the PC  
• Definition of student PC  
• Direction of PC relationship                                                 |
• Contents of employers’ PC                                                   |
• Contents of employers’ PC                                                   |
| 6.  | O'Donohue et al. (2007)  | The psychological contract of knowledge workers                      | Scientists in Australian Scientific Research Organisation | Relational Transactional and Balanced | • Content of the PC  
• Content of the PC of shorter and longer termed experienced knowledge workers |
• Contents of employers’ PC |
| 8. | Shen (2010) | University academics’ psychological contract and their fulfilment | Academics in Australia | Relational and Transactional | • Contents of PC  
• Impact of demographics  
• Fulfilment of PC  
• Impact of demographics on fulfilment |
| 9. | Spies et al. (2010) | Instrument to Measure Psychological Contract Violation in Pharmacy Students | Students in United States | | • The adoption of a psychological contract violation measure for students’ contract violation |
| 10. | Stanway et al. (2013) | Raising the curtain: Exploring dancers’ perceptions of obligation through the psychological contract lens | Professional Training Industry in Australia | Relational and Transactional | • Development of the PC  
• Content of the PC |
| 11. | Tipples et al. (2007) | University academics’ psychological contracts in Australia and New Zealand | Academics in Australia and New Zealand | Relational and Transactional | • Contents of employees’ PC  
• Contents of employers’ PC |
| 12. | Zhang et al. (2010) | A study on psychological contract breach, equity sensitivity and turnover intention of knowledge workers | Knowledge Workers | Relational and Transactional | • Relationship between PC and labour turnover |
This research was able to identify only one previous research on the psychological contract of higher education academics in Canada; the research by Hrabok (2003) on the psychological contract of experienced academics. This research aims at contributing to the knowledge on the types of psychological contract developed by academics in Canadian higher. However, unlike the research by Hrabok (2003), this research scope includes academics with short-term, medium-term and long-term employment, and across all age groups. This research is aimed at applying its findings to higher education academics generally and not restricted to Canada only.

Most existing research on the psychological contract have defined the types of psychological contract as relational and transactional, this research adopts the position of Conway and Briner (2005) that the psychological contract should be studied from a balanced perspective and not limited to the relational and transactional typologies. Hence, similar to the approach by Hrabok (2003), this research aims to investigate the psychological contract of academics from a balanced point of view by investigating the relational, transactional and balanced psychological contract.

3.2.2 Effect of HR Practices on Psychological Contract
The existing research on the relationship between HR practices and the psychological contract has been done across multiple context; industries and geographic locations and has been done on multiple dimensions of HR practices. However, the table below indicates that there is a gap on knowledge and studies on the relationship between HR practices and the psychological contract in the higher education sector.
<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Topic</th>
<th>Context</th>
<th>PC Types</th>
<th>HR Practice</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| 1.  | Aggarwal and Bhargava    | Reviewing the relationship between human resource practices and psychological contract and their impact on employee attitude and behaviours: A conceptual model | Relational and Transactional   | - Recruitment and selection  
- Learning and development  
- Rewards mgt.  
- Performance mgt. | - Recruitment positively impacts the relational PC  
- Learning and development develop both relational and transactional PC  
- Performance management impact both relational and transactional PC | |
| 2.  | Drost et al. (2002)      | Benchmarking training and development practices: a multi-country comparative analysis | Multiple countries             | Relational and Transactional | Training and development | - Training and development activities create relational perceptions |
- All PC are both relational and transactional  
- Impact of communications on the PC  
- PC changes over time |
<table>
<thead>
<tr>
<th></th>
<th>Authors and Year</th>
<th>Title and Context</th>
<th>Participants</th>
<th>Findings and Implications</th>
</tr>
</thead>
</table>
| 5. | Marescaux et al. (2012) | HR practices and HRM outcomes: the role of basic need satisfaction | Belgian employees | - Training and development
- Performance appraisals
- Training and development activities create relational perceptions
- Performance appraisals improve relational perceptions |
| 6. | Millward and Hopkins (1998) | Psychological Contracts, Organizational and Job Commitment | Multiple industries | Relational and Transactional
- Training |
- Performance appraisals
- Career development
- Performance-pay
- PC is an intermediary between HR practices and organisational performance
- Significant relationship between high investment in HR and the PC |
| 8. | Raja et al. (2004) | The impact of personality on psychological contracts | | Relational and Transactional
- Training
- Training influence relational PC |
| 9. | Scheel et al. (2013) | HR practices and their impact on the psychological contracts of temporary and permanent workers | Seven countries | - Performance-related pay
- Training
- Performance appraisals and compensation and benefits promote transactional perceptions
- Financial compensation and benefits promote both transaction and relational perceptions |
<table>
<thead>
<tr>
<th></th>
<th>Authors</th>
<th>Title</th>
<th>Country</th>
<th>Environment</th>
<th>Findings</th>
</tr>
</thead>
</table>
| 10 | Scheepers and Shuping  (2011) | The effect of human resource practices on psychological contracts at an iron ore mining company in South Africa | Iron ore industry in South Africa | Relational Transactional Balanced Transitional | • Training and development  
• Performance appraisals  
• Remuneration  
• Communication  
• Training & development promote relational PC  
• Performance appraisals promote relational PC  
• Remuneration promote both relational and transactional PC  
• Communication promote both relational and transactional PC |
| 11 | Schultz (2010)            | HR competencies at a merged Higher Education Institution             | South African Higher Education | Relational and Transactional             | • An indication of the knowledge, and skills needed in a competence based HR system |
| 12 | Suazo et al. (2009)      | Creating psychological and legal contracts through human resource practices: A signalling theory perspective | United States | Relational and Transactional | Recruitment  
• Training  
• Performance appraisals  
• Compensation Employee handbook  
• Recruitment positively impacts the relational and transactional PC  
• Compensation affect both relational and transactional PC  
• Training activities create relational contract |
| 13 | Yeh (2011)               | The effects of fairness perception of performance appraisal on psychological contract and organizational citizenship behaviour | Bank staff in Taiwan | Relational and Transactional | Performance appraisal  
• Performance appraisals have a positive effect on both the relational and transactional psychological contract types |
This research was unable to identify any research that studied the effect of HR practices on the psychological contract in higher education or any similar setting such as knowledge creation or research environments. Hence, this research is designed to fill that gap in knowledge by investigating four HR practices; recruitment and selection, training and development, performance appraisals and compensation and benefits. The research will investigate the effect these HR practices have on the relational, transactional and balanced psychological contract of academics in the higher education sector. This research aims at creating the knowledge to fill that gap.

3.3 Psychological Contract in Higher Education

There have been little empirical research done on the psychological contracts of academics, hence the following analysis is aimed at elaborating on the findings of existing literature and identifying the gap that this research aims to fill by investigating the types of psychological contract developed by academics.

3.3.1 Psychological Contract of Academics

The only known research on academics' psychological contract in Canada was done using the colloquial terms ‘College Instructors’ (Hrabok, 2003). The empirical research by Hrabok (2003), was on the psychological contract of academic staff at a Canadian university. The research focus was on the perceptions of academics with over 15 years working experience and over the age of 45. Lub et al. (2015) consider age as a factor that affects employees' perceptions and expectations at work, however, there have been inconsistent findings in the relationship between psychological contract types and age (Bal, 2015). This is indicative of the position of Cassar and Briner (2009), that the psychological contract exists based factors that exist within employee-employer relationship. Hence, the work experiences gained prior to the employees' current job and the age of the employees exist prior to the existing employee-employer relationship, cannot be factors that relate to the psychological contract. As a results, the research by Hrabok (2003) suffers the weakness of focusing on work experience employees gain from within and outside their current roles as well as focusing on age, which is not borne out of the employment relationship.
In the empirical research on the contents of the psychological contract of academics in a new university, Bathmaker (1999) collected data on the contents of the psychological contract through semi-structured interviews with 20 academic staff and 10 senior managers of the university representing the organisation. The research was aimed at identifying the extent of reciprocation and fit between employees and employers on the perceptions relating to work structure and experience (Bathmaker, 1999). Although, Bathmaker (1999) states that some might criticise the use of semi-structured interviews and qualitative analysis to determine the contents of the psychological contract, the absence of any quantitative data collection and analysis ensured that respondents were not responding within the confines of a survey, rather they expressed their individual perceptions. This is supported by Herriot et al. (1997) who state that the psychological contract is based on an individual’s perceptions and the use of surveys to gather and rate psychological contract limits the concept of the individual nature of the psychological contract. The research done by Bathmaker (1999) aims at identifying the extent of reciprocation between the parties. Hence, addressing another key concept that the contents of the psychological contract are based on an exchange and reciprocate relationship (Conway and Briner, 2005).

3.3.2 Type of Psychological Contract Developed by Academics
In a study on the mutuality and reciprocity in the psychological contract in a Latin American HEI, Dabos and Rousseau (2004) found that employers and employees had mutual agreements as to what they owed each other in the employment relationship; career advancement and promotion and increased research productivity. Tipples et al. (2007) identify the key contents of the psychological contract of academics as their interest in contributing to their academic discipline, the students, the institution and the society. Academics have a sense of professional obligation to improve the lives and learning experiences of their students while contributing to societal development and, in turn, expect their employers to reciprocate through fair management, mutual understanding and improved communication with academic staff (Tipples et al., 2007). Krivokapic-Skoko and O'Neill (2008) agree with Tipples et al. (2007) and state that academics are committed to the development of their academic disciplines, students and the wider society.
The studies by both Krivokapic-Skoko and O'Neill (2008) and O'Neill et al. (2010) arrived at similar lists of employee obligations to the university and the university’s obligations to academics. Both used a triangulation of research methods. The qualitative analysis of focus group discussions and factor analysis of cross-sectional survey data to investigate the two primary variables, the university’s obligation to the academics and the academics’ obligations to the university (Krivokapic-Skoko and O'Neill, 2008; O'Neill et al., 2010). The limitation of Krivokapic-Skoko et al. (2009) findings is that they present the psychological contract from a unilateral perspective; that the psychological contract is based on the employee beliefs only. This contradicts the writings of the majority of scholars, that the psychological contract is based on an exchange relationship between employees and employers (Herriot et al., 1997; Guest and Conway, 2002; Conway and Briner, 2005).

In a mixed methods empirical study on an Australian university to explore the formation, contents and effect of the psychological contract, Krivokapic-Skoko and O'Neill (2008) collected data on both the employees’ and employers’ perceived obligations, thereby adopting the exchange concept (Herriot et al., 1997; Raja et al., 2004; Conway and Briner, 2005). The research identified eight obligations the university had to its academic staff: fair treatment in promotion, staff development and support, good management and leadership, work-life balance, reward performance and good workplace relations (Krivokapic-Skoko and O'Neill, 2008). The three academic obligations to the university were: to meet their academic expectations, commitment and to work above and beyond normal expectations (Krivokapic-Skoko and O'Neill, 2008). These findings were reinforced by O'Neill et al. (2010), which found that academic perceptions went beyond the normal work place expectations to include a perception to maintain academic freedom, the need for academics to be seen as professionals in their contribution to teaching, student development, contribution to their academic discipline and the university’s development.

In the empirical research aimed at detecting the nature of the psychological contract among academics in higher education, Shen (2010) applied the PCI along with other qualitative methods to draw up a list and determine the content of the psychological contract among academics. The research compiled 21 obligations and concluded by classifying the psychological contract of academics into the relational and transactional psychological contract types. The typologies of relational-transactional
psychological contract types have been found to be a bit inadequate for academics in higher education (Hrabok, 2003), considering that the contents of the psychological contracts of academics differ from the contents of employees across other industries (Shen, 2010). In addition, Hrabok (2003) proposed that the balanced psychological contract should be used in defining the psychological contract of academics.

The perception academics have on contributing to knowledge and their academic discipline are not perceptions that exist only within their employment relationships. These are perceptions that relate both to their career development within their current employment and career development outside their current employment (Rousseau, 2000). Their contribution to knowledge and their academic discipline would benefit academics in their internal career development and improve their external marketability.

Employees with a mostly balanced psychological contract are considered as team players (Rousseau, 1995; Janssens et al., 2003), they have open-ended relationship with their employers, while they contribute to the learning and development of their employers they perceive that the employers contribute to their own learning and development (Rousseau, 2000). These traits accurately define the perceptions and personalities of higher education academics and knowledge workers. Academics have perceptions that are mostly ideological and based on the development of academic discipline and institution (O'Donohue et al., 2007).

In comparing the content of the academics' psychological contract (Tipples et al., 2007; Krivokapic-Skoko and O'Neill, 2008; Krivokapic-Skoko et al., 2009) to the PCI, this research determined that the contents are mostly related to the balanced psychological contract. PCI provides several perceptions that employees with balanced psychological contract have. These perceptions include the perceptions building contacts that are external to their current employment, enhancing their external marketability, enhancing their internal value to their current employers and developing internal career opportunities (Rousseau, 2000). These perceptions align with the content of the psychological contract of academics that have been defined by previous studies.
Hence, this research hypothesises that higher education academics have a balanced psychological contract this enables them focus on the collective goal of the higher education institution, academic discipline and knowledge instead of their personal benefits.

*Hypothesis 1: Academics are more likely to develop balanced psychological contracts rather than transactional or relational psychological contracts.*

This research also posits that human resource practices can be planned and executed in a manner that further strengthens or changes the psychological contract of academics. Hence, this research is aimed at identifying the specific HR practices that could be applied to strengthen or change the psychological contract of academics.

The Psychological Contract Inventory (PCI) of Rousseau (2000) has been widely used by multiple researchers (Raja et al., 2004; Dabos and Rousseau, 2004; Conway and Briner, 2005; Shen, 2010; Scheepers and Shuping, 2011) to determine the types of psychological contract of employees. The PCI enables respondents respond to a series of questions on their perceptions of what they believe they owe their employers and what their employers owe them in return. The quantitative analysis of the data collected by the PCI is used to determining the types of psychological contract of respondents. Hence, the data collected in the PCI is analysed by applying the formula:

$$PC = \max(PCR; PCT; PCB; PCTR)$$

Where:
- $PC$ – Psychological Contract
- $PCR$ - Mean values of the respondents’ relational psychological contract
- $PCT$ - Mean values of the respondents’ transactional psychological contract
- $PCB$ - Mean values of the respondents’ balanced psychological contract
- $PCTR$ - Mean values of the respondents’ transitional psychological contract

The greatest mean value between the psychological contract types defines the psychological contract type of employees (Rousseau, 2000; Scheepers and Shuping, 2011).
3.4 Effect of the Human Resource Practices on the Psychological Contract

The psychological contract is made up of employees’ perceptions of what they owe their employers and what their employers owe them in return (Rousseau, 1990; Conway and Briner, 2005; Bal, 2015). The reciprocal obligations arise out of both explicit promises from employers and the implicit perceptions employees develop as a result of communicating with their employers (Tomprou and Nikolaou, 2011). Explicit promises are made to employees via HR practices, such as, training and development programmes that create the perceptions that the employers have a long-term plan and future obligations towards employees (McDermott et al., 2013). The reciprocal nature of people means that employees will feel a mutual sense of obligations towards the organisation, thereby developing their psychological contract (Rousseau, 1995). Proper management of the reciprocal perceptions and the psychological contract would lead to increased commitment and dedication to the organisation and improve performance and output (McDermott et al., 2013).

Despite the implementation of various HR strategies and management practices, the primary medium that aid organisational success is the psychological contract of employees (Rousseau, 1995). Hence, instead of organisations focusing on the combination of HR practices that would enable increases in commitment from employees, a more productive object would be to develop practices that build the psychological contract of employees (McDermott et al., 2013). McDermott et al. (2013) posits that there is strong evidence to indicate that HR practices influence the psychological contract of employees which in-turn influences the employees’ commitment, attitude and behaviours.

The psychological contract of employees is the link between HR practices and organisational performance (Raeder et al., 2012). The type of psychological contract employees has would determine their reaction to HR practices and their levels of commitment to organisational success. The HR practices either build the economic-related obligations employees have to their employers or build the social relationship obligations (McDermott et al., 2013). The economic-related obligations, known as the transactional psychological contract is built on employees’ perceptions of financial compensation for work done. This is based on the perception of a short-term relationship. On the contrary HR practices that build long-term social commitments,
relational psychological contract, are practices that involve recognition for commitment, long-term obligations, financial and non-financial compensation (McDermott et al., 2013).

There is minimal empirical evidence on how the changes in HR practices affect the psychological contracts of employees (Scheepers and Shuping, 2011). However, in the survey research on the relationships between commitment-based HR practices and the psychological contract of employees. Employees have the perception that when their employers have HR practices that focus primarily on extensive and general skilled based training as well as extensive compensation and benefits packages, then the HR practices are considered to be commitment-based HR practices (Uen and Chien, 2010).

Employees’ perception of commitment-based HR practices positively influences their relational psychological contract and negatively influences their transactional psychological contract (Uen and Chien, 2010). The formation of the relational psychological contract depends on employees’ perceptions that their employers’ have long-term commitment to the employee. Specific HR practices, such as salaries, fringe benefits and work conditions, play a major role in shaping employees’ commitment and psychological contract (Uen and Chien, 2010; Scheepers and Shuping, 2011). HR practices that enhance employees’ role equally enhance employees’ perception of commitment and their leads to strengthening the relational psychological contract of employees (Uen and Chien, 2010).

**Effect of Specific HRP on the Psychological Contract**

Human Resource practices are communications from employers to employees (Guzzo and Noonan, 1994; Aggarwal and Bhargava, 2009) and play a critical role in creating the psychological contract of employees (Aggarwal and Bhargava, 2009). Scheepers and Shuping (2011) empirical research investigated the types of the psychological contract of employees and the effect of specific HR practices on each of the psychological contract types. The research applied a cross-sectional survey, comprising both the Psychological Contract Inventory (PCI) (Rousseau, 2000) and the HR Practice Scale (Geringer et al., 2002) to collect data on the types of psychological contract and employees’ perception of their employers’ HR practices. Scheepers and
Shuping (2011) applied the Analysis of Variance (ANOVA) to identify the effect HR practices had on the psychological contract. The research by Scheepers and Shuping (2011) faced a weakness because data was collected at a single point in time using cross-sectional surveys to determine cause and effect. Yet, the cross-sectional survey cannot be used to determine if a causal relationship exists between variables (Lub et al., 2015), in this case between HR practices and the psychological contract. Scheepers and Shuping (2011) research finds that each psychological contract type was influenced differently by specific HR practices. The following is a detailed analysis of how each of the HR practices within the scope of the research, influences the psychological contract of employees.

3.4.1 Recruitment and Selection
One of the central roles of human resources management is to ensure that organizations are adequately staffed and that employees are positioned in the right offices to maximize strength and efficiency (Balatbat, 2010). Recruitment and selection entails HR planning to ensure that managers plan their resource needs in advance (Noe et al., 1997). The HR planning activities include forecasting to determine which business units within the organisation require employees, the quality of the required employees and if the vacancies can be filled internally by existing employees or externally from the public (Noe et al., 1997; Balatbat, 2010).

The objective of the recruitment and selection HR practice is to identify and select an adequate combination of human resources that will contribute towards the organisation’s objectives. As a result, in countries like the US, Australia and Canada, the employment interview, assessment of technical skills and the review of relevant experience are considered as the most important factors in recruitment and selection (Von Glinow et al., 2002). Recruitment and selection, enables the first contact between prospective employees and the employing organisations. The perceptions created at this point of initial interaction forms the basis for the formation of the psychological contract and perceptions of what employees and employers believe they owe each other in the employment relationship.
The process of recruitment and selection involves all HR activities including planning, forecasting and execution, that fill a vacancy in an organisation (Balatbat, 2010). After the internal or external publication of the vacancy, HR reviews applications to determine the candidates that can proceed to the next stages of the recruitment process. The employers determine the adequate tests for candidates through interviews, reference and background checks verify the information received from the candidates and select the best-fit for the role (Balatbat, 2010). The successful candidates are placed into the required positions (Noe et al., 1997; Balatbat, 2010). The process of recruitment and selection in higher education is modelled after the process in the corporate world. Hence, the higher education institutions strive to ensure that HR planning; forecasting and recruitment follow the same standards and practices that are found outside the academia (Hill, 2000).

Recruitment and selection are HR practices that affect the behaviour of employees at work, by enabling employees to understand the nature of their relationship with their employers (Rousseau and Wade-Benzoni, 1994; Rousseau, 2001). This understanding commences during pre-employment contact, communication, and the recruitment and compensation negotiation process. Hence, the employment relationship begins during the recruitment process (Rousseau, 2001; Aggarwal and Bhargava, 2009).

The initial perceptions employees create during the recruitment process will determine their expectations and the way they would react to perceived breaches in the psychological contract. This is especially so because during the recruitment phase employers frequently present their organisations in a better light than they actually are (Aggarwal and Bhargava, 2009), thereby creating perceptions of loyalty, equity and long-term commitment in the minds of employees (Suazo et al., 2009). The recruitment and selection phase is the point where the social exchange, between employees and employers, is established, thereby giving rise to the relational psychological contract based on relational perceptions (Rousseau, 1990; Robinson et al., 1994; Rousseau, 1995; Millward and Hopkins, 1998).

The recruitment process is highly reliant on the communication the organisation sends out to inform the public of the available role. This communication creates perceptions
in the minds of prospective employees about the exact nature of the prospective employers. The communication, selection of candidates and the screening of candidates for the job role creates further perceptions in the minds of prospective employees. The manner in which the organisation carries out the recruitment, the promises they make to candidates during the recruitment phase and the documented communication they give out all build perception in the minds of prospective employees.

The implicit and explicit promises made by the employer during the recruitment phase as well as the promises of financial compensation and work place benefits either create perceptions of short-term or long-term commitment (Suazo et al., 2009). During the recruitment and selection process, employees make up their minds if they will be willing to commit themselves to these organisations in the long run or if the employment relationship will be a short relationship. The communications and the recruitment and selection process plays an important role in the early perceptions new employees have about the employers.

New employees in the academia have mostly relational perceptions (O'Donohue et al., 2007). Hence, they have perceptions of job security for at least the term agreed during the recruitment process. They perceive that employers will fulfil both the legal and psychological contract; as a result, they start their new roles with relational perceptions. Experience over time and the application of other HR practices, such as training, will either further strengthen, weaken or change the relational psychological contract. An effective recruitment and selection process positively influences the creation of a relational psychological contract (Aggarwal and Bhargava, 2009). Therefore, this research hypothesises that employees’ perception of the recruitment and selection HR practice positively affects the relational psychological contract of employees.

Hypothesis 2: Employees’ perception of recruitment and selection has a positive effect on the development of a relational type of psychological contract.

Although the academics’ perception may be primarily relational at the start of a new employment, experience over time and the application of other HR practices, such as
performance appraisals, changes in benefits and training and development, could further strengthen the relational psychological contract or change the employees' perceptions about the employment relationship. So, even though an academic may start an employment with a relational psychological contract, the contract type and contents could change over time. This research will investigate the psychological contracts of academics and how HR practices influence the contract.

3.4.2 Training and Development
Training involves activities aimed at improving the skills and knowledge of employees (Marescaux et al., 2012). The primary objectives of training and development include rewarding employees for performance and loyalty, improving employees' technical skills, improving interpersonal skills, remedying poor performance and helping employees understand the business (Drost et al., 2002). Training and development is a key HR practice in building social relationships between employees and employers based on the perception of commitment (Drost et al., 2002; Marescaux et al., 2012).

Social interactions between employees and employers are part of the social relationship that comprises the relational psychological contract; such social relationship create personal commitment and loyalty to the organisation. Hence, training and development allows employees and employers interact socially in an environment that is not strictly a work-based environment. This improves interactions and social relationships between employees and employers. In addition, employers use training as a tools for rewarding loyalty, which makes employees feel that their employers are also committed to the relationship (Drost et al., 2002).

Training and development activities create relational contract by creating perceptions of autonomy and independence among employees (Marescaux et al., 2012). This is because employees feel that they are valued by their employers and therefore become more committed to the organisation (Suazo et al., 2009; Marescaux et al., 2012). Career development opportunities given to employees build long-term commitment among employees and strengthen commitment and trust for their employers (Suazo et al., 2009; Marescaux et al., 2012). These findings agree with the findings of Scheepers and Shuping (2011) that training and development HR practices influence
the creation of relational psychological contracts. The findings state that the more an organisation invests in the training of their employees the more employees have relational contracts and increased their commitment and performance at work (Scheepers and Shuping, 2011).

When there is no longer job security, employers use training and development programmes to mend the relationship with their employees. In such cases, employers focus on the ability of employees to be employable as an option to providing job security (Coyle-Shapiro and Kessler, 2000). The implication of this is that when employers cannot guarantee job security they apply training and development as a tool in convincing their employees that there is a valuable employment relationship in place. Hence, training makes employees feel employable even if there is no job security in their current employment (Aggarwal and Bhargava, 2009).

Since the psychological contract arise from an individual's interpretation of the promises, obligations and commitments to an employer, employees interpret HR practices differently (Rousseau and Wade-Benzoni, 1994). However, the longer an HR practice has been in place in an organisation the more likely it will have a similar effect on employees (Rousseau and Wade-Benzoni, 1994). In addition, HR practices such as skilled-based training create the perception that the organisation is committed to the professional development of employees, thereby building their relational perceptions (Rousseau, 2001).

Training is also categorised as an HR practice that builds the transactional contract of an employee (Millward and Hopkins, 1998). However, Raja et al. (2004) analysed the research by Millward and Hopkins (1998) and reclassified training as an HR practice that builds the relational psychological contract. Scheel et al. (2013) agree with Raja et al. (2004) and state that training and development promotes relational perceptions, as long as the training and development is focused on building employee skills (Scheel et al., 2013). As a result, while skilled-based training develops relational perceptions, non-skilled based training would create transactional perceptions. Given that training and development has been categorised as an HR practice that builds both relational and transactional psychological contracts, this research hypothesises that the
employees’ perception of the training and development HR practice has a positive effect on the development of both the transactional and relational psychological contract of employees.

**Hypothesis 3:** Employees’ perception of training and development has a positive effect on the development of a transactional type of psychological contract;

**Hypothesis 4:** Employees’ perception of training and development has a positive effect on the development of a relational type of psychological contract.

### 3.4.3 Performance Appraisals

Performance appraisals are a fundamental part of HR management since it involves the evaluation of employees’ performance (Maley, 2009). Specifically, performance appraisals evaluate employees’ contribution to the organisation, within a specific timeframe or for stated tasks or assignments (Yeh, 2011). Performance appraisal system are designed to assess employees in four key areas: customer relations, financial management, innovation and growth (Schultz, 2010). The aim of performance appraisals is to get positive or negative feedback from employees. Whichever is the case, appraisals open the communication lines between employees and employers (Marescaux et al., 2012). The outcome of the appraisals are used to improve the working environment and improve the perceptions of autonomy of employees, thereby increasing employees commitment and loyalty to their employers (Marescaux et al., 2012).

Performance appraisals involves employers explicitly defining employees’ performance targets and evaluating employees' performance against their set targets (Schultz, 2010). Measuring performance leads to development opportunities for employees which will lead them to meet and beat the expected returns (Schultz, 2010). Since performance appraisals assess employees’ past performance, organisations should embrace the performance management approach, which blends the past operation of employees along with future tasks (Armstrong, 2003). The essence of assessing both the past and future is to plan improvement strategies, invest in employee development through the use of other HR practices, such as training and development and compensation for performance (Armstrong, 2003).
The feedback employees receive from the appraisals affects their satisfaction with the performance appraisal practice. Detailed feedback on appraisals increases employee satisfaction of the appraisal process, while inadequate feedback from employers builds distrust and greater dissatisfaction with the HR practices of employers (Maley, 2009). The application of performance appraisals as an HR practice does not exist in isolation from other HR practices (Maley, 2009) and usually relates directly to training and development (Armstrong, 2003) and compensation and benefits (Balatbat, 2010).

There is no agreement in the literature on the type of perceptions employees build in response to performance appraisals HR practices. Existing research indicates that new and experienced employees react differently to performance appraisals (Rousseau, 2001). While new employees are more likely to welcome the practice, experienced employees are more unlikely to support the practice. As a result, performance appraisals would build relational perceptions among new employees and build transactional perceptions among experienced employees. In the survey research on the relationship between performance appraisals and the psychological contract, Yeh (2011) finds that performance appraisals have a positive effect on both the relational and transactional psychological contract types depending on how fair employees consider the performance appraisals to be. On the contrary, Scheel et al. (2013) research on the effect of HR practices on the psychological contract of employees finds that performance appraisals promote transactional perceptions.

Academic faculty play a central part in the economic development of a nation. Hence, there has been an increasing need for governments and managers of HEI to get involved in performance and the measurement of performance of academics in Higher Education (Alexander, 2000). Performance appraisals ensure that the institution, its students and the larger society can benefit from the high skills and knowledge available through academics (Alexander, 2000). However, performance appraisals among academics is a relatively new practice which has been introduced as a consequence of the need for governments and financiers of HEI to ensure academics perform at optimum and the institution is able to fulfil its role in overall economic growth (Flaniken, 2009). Performance appraisals are not welcome among academics, as they prefer to be assessed on their contribution to knowledge through research and
teaching (Flaniken, 2009). If academics approach performance appraisals with scepticism and do not support the process, it is likely that performance appraisals will promote transactional perceptions among academics.

Considering existing research findings that performance appraisals build relational perceptions and the deduction from the research by Flaniken (2009) that appraisals build transactional perceptions among academics, this research hypothesises that employees’ perception of the performance appraisals HR practice has a positive effect on both the relational and transactional types of psychological contract of employees.

*Hypothesis 5: Employees’ perception of performance appraisals has a positive effect on the development of a relational type of psychological contract;*

*Hypothesis 6: Employees’ perception of performance appraisals has a positive effect on the development of a transactional type of psychological contract.*

### 3.4.4 Compensation and Benefits
While HR management is aimed at using financial compensation to motivate employees, existing research have identified several job characteristics that have significant impact on whether or not academics are motivated by financial compensation and the extent to which they will be motivated. Faculty employment level (instructor, assistant professor etc.), tenure track and academic discipline (education, natural sciences, human sciences etc.) influence academics reaction to compensation and benefits (Hemmasi et al., 1992). In addition, education qualifications, gender, years of experience, employment level and demographic characteristics influence the academics reactions to the financial compensation and benefits they receive (Rasheed et al., 2010). These job characteristics and demographic factors are not within the control of HR management and are not considered as existing within the psychological contract employment relationship. Hence, to better understand the factors that determine the development of the psychological contract, this research aims at studying the impact of compensation and benefit, as HR practices, on the psychological contract.

Financial compensation plays an important role in the employment relationship; it shows commitment from employees and employers and it defines the psychological
contract expectations (Lucero and Allen, 1994; Aggarwal and Bhargava, 2009). Organisations use compensation and benefits to structure the type of relationship they want to have with their employees. To create the perception of a long-term relationship with employees, employers offer family benefits and investment programmes like share options (Aggarwal and Bhargava, 2009). In many countries compensation and benefits are not adequately used as incentives for employees, therefore, they do not pay much emphasis on employee compensation and benefits as a factor in HR practices (Von Glinow et al., 2002).

The creation and offer of benefits to employees is a tool that is capable of making employees more dedicated and aids in obtaining and retaining a dedicated workforce (Lucero and Allen, 1994). Compensation and benefits is a pre- and post-employment HR practice that benefits all employees, new and experienced. Kidder and Buchholtz (2003) state that as employees receive benefits that promote job security their psychological contracts become relational. Conway and Briner (2005) support this position, that when there is a value-based reward for performance or commitment, compensation and benefits promote relational perceptions of employees. In contrast, financial compensation and benefits promote both transactional and relational perceptions (Scheel et al., 2013).

HR practices are not only written, verbal or even promises to employees at the recruitment stage; they also include reward and benefits employees receive early in their new roles (Suazo et al., 2009). If an employee receives additional monetised rewards, their psychological contract becomes more transactional and as they gain more non-work benefits such as recognition, they become relational (Suazo et al., 2009). For instance, an employee on an international assignment believes that the assignment is evidence that the employer trusts them and their contribution to the organisation. Hence, the employee feels a sense of mutual commitment and trust, which leads to an increase in relational perceptions, such as long-term employment and recognition (Guzzo and Noonan, 1994). The employee’s psychological contract changes as a result of their interpretation of the HR practices through benefits received on the new assignment.
Compensation and benefits relate to both relational and transactional psychological contracts. However, this research hypothesises that employees’ perception of compensation and benefits HR practice positively influences the development of relational psychological contract of academics as higher education employees.

Hypothesis 7: Employees’ perception of compensation and benefits has a positive effect on the development of a relational type of psychological contract.

This study aims at providing empirical evidence to show the effect employees’ perception of HR practices have on the psychological contract of academics as employees of higher education institutions generally.

3.5 Theoretical Framework
This research has analysed key issues in the previous literature and adopted the psychological contract as a framework for further understanding the employee-employer relationship within the higher education context. The primary aims of this research are to understand the types of psychological contract developed by academics and the effect employees’ perception of human resource practices have on the psychological contract of academics as higher education employees. The overall subject matter of this research is the development of a further understanding of the employment relationship between employees and employers within the higher education context. Previous research has tried to show a relationship between HR practices in organisations and psychological contract of employees. This research aims at hypothesising on previous research findings and testing those hypotheses within the higher education context.
3.5.1 Theoretical Model

![Diagram of Employees' Perception Human Resource Practices and Academics' Psychological Contract Types]

Figure 1: Effect of HR practices on the psychological contract of academics

Figure 1 represents the conceptual framework for this research and the justification for the relationships mentioned in each hypothesis. The theoretical bases for the research questions and hypothesis in this research are detailed below. Hypothesis 1 (H1) indicates that academics are more likely to have a balanced psychological contract, while Hypotheses 2 to 7 (H2-7) indicate that employees' perceptions of the four human resource practices influence the psychological contract of academics as higher education employees.

Psychological Contract Theory

The theoretical framework of this research derives from specific concepts within the psychological contract framework. First, the psychological contract exists on a reciprocal exchange relationship between employees and employers (Rousseau, 1989; Rousseau, 1995; Conway and Briner, 2005; Richard et al., 2009; Bal and Vink, 2011). The perceptions of employees rely on what they give their employers and what they perceive their employers owe them in return. Second, the psychological contract exists between employees and employers as a result of the employment relationship (Guest and Conway, 2002; Guest, 2004; Conway and Briner, 2005; Conway and Briner, 2009; Richard et al., 2009). Hence, factors that are external to that relationship are not within the scope of the psychological contract. Third, employees have various demographic backgrounds and job characteristics, however, these are not factors that exist within the employment relations (Robinson, 1996; Raja et al., 2004; Conway and Briner, 2005; Conway and Briner, 2009). Four, although there is no clear distinction between the types of the psychological contract (Janssens et al., 2003; Conway and Briner, 2005), psychological contract can be scaled and measured using typologies.
(Coyle-Shapiro and Kessler, 2000; Raja et al., 2004; Jamil et al., 2013). Fifth, HR practices are activities that employers use to enable employees fulfil their roles within the organisation. Finally, employees’ perception of HR practices influences the psychological contract of employees.

**Psychological Contract Types**

Scholars of the psychological contract theory (MacNeil, 1985; Guzzo and Noonan, 1994; Anderson and Schalk, 1998; Conway and Briner, 2005; Patrick, 2008) regularly classify the psychological contract into types. The most commonly defined types of the psychological contract are the relational, transactional, balanced and transitional psychological contracts. The relational psychological contract, exists based on perceptions of a social relationship between employees and employers (Rousseau, 1990; Rousseau, 1995). The transactional psychological contract exists based on perceptions of an economic employment relationship (Rousseau, 1990; Rousseau, 1995). While the balanced psychological contract includes traits from both the relational and transactional contracts (Rousseau and Wade-Benzoni, 1994; Jamil et al., 2013). The forth type of the psychological contract is the transitional contract, this exists in environments where the employment relationship is unstable or coming to an end (Rousseau, 1995; Jamil et al., 2013). This research adopts the relational, transactional and balanced psychological contract. The few existing research on the types of psychological contract of academics in the higher education sector state that academics have relational (Shen, 2010) and balanced psychological contracts (Hrabok, 2003). Hence, the research hypothesised that academics are more likely to develop balanced psychological contracts.

**Effect of Human Resource Practices on the Psychological Contract**

HR practices communicate the intentions of employers, and the expectations they have of their employees in fulfilling the organisational objectives. HR practices also build perceptions among employees and indicate commitment to the employment relationship (Marescaux et al., 2012). Hence, HR practices influence the formation of employees’ psychological contract (Conway and Briner, 2005; Aggarwal and Bhargava, 2009). This research investigates employees’ perception of the HR practices of their employers and the effect each of the HR practices have on the psychological contract of employees. The HR practices within the scope of this
research are recruitment and selection, training and development, performance appraisals, and compensation and benefits.

The recruitment and selection HR practices enables employees to form their initial perceptions of the employers, what they aim to give and expect in return from the new or renewed employment relationship (Rousseau, 2001; Aggarwal and Bhargava, 2009). Hence, the recruitment and selection HR practices establish the feeling of commitment and socio-emotional perceptions on the part of employees and therefore has a positive effect on the relational psychological contract of employees (Suazo et al., 2009). In effect, this research hypothesises that employees’ perceptions of the recruitment and selection HR practices of their employers have a positive effect on the relational psychological contract of employees.

The training and development HR practices build employees’ skills and knowledge; however, it also aids in the building of perceptions of autonomy and independence on the part of employees and indicates that employers are committed to the employment relations (Suazo et al., 2009; Marescaux et al., 2012). This is especially so in cases where the design of the training and development is to build employees’ skills for their current job (Scheel et al., 2013). The training and development HR practices have been known to influence both the relational and transactional psychological contracts. Hence, this study hypothesises that employees’ perception of training and development HR practices has a positive effect on both the transactional and relational types of psychological contract.

The performance appraisal HR practices enable feedback in the employment relationship, usually this feedback leads to corrective action, improvements in the working relations and further creates perceptions of independence and autonomy on the part of employees (Marescaux et al., 2012). The absence of feedback from employers to employees breeds dissatisfaction among employees (Maley, 2009). However, performance appraisals provide feedback, which usually relates to compensation and benefits HR practices and enables transactional perceptions among employees (Yeh, 2011; Scheel et al., 2013). The performance appraisals HR practices are known to positively affect both transactional and relational psychological contracts, as a result, this research hypothesises that employees’ perception of
Performance appraisals have a positive effect on both the relational and transactional types of psychological contract.

Financial compensation and benefits go a long way into defining the relationship between employees and employers, as well as defining the nature of the psychological contract of employees (Lucero and Allen, 1994; Aggarwal and Bhargava, 2009). Compensation and benefits could create transactional perceptions in employees (Scheel et al., 2013). However, the structure and content of employees’ compensation and benefits could indicate a long-term relationship and thereby relate to the relational psychological contract of employees (Conway and Briner, 2005). Given that, the compensation and benefits HR practices could relate to both transactional and relational psychological contract, this research takes a position and hypothesises that compensation and benefits positively influence the relational psychological contract of employees.

3.5.2 Deriving the Hypotheses from the Literature

The literature review on the existing empirical work on the psychological contract in higher education indicated that there were gaps in the literature. The following is a summary of the research hypotheses and the related literature that led to the development of the research hypotheses.

**H1:** Academics are more likely to develop balanced psychological contracts rather than transactional or relational psychological contracts.

The existing literature on the types of psychological contract developed by academics indicated that academics have perceptions that are both internal, within the current employment (to students and the institution) and external (to knowledge, the discipline). This is indicative that academics mostly develop balanced psychological contract. In addition, there is a gap in the literature on the types of psychological contract developed by academics.

**H2:** Employees’ perception of recruitment and selection has a positive effect on the development of a relational type of psychological contract.
A critical review of the existing literature on the effect of recruitment and selection HR practices on the psychological contract of employees indicated that this HR practice develop relation perception among employees. Hence, the research aimed at testing these findings within the context of higher education and thereby developed the hypothesis 2

_**Hypothesis 3:** Employees’ perception of training and development has a positive effect on the development of a transactional type of psychological contract;_

_**Hypothesis 4:** Employees’ perception of training and development has a positive effect on the development of a relational type of psychological contract._

The literature on the effect of HR practices on the psychological contract of employees indicated that training and development HR practices developed both transactional and relational perceptions among employees outside the academia. Hence, this research aimed at investigating these two outcomes within the higher education context.

_**H5:** Employees’ perception of performance appraisals has a positive effect on the development of a relational type of psychological contract;_

_**H6:** Employees’ perception of performance appraisals has a positive effect on the development of a transactional type of psychological contract._

The literature on the effect of HR practices on the psychological contract of employees indicated that performance appraisals HR practices developed both transactional and relational perceptions among employees outside the academia. Hence, this research aimed at applying empirical data to investigate these two outcomes within the higher education context.

_**H7:** Employees’ perception of compensation and benefits has a positive effect on the development of a relational type of psychological contract._

The literature on the effect of HR practices on the psychological contract of employees indicated that compensation and benefits HR practices developed relational perceptions among employees. However, few research has tested this position within the higher education context. Hence, this hypothesis was developed to investigate the effect of compensation and benefits on the psychological contract of academics.
The next chapter, research methods, outlines the research philosophy, research design, the measurement instruments, research settings and analytical approaches that has been applied to answer the research questions and test the related hypotheses aimed at fulfilling the objectives of this research.
Chapter 4 – RESEARCH METHODS

4.1 Introduction
This chapter commences by outlining the research ontology and the related epistemological and methodological approach. The chapter includes a detailed description and justification of the research design, the quantitative analytical strategies adopted and the methodological fit that shows the relationships between the research questions, hypotheses, data collection methods, constructs, analysis methods, as well as the theoretical contribution of the research. The chapter includes a description of the research setting, within the higher education context, ethical issues relating to confidentiality, anonymity and data management. Finally, this chapter concludes with a summary presentation of the descriptive statistics and reliability scales.

4.2 Research Philosophy
The research philosophy is “a set of assumptions about the social world and what constitute proper techniques and topics for inquiring into that world (p. 31)” (Punch, 2006). Research philosophy is the set of beliefs that guide the research (Creswell, 2003). Research philosophy are also known as epistemological and ontological considerations (Bryman, 2012), paradigm (Punch, 2006) and worldview (Creswell, 2003; Feilzer, 2010). The research philosophy are the principles that guide the researchers’ perspectives, practices, approach to relating to the respondents and guide to data collection and interpretation (Punch, 2006). Research philosophy guides in determining the overall research approach; if a research will be qualitative, quantitative or mixed method research (Punch, 2006). Generally, philosophy relate to specific research methods; positivism/postpositivism philosophy lead to quantitative research, constructivism to qualitative research, transformative and pragmatism philosophy are mixed methods research (Creswell, 2003; Bryman, 2012). In addition, some research philosophy are a wholly qualitative, such as feminism, post-modernism, ethno-methodology, conversation analysis and discourse analysis (Punch, 2006).

The research philosophy applies to various degrees depending on the field of study; different social sciences pay various levels of attention to research philosophy (Punch, 2006).
The selection of a research approach relies on several key factors, including the philosophical assumptions, the context of the research problem, the experiences of the researcher and the research audience (Creswell, 2003). The research philosophy is not usually explicitly stated in a research; however, it plays an influential role in its execution (Creswell, 2003). Research philosophy guides both the selection of a research method and the research design, while these three collectively define the research approach and perspective of the research (Punch, 2006).

The decision of which method to apply to a research study depends on the nature of the problem under study. The research philosophy provides the set of principles that guides the research perspectives, practices, approach to relating to the respondents and guide to data collection and interpretation (Punch, 2006). To successfully execute the research there must be a clear relationship between the research philosophy and the research model. The following are details of the ontological approach, epistemology and methodology applied in this research.

4.2.1 Ontology
There is a fundamental need to understand the philosophical issues relating to every research; understanding the philosophical issues creates a clear sense of the researcher’s role in a research. This understanding creates clarity for the research designed to be applied, by understanding what kind of data is needed and how to gather that data. A clear understanding of the research philosophy enables researchers identify which research design will fulfil the research objectives and enable the researcher productively execute the research design.

This research adopted the internal realism ontology that there is a single reality, however that reality is impossible to access through direct means. Hence, the internal realism ontology expects that a research can only gather indirect evidence of occurrences within an environment (Easterby-Smith et al., 2015). The essence of this research was to investigate human behaviour and perceptions while aiming at drawing conclusions from the investigation. Therefore, concepts such as the psychological contract and human resource practices were treated as actual phenomena, which were not influenced in anyway by the researcher and which have measurable impacts on lives and careers on individuals across various context or occupational
characteristics. Even though researchers and scholars might not agree on how to measure the impact these concepts have on human life, scholars would still agree that they do impact life and professional career (Easterby-Smith et al., 2015).

This research falls within the realm of the management, which is interested in human behaviour as opposed to a scientific research that focuses on inanimate objects (Creswell, 2003). Hence, this research adopts the internal realism ontology from the perspective of human behaviour as opposed to the measure of scientific objects (Easterby-Smith et al., 2015). This research was concerned with the measurement of the psychological contract and perceptions of human resource practices, while emphasising on the accuracy of the measurement and the role of human judgement in the work environment. Hence, in applying the internal realism ontology, the research aimed at investigating the effect of human resource practices on the psychological contract of academics.

### 4.2.2 Epistemology

In identifying an epistemological approach within the ontology of ideal realism, this research reviewed the positivist paradigm. The positivist philosophy is largely associated with scientific research; however, the scholars of science have found it challenging to explicitly define the philosophical approach of a scientific study (Bryman, 2012). The search for knowledge, through scientific research, was based on the philosophy that science provides an absolute truth (Creswell, 2003; Easterby-Smith et al., 2015). The positivist philosophy could not apply to social sciences since the study of humans could not be an absolute science (Creswell, 2003). Hence, the development of the postpositivist philosophy made it possible to execute a quantitative research in a social science environment (Creswell, 2003). This approach presents data in quantitative values to prevent human bias from influencing the research outcome.

The postpositivist philosophy refers to the philosophy after positivism, thereby applying an approach that goes beyond the positivist view of ‘absolute knowledge’ (Creswell, 2003). However, in presenting a differentiation between the positivist philosophy that focuses of on ‘absolute knowledge’ in experimental designs and the application of the positivist philosophy in a non-scientific environment, Easterby-Smith et al. (2015)
refers to the traditionally scientific positivism philosophy as ‘strong positivism’ and positivist philosophy applied in a non-scientific study as ‘positivism’. Hence, the research applied a postpositivist epistemological research while adopting the terminology of Easterby-Smith et al. (2015), and refers to this study as a positivist study within a management and social science framework. The table below explains the methodological implications of different epistemologies and the mapping of the internal realism ontology with the positivism epistemology and the related research design.

Table 5: Methodological implications of different epistemologies (Easterby-Smith et al., 2015)

<table>
<thead>
<tr>
<th>Ontologies</th>
<th>Realism</th>
<th>Internal Realism</th>
<th>Relativism</th>
<th>Nominalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemology Methodology</td>
<td>Strong Positivism</td>
<td>Positivism</td>
<td>Constructionism</td>
<td>Strong Constructionism</td>
</tr>
<tr>
<td>Aims</td>
<td>Discovery</td>
<td>Exposure</td>
<td>Convergence</td>
<td>Invention</td>
</tr>
<tr>
<td>Starting Points</td>
<td>Hypotheses</td>
<td>Propositions</td>
<td>Questions</td>
<td>Critiques</td>
</tr>
<tr>
<td>Designs</td>
<td>Experiments</td>
<td>Large Surveys; multi-cases</td>
<td>Cases and Surveys</td>
<td>Engagement and reflexivity</td>
</tr>
<tr>
<td>Data Types</td>
<td>Numbers and facts</td>
<td>Mainly numbers with some words</td>
<td>Mainly words with some numbers</td>
<td>Discourse and experiences</td>
</tr>
<tr>
<td>Analysis/ Interpretations</td>
<td>Verification / falsification</td>
<td>Correlation and regression</td>
<td>Triangulation and comparison</td>
<td>Sense-making; understanding</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Confirmation of theories</td>
<td>Theory-testing and generation</td>
<td>Theory generation</td>
<td>New insights and actions</td>
</tr>
</tbody>
</table>

Overall, the research adopted a deductive approach by first defining the underlying theory, developing hypotheses, collecting data, analysis of data to arrive at findings to confirm or reject the hypotheses and conclude with a revision of the initial theory (Bryman, 2012). The essence of the research design was to bring the research out of the theoretical world to the empirical state (Punch, 2006). Hence, the research design for this study aimed at connecting the research questions and hypotheses to the data, which indicated a practical approach to executing the research. This study adopted the positivist quantitative research approach.
The positivist approach was chosen because it presented data in quantitative values and largely prevented human bias from influencing the research outcome (Bryman, 2012). The positivist study ensured that the researcher was independent from the variables being observed thereby preventing possible human interference in the research (Easterby-Smith et al., 2015). The primary research method applied in executing positivist research is the survey research method, using cross-sectional surveys to show relationships between variables (Easterby-Smith et al., 2015).

4.2.3 Methodology
The research adopted an inferential cross-sectional survey research methodology. The application of this methodology was aimed at selecting groups of respondents within a common context, comparing their experiences and arriving at knowledge that was indicative of the relationships between the variables in these groups. In addition, an inferential survey was applied because it is aimed gathering data to test prior concepts and hypotheses on the relationships between variables. Inferential cross-sectional surveys relate directly to the ontology of internal realism and positivist epistemology, which enabled the research to test predefined concepts and theories within the management and social science context without applying experimental research designs found in scientific research (Creswell, 2003; Easterby-Smith et al., 2015). The survey methodology is applied to a large sample that can be generalised (nomothetic) instead of applying a descriptive case study research (idiographic). The large sample is aimed at having an overview on the quantitative predictive relationships between the variables. Hence, the quantitative measurements would enable the research arrive at a generalised relationship between human resource practices and the psychological contract.

The aim of the chosen research methodology was to expose existing relationships between variables. Hence in executing a positivist quantitative research, the researcher sort to remain independent and not bias the research outcome. However, the research interfered in the reality of the respondents by introducing surveys with large sample sizes aimed at individuals within several organisation settings. The essence of the positivist quantitative research was to gather data in quantitative formats analyse and interpret the data showing correlations and relationships. The outcome of this research method was to test pre-determined theories and generate
new theories. This research applied the use of empirical data to verify the findings of prior conceptual and empirical research through the creation of research questions. The research adopted the use of modified versions of existing surveys (PCI and HR Practice Scale) that had been validated in previous studies.

The Psychological Contract Inventory (PCI) survey (Rousseau, 2000) was used to collect data on the types of the psychological contract. The survey has been validated by various studies in the past (Raja et al., 2004; Dabos and Rousseau, 2004; Conway and Briner, 2005). In addition, the study adopted the HR Practice Scale for assessing the perceptions employees have about the HR practices of their employers. The HR Practice Scale has also been previously validated by various studies on HR practices (Drost et al., 2002; Geringer et al., 2002; Scheepers and Shuping, 2011) and the psychological contract (Scheepers and Shuping, 2011).

4.3 Research Design, Methods and Analytical Strategy

4.3.1 Research Design and Methods

The proposed methodology follows from the aforementioned positivist epistemology; hence, the methodology is to apply a large sample that will be generalised instead of applying a descriptive case study research.

The psychological contract of an employee is individualised and differs from person to person (Herriot et al., 1997; Balatbat, 2010). This research was aimed at both the employees’ perception of the HR practices and the psychological contract. Hence, the focus of the study was to investigate the perceptions of individual academics within the higher education sector. The individualised nature of this study is adequate and is in line with the individualised perceptions that make up the psychological contract and the perceptions of respondents about the human resource practices of their employers (Scheepers and Shuping, 2011).

To execute a study on the individualism of respondents in relation to human resource practices and the psychological contract, the research adopted a cross-sectional survey instrument. As a result, the survey instrument is appropriate for the research methodology. The survey instrument enjoys certain advantages; the survey is highly capable of representing a large population; this is a result of the large number of
participants that respond to surveys. In that case, the data collected through the survey includes detailed characteristics of the general population represented by the survey. Surveys are largely able to collect data that provide a description that is similar to the population under study. The survey enables the research to gather data on various groups within the population and do comparisons and analysis between those groups.

The literature analysis of the psychological contract indicated that the typology of the psychological contract can be used when the focus on the research is aimed at measuring the contract (Coyle-Shapiro and Kessler, 2000; Jamil et al., 2013). Largely, the survey instruments have been applied in quantitative research on the psychological contract, with approximately 80% of research applying the survey for measuring the psychological contract (Conway, no date). Hence, the survey is an appropriate tool in researching the types of the psychological contract and the relationships with other variables such as human resource practices, which was the focus of this research.

The creation and distribution of surveys is not expensive, especially in the design of web-based surveys and the distribution of surveys by email, websites and the internet generally. The costs of the internet-based surveys are usually much less than paper based and telephone surveys. In addition, web-based surveys ensure that the research can send and retrieve the completed surveys at no extra cost. The online survey tools also do data collection, data storage, and facilitate data analysis and reporting, which are usually part of the cost of using the online survey. Hence, by and large web-based surveys are relatively less costly to administer (Janghorban et al., 2014). This research was aimed at collecting data on academic staff in Canadian higher education institutions, with no restriction on location. Hence, the survey instrument was an additional advantage since it was possible to distribute the survey to remote locations easily, via email. This made data gathering timely and convenient.

Another point in favour of the survey is that, the survey enables the research to gain high representation of the population. Therefore, it becomes more likely that the data collected will be statistically significant. In addition, the data collected via the survey enabled the research carry out an effective analysis of the multiple variables in the research, as the survey tool can be designed to gather data on several variables. In
the case of the research, the survey tool gathered data on the type of the psychological contract of employees, on their perception of the human resource practices of their employers and on control variables: demographics and job characteristics.

In line with the principle of positivists’ philosophy, the researcher distributing the survey did not bias the data collection. The survey distribution makes it possible for respondents to answer questions without any influence from the researcher. In addition, online surveys make responding to the survey even more impersonal and remove the feeling of being influenced by the researcher. Another advantage of the survey is that the design enables the content and questions are precise since the researcher has the opportunity to review and ensure that the survey structure, format and content meet specific predetermined standards. There is uniformity in the content and terms on the survey, which enables the researcher replace complex terms with easily understood terms. This enabled precision in the data collected, analysed and measured.

The cross-sectional survey faces some inherent weaknesses; the survey is designed to collect data at a specific point in time, hence the tool is unable to track changing social order over a period. The cross-sectional surveys are based on past trends, which might not always be good predictors of future trends. The survey tool neglects the possible effects of social factors in the collection of data, changing current events could affect the responses to the questions, and these changes are not captured in the survey tool. The cross-sectional survey shows relationships between variables, but it has weaknesses in showing cause and effect relationships (Bryman, 2012; Lub et al., 2015).

A disadvantage of the survey instrument is the survey design, content and distribution methods that are applied at the start of the survey distribution must remain unchanged for consistency. Usually, the research is unable to change the contents and structure half way through without restarting the entire process, even when there are genuine reasons to make changes. However, this inflexibility in design can also be seen as an advantage because the inflexible design enables consistency in the design and use of the survey for data collection and analysis. In addition, the standardised structure of the survey implies that all respondents have to adhere to a single pattern of answering
questions, even though there could be differences among respondents. There is no consistency on the appropriateness of the questions; a question could be appropriate for one respondent and not appropriate for another. Individual differences of the respondents are not handled by the survey tool.

The weaknesses in the cross-sectional survey are addressed primarily by the use of previously validated surveys; hence, the use of the PCI and HR Practice Scale ensured that this research applied a data-gathering tool that was appropriate for the research objectives and for the respondents.

4.3.2 Analytical Strategy

Multiple Regression Analysis

The Multiple Regression Analysis (MRA) was applied as a tool to explore the theoretical and conceptual knowledge that had been developed. Hence, MRA was applied to explore the relationships between each continuous dependent variable - the psychological contract types - and the predictor and control variables. The MRA was executed to address the research questions and hypotheses that had been developed as part of the literature analysis. In addition, MRA was applied to determine how well a group of variables was able to predict specific outcomes. The MRA was used to provide information about the research scales and sub-scales to determine if adding additional variables to the regression model will contribute to the predictive value of the regression model (Pallant, 2013). Hence, the MRA technique was to identify the variables that had a significant linear relationship with dependent variables (Argyrous, 2011; Verma, 2013) and investigate the relationship between one dependent variable and a couple of predictor variables (Pallant, 2013). This was done to test if the addition of variables contributed to the relationship in addition to the variables already contained in the regression model (Pallant, 2013).

The research applied the standard multiple regression analysis technique, since the research was analysing a number of predictor variables and the research has prior knowledge about the relationships between the predictor variables (HR practices) and the dependent variables (psychological contract types) (Verma, 2013). The Multiple Regression Analysis (MRA) has a couple of limitations; the MRA could only be applied where the variables have a linear relationship, when the variables are based on a ratio...
or interval scale and where there are a minimum of 30 observations. A couple of assumptions were made when applying multiple regression analysis. First, that the sample size is adequate for the use of multiple regression analysis. Second, that multicollinearity does not exist among the independent and dependent variables i.e. the variables cannot be measuring the same things and that the independent variables must correlate to the dependent variables. Multiple regression analysis includes assumptions that outliers, very high or very low scores, are not included in the data, that all variables are normally distributed, and that a linear relationship exists between independent variables and the dependent variables (Verma, 2013; Pallant, 2013). The research applied Statistical Package for the Social Sciences (SPSS) to execute the computation of the standard multiple regression analysis (enter method in SPSS).

The research applied the scatter diagram to plot the relationship between variables and test the linearity in that relationship (Del Balso and Lewis, 1997). The research checked for multicollinearity among variables to test that each variable explains additional variability. Multicollinearity exists when there is a high correlation \((r=0.9\) and above) among independent variables (Pallant, 2013). As a result, if multicollinearity exists among the variables, then one variable must be dropped from the analysis (Muijs, 2010; Verma, 2013; Pallant, 2013). The test for multicollinearity included checking that the values in the Coefficients table to verify that the value of Tolerance was 0.10 or greater or that the value of the Variance Inflation Factor (VIF) was less than 10 (Rovai et al., 2013). The multiple regression analysis included the test of significance of the regression coefficient \((t)\) and a test of the regression model \((F)\) by using the individual regression coefficient \(t\)-test and \(F\)-test respectively (Nardi, 2006). If p-value of \(t\) was less than 0.05 \((p<0.05)\), the coefficients were considered to be statistically significantly (Rovai et al., 2013).

The research reviewed three measures to determine how well the regression model fit the data: \(R\), \(R^2\), and adjusted \(R^2\). The multiple correlation coefficient \((R)\) ranges from 0 to 1 with a higher value indicating that the explanatory variable values are closely related to the dependent variables (Nardi, 2006; Pallant, 2013; Rovai et al., 2013). The coefficient of determination \((R^2)\) gave an indication of what proportion of the variance in the dependent variable could be explained by the predictor variables (Rovai et al., 2013). The value of the adjusted \(R^2\) was used to determine the proportion
(effect size) of variance in the dependent variable that can be explained by the predictor variables (Nardi, 2006; Pallant, 2013; Rovai et al., 2013). The interpretation of the effect size (R²) was determined by using the standard; small relationship (0.0196), medium relationship (0.1300) and large relationship (0.2600) (Rovai et al., 2013).

The research analysed the data for unstandardized coefficients, that indicated how much the dependent variable varied with one predictor variable when all other variables are constant (Nardi, 2006). The unstandardized coefficients (B) were standardized using the analytical tool, SPSS. Hence, the research reviewed the values of the unstandardized regression coefficients (B) and standard errors (Std. Error) of the coefficients. Finally, the statistical significance of each dependent variable was analysed to test if the coefficients (unstandardized or standardized) were equal to 0 in the population. The test of assumptions included a test for normality using the Normal P-P Plot of Regression Standardised Residual. The visual analysis of the P-P Plot was done to confirm that the points aligned with the diagonal line and that the distribution was close enough to indicate that the residuals were close enough to normal.

Multiple regression analysis was executed to correlate the dependent variables with independent (predictor) variables and control variables. The dependent variables were the relational, transactional and balanced psychological contract types. The predictor variables were employees’ perception of HR practices (recruitment and selection, training, development and appraisals, and compensation and benefits). The control variables were demographics (gender, age and educational qualifications) and job characteristics; employment type (full-time, part-time), professional experience (long-term, medium-term and short-term) and academic discipline (education, social science and science). During the multiple regression analysis, dependent variables (psychological contract types) were correlated with predictor variables (perception of HR practices).

During the data analysis, control variables (demographics and job characteristics) were converted into dummy variables and applied in the multiple regression analysis computation. Dummy variables were created for gender: male and female. The data for the age control variable was collected in 10 age ranges, and in order to reduce the
The research was designed to test predictive relationships between the psychological contract and human resource practices. Specifically, to test how employees’ perception of human resource practices predict the psychological contract types of employees. The aim of this analytical strategy was to test previous knowledge derived from the literature review in the context of the higher education sector. Hence, the research adopted the use of regression analysis to test if the developed regression model is valid for the population (Verma, 2013), in this case the academic staff of HEI.

**Psychological Contract Type Calculation**

The research analysed the data collected from the PCI and applied a quantitative analysis on the data to determine the mean values of the types of psychological contract of respondents (Rousseau, 2000; Scheepers and Shuping, 2011). As a result, the PCI section of the research survey was partitioned to include questions on the employees’ perception of what they believe they owe their employers and what they believe their employers owe them in return. In addition, the survey was sectioned using the three psychological contract types (relational, transactional and balanced). The Psychological Contract (PC) type formula was applied to determine the types of psychological contract of respondents. This research examined the relational, transactional and balance types of the psychological contract of academics in HEI. Hence, in applying the PC Type formula:

\[
PC = [>(PCR; PCT; PCB)]
\]
Where:
- PC - Psychological Contract
- PCR - Mean values of the respondents' relational psychological contract
- PCT - Mean values of the respondents' transactional psychological contract
- PCB - Mean values of the respondents' balanced psychological contract

The greatest mean value between the psychological contract types defined the psychological contract type of academics. The research executed a paired sample t-test to test the statistical significance of the differences between the mean values of each type of psychological contract (Argyrous, 2011).

4.3.3 Methodological Fit
This research adopted the methodological fit of Edmondson and McManus (2007) by establishing the relationship between the research questions, hypotheses, data collection methods, constructs and measures, data analysis methods, as well as the theoretical contribution of the research. The table below is a summary of these relationships within the context of this research.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Hypotheses</th>
<th>Data collection method</th>
<th>Constructs and measures</th>
<th>Data analysis methods</th>
<th>Theoretical contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1 – What type of psychological contracts are developed by academics and what is the effect of HR practices and on the development of these contracts?</td>
<td>H1: Academics are more likely to develop balanced psychological contracts rather than transactional or relational psychological contracts.</td>
<td>Cross-sectional survey: PCI and HR Practice Scale</td>
<td>3 PC types: Relational Transactional Balanced</td>
<td>PC Type formula &amp; Paired Sample T-Test</td>
<td>The types of psychological contract academics have in Canadian HEI</td>
</tr>
<tr>
<td>RQ2 - What is the effect of recruitment and selection on the development of the psychological contract types of academics?</td>
<td>H2: Employees’ perception of recruitment and selection has a positive effect on the development of a relational type of psychological contract</td>
<td>Cross-sectional survey: PCI and HR Practice Scale</td>
<td>Employees’ perception of recruitment and selection HR practice &amp; Relational PC</td>
<td>Multiple Regression Analysis</td>
<td>The effect of recruitment and selection on the relational psychological contract of academics</td>
</tr>
<tr>
<td>RQ3 - What is the effect of training and development on the development of the psychological contract types of academics?</td>
<td>H3: Employees’ perception of training and development has a positive effect on the development of a transactional type of psychological contract</td>
<td>Cross-sectional survey: PCI and HR Practice Scale</td>
<td>Employees’ perception of training and development HR practice &amp; Transactional and relational PC</td>
<td>Multiple Regression Analysis</td>
<td>The effect of training and development on the transactional psychological contract of academics</td>
</tr>
<tr>
<td>H4: Employees’ perception of training and development has a positive effect on the development of a relational type of psychological contract</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

| RQ4 - What is the effect of performance appraisals on the development of the psychological contract types of academics? | H5: Employees’ perception of performance appraisals has a positive effect on the development of a transactional type of psychological contract | Cross-sectional survey: PCI and HR Practice Scale | Employees’ perception of performance appraisals & Transactional and relational PC | Multiple Regression Analysis | The effect of performance appraisals on the transactional psychological contract of academics |
| H6: Employees’ perception of performance |
appraisals has a positive effect on the development of a transactional type of psychological contract

| RQ5 – What is the effect of compensation and benefits on the development of the psychological contract types of academics? | H7: Employees’ perception of compensation and benefits has a positive effect on the development of a relational type of psychological contract | Cross-sectional survey: Psychological Contract Inventory & HR Practice Scale | Employees’ perception of compensation and benefits & Relational PC | Multiple Regression Analysis | The effect of compensation and benefits on the relational psychological contract of academics |
4.4 Measurement Instrument and Tools

4.4.1 Measurement Tool

The data collected from the research survey was designed to answer the research question and sub-research questions (Del Balso and Lewis, 1997; Babbie, 2001). The research clearly mapped the relationship between each research question, the hypotheses, the type of data collected, the methods of collecting data, the constructs and measures, the goals of the data analysis, the data analysis methods adopted by the research and the theoretical contribution to knowledge. The mapping was done following the approach of Edmondson and McManus (2007). The aim of the survey was to collect data on the points of view, attitudes, perceptions of respondents (Cohen et al., 2007).

The researcher identified various levels of complexity in the use of surveys. Hence, the population, sample and location of respondents determined the content, method of delivery and retrieval of the surveys. The research aimed at picking a sample size using techniques that would ensure adequate representation of the population. This research administered a three-part survey to academics of Canadian HEI, with the aim of providing responses to answer the research questions and test the hypotheses. The design of the survey was to collect data on demographics, job characteristics, measure the psychological contract of employees as well as employees' perception of the HR practices of their employers.

4.4.2 Pilot Survey

The researcher carried out a pilot survey to find out if the survey will achieve the purpose it was designed to achieve, prior to distributing the survey to the research participants. Since, the main survey was designed to have closed questions; the pilot survey was designed to enable respondents to provide feedback on the survey contents and structure. The pilot survey was also used to determine if the instructions prior to starting the study were adequate and if the description of the research was clearly and concisely explained. The pilot was designed to test that the respondents understood their roles and rights as well as the role and responsibility of the researcher. Considering that the survey was a combination of two existing surveys and included additional questions on demographics and job characteristics, the pilot
survey also tested the length of the survey to know if the questions were adequate or too many for the respondents.

The pilot survey was not distributed to people that might have been involved in the actual survey; this was to ensure that the respondents to the pilot survey do not also participate in the actual survey. The researcher identified a small group of respondents that had comparable characteristics to the research participants (Bryman, 2012). The researcher contacted academic staff of Canadian institutions to participate in the pilot survey. The pilot survey respondents were contacted via email and the email included an introduction to the research, the research objectives and an online link to the survey. The respondents were required to provide feedback on the content and structure of the survey as well as answer the survey questions.

The respondents to the pilot survey comprised of male (40%) and female (60%) academics within the ages of 35 to above 65 years old. 40% of the pilot respondents had Master's degrees and 60% had Doctorate Degrees. The employment type of the pilot survey respondents was part-time (40%) and full-time (60%), the academic discipline of respondents was education (20%), social science (50%) and science (30%). The professional experience of the pilot survey respondents was short-term (20%), medium term (10%) and long-term experience (70%) with their current and primary employer.

The feedback from the pilot respondents indicated that the online survey tool needed to be changed. The researcher initially used a survey tool that had a domain in the United States, the respondents were concerned that the US Patriot Act enabled the US government have unrestricted access to the content of the survey. This violated the privacy and confidentiality of respondents to the survey. As a result, the survey was redesigned and created on the University of Bath, BOS Survey tool.

Feedback from the pilot survey required the researcher to change the content of the introductory page of the survey and include additional information on data security, a guarantee that the survey will not collect data on the location and IP addresses of respondents, and the inclusion of a clearer message that the responses to the surveys
will not be shared with the employers of respondents. Finally, the feedback required clarity on how respondents can withdraw from participating if they were uninterested.

The survey combined two existing surveys on the psychological contract and employees’ perceptions of the HR practices of their employers. The responses to the pilot survey indicated that there were too many questions in the survey. Hence, the researcher reviewed the questions to ensure there were no duplications in the meanings of the questions and that all questions were strictly within the scope of the research. As a result, questions on HR practices, such as communication, were removed from the survey since it was not within the scope of the research. The next section includes further details of the adopted surveys; PCI and HR Practice scale.

**4.4.3 Cross-Sectional Survey**

The adoption of existing surveys enabled this research use questions that have previously been piloted and used in real research environments. Previous surveys would have already been through the tests of reliability and validity; this provided the current research information about the measurement qualities of the adopted surveys (Bryman, 2012). The adoption of the existing surveys enabled this research to draw comparisons with previous research. This allowed the research to determine if changes have occurred in the construct and context or/and if the findings of this research could be further validated by the findings of previous studies. Examining the surveys applied by others gave this research ideas on the best ways to approach this study (Bryman, 2012). Hence, this research inculcated to two previously created and validated surveys in answering research questions. These surveys are the Psychological Contract Inventory (PCI) (Rousseau, 2000) and the HR Practice Scale (Geringer et al., 2002).

*Psychological contract*

The Psychological Contract Inventory (PCI) was designed by Rousseau (2000) to assess employees’ perceptions about the implicit employment terms and the exchange relationship between them and their employers. The psychological contract scale was designed to collect data on the three types of the psychological contract; relational, transactional and balanced contracts. The survey adopted an abbreviated version of the PCI (Rousseau, 2000). The original PCI included a measure for the
transitional psychological contract, however the transitional contract exists in unstable work environments were the employment relationship is coming to an end (Rousseau and Wade-Benzoni, 1994; Jamil et al., 2013). Hence, the transitional contract was excluded from the scope of this research and thereby excluded from the PCI scale in the survey. The original PCI had a reliability coefficient of 0.70 and this research psychological contract scale also had a reliability coefficient of 0.70.

The main themes of the PCI were maintained in the survey. First, the questions that covered each of the three types of the psychological contracts were measured twice, from the perspective of what the employees believed they owed their employers and what they believed their employers owed them in return. Second, the survey measured the following from both the employee and employer perceived obligations; short-term, loyalty, narrow, internal development, external development and stability. The psychological contract scale in the research survey included two questions for each type of measure as well questions from both the employee and employers perspectives. Therefore the psychological contract scale had a total of twelve questions.

Sample items on the relational psychological contract: “to make personal sacrifices for this institution” and for transactional psychological contract is “to only perform specific duties I agreed to when hired”. Respondents were asked to rate the items on the scale using a 5-point Likert scale, were 1 was ‘not at all’ and 5 was ‘to a great extent’. The reliability coefficient for the relational psychological contract was 0.67, the transactional psychological contract was 0.72 and the balanced psychological contract was 0.77. The overall psychological contract scale had a reliability coefficient of 0.70. Rousseau (2000) published the reliability coefficient for the original PCI as 0.70.

**HR Practice Scale**
The HR Practice Scale was designed by Geringer et al. (2002) to measure employees’ perceptions of the human resource practices of their employers. The survey included an abridged version of the HR Practice Scale. The HR Practice Scale of Geringer et al. (2002) included demographic, organisational questions and questions designed to rate some HR practices, such as communication, that were not within the scope of this research. In addition, the original HR Practice scale included measures of what
employees felt their employers could do to improve HR practices. Hence, the questions in the original HR Practice Scale that were not within the scope of this research were not included in the research survey. The survey adopted the HR Practice Scale to measures the four HR practices within the scope of this research. Respondents were asked about their perception of their employers’ HR practices: recruitment and selection, training and development, performance appraisals, and compensation and benefits. The survey comprised of three questions for each HR practice. Therefore, the HR Practice Scale section of the survey had a total of twelve questions.

Sample items on employees’ perception of the importance of training and development HR practice: “to remedy employees' past poor performance” and compensation and benefits HR practice: “to pay incentives, such as bonus or profit sharing, that are an important part of the compensation strategy in this institution”. Respondents were asked to rate the items on the scale using a 5-point Likert scale, were 1 was ‘not at all’ and 5 was ‘to a great extent’. The reliability coefficient for the recruitment and selection HR practice was 0.75, training and development 0.87, performance appraisals was 0.82, and compensation and benefits was 0.90. The overall HR Practice scale had a reliability coefficient of 0.88. Geringer et al. (2002) did not publish reliability coefficients for the HR Practice scale.

The survey included a section to collect demographic data and data on the job characteristics of employees. The data collected on demographics and job characteristics were included in the survey as control variables, to ensure that only valid responses, within the scope of the research, are included in the data collection and analysis. The demographic data collected by the survey were gender, age, highest educational qualification. The data collected on employees’ job characteristics; length of experience on their current main job, hours worked weekly, primary academic discipline and primary responsibility. In all, there were seven questions designed to collect demographic and job characteristics data.

4.4.4 Research Variables

The following are descriptions of the variables collected by the cross-sectional survey. The primary objective of this research was to determine the effect of employees’
perceptions of their employers’ HR practices on the psychological contract of academics. Hence, the psychological contract types are the dependant variable, the HR practices are predictor/independent variables, while control variables are comprised of demographics and job characteristics.

4.4.4.1 Dependent Variables

The survey was designed to measure seven different scales: three psychological contract scales and four HR practice scales. These scales comprised of the three psychological contract types (relational, transactional and balanced) and four HR practices (recruitment and selection, training and development, performance appraisals, compensation and benefits) within the scope of this research. All the questions for the three psychological contract types were derived from the abbreviated version of the Psychological Contract Inventory (Rousseau, 2000). The questions for the four HR practices used questions from the abbreviated version of the HR Practice Scale (Geringer et al., 2002).

Relational Psychological Contract

The relational psychological contract questions covered issues on what the employees believed they owed their employers and what they believed their employers owed them in return. The design of the relational psychological contract survey questions was to measure loyalty and stability and security. Respondents were asked two questions to measure loyalty - to what extent they made personal sacrifices for their employers and to what extent their employers were responsive to their personal concerns and wellbeing. In addition, respondents were asked two questions to measure stability and security - to what extent they were willing to remain in their current jobs indefinitely and to what extent their employers provided them with secure employment. The four questions measuring the relational psychological contract in the survey attained an alpha coefficient of 0.67 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the relational psychological contract (Muijs, 2010; Pallant, 2013).
**Transactional Psychological Contract**

The transactional psychological contract questions covered what the employees believed they owed their employers and what they believed their employers owed them in return. The design of the transactional psychological contract survey questions was to measure short-term and narrow commitments in the employment relationship. Respondents were asked two questions to measure short-term commitments - to what extent they had intentions of committing to future obligations to their employers and to what extent their employers provided long-term employment to them. In addition, respondents were asked two questions to measure the narrowness of the employment relationship - to what extent they performed only the specific duties they agreed to when they were hired and to what extent had their employers limited their involvement in the institution. The four questions measuring the transactional psychological contract in the survey attained an alpha coefficient 0.72 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the transactional psychological contract (Muijs, 2010; Pallant, 2013).

**Balanced Psychological Contract**

The balanced psychological contract questions were from the perspective of what the employees believed they owed their employers and what they believed their employers owed them in return. The design of the balanced psychological contract survey questions was to measure internal and external development opportunities for employees. Respondents were asked two questions to measure internal development opportunities: to what extent they seek out opportunities that enhanced their value to their employer and to what extent their employers provided opportunities for career development within the institution. In addition, respondents were asked two questions to measure external development opportunities: to what extent they built contacts outside their current jobs to enhance their career potentials and to what extent their employers provided them with job assignments that enhanced their external marketability. The four questions measuring the balanced psychological contract in the survey attained an alpha coefficient 0.77 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the balanced psychological contract (Muijs, 2010; Pallant, 2013).
4.4.4.2 Predictor Variables

Recruitment and Selection HR Practice
The design of the questions on recruitment and selection HR practice was to rate the factors that employers use to decide on the recruitment and selection of employees. Respondents were asked to rate the extent to which a person’s ability to perform the requirements of the job, a personal interview and having the right connections (e.g. school, family, friends) affected the recruitment and selection decision of their employers. The three questions measuring the recruitment and selection HR practice scale in the survey attained an alpha coefficient 0.34 in the first iteration. However, following the removal of one item (having the right connection) the alpha coefficient increased to 0.75 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the relational psychological contract (Muijs, 2010; Pallant, 2013).

Training and Development HR Practice
The design of the questions on training and development HR practice was to rate the outcome of their employers’ training and development HR practices, and their effect on employees. Respondents were asked to what extent training and development HR practices improved employees’ job abilities, improved employees' interpersonal abilities and remedied employees’ past performance. The three questions measuring the training and development HR practice scale in the survey attained an alpha coefficient 0.87 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the training and development HR practice (Muijs, 2010; Pallant, 2013).

Performance Appraisals HR Practice
The design of the questions on performance appraisals HR practice was to rate the objectives and uses of performance appraisals. Respondents were asked to what extent the performance appraisals determined appropriate pay of employees, documented employees' performance and provided input for employers to plan development activities of employees (e.g. training, new duties). The three questions measuring the performance appraisals HR practice scale in the survey attained an alpha coefficient 0.82 applying the Cronbach’s Alpha test of reliability. Hence, the
alpha coefficient was to closer to 1 and considered as a reliable measure of the performance appraisals HR practice (Muijs, 2010; Pallant, 2013).

**Compensation and Benefits HR Practice**

The purpose of the questions on compensation and benefits HR practice was to rate the importance and benefits of the compensation and benefits package of employers. Respondents were asked to what extent pay incentives such as bonus or profit sharing were an important part of the compensation strategy of their employers. Also, respondents were asked to what extent benefits were an important part of the total compensation package and to what extent a portion of employees’ earnings were contingent on the employers’ achievement of their performance goals. The three questions measuring the compensation and benefits HR practice scale in the survey attained an alpha coefficient 0.90 applying the Cronbach’s Alpha test of reliability. Hence, the alpha coefficient was to closer to 1 and considered as a reliable measure of the compensation and benefits HR practice (Muijs, 2010; Pallant, 2013).

**4.4.4.3 Control Variables**

**Demographics**

The research used control variables to validate the respondents to the survey and ensure that only responses from academic staff were analysed. The control variables collected in the survey were gender, age, highest educational qualification and primary responsibility. The questions on demographic data of respondents, gender and age, were to ease the respondents into the survey, by making the first few questions easy to answer. The data collected on gender had the options of male and female, the data on age was collected in ranges with values in years. The age ranges used were 20 to less than 25, 25 to less than 30, and 35 to less than 40 up until the last range of 65 and above. There were 11 age ranges collected in the survey; however, for the analysis of the data, the researcher grouped the age ranges into two groups: respondents below the age of 45 and respondents that were 45 and over. The age of 45 was used as a boundary because the average age of respondents was between the age ranges of 40 to less than 45. This grouping was required for multiple regression analysis.
The data collected on the highest educational qualification of respondents included high school (secondary school), bachelor's degree (or equivalent), postgraduate qualification (non-master's degree), master's degree (or equivalent) and doctorate degree (or equivalent). The average educational qualification of respondents was postgraduate qualification (non-master's degree), hence, the research used postgraduate qualification as a boundary and analysed educational qualifications as graduate and postgraduate qualifications. Whereby, high school and bachelor's degrees made up graduate qualifications, and non-master's degree, master's degree (or equivalent) and doctorate degree (or equivalent) made up postgraduate qualifications.

**Job Characteristics**

In addition, the research collected data on job characteristics of respondents as control variables. The survey included questions on the job characteristics such as employee type (full-time, part-time), length of experience on their current main job and their academic disciplines. The employee types were determined by asking respondents how many hours they worked each week for their primary employer. This question was used to determine if the respondents were full-time or part-time employees as defined by Statistics Canada (2012). Statistics Canada states that full-time employees are persons that work 30 hours or more weekly at their main or only job. While part-time employees are persons that work less than 30 hours a week at their main or only job (Statistics Canada, 2012).

The data on the control variable professional experience was collected by asking respondents to state how many years they had worked for their primary employer. The length of time used to determine if a respondent was short-term, medium-term and long-term was derived from an analysis of the statistics on the length of work experience across all occupations and academic staff in Canada (Statistics Canada, 2015). Respondents with short-term experience were those with less than 5 years experience on their current jobs; respondents with medium-term experience were those with experience of 5 years and over but less than 9 years in their current jobs. Respondents with long-term experience were those with 9 years and over on their current jobs.
The data collected on the academic disciplines of respondents included 13 academic disciplines using the Canadian Classification of Instructional Programs (CIP). The data collected from these 13 academic disciplines were grouped into three academic disciplines for data analysis and presentation of the research. Academic disciplines in humanities, social and behavioural sciences, law, personal improvements and leisure were grouped as social sciences; the education academic discipline was a group on its own; and physical, life sciences, agriculture, natural sciences and health sciences were grouped as science academic discipline.

4.5 The Research Setting

4.5.1 Sample and Sampling Procedure
The research applied probability random sampling techniques for the selection of Canadian HEI, who were then approached to consent to the participation of their academic staff in the research. Probability sampling ensures that every member of the population has an equal chance of being selected for the research (Bryman, 2012). The research identified Canadian HEI through an online search, thereby using the available technology to improve access to information (Janghorban et al., 2014). Initially, the research aimed to select degree-awarding universities across the geopolitical regions of Canada, as well as selecting HEI that are public or privately owned. The initial plan was to select these HEI by adopting simple random sampling (Bryman, 2012) to obtain a random sample of HEI that would allow the research to find the academic staff from these institutions to participate in the study. However, while contacting various HEI to distribute the data gathering tool - the online survey - it became clear that there were multiple ways through which permission had to be obtained from Canadian HEI to distribute the online surveys. Some HEI out-rightly agreed to their participation, some requested that the researcher seeks formal approval through the institution’s Research Ethics Board (REB), and some declined to give their academic staff permission to participate in the research.

The survey data were collected from academic staff in Canadian HEI. There were no restrictions of academic disciplines of respondents; hence, academics across all thirteen disciplines in the Canadian Classification of Instructional Programs (CIP) (CIP, 2011) were included in the research. The survey participants included full-time and
part-time academic staff including contingent, contract and sessional staff. Participants included academic staff that had short, medium and long-term experience in their current jobs. Academics who were employed simultaneously in more than one HEI were required to respond to the survey questions with only their main employer in mind. Participation in the survey was limited to academic staff i.e. academic faculty members with primary responsibility of teaching and research.

The sample of participants included only academic staff working in degree-awarding HEI. Hence, the research excluded academic staff in community colleges, professional career colleges and non-degree awarding polytechnics. The research sought participants from across all geo-political regions of Canada. However, 66% of the participants were recruited through individual contacts; the researcher contacted them via their official email addresses with an invitation to participate in the study. While 34% of respondents were recruited from four Canadian HEI: comprising of two universities and two degree-awarding polytechnics. The four HEI were located across three Canadian Provinces: Alberta, British Colombia and Ontario. The individual respondents included academics from both public and private HEI. The research was limited to participants from HEI located in Canada. Branches of Canadian HEI located outside of Canada and foreign HEI with branches in Canada were excluded from the research. In addition, online HEI were excluded from the research. The research survey was sent to all respondents via email with a link to a secure online survey. The surveys were sent to respondents between September and November 2015.

4.5.2 Response Rate
A total of 583 surveys were distributed to respondents; these included surveys that were sent directly by the researcher to individual academics and those that were sent by HEI via their email distribution system. The research received 470 completed surveys via the online survey tool. Out of the 470 survey responses received, 56 where invalidated due to incomplete responses, missing data and respondents who were not classified as academic staff. An additional nine respondents were excluded due to the presence of outliers; these respondents had very high or very low scores that were very different from all other respondents. The removal of outliers was a prerequisite and assumption test prior to executing Multiple Regression Analysis. The final total
number of useable responses was therefore 405; hence, the response rate based on valid useable responses was 70%.

4.5.3 Description of the Sample

In addition to collecting data on the types of psychological contract of employees and the perception of employees on the human resource practices of their employers, the research survey collected data on both the demographic and job characteristics of respondents. The demographic data collected were age, gender and highest educational qualification. The survey collected data on the job characteristics of respondents, their employment types, length of professional experience and academic disciplines. The survey sections on job characteristics included questions on the number of hours’ respondents worked each week to determine if they were full-time or part-time employees as defined by Statistics Canada (2012). The survey asked respondents about the number of years they had worked for their current main employer. In addition, there was a question on the primary academic discipline of respondents based on the options from the Canadian Classification of Instructional Programs (CIP) (CIP, 2011).

Gender

There was a near equal representation of male and female respondents in the sample, with females making up 51.1% (N=207) and males 48.9% (N=198) of respondents.

Table 7: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>198</td>
<td>49.90</td>
</tr>
<tr>
<td>Female</td>
<td>207</td>
<td>51.10</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Two dummy variables were created for the data on gender, male and female, these were applied in the computation for multiple regression analysis.
**Age**

The sample size across age groups indicated that respondents between the ages of 35 to less than 40 years old form the largest group of respondents at 14.3% (N=58), and the next largest group were respondents between the ages of 40 to less than 45 years old at 13.6% (N=55). The age group with the fewest respondents were between the ages of 20 to less than 25 at 4.2% (N=17).

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to less than 25</td>
<td>17</td>
<td>4.20</td>
</tr>
<tr>
<td>25 to less than 30</td>
<td>46</td>
<td>11.40</td>
</tr>
<tr>
<td>30 to less than 35</td>
<td>52</td>
<td>12.80</td>
</tr>
<tr>
<td>35 to less than 40</td>
<td>58</td>
<td>14.30</td>
</tr>
<tr>
<td>40 to less than 45</td>
<td>55</td>
<td>13.60</td>
</tr>
<tr>
<td>45 to less than 50</td>
<td>29</td>
<td>7.20</td>
</tr>
<tr>
<td>50 to less than 55</td>
<td>28</td>
<td>6.90</td>
</tr>
<tr>
<td>55 to less than 60</td>
<td>41</td>
<td>10.10</td>
</tr>
<tr>
<td>60 to less than 65</td>
<td>34</td>
<td>8.40</td>
</tr>
<tr>
<td>65 and above</td>
<td>45</td>
<td>11.10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The data for the age control variable was collected in 10 age ranges, and in order to reduce the number of dummy variables in the multiple regression analysis the average age of respondents was used as a boundary; therefore, two dummy variables were created for age - less than 45 years old and 45 years old and over. Hence, the responses to the question on the age of respondents were further grouped into respondents who were less than 45 years old (56.3%) (N=228) and respondents who were 45 and over (43.7%) (N=177).

**Highest Educational Qualification**

The question on the highest educational qualification of respondents indicated that 30.1% (N=122) had master's degrees, 27.2% (N=110) had bachelor's degrees and 20.7% (N=84) had doctorate degrees.
Table 9: Highest Education Qualification

<table>
<thead>
<tr>
<th>Highest Educational Qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>14</td>
<td>3.50</td>
</tr>
<tr>
<td>Bachelor's Degree (or Equivalent)</td>
<td>110</td>
<td>27.20</td>
</tr>
<tr>
<td>Postgraduate Qualification (Non-Master's)</td>
<td>75</td>
<td>18.50</td>
</tr>
<tr>
<td>Master's Degree (or Equivalent)</td>
<td>122</td>
<td>30.10</td>
</tr>
<tr>
<td>Doctorate Degree (or Equivalent)</td>
<td>84</td>
<td>20.70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The data on the highest educational qualification of respondents was collected using 5 classifications of educational qualifications. Hence, for the regression analysis two dummy variables were created - graduate and postgraduate qualifications. Hence, the responses to the question on the highest educational qualification were further grouped into respondents with graduate qualifications (high school and bachelor’s degrees), 30.7% (N=124), and respondents with postgraduate qualifications (postgraduate, master’s degrees and doctorate degrees), 69.3% (N=281).

**Employment Type**

The sample comprised of full-time employees at 58.8% (N=238) and part-time employees at 41.2% (N=167). The classification of employment type here is in adherence to Statistics Canada (2012) that states that full-time employees are employees that work 30 hours or more on their main or only job, while part-time employees are employees who work less than 30 hours a week at their main or only job.

Table 10: Employment Types

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>238</td>
<td>58.80</td>
</tr>
<tr>
<td>Part-time</td>
<td>167</td>
<td>41.20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Two dummy variables were created for the data on employment types; full-time and part-time, these were applied in the computation for multiple regression analysis.
**Professional Experience**

The Professional experience of the sample is defined, in this research, as the length of time an employee has worked with their current main or only employer. Hence, 42.7% (N=173) of respondents had long-term experience (9 years and over), 25.7% (N=104) of respondents had medium-term experience (5 years but less than 9 years) and 31.6% (N=128) of respondents had short-term experience (less than 5 years).

<table>
<thead>
<tr>
<th>Professional Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>128</td>
<td>31.60</td>
</tr>
<tr>
<td>Medium-term</td>
<td>104</td>
<td>25.70</td>
</tr>
<tr>
<td>Long-term</td>
<td>173</td>
<td>42.70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Three dummy variables were created for the data on professional experience; short-term, medium-term and long-term, these were applied in the computation for multiple regression analysis.

**Academic Discipline**

The sample included respondents from across the 13 academic disciplines defined by derived from the Canadian Classification of Instructional Programs (CIP) (CIP, 2011). Three dummy variables were created for the data on academic disciplines for multiple regression analysis. Hence, the 13 academic disciplines of respondents were further grouped into three main disciplines: education, social sciences and sciences. As a result, 41.0% (N=166) of respondents were from the education discipline, 31.4% (N=127) from the social sciences, and 27.7% (N=112) from sciences.

<table>
<thead>
<tr>
<th>Academic Discipline</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>166</td>
<td>41.00</td>
</tr>
<tr>
<td>Social Science</td>
<td>127</td>
<td>31.40</td>
</tr>
<tr>
<td>Science</td>
<td>112</td>
<td>27.70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>
4.5.4 Research Ethics
Most Canadian higher education institutions adhere to the Canada Tri-Council (2010) guidelines on research involving humans. The guidelines stipulate that the Ethic Committees of respective Institutions must approve their employees’ participation in any research. Hence, in adhering to these guidelines, the researcher undertook Tri-Council training for researching with human participants in Canadian HEI and attained the required certification. In addition, the researcher sought approval from the respective institutions’ Ethics Committees and Research Ethics Boards to enable their academic staff to participate in the research. This research also adhered to the ethical directives of the British Educational Research Association (British Educational Research Association, 2011) and the University of Bath in the UK (University of Bath, 2014).

This research focused on the individual experiences of academics and not the institutions they work for; as a result, the researcher notified the institutions and respondents that the research would not collect any information about their Institutions. In the case of respondents, the researcher guaranteed complete anonymity by neither retaining nor publishing the names and personal details of the respondents. The researcher gave the survey questions to the participating HEI ahead of the distribution of the surveys. The summaries of the findings are available to both individual participants and the HEI. This ensured adherence to all ethics and confidentiality guidelines and agreements.

The researcher managed the ethical issues as follows during the course of the data collection activity. The researcher undertook the understated steps to address these issues. The letters sent to the HEI requesting their academic staff’s participation in the research, as well as the introductory page of the survey, included an invitation to participate in the survey. The introductory message to the HEI and participants included a statement of the research purpose in plain language. The message also included the identity and contact information of the researcher, the research supervisors and the name and location of the University of Bath. The information sent to the HEI and prospective respondents included the expected duration and nature of participation, a description of the research procedures and an explanation of the responsibilities of the participants. The survey included a 'next' button for participants
to click so that they acknowledged that they had read the invitation to participate, the conditions, roles, rights and responsibilities of all parties and that they consented and agreed to participate in the research.

The consent document or letter of introduction indicated the location of the survey company’s server and included a description of any associated limits to confidentiality. The communication to HEI and participants included a description in plain language of all reasonably foreseeable risks and potential benefits of participating in the research. The researchers assured participants that they were under no obligation to participate and were free to withdraw from the research at any time. The researcher informed participants of their right to request the withdrawal of data, including any limitations on the feasibility of that withdrawal. The researcher provided direction about how the participants could find out about the results of the study. The researcher also gave an indication of the information that would be collected about each of the participants, the purposes of collecting that information and an indication of who would have access to the information collected.

The researcher did not have any real or apparent conflict of interest because of or in connection to this study. The researcher was neither influenced by, nor appeared to be influenced by, private or personal interests such as remuneration, intellectual property rights, rights of employment, consultancies, board membership, stock options, etc. The researcher treated all data with absolute confidentiality; any publications of findings were summaries only. The online survey did not collect either the Internet Protocol (IP) or the participants’ HEI affiliation. The researcher did not share any information that could possibly identify the participants and their institutions of employment with anyone. The responses to all questions were anonymous for all reporting and preparation of summaries. The data collected was stored securely within the University of Bath’s secure drive. The data was stored and archived until the completion of the researcher’s doctorate degree.
4.6 Psychometric Analyses

4.6.1 Reliability Scales
Cronbach’s alphas for the two-factor model are for psychological contract (PC) scale (twelve items) $\alpha = 0.70$ and for HR practice scale (eleven items) $\alpha = 0.88$.

<table>
<thead>
<tr>
<th>Type of Psychological Contract</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Psychological Contract</td>
<td>0.67</td>
<td>4</td>
</tr>
<tr>
<td>Transactional Psychological Contract</td>
<td>0.72</td>
<td>4</td>
</tr>
<tr>
<td>Balanced Psychological Contract</td>
<td>0.77</td>
<td>4</td>
</tr>
</tbody>
</table>

The reliability of the psychological contract scale was considered to be acceptable ($\alpha = 0.70$) which fulfils the recommended 0.70 threshold (Muijs, 2010; Pallant, 2013).

<table>
<thead>
<tr>
<th>Human Resource Practices</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment and Selection</td>
<td>0.34</td>
<td>3</td>
</tr>
<tr>
<td>Training and Development</td>
<td>0.87</td>
<td>3</td>
</tr>
<tr>
<td>Performance Appraisals</td>
<td>0.82</td>
<td>3</td>
</tr>
<tr>
<td>Compensation and Benefits</td>
<td>0.90</td>
<td>3</td>
</tr>
</tbody>
</table>

The recruitment and selection HR practice had a low reliability value ($\alpha = 0.34$), therefore, one item in the recruitment and selection sub-scale (having the right connections) was deleted from the analysis, this improved the validity of the recruitment and selection sub-scale ($\alpha = 0.75$).
The reliability of the human resource practice scale was considered to be acceptable \((\alpha = 0.88)\) which fulfils the recommended 0.70 threshold (Muijs, 2010; Pallant, 2013).

4.6.2 Descriptive Statistics
The correlations between the three dependent variables (relational, transactional and balanced psychological contracts) and the four-predictor variables (employees’ perception of the HR practices) are provided in the table below. The table comprises of the correlations between all the continuous variables included in this research.
Table 16: Correlation Matrix - Psychological Contract Types and HR Practices

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relational PC</td>
<td>3.19</td>
<td>1.00</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Transactional PC</td>
<td>3.27</td>
<td>1.01</td>
<td>-0.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Balanced PC</td>
<td>3.30</td>
<td>1.02</td>
<td>0.54**</td>
<td>-0.13**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Recruitment and Selection</td>
<td>3.97</td>
<td>0.98</td>
<td>0.45**</td>
<td>0.09</td>
<td>0.34**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Training and Development</td>
<td>3.27</td>
<td>1.04</td>
<td>0.61**</td>
<td>-0.10</td>
<td>0.57**</td>
<td>0.39**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Performance Appraisals</td>
<td>3.18</td>
<td>1.07</td>
<td>0.47**</td>
<td>-0.12*</td>
<td>0.46**</td>
<td>0.27**</td>
<td>0.66**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Compensation and Benefits</td>
<td>2.55</td>
<td>1.31</td>
<td>0.38**</td>
<td>-0.36**</td>
<td>0.49**</td>
<td>0.10*</td>
<td>0.54**</td>
<td>0.49**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: N = 405. * p < 0.05. ** p < 0.01 *** p < 0.001. M=Mean. SD = Standard Deviation
The table above indicated that the correlations between the employees’ perception of HR practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) and the relational psychological contracts are relatively strong and significant. In addition, the correlations between the employees’ perception of HR practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) and the balanced psychological contracts are relatively strong and significant. The strongest relations are between employees’ perception of training and development HR practice and the relational psychological contract ($r = 0.61, p < 0.01$) and between employees’ perception of training and development HR practice and the transactional psychological contract ($r = 0.57, p < 0.01$).

### 4.6.3 Exploratory Factor Analysis

The research adopted the data reduction technique, factor analysis, to determine if a fewer set of variables could be used to measure the same constructs as in the original data collection tool (Pallant, 2013). Hence, the factor analysis technique was applied to examine the relationship between the dependent variables and to separate them into different factors based on their relationship. The adoption of factor analysis was primarily because it is a multivariate technique; hence, it was used to determine whether groups of indicators can be clustered together to form distinct factors (Muijs, 2010; Verma, 2013). Factor analysis was applied to mine out the important variables from the large number of variables to form factors. Hence, factor analysis gave groupings that were analysed to provide mathematical results to indicate which items hold together and which items appeared to be measuring the same construct (Verma, 2013). The factor rotation technique was applied to ensure that factors were mutually exclusive; hence, a few factors were used to define the larger group of variables (Bryman, 2012; Verma, 2013). Factors for the psychological contract types and HR practice types were extracted based on Eigenvalues greater than one with the aim of transforming variables into fewer combinations, using all the variances in the variables (Pallant, 2013).

The research applied the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to test the adequacy of the sample size used in this research. The range of the results
in a KMO test fall between 0 and 1; with a higher value indicating the adequacy of the sample size. The KMO values were above 0.5, hence they were considered acceptable measures of sampling adequacy (Verma, 2013; Pallant, 2013). The Bartlett's Test of Sphericity was computed to determine the appropriateness of applying factor analysis on the data set. The Bartlett's Test of Sphericity was used to test the data to determine if the correlation matrix was an identity matrix, hence the significant value of $p<0.001$ signified that the factor analysis is appropriate for the data (Verma, 2013). The research used Principal Component Analysis to obtain unrotated factor solution so that this returned the selected number of factors with their eigenvalues. The unrotated factor solution provided the total factor loading of the variables, the percentage of variance and the cumulative variance in percentages. Hence, the factor analysis solution provided the percentage of variability explained by all the factors together. This factor analysis was computed separately for the psychological contract types and the HR practice types.

**Psychological Contract Scales (First Iteration)**

The 12 items of the Psychological Contract Inventory (PCI) were subjected to Principal Component Analysis (PCA) using SPSS Version 22. Prior to performing PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.30 and above. Kaiser-Meyer-Olkin (KMO) value was 0.76, exceeding the recommended value of 0.6 (Pallant, 2013) and the Barlett's Test of Sphericity reached statistical significance ($p < 0.0005$), supporting the factorability of the correlation matrix (Cohen et al., 2007; Verma, 2013).

PCA revealed the presence of three components with eigenvalues exceeding 1, explaining 31.22%, 18.56% and 10.33% of the variance respectively. A visual inspection of the scree plot revealed a clear break after the third component. In addition, a three-component solution met the interpretability criterion. Component loadings and communalities of the rotated solution are presented in the table below.
Table 17: Exploratory Factor Analysis: Psychological Contract Scales

<table>
<thead>
<tr>
<th>Rotated Component Matrix*</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PCB Internal Career Opportunity</td>
<td>0.81</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR Secure employment</td>
<td>0.80</td>
<td></td>
<td></td>
<td>0.66</td>
</tr>
<tr>
<td>PCB Enhance external marketability</td>
<td>0.77</td>
<td>0.32</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>PCR Responsive to me</td>
<td>0.75</td>
<td></td>
<td></td>
<td>0.60</td>
</tr>
<tr>
<td>PCT Limited involvement</td>
<td></td>
<td>0.79</td>
<td></td>
<td>0.68</td>
</tr>
<tr>
<td>PCT Only perform specific duties</td>
<td>0.74</td>
<td></td>
<td></td>
<td>0.60</td>
</tr>
<tr>
<td>PCT No future obligations</td>
<td></td>
<td></td>
<td>0.70</td>
<td>0.49</td>
</tr>
<tr>
<td>PCT Short term employment</td>
<td></td>
<td></td>
<td>0.70</td>
<td>0.52</td>
</tr>
<tr>
<td>PCB Build external contacts</td>
<td></td>
<td></td>
<td>0.79</td>
<td>0.68</td>
</tr>
<tr>
<td>PCB Enhance my value</td>
<td></td>
<td></td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>PCR Make personal sacrifices</td>
<td></td>
<td></td>
<td>0.73</td>
<td>0.67</td>
</tr>
<tr>
<td>PCR Remain indefinitely</td>
<td>0.43</td>
<td>0.44</td>
<td>0.44</td>
<td>0.39</td>
</tr>
</tbody>
</table>


The interpretation of the data was inconsistent with the psychological contract type’s strong loadings of relational and balanced types of the psychological contract items on both component 1 and component 3. The items in the transactional type of psychological contract loaded as expected in component 2. However, combining relational and balanced psychological contracts in the way the Exploratory Factor Analysis (EFA) indicates could not be explained in the psychological contract theory. To reduce the cases of cross loading, 1 item representing the balanced (PCB internal career opportunities) and 1 item representing the relational psychological contract (PCR make personal sacrifice) were deleted from the factor analysis. The selection of the two items deleted was based on their contribution within the psychological contract theory; other items better explained the nature of the psychological contract of employees.

The relational psychological contract items that were retained addressed aspects of the relational contract that are vital to the employment relationship. Such as
employees’ willingness to remain indefinitely with their employers (PCR remain indefinitely), the employees’ perceptions of a reciprocal exchange (PCR responsive to me) and job security (PCR secure employment). The item that was removed (PCR make personal sacrifices) is considered as a natural expectation of employees. Hence, even though it is clearly a relational item, the research determined that the other retained items fully represent the theoretical meaning of the relational psychological contract.

The balanced psychological contract items that were retained addressed aspects of the balanced contract that are salient to the employment relationship. The nature of the balanced psychological contract is such that employees build their career knowledge and skills to benefit both their current employer and potential external organisations. Hence, the retained items were selected because they represent both internal career development (PCB enhance my value) and external development (PCB build external contracts). Although the deleted item (PCB internal career opportunities) was a good representation of the balanced contract, other items better explained the balanced contract.

*Psychological Contract Scales (Second Iteration)*

As a result of the reduction in items, a second iteration was run for the psychological contract factor analysis. In the second iteration, 10 items of the Psychological Contract Inventory (PCI) were subjected to Principal Component Analysis (PCA) using SPSS Version 22. Prior to performing PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.30 and above. Kaiser-Meyer-Olkin (KMO) value was 0.72, exceeding the recommended value of 0.6 (Pallant, 2013) and the Barlett’s Test of Sphericity reached statistical significance (p < 0.0005), supporting the factorability of the correlation matrix (Cohen et al., 2007; Verma, 2013).

PCA revealed the presence of three components with eigenvalues exceeding 1, explaining 29.98%, 21.84% and 10.80% of the variance respectively. A visual inspection of the scree plot revealed a clear break after the third component. In addition, a three-component solution met the interpretability criterion. As such, the three components were retained. The three-component solution explained 62.63% of
the total variance. A Varimax orthogonal rotation was employed to aid interpretability. The rotated solution exhibited 'simple structure' (Thurstone, 1947; Cohen et al., 2007; Pallant, 2013).

Table 18: Exploratory Factor Analysis: Psychological Contract Scales

<table>
<thead>
<tr>
<th>Items</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCR Secure employment</td>
<td>0.84</td>
<td></td>
<td>0.74</td>
</tr>
<tr>
<td>PCR Responsive to me</td>
<td>0.77</td>
<td></td>
<td>0.63</td>
</tr>
<tr>
<td>PCB Enhance external marketability</td>
<td>0.70</td>
<td>0.37</td>
<td>0.64</td>
</tr>
<tr>
<td>PCR Remain indefinitely</td>
<td>0.57</td>
<td></td>
<td>0.41</td>
</tr>
<tr>
<td>PCT Limited involvement</td>
<td></td>
<td>0.80</td>
<td>0.68</td>
</tr>
<tr>
<td>PCT Only perform specific duties</td>
<td>0.73</td>
<td></td>
<td>0.58</td>
</tr>
<tr>
<td>PCT No future obligations</td>
<td></td>
<td>0.70</td>
<td>0.50</td>
</tr>
<tr>
<td>PCT Short term employment</td>
<td></td>
<td>0.70</td>
<td>0.53</td>
</tr>
<tr>
<td>PCB Enhance my value</td>
<td></td>
<td></td>
<td>0.85</td>
</tr>
<tr>
<td>PCB Build external contacts</td>
<td></td>
<td>0.84</td>
<td>0.77</td>
</tr>
</tbody>
</table>


Upon completion of the second iteration, the interpretation of the data was still inconsistent with the psychological contract type’s loadings of relational and balanced types of the psychological contract items on both component 1 and component 3. However, the strength of the cross-loading between the relational and balanced psychological contract types was reduced. The research accepted this results because combining the relational and balanced psychological contracts in the way the Exploratory Factor Analysis (EFA) indicates could not be explained in the psychological contract theory.

Component loadings and communalities of the rotated solution are presented in the Table above. The value of the communalities indicated the portion of the variability that was explained by the factors in the analysis; hence, a variable with a communality value of less than 0.40 must be removed from the model (Verma, 2013). Component loadings and communalities of the rotated solution are presented in the above table; the communality value for each variable was above 0.40.
**Human Resource Practice Scale**

The Exploratory Factor Analysis (EFA), applying Principal Component Analysis (PCA), for the human resource practice scale was run in one iteration.

The PCA was run on the 11 HR practice scale survey questions that measured employees' perception of the HR practices of the employers of 405 responding academic employees. The appropriateness of the PCA was assessed prior to the factor analysis. To apply principal components analysis, some correlations that are greater than 0.30 between the variables should be included in the analysis (Pallant, 2013). Hence, inspection of the correlation matrix indicated that the matrix included variables that had correlation coefficients greater than 0.30. The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.87, exceeding the recommended value of 0.6 (Pallant, 2013) and the Barlett’s Test of Sphericity reached statistical significance (p < 0.0005), supporting the factorability of the correlation matrix (Cohen et al., 2007; Verma, 2013).

The PCA indicated that four components had eigenvalues greater than one that explained 47.51%, 15.88%, 9.88% and 6.95% of the total variance respectively. The scree plot was visually inspected and the values showed that the three components should be retained (Cohen et al., 2007; Verma, 2013; Pallant, 2013). In addition, the four-component solution met the interpretability criterion, which was determined by the inspection of the structure of the rotated component matrix. Therefore, the four components were retained. The four components explained 80.23% of the total variance. The research applied a Varimax orthogonal rotation to aid interpretability. The rotated solution exhibited a simple structure (Thurstone, 1947; Cohen et al., 2007; Pallant, 2013). Component loadings and communalities of the rotated solution are presented in the table below.

<table>
<thead>
<tr>
<th>Rotated Component Matrix*</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>HRP1 Ability to perform the job</td>
<td>0.85</td>
<td>0.79</td>
</tr>
<tr>
<td>HRP1 Personal interview</td>
<td>0.89</td>
<td>0.82</td>
</tr>
</tbody>
</table>
HRP2 Improve interpersonal abilities 0.83 0.84
HRP2 Improve job abilities 0.83 0.83
HRP2 Remedy past poor performance 0.70 0.74
HRP3 Determine appropriate pay 0.73 0.73
HRP3 Document subordinate’s performance 0.87 0.82
HRP3 Plan subordinate development activities 0.44 0.71 0.75
HRP4 Earnings is contingent on performance 0.85 0.83
HRP4 Pay incentives are important 0.88 0.87
HRP4 The benefits are important 0.87 0.80


The interpretation of the data was consistent with the HR practice scale that the survey was designed to measure with strong loadings of compensation and benefits items on component 1, training and development items on component 2, performance appraisal items on component 3 and recruitment and selection on component 4. Component loadings and communalities of the rotated solution are presented in the table above.

The value of the communalities indicated the portion of the variability that was explained by the factors in the analysis; hence, a variable with a communality value of less than 0.40 must be removed from the model (Verma, 2013). Component loadings and communalities of the rotated solution are presented in the above table; the communality value for each variable was above 0.40.

4.7 Validity and Reliability
The validity and reliability of the research address the overall dependability of the research. Generally, research validity refers to the extent to which the research measures the variables that it is design to measure, while, reliability refers to the ability for the research to consistently measure the same variables (Babbie, 2001; Blumberg et al., 2005).

4.7.1 Validity
Punch (2005) defines the validity in a research as the extent to which the reality studied matches the reality that has been reported in the research. Acceptance of the findings
in the research is reliant on the validity of the data collected and the validity of the overall research. The data collected should adequately represent the constructs which they purport to represent. In addition, the various aspects of the research should collectively fulfil the research design and objectives.

The research components, such as methodology, could lead to valid conclusions or sampled respondents could aid valid inferences. However, the overall validity of the research is determined by the research questions, hypotheses, inferences and conclusions (Trochim, 2006). The research was designed to address six types of validity; conclusion validity, internal validity, construct validity, external validity, content validity and face validity. The following is a discussion on the type of validity and the questions/hypotheses within the research that were investigated.

**Conclusion Validity:** The research questions asked about the effects of HR practices (recruitment and selection, training and development, performance appraisals, compensation and benefits) on the types of the psychological contract (relational, transactional and balanced). The conclusions of the research indicated that there were positive, inverse or no relationships between the predictor variables (HR practices) and dependent variables (psychological contract types). Hence, the researcher could assess the conclusion validity of each of the research findings and inferences by indicating that the conclusions were directly related to the research questions.

**Internal validity:** The research hypotheses were designed to investigate a cause and effect relationship between variables. The research outcome produced findings to support or not support each hypothesis. Hence, through the findings the researcher could confirm the internal validity of the research, since the findings show the cause and effect relationship that the hypotheses were designed to investigate.

**Construct validity:** The ability for researcher to recommend an implementation of the findings of the research indicate that the research could measure the outcome that it was designed to study (Trochim, 2006). Hence, this research could operationalise the cause and effect relationship between variables by arriving at both practical and theoretical implications of these relationships. The development of practical and
theoretical implications of the research findings indicates validity in the construct investigated by this research.

*External validity:* The conclusions of this research indicated that the research is generally applicable to academic faculty in HEI. To increase validity of the research, the respondents included academics across various employment types (full-time, part-time), professional experience (long-term, medium-term, short-term) and academics disciplines (science, social science, education). This selection ensured that academics with various employment characteristics were all represented within the research. In addition, respondents included academics across various demographic characteristics (age, gender and educational qualification). This ensured that the research was generalized to different groups, thereby increasing external validity.

*Content validity:* the research included a measure of the extent to which the elements in the survey were relevant and were a representation of the constructs (Haynes et al., 1995); psychological contract and HR practices. Establishing the content validity was necessary at the initial stage of the survey development, thus, the validity of the each of the elements in the survey were tested before the research made a final assessment of the overall content validity. The content validity was measured by replying on the knowledge from existing research and scholars that are familiar with the constructs being measured; psychological contract and HR practices.

*Face validity:* The research analysed the survey and its content, to test if it was measuring the concepts it was designed to measure. The researcher used the existing literature on the psychological contract concepts and HR practices, to determine the transparency and relevance of the survey to these concepts (Holden, 2010). The research found direct relationships between the question in the survey and the concepts. Hence, the survey met the requirements for face validity.

To ensure the overall validity of the research, the researcher ensured that an appropriate time scale for the research was planned, the appropriate methodology, sampling approach and analytical methods were adopted and the respondents were not pressured into selecting any set of answers to the surveys.
4.7.2 Reliability

Research reliability refers to the ability of the research to be able to produce consistent set of results if the research is repeated, using the same instruments, with the same participants or with a similar group of participants (Babbie, 2001; Blumberg et al., 2005). In quantitative research, there are several approaches to ensuring the reliability of the research including; test/retest and internal consistency. While test/retest involves executing the research instrument at two different times, the internal consistency is aimed at quantitatively estimating the reliability of the survey instrument.

This research adopted the internal consistency approach to ensuring the research data collected and the overall research was reliable. The research estimated the reliability of data collection tools and overall research by grouping questions in the cross-sectional survey that measured the same concepts. For instance, the survey grouped questions that related to each type of the psychological contract as well as questions that related to each HR practice. After collecting the responses from the survey, correlation estimates were run on each group of questions, to determine if the survey was reliable in measuring each concept; the psychological contract types and HR practices. The research adopted a common approach to estimating the correlation among the questions in the survey by applying Cronbach’s Alpha. Cronbach’s Alpha was applied to divide the questions in the survey into groups and compute the correlation values for each group separately. Hence, the reliability estimates were determined for each concept collected by the survey.

To ensure the general reliability of the study, the research executed appropriate analytical approaches to analyse the data collected from the cross-sectional surveys. The analytical approach applied to measuring the data collected using correlations and multiple regression analysis was in adherence to the research methodology, design and data types (Easterby-Smith et al., 2015). Hence, since the research was based on the internal realism ontology and a positivist epistemology, the researcher ensured that the research design included a large survey with multiple cases, that the data type collected was mainly numbers and that the analysis and interpretation of data was done using correlations and regression analysis (Easterby-Smith et al., 2015). The application of related data collection, data analysis and interpretation increased the overall reliability of the research. The reliability of the concepts collected
by the survey supported the reliability of the entire research in consistently measuring the same constructs each time the research is repeated using the same instruments and research approach.

4.8 Summary of Research Method

This chapter presented the method followed by this research. It has included a review of the research philosophy positivist/postpositivist research philosophy. The design of the research methods chapter is to demonstrate how data was collected in response to the research questions and to test the hypotheses. The methods of data collection using an online survey derived from the Psychological Contract Inventory and HR Practice Scales, as well as questions of job characteristics and demographic questions. The chapter concluded by addressing issues relating to the validity and reliability of the research. The following chapter will involve a detailed presentation of the data collected from the survey as well as tests of the hypotheses. Hence, chapter 5 will include data analysis and the results from the data analysis.
Chapter 5 – ANALYSIS AND RESULTS

5.1 Introduction

In the research methods chapter, chapter 4, the methodology for this research was outlined based on the research philosophy, the research measuring instrument was tested for reliability and was found to be a reliable instrument to measure the predictive relationship between the predictor variables (employees’ perception of HR practices) and dependent variables (types of psychological contract of employees).

The objective of this chapter is to present the results of the analysis done on the data collected by the online survey undertaken within Canadian HEI. The analytical strategies adopted by this research were aimed at testing the research hypotheses that were created in chapter three, literature review. Hypothesis one was tested using Psychological Contract Inventory formula to determine the types of the psychological contract developed by academics. Hypotheses two to seven were tested to determine the effect employees’ perceptions of HR practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) had on the three types of psychological contract (relational, transactional and balanced). Hypotheses two to seven were tested using standard multiple regression analysis. Multiple regression analysis was also executed to test the effect demographics, such as age and gender, had on the psychological contract types. In addition, the multiple regression analysis was applied to test the effect of job characteristics, such as employment type and professional experience, had on the types of the psychological contract. Demographics and job characteristics were control variables.

This chapter includes the descriptive statistics of the survey participants, the results of the calculation of the types of psychological contract of academics and the results of the tests of assumptions that guide the multiple regression analysis. The chapter also includes the regression models created for each of the three dependent variables; (relational, transactional and balanced psychological contracts), as well as a description of the results following each regression model. This chapter includes a test of each hypothesis, however, the analysis and results include neither discussions nor conclusions drawn from the reports and the results. The discussion of the findings is detailed and analysed in the findings and discussion chapter (Chapter 6).
5.2 Sample Demographics and Job Characteristics

The table below is an overview of the control variables and it is aimed at showing the structure of participants in this research.

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>238</td>
<td>58.80</td>
</tr>
<tr>
<td>Part-time</td>
<td>167</td>
<td>41.20</td>
</tr>
<tr>
<td>Professional experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term</td>
<td>173</td>
<td>42.70</td>
</tr>
<tr>
<td>Medium-term</td>
<td>104</td>
<td>25.70</td>
</tr>
<tr>
<td>Short-term</td>
<td>128</td>
<td>31.60</td>
</tr>
<tr>
<td>Academic discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>166</td>
<td>41.00</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>127</td>
<td>31.40</td>
</tr>
<tr>
<td>Sciences</td>
<td>112</td>
<td>27.70</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>198</td>
<td>48.90</td>
</tr>
<tr>
<td>Female</td>
<td>207</td>
<td>51.10</td>
</tr>
<tr>
<td>Highest education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate education</td>
<td>281</td>
<td>69.30</td>
</tr>
<tr>
<td>Graduate education</td>
<td>124</td>
<td>30.70</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 years and over</td>
<td>177</td>
<td>43.70</td>
</tr>
<tr>
<td>Less than 45</td>
<td>228</td>
<td>56.30</td>
</tr>
</tbody>
</table>

Note: N = 405

5.3 Hypotheses Testing

This sub-section comprises of the test of hypotheses in this research. First, the test of hypothesis 1 on the types of psychological contract developed by academics. Second, the tests on hypotheses 2 to 7 on the impact of human resource practices on the psychological contract of academics.
5.3.1 Psychological Contract Types of Academics

The research analysed the typology of the psychological contract and scoped the development of three types of psychological contract. The relational psychological contract exists within the context of a social employment relationships, based on trust and commitment (Rousseau, 1990; Robinson et al., 1994; Guzzo and Noonan, 1994; Suazo et al., 2009). The transactional psychological contract exists based on a compensational employment relationship, focusing on economic factors (Bathmaker, 1999; McInnis et al., 2009; Conway and Briner, 2005), and the balanced psychological contract, that draws its nature from both the relational and transactional psychological contract types (Rousseau and Wade-Benzoni, 1994; Bynum et al., 2012; Scheepers and Shuping, 2011).

5.3.1.1 Mean Values of PC Types

As a result of the critical analysis of the psychological contract types of academics within the higher education context, this research developed the hypothesis that higher education academics are more likely to develop a balanced type of psychological contract than the transactional or relational types. The data on the types of psychological contract was collected using the previously validated Psychological Contract Inventory (PCI) (Rousseau, 2000). To determine the type of psychological contract developed by academics, the research applied PCI psychological contract type formula (Rousseau, 2000; Scheepers and Shuping, 2011). The understated table are the mean values of the psychological contract types of the 405 research participants, as well as the number of respondent with each type of the psychological contract.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relational psychological contract</td>
<td>3.19</td>
<td>0.998</td>
<td>132</td>
<td>32.71</td>
</tr>
<tr>
<td>2</td>
<td>Transactional psychological contract</td>
<td>3.27</td>
<td>1.011</td>
<td>136</td>
<td>33.52</td>
</tr>
<tr>
<td>3</td>
<td>Balanced psychological contract</td>
<td>3.30</td>
<td>1.016</td>
<td>137</td>
<td>33.77</td>
</tr>
</tbody>
</table>

N=405

Most the sample have balanced psychological contract (33.77%), then transactional psychological contract (33.52%) and the relational psychological contract (32.71%).
applying the formula for calculating the types of psychological contract (PC) academics develop, using the Psychological Contract Inventory (PCI):

\[ PC = \langle PCR; PCT; PCB \rangle \]

Where:
- \( PC \) - Psychological Contract
- \( PCR \) - Mean values of the respondents' relational \( PC = 3.19 \)
- \( PCT \) - Mean values of the respondents' transactional \( PC = 3.27 \)
- \( PCB \) - Mean values of the respondents' balanced \( PC = 3.30 \)

Therefore: \( PC = \langle 3.19; 3.27; 3.30 \rangle \)

The greatest mean value among the psychological contract types defines the psychological contract type of employees. Hence, the results indicate that academic staffs of higher education institutions develop balanced psychological contracts (mean = 3.30).

5.3.1.2 Statistical Significance in Mean Differences
The understated table indicates the results of the Paired T-Test to indicate the findings of the comparison between the populations means. Hence, the paired t-test was applied to determine the statistical significance between the means of the psychological contract types. The paired t-test were run in SPSS to compare the means between the relational and transactional psychological contract, between the relational and balanced contracts and between the transactional and balanced contracts.
Table 22: Paired Sample T-Test on Psychological Contract Mean Values

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>-0.079</td>
<td>1.449</td>
<td>0.072</td>
<td>-0.220</td>
<td>0.063</td>
<td>-1.092</td>
<td>404</td>
<td>0.276</td>
</tr>
<tr>
<td>Pair 2</td>
<td>-0.103</td>
<td>0.962</td>
<td>0.048</td>
<td>-0.197</td>
<td>-0.009</td>
<td>-2.152</td>
<td>404</td>
<td>0.032*</td>
</tr>
<tr>
<td>Pair 3</td>
<td>-0.024</td>
<td>1.525</td>
<td>0.076</td>
<td>-0.173</td>
<td>0.125</td>
<td>-0.320</td>
<td>404</td>
<td>0.749</td>
</tr>
</tbody>
</table>

N=405, P < 0.05*,
Three paired samples t-test were conducted to compare the mean value of the relational and transactional psychological contracts, relational and balanced psychological contracts and transactional and balanced psychological contracts respectively. The results indicated that there was a no significant difference in the scores for relational psychological contract (M=3.19, SD=0.998) and transactional psychological contract (M=3.27, SD=1.011) conditions; t (404) =-1.092, p=0.276. There was a significant difference in the scores for relational psychological contract (M=3.19, SD=0.998) and balanced psychological contract (M=3.30, SD=1.016) conditions; t (404) =-2.152, p=0.032. In addition, there was no significant difference in the scores for transactional psychological contract (M=3.27, SD=1.011) and balanced psychological contract (M=3.30, SD=1.016) conditions; t (404) =-0.320, p=0.749.

The results indicated that the balanced psychological contract was significantly higher than the relational psychological contract. However, the balanced psychological contract was not significantly higher than the transactional contract

5.3.2 Effect of HR Practices on the PC of Academics

5.3.2.1 Regression Assumptions

In analysing all the regression equations reported below, the research checked the underlying model assumptions. By comparing the standardized residuals with the predicted values, the results included nine cases with standard residual values between -5.13 and 3.30. Hence, the research decided to exclude these data items thereby removing the outliers from the analysis. These outliers were left out of the respective regression analyses reported below. It is noteworthy that additional analyses showed that the outliers' inclusion did not meaningfully change the results and interpretations. No major violations were found in the normal probability plots of standardized residuals. The standard multiple regression analysis excluded independent variables that were highly correlated with other independent variables to avoid multicollinearity. The full-time employment, long-term experience, education academic discipline, male gender, age less than 45 and graduate education were all excluded from the analysis. The excluded variables were all control variables.
The composite HR practice scales, for the items within each HR practice, was applied in the multiple regression analysis for testing hypotheses 2 to 7. Hence, recruitment and selection HR practice scale comprised of 2 items (ability to perform the job and personal interview). The training and development HR practice scale comprised of three items (improve interpersonal skills, improve job abilities and remedy past poor performance). The performance appraisals HR practice scale comprised of three items (determine appropriate pay, document subordinate’s performance and plan subordinate development activities). Finally, the compensation and benefits HR practice scale comprised of three items (earnings is contingent on performance, pay incentives are important and the benefits are important).

5.3.2.2 Multiple Regression Analysis

The effect of employees’ perception of HR practices on the types of the psychological contract of academics was tested using three Standard Multiple Regression Models.

Multiple Regression Model: Relational Psychological Contract

To test the research hypotheses a standard multiple regression analysis was run to determine if the addition of employees’ perception of the human resource practices improved the prediction of relational psychological contract type of academics in Canadian HEI over and above the control variables (demographics and job characteristics) alone. See the table below for full details on the regression model.
Table 23: Results of Regression Analysis for Relational Psychological Contract (PCR)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Part-time</td>
<td>B</td>
<td>SE</td>
<td>B</td>
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<td>B</td>
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<td>0.07</td>
<td>0.05</td>
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<td></td>
<td>Compensation and benefits</td>
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<td></td>
<td></td>
<td>0.06</td>
<td>0.04</td>
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</tr>
</tbody>
</table>

$R^2$ | Model 1 | 0.31 | Model 2 | 0.70 |

$\Delta R^2$ | Model 1 | 0.10*** | Model 2 | 0.39*** |

Note: N = 405 participants. *Regression effect is significant at the 0.05 level (2-tailed). **Regression effect is significant at the 0.01 level (2-tailed). ***Regression effect is significant at the 0.001 level. B=unstandardized regression coefficient, SE= standard error, PCR=Relational Psychological Contract.
The regression results for models with relational psychological contract as the dependent variable are summarized in the table above. The multiple regression table, model 1 indicated that 31% ($R^2 = 0.31$) of the variation in the relational psychological contract is predicted by the control variables. However, 39% ($\Delta R^2 = 0.39$) more of the variation in the relational psychological contract is predicted by the addition of the employees’ perception of HR practices.

The coefficient tables indicated that short-term experience was inversely and significantly related to the relational psychological contract ($b = -0.48$, $se=0.10$, $p<0.001$). In addition, the coefficient tables indicated that employees’ perception of recruitment and selection HR practices was positively and significantly related to the relational psychological contract ($b=0.25$, $se=0.04$, $p<0.001$). Employees’ perception of training and development is positively and significantly related to the relational psychological contract ($b=0.40$, $se=0.05$, $p<0.001$). On the contrast, employees’ perception of performance appraisals and compensation and benefits are not significantly related to the relational psychological contract.

There was some evidence for an inverse and significant relationship between short-term experience and the relational psychological contract, as well as an inverse and significant relationship between part-time employment and the relational psychological contract in model 1. The addition, employees’ perception of the HR practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) in model 2 increased the explanatory power of the model ($\Delta R^2=0.39$) with a positive coefficient for employees’ perception of the recruitment and selection HR practice ($b=0.25$) and a positive coefficient for employees’ perceptions of the training and development HR practice ($b=0.40$). Academics that reported higher perceptions of recruitment and selection HR practice and training and development HR practice also have stronger relational psychological contracts with their employers.

Variance inflation factors (VIFs) for the second model were all well below 4, suggesting that multicollinearity was not a problem in these analyses (Rovai et al., 2013).
Multiple Regression Model: Transactional Psychological Contract

To test the research hypotheses a standard multiple regression analysis was run to determine if the addition of employees’ perception of the human resource practices improved the prediction of transactional psychological contract type of academics in Canadian HEI over and above the control variables (demographics and job characteristics) alone. See the table below for full details on the regression model.
### Table 24: Results of Regression Analysis for Transactional Psychological Contract (PCT)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td></td>
<td>B</td>
<td>SE</td>
<td>VIF</td>
</tr>
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<td>Control variables</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Part-time</td>
<td>-0.11</td>
<td>0.10</td>
<td>-0.12</td>
<td>0.10</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short-term</td>
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<td>0.13</td>
<td>0.02</td>
<td>0.13</td>
<td>1.71</td>
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</tr>
<tr>
<td></td>
<td>Medium term</td>
<td>-0.40**</td>
<td>0.13</td>
<td>-0.40**</td>
<td>0.12</td>
<td>1.42</td>
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<tr>
<td></td>
<td>Social Science</td>
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<td>-0.12</td>
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<td>1.29</td>
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<tr>
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<td>0.12</td>
<td>1.32</td>
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<tr>
<td></td>
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<td>0.26**</td>
<td>0.10</td>
<td>0.23</td>
<td>0.09</td>
<td>1.02</td>
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<tr>
<td></td>
<td>Age 45 and Over</td>
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<td>0.11</td>
<td>0.27</td>
<td>0.12</td>
<td>1.62</td>
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<tr>
<td></td>
<td>Recruitment and selection</td>
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<td>0.05</td>
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<td>1.29</td>
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<tr>
<td></td>
<td>Training and development</td>
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<td>0.07</td>
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<tr>
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<td>Performance appraisals</td>
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<tr>
<td></td>
<td>Compensation and benefits</td>
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<td></td>
<td>1.68</td>
<td></td>
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</tbody>
</table>

| R²     | 0.36 |       | 0.47 |       |
| ΔR²    | 0.13***| 0.09***|       |

Note: N = 405 participants. *Regression effect is significant at the 0.05 level (2-tailed). **Regression effect is significant at the 0.01 level (2-tailed). ***Regression effect is significant at the 0.001 level. B=unstandardized regression coefficient, SE= standard error, PCT=Transactional Psychological Contract.
The regression results for models with transactional psychological contract as the dependent variable are summarized in the table above. The multiple regression table, model 1 indicated that 36% ($R^2=0.36$) of the variation in the transactional psychological contract is predicted by the control variables. However, 9% ($\Delta R^2=0.09$) more of the variation in the transactional psychological contract is predicted by the addition of the employees' perception of HR practices.

The coefficient tables indicated that medium-term experience was inversely and significantly related to the transactional psychological contract ($b=-0.40$, $se=0.12$, $p<0.05$). In addition, the coefficient tables indicated that employees' perception of compensation and benefits HR practice was inversely and significantly related to the transitional psychological contract ($b=-0.27$, $se=0.05$, $p<0.001$). The employees' perception of recruitment and selection, training and development and performance appraisals were not significantly related to the transactional psychological contract.

There was some evidence for an inverse and significant relationship between the female gender and the transactional psychological contract, as well as an inverse and significant relationship between academics aged 45 and over and the transactional psychological contract in model 1. The addition of employees' perception of the human resource practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) in model 2 reduced the explanatory power of the model ($\Delta R^2=0.09$) with a negative coefficient for employees' perception of the compensation and benefits HR practice ($b=-0.27$) and a positive coefficient for employees' perceptions of the training and development HR practice ($b=0.11$). Academics that reported lower perceptions of compensation and benefits HR practice also reported weaker transactional psychological contracts. In addition, academics that reported stronger perceptions of training and development HR practices also have stronger transactional psychological contracts with their employers.

Variance inflation factors (VIFs) for the second model were all well below 4, suggesting that multicollinearity was not a problem in these analyses (Rovai et al., 2013).
Multiple Regression Model: Balanced Psychological Contract

To test the research hypotheses a standard multiple regression analysis was run to determine if the addition of employees’ perception of the human resource practices improved the prediction of balanced psychological contract type of academics in Canadian HEI over and above the control variables (demographics and job characteristics) alone. See the table below for full details on the regression model.
Table 25: Results of Regression Analysis for Balanced Psychological Contract (PCB)

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<tr>
<th>Model</th>
<th>Variable</th>
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<th>Model 2</th>
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<tr>
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<td>Recruitment and selection</td>
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<td>0.04</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>ΔR²</td>
<td>0.11***</td>
<td></td>
<td>0.31***</td>
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</tr>
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</table>

Note: N = 405 participants. *Regression effect is significant at the 0.05 level (2-tailed). **Regression effect is significant at the 0.01 level (2-tailed). ***Regression effect is significant at the 0.001 level. B = unstandardized regression coefficient, SE = standard error, PCB = Balanced Psychological Contract.
Regression results for models with balanced psychological contract as the dependent variable are summarized in the table above. The multiple regression table, model 1 indicated that 33% ($R^2 = 0.33$) of the variation in the transactional psychological contract is predicted by the control variables. However, 31% ($\Delta R^2 = 0.31$) more of the variation in the balanced psychological contract was predicted by the addition of the employees’ perception of HR practices.

The coefficient tables indicated that employees’ perception of recruitment and selection HR practices was positively and significantly related to the balanced psychological contract ($b=0.18$, $se=0.05$, $p<0.001$). The employees' perception of training and development was positively and significantly related to the balanced psychological contract ($b=0.29$, $se=0.06$, $p<0.001$). In addition, employees’ perception of compensation and benefits was positively and significantly related to the balanced psychological contract ($b=0.18$, $se=0.04$, $p<0.001$).

There was some evidence for an inverse and significant relationship between the female gender and the balanced psychological contract, as well as an inverse and significant relationship between academics aged 45 and over and the balanced psychological contract in model 1. The addition of employees' perception of the HR practices (recruitment and selection, training and development, performance appraisals and compensation and benefits) in model 2 increased the explanatory power of the model ($\Delta R^2=0.31$) with a positive coefficient for employees’ perception of the recruitment and selection HR practice ($b=0.25$) and a positive coefficient for employees' perceptions of the recruitment and selection HR practice ($b=0.18$), training and development HR practice ($b=0.29$) and compensation and benefits HR practice ($b=0.18$). Academics that reported higher perceptions of recruitment and selection HR practice, training and development HR practice and compensation and benefits HR practices also have stronger balanced psychological contracts with their employers.

Variance inflation factors (VIFs) for the second model were all well below 4, suggesting that multicollinearity was not a problem in these analyses (Rovai et al., 2013).
5.4 Summary of Results

The quantitative research was designed to explore several statistical combinations with the aim of identifying the combination of variables that showed the best predictive relationships with the dependent variables; the psychological contract types. The research gathered data from a total sample size of 414 respondents. However, the test of assumptions in the multiple regression analysis excluded 9 respondents who failed the outliers' assumption test. Hence, all the quantitative analysis: reliability, descriptive statistics and multiple regression analysis were executed using a final sample of 405 respondents.

The descriptive statistics indicated the frequency of responses to the questions on the research survey. The quantitative analysis included the execution of standard multiple regression analysis to investigate the predictive relationship between the employees' perception of the HR practices and their psychological contract types. The predictive relationship between the employees' demographics and job characteristics (control variables) and psychological contract types (dependent variables) was also examined using the multiple regression analysis.

The execution of the standard multiple regression analysis comprised the creation of three regression models, made up of a combination of predictor and control variables, for comparison with the dependent variables. The strongest predictive relationship between the perception of HR practices and the psychological contract types was indicated in the relationships between two HR practices: recruitment and selection, and training and development and the relational and balanced psychological contract types.

The results of the PCI psychological contract type computation indicated that hypothesis one (H1), academics are more likely to develop balanced psychological contracts rather than transactional or relational psychological contracts, was supported. The results of the standard multiple regression analysis also indicated that hypothesis two (H2), employees’ perception of recruitment and selection HR practice has a positive effect on the development of a relational type of psychological contract, was supported. The results indicated that hypothesis four (H4), employees’ perception of training and development has a positive effect on the development of a relational
type of psychological contract, was supported. A detailed discussion of the results, those hypotheses that were not supported and the additional information gained from the data analysis, will be done in the findings and discussion chapter (chapter 6).

The next chapter discusses findings from the quantitative analysis and aims to support the findings with relevant literature relating to the psychological contract types, psychological contracts in HEI, HR practices and the higher education context.
Chapter 6 – FINDINGS AND DISCUSSIONS

6.1 Introduction
This chapter presents a theoretical discussion of the research results that were presented in Chapter 5. The objective of this chapter is to draw out meaningful discussions from the results of the quantitative analysis, to discuss the outcome of the hypotheses tests and to theoretically explain quantitative results and decisions taken by the researcher. The discussions comprise of the types of psychological contracts of academics and the effects of employees’ perception of HR practices on the psychological contract.

This research found backing for the hypotheses that academics are more likely to develop balanced psychological contracts than relational and transactional contracts (H1). In addition, that employees’ perception of recruitment and selection HR practice had a positive effect on the relational psychological contract (H2). The research findings also supported the hypothesis that employees’ perception training and development HR practices had a positive effect on the relational psychological contract (H4). The research did not find support for four hypotheses. The hypotheses that were not supported by the research findings are that, employees’ perception of training and development HR practice has a positive effect on the development of a transactional psychological contract (H3). The findings did not support the hypotheses that stated that employees’ perception of performance appraisals HR practices has a positive effect on the development of relational (H5) and transactional psychological contracts (H6). The research findings did not support the hypothesis that employees’ perception of compensation and benefits HR practice has a positive effect on the development of relational psychological contract (H7). Hence, the research findings support three out of the seven hypotheses.

6.2 Psychological Contract Types of Academics
The objective of this research was to extend the knowledge of the psychological contract theory within the context of the higher education sector by examining the psychological contract types of academics and how these contracts are impacted by the human resource practices of their employers.
The existing researches of the types of psychological contract of academics do not explicitly define academics using the same or similar characteristics as this research. Hrabok (2003) researched on the psychological contract of experienced academics, indicated that experienced higher education academics developed balanced psychological contracts. Majority of the existing research on the types of the psychological contract developed by academics investigated the extent to which academics developed economic-based perceptions (Rousseau, 1989; Millward and Hopkins, 1998) and social relationship-based perceptions (Rousseau, 1990; Robinson et al., 1994; Guzzo and Noonan, 1994; Suazo et al., 2009).

In analysing the content of the psychological contract of academics, prior research found that academics perceptions went beyond relational and transactional expectations, rather academics perceived that their employers owed them, the opportunities to research and teach autonomously, contribute to the development of students, contribute to their academic disciplines and the development of the university (Krivokapic-Skoko and O'Neill, 2008; O'Neill et al., 2010). The perception of contributing to knowledge and their academic discipline are not perceptions that are strictly within the confines of academics’ current employers. Hence, the content of the psychological contract of academics could be considered as balanced contents since an academic contribution to the academic discipline and contribution to knowledge could create external career development opportunities for the academic.

The balanced psychological contract of an employee implies that the employee is interested in their personal career development within their current employment and also interested in career development activities that are external to their current employment (Rousseau, 2000). The prior research on the types of psychological contract developed by academics (Tipples et al., 2007; Krivokapic-Skoko and O'Neill, 2008; Krivokapic-Skoko et al., 2009; O'Neill et al., 2010) primarily classified the psychological contract into relational and transactional contracts. In comparing the content of the psychological contract of academics to the Psychological Contract Inventory (Rousseau, 2000), there is an indication that the content of the psychological contract of academics should be considered as mostly balanced. Hence, although the previous research on the contents of the psychological contract of academics indicate
that academics have relational contract, within the PCI those contents would be classified as balanced content.

6.3 Effect of HR Practices on the Psychological Contract of Academics

Human resource managers vary the use of HR practices with the aim of improving management services, increasing productivity, ensuring both employee and customer satisfaction (Schultz, 2010; Marescaux et al., 2012) and improving communications between employers and employees (Guzzo and Noonan, 1994; Aggarwal and Bhargava, 2009). HR practices are not distinct; they overlap and do not exist in isolation (Maley, 2009). However, managers and scholars have classified HR practices in multiple ways. Armstrong (2003) classified HR practices into four main areas (recruitment and selection, training and development, performance appraisals and compensation and benefits) using the HR lifecycle. The objective of this research included an exploration of employees’ perception of HR practices and their effect on the psychological contract types of academics. The research adopted the HR practice scale of Geringer et al. (2002), to enable respondents to rate employees’ perception of the HR practices of their higher education employers. The HR practice scale included several questions on each of the four HR practices within the scope of this research.

The figure below presents a summary of this research’s findings on the effect of employees’ perception of HR practices on the psychological contract of academics.

![Diagram of Psychological Contract Types](image)

**Figure 2:** Findings on the effect of HR practices on the PC of academics
Positive effect (+), Negative effect (-)
6.3.1 Effect of Recruitment and Selection on the Psychological Contract
Recruitment and selection is the point at which the employment relationships between employees and employers are established (Rousseau, 2001; Aggarwal and Bhargava, 2009). The recruitment phase is also the point at which a social relationship is created between employees and employers (Rousseau, 1990; Robinson et al., 1994; Rousseau, 1995; Millward and Hopkins, 1998). During the recruitment and selection process, employers tend to portray their organisations positively (Aggarwal and Bhargava, 2009) which leads to the establishment of relational perceptions in the minds of new employees (Suazo et al., 2009). The recruitment and selection phase is the point at which new employees create short-term or long-term perceptions of commitment to the working relationship and these commitments are based on their experiences and communications they received from the employers during the recruitment and selection process (Guzzo and Noonan, 1994; Robinson et al., 1994; Tomprou and Nikolaou, 2011).

This research results indicated that there was no significant relationship between employees' perception of recruitment and selection HR practice and the transactional psychological contract. This is supported by O'Donohue et al. (2007) that states that new employees in the academia mostly have relational perceptions. Hence, improvements in academics’ perception of the recruitment and selection HR practice do influence strengthening or otherwise of the transactional psychological contract. Transactional psychological contracts comprise of perceptions that are measurable in economic terms (Batmacher, 1999; Conway and Briner, 2005). On the contrary, recruitment and selection builds perceptions that are based on trust and fair dealing, open-ended (Millward and Hopkins, 1998) and have socio-emotional content social relationship (Cavanaugh and Noe, 1999). Hence, recruitment and selection have no relationships with transactional perceptions.

In contrast, the research results indicated that employees’ perception of the recruitment and selection HR practice had a positive effect on the balanced psychological contract. Hence, increases in employees’ perception of recruitment and selection HR practices would have positive effects on the relational and balanced psychological contracts. This results of this research indicated that employees’ perception of recruitment and selection HR practices has a stronger effect on the
relational psychological contract than on the balanced psychological contract. While the positive effect of recruitment and selection HR practice on the relational contract is addressed in existing studies (Suazo et al., 2009), there is minimal research on the relationship between any HR practice and the balanced psychological contract.

The absence of a significant relationship between employees’ perception of the recruitment and selection HR practice and the transactional psychological contracts, could be explained by the recruitment and selection process. The positive communication, written and unwritten messages from employers to prospective employees show the positive sides of prospective employees working with the organisation (Aggarwal and Bhargava, 2009; Tomprou and Nikolaou, 2011). The communication usually indicates the interest of the employer in building a good and mutually beneficial relationships with prospective employees. Hence, this leads to employees developing perceptions based on a social relationship. The perceptions developed based on social relations lead to more relational perceptions than transactional perceptions which are based on economic perceptions.

6.3.2 Effect of Training and Development on the Psychological Contract
Training and development HR practices are aimed at developing the skills and knowledge of employees as well as creating the perception of autonomy and independence among employees (Marescaux et al., 2012). Training and development enables employees become more devoted to their employers (Suazo et al., 2009; Marescaux et al., 2012). Training and development HR practices enables employees feel a sense of commitment to their employers and improves interaction and relationships between employees and employers (Suazo et al., 2009; Marescaux et al., 2012). Training and development HR practices contribute to the building of a relationship between employees and employers as well as the development of the perception of commitment in the employment relationship (Drost et al., 2002; Marescaux et al., 2012). Hence, training and development HR practices build perceptions of loyalty and commitment, which are relational perceptions. The actual training and development activities enables employees of all cadres to relate and interact in an informal setting, this strengthens social interactions and relational
contents in the psychological contract (Coyle-Shapiro and Kessler, 2000). Hence, training and development develop relational perceptions among employees.

The balanced psychological contract of an employee indicates that the employee has perceptions of career development within their current employment and also perceptions of developing their skills and knowledge for their own benefits outside their current employment (Rousseau, 2000). Training and development HR practices make it possible for employees to develop skills and knowledge that could be applied within their current employment improve employees’ career development outside their current employment. In cases where employers can no longer guarantee job security for their employees, employers apply training and development practices to enable employees obtain jobs outside their current employment (Coyle-Shapiro and Kessler, 2000; Aggarwal and Bhargava, 2009). Hence, training and development HR practice would further strengthen the balanced psychological contract of employees by giving employees skills and knowledge for career development within and outside their current employment.

Prior research found that training and development HR practice positively impacts the transactional psychological contract of employees (Millward and Hopkins, 1998). However, the items in the psychological contract which Millward and Hopkins (1998) classified as transactional, where latter reclassified as relational psychological contract items by Raja et al. (2004) and validated by Conway and Briner (2005). Hence, the results of this research that indicated that the absence of a significant relationship between training and development HR practice and the transactional contract is supported by previous research.

Most of the researches on the type of psychological contract have studied the relational and transactional types of psychological contract. However, this research contributes to the knowledge and indicates that employees’ perception of training and development have a positive and significant effect on the relational and balanced psychological contract of academics. The findings on the positive effect of training and development HR practices, on the relational and balanced psychological contract, is supported by the empirical research of Shuping (2010) and Scheepers and Shuping (2011), within the context the South African industrial sector. Finally, the research
results indicated that training and development HR practice has a stronger predictive
effect on the relational psychological contract than the balanced psychological
contract.

6.3.3 Effect of Performance Appraisals on the Psychological Contract
Performance appraisals are designed to measure the work performance of employees
(Maley, 2009), report on the performance and improve employee performance using
training and development HR practices (Armstrong, 2003; Marescaux et al., 2012).
While, the objectives of performance appraisals are for employers to evaluate
employees' performance, contribution to the organisation (Yeh, 2011), and provide
both positive and negative feedback. Performance appraisals further improve the
communication and understanding between employees and employers (Marescaux et
al., 2012). The objective for appraising employees’ past performance is to reward
employees for good performance and loyalty (Drost et al., 2002), remedy bad
performance and plan for future improvements (Armstrong, 2003; Schultz, 2010).

Through performance appraisals, employers determine the performance of their
employees and training and development HR practices are used to remedy the
performances of employees (Armstrong, 2003). The outcome of measuring of
employees' performance provides an input into the training and development HR
practices (Schultz, 2010). Hence, performance appraisals and training and
development practices complement each other. However, prior research on the
relationship between performance appraisals and the psychological contract types
indicate that there is positive relationship between performance appraisals HR practice
and both the relational psychological contract (Yeh, 2011) and the transactional
psychological contract (Yeh, 2011; Scheel et al., 2013).

The results indicated that there were no significant relationships between employees’
perception of performance appraisals HR practice and any of the three psychological
contract types. A possible explanation of the difference between the findings in this
research and the prior research is that the structure, nature and objectives of
performance appraisals in higher education are different from other industries. While
employees in non-academic sectors are resources that form part of the production
process, academics in higher education institutions control the production process through the creation and dissemination of knowledge (Bozeman and Gaughan, 2011). Hence the management of academics generally and the application of performance appraisals in higher education should be different from the performance appraisals in the non-academic sectors. The practice of measuring academics’ productivity with performance appraisals has not always been accepted by academics. Academics prefer their productivity to be measured by their contribution to knowledge and their academic discipline (Flaniken, 2009). This is further evidence that the context in which the psychological contract is investigated could have a significant impact on the outcome of the results (Cassar and Briner, 2009).

6.3.4 Effect of Compensation and Benefits on the Psychological Contract
Compensation and benefits are pre- and post-employment HR practices that employers use to structure the type of relationship they want to have with their employees. Compensation and benefits can be used to build perceptions of dedication among employees (Lucero and Allen, 1994) which is a relational perception. In addition, compensation and benefits that promote job security also promote the relational psychological contract (Kidder and Buchholtz, 2003). Generally, value-based rewards for performance, such as compensation and benefits, promote the relational psychological contract (Conway and Briner, 2005). However, the changes an employer makes in the employee’s benefits can change the perceptions employees have about their employers. Recognition from employers builds relational perceptions (Guzzo and Noonan, 1994) while increases in monetised rewards promote transactional perceptions in employees (Suazo et al., 2009). Hence, compensation and benefits HR practice relates to both relational and transactional psychological contracts.

In assessing the relationships between the psychological contract types and employees’ perception of the HR practices, the findings from the research indicated that employees’ perception of compensation and benefits HR practices had no significant impact on the relational psychological contract of academics. Previous research indicate that financial compensation positively affects both relational and transactional perception of employees (Scheel et al., 2013). However, the structure
and content of the compensation and benefits package given to employees will determine the type of psychological contract that will be developed. Hence, compensation and benefits that promote job security and long-term employment positively affect the relational psychological contract of employees (Kidder and Buchholtz, 2003). Value-based compensation and benefits packages positively affect the relational psychological contract (Conway and Briner, 2005), while compensation and benefits packages that indicate a short-term employment relationship has a positive effect on the transactional psychological contract.

Applying the statements from previous research, it is likely that the inverse and significant predictive effect of employees’ perception of compensation and benefits HR practices on the transactional psychological contract could be explained by the content and structure of the compensation and benefits in higher education. This could also explain the results that compensation and benefits HR practice had a positive and significant effect on the balanced psychological contract. Considering the balanced psychological contract, insufficient compensation and benefits could motivate employees to seek career opportunities outside their current employment without given up on their jobs. In that case employees, will have mixed loyalties to their current employer while seeking external career development. This is the nature of the balanced psychological contract. Thus, employees’ perception of compensation and benefits HR practices could positively strengthen the balanced psychological contract of employees. Overall, the differences in the results between this research and prior research could be explained by the context of this study, higher education. Since, context in which the psychological contract is studied would usually impact the outcome of the research (Rousseau and Schalk, 2000; Cassar and Briner, 2009).

6.4 Effect of Demographics and Job Characteristics on the PC of Academics

This sub-section comprises of the findings and discussions on the effects of demographics and job characteristics on the psychological contract of academics. The discussions are derived from analysis of the three regression models indicating the effect of control variables and HR practices on the relational, transactional and balanced psychological contracts.
The figure above presents a summary of this research’s findings on the effect of demographics and job characteristic on the psychological contract of academics.

6.4.1 Demographics on the Psychological Contract of Academics
The research explored the effect of control variables: demographics (age, gender and education qualification) and job characteristics (employment type, professional experience and academic) on the psychological contract types.

Gender
The psychological contract is that the psychological contract is based on an exchange relationship between employees and employers (Robinson et al., 1994; Bathmaker, 1999; Raja et al., 2004; Conway and Briner, 2005) based on factors that exist within the employment relationship. However, in considering the effect of demographics on the psychological contract of employees, the results indicated that the female gender of academics had a positive and significant effect on the transactional contract and an inverse and significant effect on the balanced psychological contract. These relationships are contrary to the empirical research on the psychological contract of
academics, which indicate that the gender of academics does not have a significant relationship with employees' psychological contract (Conway and Briner, 2009).

Higher education institutions do not differentiate between the workload of male and female academics and hence gender is unlikely to make a significant difference in the psychological contract (Shen, 2010). On the contrary, there have been studies that indicate that employees are likely to respond differently to aspects of the psychological contract, such as perceived breaches, depending on their gender among other factors (Pao-Ling and Min-Li, 2013). The research findings also contradict existing research on the psychological contract that indicates that the psychological contract is built and exists on reciprocal perceptions within the employment relationship (Robinson et al., 1994; Bathmaker, 1999; Raja et al., 2004; Conway and Briner, 2005).

Hence, demographic characteristics, such as gender and education, are not created out of that employment relationship and hence have no impact on the relationship (Robinson, 1996). It is noteworthy that the gender of employees could influence expectations. However, since gender is not a factor that relates to the employment relationship, then the expectations are not created from perceived promises and therefore not within the employment relationship and the psychological contract.

**Age**
The research by Hrabok (2003) states that academics that are 45 years and older and have 15 years and more experience, develop balanced psychological contracts. Academics within this age group indicated that their perceptions include a balanced of home and work life, career development opportunities, collaborative work environment with their colleagues and high commitment to their employers (Hrabok, 2003).

Several scholars (Tipples et al., 2007; Shen, 2010; Lub et al., 2015) have considered the age of an employee as a factor that affects their perceptions and contents of their psychological contract. The contents of the psychological contract refer to the perceptions employees have about what they owe their employers and what their employers owe them in return (Conway and Briner, 2005; Bal, 2015). Employees across different generational divisions were found to respond differently to organisational commitment and willingness to stay or leave their employers (Lub et
al., 2015). The research by Lub et al. (2015) indicates that employees across different age ranges respond differently to career development, job content and organisational policies. Schalk (2004) explains that as employees grow older they have lower perceptions of what their employers owe them and their perceptions of what they owe their employers will either increase or remain unchanged.

There have been inconsistent findings in the relationship between psychological contract types and age (Bal, 2015). Vantilborgh et al. (2015) indicate that there is a negative relationship between age and the transactional psychological contract, while there is no significant relationship between age and the relational psychological contract. While, this research found that there was no significant relationship between age and the relational psychological contract, the findings of this research are in contrast with Vantilborgh et al. (2015), as this research found a positive relationship between age (45 and over) and the transactional psychological contract.

In addition, work centrality, how important a job is to an employee’s personal life (Bal et al., 2013; Bal, 2015), plays a mediating role in the relationship between age and the psychological contract types. Usually, employees with high work centrality have relational psychological contracts and employees with low work centrality have transactional contracts (Bal et al., 2013). Despite these findings, Bal and Kooij (2011) state that older employees with low work centrality have transactional contracts. In the empirical research on the psychological contract of Canadian academics, Hrabok (2003) found a positive relationship between academics, aged 45 and over or/and with 15 years’ experience, and the balanced psychological contract. Bal (2015) concludes that there is no conclusive finding on the relationship between age and the types of psychological contract.

*Education*

The multiple regression analysis indicated that there was no significant relationship between the educational qualification and the psychological contract of academics. Higher education academics take longer time, than most professions outside the academia, to develop their careers. The longer career development is usually as a result of acquiring the academic qualifications required to teach and research in higher education. As much as academics have different levels of education qualifications
these education qualifications alone do not always determine their entry and growth in the academia. Academics are also judged by their contribution to knowledge, their discipline and students’ development. Hence, education is not a stand-alone factor in determining the career of academics. Shen (2010) states that individual demographic factors (such as age, education, and gender of employees) affect the perceptions and contents of psychological contracts. However, the existing literature has minimal evidence to show the relationship between the educational qualification of employee and their psychological contracts.

6.4.2 Job Characteristics on the Psychological Contract of Academics
The research explored the effect of job characteristics (employment type, professional experience and academic) on the types of psychological contract of academics.

*Employment Type*

The type of employment employees has with their employer affects their perceptions and the content of their psychological contract (Guzzo and Noonan, 1994). In considering the impact of employment types on the relational psychological contract of employees, the results indicated that there was an inverse and significant predictive relationship between the part-time status of academics and their relational psychological contract. These results imply that part-time employment status weakens the relational psychological contract. In addition, the results indicated that there were no significant relationships between part-time employment and the transactional and balanced psychological contracts.

There are differences in the experiences and perceptions of employees; hence, there are differences in the contents of their psychological contract. The content of the psychological contract of employee has a relationship with the employment status of the employee, specifically, if the employee is a full-time or part-time employee (Guzzo and Noonan, 1994; Rousseau and Wade-Benzoni, 1994; Kraimer et al., 2005). Full-time and part-time employees are treated differently in the work environment; the benefits they receive, the workload, the tasks assigned and their future prospects with the organisation depend partially on the employment type of the employees (Conway and Briner, 2002b). While full-time employees seek better and improved relationships
with their employers, part-time employees have more transactional expectations of their employers, focusing more on the number of hours worked hourly rates and economic compensation. Conway and Briner (2002b) and Bal et al. (2013) explain that, even though employment type has a relationship with employee attitudes, the employment type does not have a significant impact on the perceptions of employees (Conway and Briner, 2002b; Bal et al., 2013).

There have been other scholars who have been more specific on the type and content of the psychological contract of employees based on their employment type. Guzzo and Noonan (1994) and Rousseau and Wade-Benzoni (1994) posit that part-time employees have been identified as having transactional psychological contracts, with perceptions that focus more on economic compensations. Additional empirical research has indicated that employees with better job security, such as full-time employees, tend to have relational perceptions, while employees with lesser or no job security, such as part-time employees, tend to have transactional perceptions (Kraimer et al., 2005). This research is unable to take the position that the weakening of the relational psychological contract could be an indication of a strengthening of the transactional psychological contract. However, this position is not supported by the data, as the multiple regression analysis indicates that there is neither a significant relationship between part-time employment and the transactional contract nor the balanced psychological contract. In addition, there is no certainty as to whether transactional and relational contracts are exclusively opposites of each other (Conway and Briner, 2005; Koskina, 2011).

**Professional Experience**

The professional experience of employees comprises of the length of time employees have worked with their current employers (Ng and Feldman, 2009). In addition, the length of employees’ professional experience significantly affects their financial compensation (Dobbie et al., 2014). Hence, individual professional experiences affect the individual disposition, satisfaction and perceptions within the employment relations (Kickul and Liao-Troth, 2000). Prior research found that new employees usually start the roles with transactional perceptions and their perceptions become relational as the experience increases (Guzzo and Noonan, 1994; Rousseau, 2001). However, Rousseau (1990) explains that employees that have short-term goals with their
employer develop transactional perceptions while employees with long-term employment plans develop relational perceptions.

The research findings indicated that there were inverse and significant predictive relationships between short-term experience and the relational psychological contract. In addition, there was an inverse and significant predictive relationship between medium-term employment and the transactional psychological contract. There was no significant relationship between short-term employment and both the transactional and balanced psychological contract. Also there was no significant relationship between medium-term employment and both the relational and balanced contracts. The inclusion of employees’ perception of HR practices in the regression models did not significantly change the results and relationships between the professional experience of academics and their psychological contract types.

This research focused on the years of experience employees have with their current main employer. New and experienced employees have different experiences, desires and perceptions of what they owe their employers and what they perceive their employers owe them in return (Kickul and Liao-Troth, 2000). As employees, spend more time with their employers, their perceptions become more relational than transactional (Guzzo and Noonan, 1994; Rousseau, 2001) since the feeling of commitment from employers’ increases over time. Employees with longer-term experience are more acceptable to changes in the organisation, they are more patient and have greater feelings of professional fulfilment, and hence, they have more relational perceptions. This is because longer term employees are more tolerant to changes in the organisation (McInnis et al., 2009).

The exact nature of the relational and transactional psychological contracts has not been fully understood, hence, the research cannot categorically say that the weakening of the relational or transactional contracts will strengthen any other contract type. The relational and transactional contracts are not known to be exclusively opposites of each other (Conway and Briner, 2005; Koskina, 2011). However, the findings in this research could be explain by the context in which the research has been executed; in higher education.
**Academic discipline**

The results indicated that there were no significant relationships between academic discipline and the psychological contract types of academics (relational, transactional and balanced). This research explored the relationship between the academic discipline of academics and their psychological contract type.

The contents of the psychological contract of academics indicated that academics have perceptions relating to their contribution to their academic discipline, autonomy, the development of students at contributing to the institution’s growth (Tipples and Krivokapic-Skoko, 1997; Tipples et al., 2007; Krivokapic-Skoko and O’Neill, 2008; Krivokapic-Skoko et al., 2009; O’Neill et al., 2010). Hence, these perceptions are not expected to change because of the academic discipline of academics. Their willingness to contribute to their various disciplines is not expected to be impacted by the discipline itself but by virtue of them being academics with the primary role of creating and dissemination of knowledge. In addition, academics are not strictly restricted to one field of study, academics could broaden their research interest to other fields of study.

In the research on job satisfaction of academics from various academic disciplines, earlier research found that academics such as economists focused on pay and pay equity and sociologist on demographics (Bozeman and Gaughan, 2011). Although there are different levels of job satisfaction among academics from different academic disciplines, the empirical study by Terpstra and Honoree (2004) was unable to prove that the academic discipline impacted job satisfaction among academics. Equally, this research did not indicate that academic discipline of academics had an impact on the psychological contract. In addition, the findings of this research are supported by the research in the psychological contract theory, that factors that do not exist between the employment relation are not part of the psychological contract (Conway and Briner, 2005; Bal, 2015). Hence, this research adopts the findings and the proven principles in the psychological contract theory that the employment relation is not made up of demographic factors, such as education, but comprises of promises that exist within the employee – employer relationship (Conway and Briner, 2009).
There was hardly any previous literature on the topic to compare to the results of this research. However, there have limited studies that have indicated that differences in academic disciplines have a relationship with psychological contract types of academic staff. The findings in this research indicate that the academic disciplines of academics do not have any effect on the strength and direction of the psychological contract of academics.

6.5 Summary of Findings
In relations to the research questions and hypotheses, the research findings indicate that academics in higher education have balanced psychological contracts. In addition, there are significant and positive effects of employees’ perception of the recruitment and selection, training and development and compensation and benefits on the balanced psychological contract. This implies that an improvement in employees’ perceptions of these HR practices would further strengthen the balanced psychological contracts of academics. The findings also indicated that the employees’ perceptions of the recruitment and selection and training and development have significant and positive effects on the relational psychological contracts. The research findings indicated that there was an inverse relationship between compensation and benefits and the transactional psychological contract and no relationship between performance appraisals and any of the psychological contract types. Finally, the research results showed predictive relationships between demographics (gender and age) and the psychological contract and predictive relationships between job characteristics (part-time employment, short-term and medium term employment) and the psychological contract.

The next chapter, conclusions, includes a discussion on the contributions to theory, practical implications of the research findings, the limitations encountered during the execution of this research and proposed directions for future research that would enhance the findings. The chapter includes an overview of the research, its findings and conclusions.
Chapter 7 – CONCLUSIONS AND CONTRIBUTIONS

7.1 Introduction
In this research, the psychological contract was investigated within the context of the higher education sector, focusing specifically on the perceptions of academic staff as employees. The research elaborated on the relationship between employees’ perception of the human resource practices of higher education employers and the perceptions of academics as employees. The objective of this chapter is to give an overview of the research by restating the objectives, the input from the literature review that led to the creation of the research questions and hypotheses, and summarising the findings and results that have been elaborated in the earlier chapters. In addition, this chapter details the theoretical contribution, practical implications, limitations of the research and recommendations for future research.

7.2 Research overview
The objective of this research was to investigate the types of psychological contract that are developed by academics in the higher education context. In addition, the research aim was to investigate the effect employees’ perception of training and development, recruitment and selection, performance appraisals, and compensation and benefit HR practices have on the relational, transactional and balanced psychological contract types of academics. The researched aimed at making theoretical and empirical contributions to the existing knowledge on the psychological contract generally and specifically within the higher education context. There has been minimal research done on the psychological contract in higher education management, hence, this research aimed at filling that knowledge gap.

The research entailed a critical analysis of the existing literature on the psychological contract theory and the effect of human resource practices on the psychological contract. As a result, the research developed five research questions and seven hypotheses and applied quantitative research methods based on a postpositivist/positivists research philosophy, thereby applying a cross-sectional survey. The cross-sectional survey was a combination of two previously validated surveys; the Psychological Contract Inventory (PCI) of Rousseau (2000) and the HR Practice Scale of Geringer et al. (2002). The PCI was used within the research survey
to collect data on the types of psychological contract of academics, while, the HR Practice Scale was used to collect data on academics’ perceptions of the HR practices of the higher education employers. The survey also collected demographic data (age, gender, education) and job characteristics (employment type, professional experience, academic discipline) of academics.

The research applied multiple regression analysis to quantitatively determine how well each of the human resource practices (recruitment and selection, training and development, performance appraisals, compensation and benefits) predicted the psychological contract types (relational, transactional and balanced) of academics. The research also computed the type of the psychological contract of academics from the data collected via the PCI in the survey. The survey was designed to collect data on the control variables: demographics (age, gender, education) and job characteristics (employment type, professional experience, academic discipline). The research analysed the effect demographics and job characteristics had on the type of psychological contract of academics. The research findings provided responses to all research questions, the results indicated that three of the seven hypotheses were supported by the findings. In addition, further knowledge, outside the defined hypotheses, was created from the data analysis, results and findings.

7.3 Contribution to theory
The following table is a summary of the contribution this research has made to the theory on human resource practices, psychological contracts (PC) and higher education management. The table indicates the research gaps identified in the literature review and the specific contribution of this research towards filling the gap. The detailed analysis of the contribution to theory is done after the table.
Table 26: Overview of contribution to theory

<table>
<thead>
<tr>
<th>No.</th>
<th>Gap in existing literature</th>
<th>Contribution</th>
<th>Ref. Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Research gap</td>
<td>• This thesis is offers a comprehensive approach by investigating the effect of four HR practices on the psychological contract of higher education academics</td>
<td>6.3.1</td>
</tr>
<tr>
<td>2.</td>
<td>Balanced approach</td>
<td>• Examined the relational, transactional and balanced psychological contract</td>
<td>6.3.2</td>
</tr>
<tr>
<td>3.</td>
<td>Types of academics’ psychological contract</td>
<td>• Academics develop mostly balanced psychological contracts</td>
<td>6.3.3</td>
</tr>
<tr>
<td>4.</td>
<td>Effect of HR practices on psychological contract types</td>
<td>• The effect of each HR practice on each type of psychological contract</td>
<td>6.3.4</td>
</tr>
<tr>
<td>5.</td>
<td>Significance of effect of HR practices on the relational psychological contract</td>
<td>• 39% ($\Delta R^2 = 0.39$) more of the variation in the relational psychological contract is predicted by the addition of the employees’ perception of HR practices.</td>
<td>6.3.5</td>
</tr>
<tr>
<td>6.</td>
<td>Significance of effect of HR practices on the balanced PC</td>
<td>• 31% ($\Delta R^2 = 0.31$) more of the variation in the balanced psychological contract is predicted by the addition of the employees’ perception of HR practices.</td>
<td>6.3.5</td>
</tr>
</tbody>
</table>
| 7.  | Effect of demographics on academics’ psychological contract | • Female gender has positive effect on the transactional and an inverse effect on the balanced psychological contracts  
• Aged 45 and over has a positive effect on the transactional contract and inverse effects on the relational and balanced psychological contracts  
• Educational qualifications have no effect on any psychological contract type | 6.3.6 |
| 8.  | Effect of job characteristics on the psychological contract in higher education | • Part-time employment has an inverse effect on the relational PC  
• Short-term and medium term professional experience both have inverse effects on the relational and transactional psychological contracts respectively  
• Academic discipline has no effect on any psychological contract type | 6.3.6 |
7.3.1 Research Gap
This research combined two related constructs; human resource practices and the psychological contract. Existing research have studied these fields together, as the psychological contract is a fundamental approach to understanding and managing human resources within an organisation. However, a few of the existing studies have investigated these constructs within the higher education sector and among academics specifically.

The higher education sector plays a significant role in economic development and the management of a productive workforce enables institutions to fulfil that role of economic development (Alexander, 2000). Academics as employees in the higher education sector are mostly different from employees across other industries (Bozeman and Gaughan, 2011). Academics have invested more time in their education and career development (Lin, 2008), academics play a direct role in the development and dissemination of knowledge and control the knowledge creation process (O'Donohue et al., 2007). As a result, it is important that the literature on human resource practices and the psychological contract are expanded to include the higher education management. In addition, this research contributes to the known gap on the research of the psychological contract in higher education (Koskina, 2011) and among academics (Shen, 2010).

This thesis reduces the gap in the literature on the effect of HR practices on the psychological contract within higher education. While existing research have addressed the effect of HR practices on the different psychological contract types, few of these existing research have been specific on the impact each HR practice have on specific psychological contract types. The findings of this research show the effect and the significance of each HR practice; recruitment and selection, training and development, performance appraisals on the relational, transactional and balanced psychological contract types.

7.3.2 Balanced Approach to the psychological contract
This research approached the study on the psychological contract from a balanced approach; thereby not restricting the psychological contract types to relational and
transactional. The existing research on the types of the psychological contract have been dominated by research that classify the psychological contract as being either mostly relational or transactional. The relationship between the relational and transactional psychological contract has not been clearly defined in the literature, and there is no clear evidence to suggest that the relational and transactional psychological contract are opposites of each other. Hence, there is the need to draw a balanced in the research on the psychological contract types (Conway and Briner, 2005).

The research on the Psychological Contract Inventory (PCI) (Rousseau, 2000) identified the balanced psychological contract as a classification of the psychological contract that includes features of both the relational and transactional contracts. In following these classifications on the psychological contract, there are other research that have identified a ‘balanced’ type of contract that is neither strictly relational nor transactional. Although different studies have named them differently. The research of Coyle-Shapiro and Kessler (2000) on the psychological contract types identified a third type of the psychological contract and referred to it as the ‘training obligation’, the perceptions employees gain from receiving skill-based training. There are also other research that have identified the ideological contract as a third focus (Thompson and Bunderson, 2003) and applied it in the psychological contract research within higher education (Koskina, 2011).

It is noteworthy that very few existing research on the effect of HR practices on the psychological contract types have used a balanced approach to studying the psychological contract. Most prior research investigated the relational and transactional psychological contract, while this study included an investigation on the types of psychological contract developed by academics and studied the relational, transactional and balanced psychological contract types. The only other known empirical research on the effect of HR practices on the psychological contract that was not restricted to the relational and transactional psychological contract, is the research by Scheepers and Shuping (2011) on the effect of HR practices on the psychological contract of employees within the iron-ore industry in South Africa.
7.3.3 Types of psychological contract developed by academics

This study contributes to the literature on the typology of the psychological contract among higher education academics. The research included a quantitative analysis using the output of the Psychological Contract Inventory (PCI) to determine the types of psychological contract developed by academics. This research found that academics are more likely to develop a balanced psychological contract than a relational or transactional contracts.

The existing literature on the types and content of the psychological contract in higher education, mostly used the relational and transactional psychological contract types. Only a handful of research defined the psychological contract in higher education using the balanced approach; Hrabok (2003) research on the psychological contract of experienced academics and Koskina (2011) on the psychological contract of students. Hence, the research that applied the relational-transactional typologies state that academics developed relational psychological contracts and the contents of the contract indicated non-transactional contents such as fair treatment in promotion, staff development and support, good management and leadership, work-life balance, reward performance and good workplace relations (Krivokapic-Skoko and O’Neill, 2008; Krivokapic-Skoko et al., 2009; O’Neill et al., 2010; Shen, 2010).

The research results support the theory that the psychological contract types do not exist in watertight compartments. During the factor analysis stage, the balanced and relational items in the psychological contract scale loaded together. Hence, this indicated that relational and balanced psychological contract items on the PCI were measuring the same things. Based on the literature, this research could not combine the relational and psychological contract into one scale. In determining the types of the psychological contract of academics, the existing literature indicated that academics either had relational (Tipples et al., 2007; Krivokapic-Skoko and O’Neill, 2008; Krivokapic-Skoko et al., 2009; O’Neill et al., 2010; Shen, 2010) or balanced psychological contract type (Hrabok, 2003), the findings supported the hypothesis that academics had mostly balanced psychological contracts. However, there was a minimal difference in the mean values of the three psychological contract types. Considering that the balanced psychological contract is considered to have the features of both the relational and transactional psychological contract, the indication
is that there could be overlaps in the structure of the psychological contract of academics.

The psychological contract literature also indicates that the typology of the psychological contract could be used for measuring the contents of the contract for comparisons to be made (Coyle-Shapiro and Kessler, 2000; Jamil et al., 2013). This research highlights the need to first clarify the psychological contract types before measuring the psychological contract because a lack of clarity on the psychological contract types would have an impact on the measurements and the outcome of the measurements of the content and types of the psychological contract. This is especially so because measuring the contents of the psychological contract is normally done using the typology of the psychological contract. Hence, the typology and the measurement are reliant on each other.

7.3.4 Effect of HR practices on the psychological contract
This research made significant contributions to the literature on the effects of HR practices on the psychological contracts. This research mapped specific HR practices in the HR lifecycle (Armstrong, 2003) to each type of psychological contract. Hence, this research identified the effect employees’ perception of recruitment and selection, training and development, performance appraisals and compensation and benefits, have on the relational, transactional and balanced types of the psychological contract. There has been a few research that have studied this level of detail in HR practices and their effect on the psychological contract. Most research on the effect of HR practices on the psychological contract has focused on a few HR practices and their effect on the relational and transactional psychological contract types. Hence, the comprehensive approach of this research enabled respondent see the HR practices and psychological contract types from wholistic points of view.

This research has contributed to the theory of HR practices and their effect on the psychological contract, has been precise in identifying the relationships between specific HR practices and their effects on the specific psychological contract types. In addition, this research has been comprehensive by investigating four HR practices and three psychological contract types, all within the same research.
The existing theory and knowledge on the relationship between HR practices and the psychological contract posit that specific HR practices build specific types of perceptions. Although, there is no consensus on the relationships, this research found that employees’ perception of the recruitment and selection and training and development had significant and positive effects on the relational psychological contracts. Employees’ perception of the recruitment and selection, training and development and compensation and benefits had significant and positive effects on the balanced psychological contracts. This could be explained by existing literature on the psychological contract of academics in higher education that found that academics usually have relational psychological contracts (Krivokapic-Skoko and O’Neill, 2008; O’Neill et al., 2010) and balanced psychological contracts (Hrabok, 2003). Hence, an increase in employees’ perception of HR practices would further build on the existing relational and balanced psychological contracts of academics. The context in which the psychological contract is studied has an impact on the results; hence, the research on the psychological contract of academics in the higher education environment would likely affect the outcome of the research.
7.3.5 Significance of HR Practices on specific psychological contract types

This research has made significant contributions to the effect of HR practices on the relational and balanced psychological contract. In investigating the relationship between HR practices and the relational psychological contract, the results indicated that 39% ($\Delta R^2 = 0.39$) more of the variation in the relational psychological contract is predicted by the addition of the employees’ perception of HR practices above the control variables (demographics and job characteristics). In addition, the results indicated that 31% ($\Delta R^2 = 0.31$) more of the variation in the balanced psychological contract is predicted by the addition of the employees’ perception of HR practices above the control variables (demographics and job characteristics).

In the field of social research both 31% and 39% are considered to be significantly high. Hence, this finding indicates that the HR practices are responsible for 39% of the relational psychological contracts of employees and 31% of the balanced psychological contract. Hence, HR practices can be applied to influence employee commitment, trust, loyalty and productivity in an organisation through the manipulation of recruitment and selection HR practices for new employees and the manipulation of training and development HR practice for new and existing employees. This research indicated that these two HR practices have the strongest and most significant effect on predicting the relational psychological contract. In addition, the manipulation of recruitment and selection, training and development and compensation and benefits HR practices can be applied to influence the development of the balanced psychological contract of employees. This research indicated that these three HR practices have the strongest and most significant effect on predicting the balanced psychological contract.

These findings and contributions are further indications that the psychological contract type of a person is dynamic, changes over time and in this case, can be influenced by the HR practices of their employer.

7.3.6 Demographics and job characteristics on the psychological contract

This research contributed to the theory on the relationship between demographics and job characteristics on the psychological contract. Considering demographics, the findings indicated that the female gender had a positive and significant effect on the
transactional psychological contract as well as an inverse and significant effect on the balanced psychological contract. The findings also indicated that age, 45 and over, had inverse and significant effects on both the relational and balanced psychological contract. However, age 45 and over had a positive and significant effect on the transactional psychological contract. This research also found no significant effect of the educational qualification of academics on of the psychological contract types.

The results on the relationships between jobs characteristics and the psychological contracts types, indicated that the part-time employment has an inverse and significant effect on the relational psychological contract and no significant effect on the transactional and balanced contracts. In addition, short-term employment has an inverse and significant effect on the relational contract but no significant effect on the transactional and balanced contract. Medium term employment has an inverse and significant effect on the transactional psychological contract and no significant effect on the relational and balanced psychological contract. Finally, the research results indicated that the academic disciplines of academics do not impact any of the psychological contract types.

Prior psychological contract research on the relationship between the psychological contract types and demographics and job characteristics were not provable in this research. Previous research indicated relationships between employment types and the psychological contracts, specifically that there are positive relationships between the full-time employees and the relational psychological contract and between part-time employees and the transactional psychological contract.

Previous research also indicated that there are positive relationships between long-term employment and the relational contract and between short-term experience and the transactional psychological contract. Hence, in contributing to the theory on the psychological contract, research should focus on the context in which the psychological contract is studied, as the context could affect the outcome (Rousseau, 1995; Rousseau and Schalk, 2000; Cassar and Briner, 2009). In addition, prior research on the psychological contract indicates that demographics do not exists as part of the employment relationship and hence not part of the psychological contract (Conway and Briner, 2005).
The research results indicate that the variance added by the control variables (demographics and job characteristics) are not significant. This indicates that the prediction of the psychological contract types have not been biased by the control variables (demographics and job characteristics). Hence, this shows that HR practices produce a greater effect on the psychological contract. This strengthens the results that indicate the significant contribution HR practices have on predicting the relational (39%) and balanced (31%) psychological contract. In the existing research, there have been no consensus of the role of demographics in predicting the psychological contract types of academics. Earlier research have shown that academics’ psychological contract are not impacted by demographics. This research finds that the psychological contract of academics is even less affected by demographics and job characteristics and impacted more by HR practices.

7.4 Practical Implications

7.4.1 Higher Education Management
This research has provided further insight into the management of human resources within the higher education context. The psychological contract has been increasingly used as a framework for understanding the employee-employer relationship. The application of the psychological contract theory in HR management in higher education institutions is relatively new. Hence, HR practitioners outside the higher education sector are more familiar with the psychological contract theory and its application than within higher education. In addition, higher education institutions play a key role in economic development through the creation and dissemination of knowledge. Hence, HR managers in the higher education context should apply context-specific HR practices in developing the types and contents of academics’ psychological contract.

HR managers should develop a clear understanding of the psychological contract of employees and how they influence employees’ behaviour, commitment and productivity. The results of this research showed that practitioners should consider the meaning of each type of psychological contract within the psychological contract theory and understand how each human resource practice could be applied to influence the psychological contract. HR practices influence employees’ commitment
and perceptions of what they owe their employers and what their employers owe them in return. In addition, HR practices affect employees’ reaction to perceived breaches and fulfilment of the psychological contract. Hence, practitioners need to have a practical understanding of the psychological contract of employees and what combination of human resources practices could lead to certain outcomes from the perspective of the employees.

7.4.2 Human Resource Practices on the Psychological Contract
This research revealed that employees’ perception of recruitment and selection and training and development HR practices have positive and significant effects on academics’ relational psychological contract. The implication is that an improvement in employees’ perception of the recruitment and selection process and training and development HR practices would have a positive effect on relational psychological contract of academics. In practice, the findings enable practitioners in higher education to understand that the relational psychological contract implies that academics have perceptions of commitment, long-term employment, loyalty and the building of a good social relationship with their employers. The previous research on the contents of the psychological contracts of academics indicate that academics perceptions of what their employer owed them include fair treatment in promotion, staff development and support, good management and leadership, work-life balance, reward performance and good workplace relations. Academics’ perceptions of what they owe their employers in return include meeting their academic expectations, commitment and to work above and beyond normal expectations (Krivokapic-Skoko and O’Neill, 2008; Krivokapic-Skoko et al., 2009; O’Neill et al., 2010).

The training and development HR practice had the strongest positive effect on the relational psychological contract among the HR practices, while recruitment and selection had the second strongest effect on the relational psychological contract of academics. HR practitioners in higher education could apply training and development practices to build employees' commitment, the perception of autonomy and independence (Marescaux et al., 2012). Training and development enables employees feel that they are valued by their employers and thereby have more commitment to their employers (Suazo et al., 2009; Marescaux et al., 2012).
The recruitment and selection process in HEI can be used as an opportunity to establish a strong social relationship between employees and employers and to build the feelings of commitment and loyalty to the HEI. The literature on the psychological contract indicates that the initial understanding between employees and employers commences during the pre-employment contacts, the initial communication and the recruitment process (Rousseau, 2001; Aggarwal and Bhargava, 2009). The recruitment and selection process is the point at which a social relationship is created between employees and employers, hence the relational perceptions are built during the recruitment process (Robinson et al., 1994; Rousseau, 1995; Millward and Hopkins, 1998).

Employees with transactional psychological contracts have perceptions that are measurable in economic terms, are usually interested in short-term employment and do not seek out recognition and organisational commitments. This research found that none of the four HR practices in the scope of this research has a positive effect on the transactional psychological contract. Conversely, employees’ perception of the compensation and benefits has an inverse effect on the transactional psychological contract of academics. Practitioners should understand that the implication of this inverse relationship is that the stronger academics’ perception of the HR practices in higher education, the weaker their transactional contract. There is no clear evidence on whether transactional psychological contracts are exclusively opposites of relational psychological contracts (Conway and Briner, 2005; Koskina, 2011). Hence, this research cannot categorically state that the weakening of the transactional contract would strengthen the relational psychological contract.

This research indicated that employees’ perception of compensation and benefits had a significant inverse effect on the transactional psychological contracts. This implies that increasing employees’ perception of compensation and benefits has negative effects on transactional psychological contracts. Compensation and benefits build perceptions of commitment in the employment relationship (Lucero and Allen, 1994; Aggarwal and Bhargava, 2009). Practitioners should leverage on the merits of using the compensation and benefits package to build the initial relational perceptions, including loyalty, commitment and fairness.
Practitioners need to understand the implication of the academics developing balanced psychological contracts. This implies that academics seek out internal development opportunities as well as build contacts outside their current employers to enhance their career potential. The balanced psychological contract indicates that academics develop features of both the relational and transactional perceptions (O’Donohue et al., 2007; O’Donohue and Nelson, 2007; Bynum et al., 2012). The implication of this in practice is that HR managers should pay as much attention to transactional perceptions as they do to relational perceptions. This research indicated that recruitment and selection, training and development and compensation and benefits all have positive effects on the balanced psychological contract of academics. In addition, training and development HR practices have the strongest relationship, among the HR practices, on the balanced psychological contract of academics.

The research found no significant relationships between performance appraisals HR practices and any of the psychological contract types. However, performance appraisals HR practices are applied along with training and development HR practices as corrective action from the outcome of performance appraisals. As a result, performance appraisals play a significant role in the training and development process (Schultz, 2010).

7.4.3 Demographics and Job Characteristics
In the management of human resources within the academia, HR practitioners would have to be conscious of the differences in the demographics and job characteristics of academics and specifically on how these characteristics could impact employee perceptions within the employment relationship.

There are practical merits in understanding the relationship between the individual characteristics of employees and their psychological contract. Full-time and part-time employees are usually treated differently in the workplace, they are given different levels of workload, assigned tasks and receive different types of compensation and benefits. There is a difference in the orientation of full-time and part-time employees. Full-time employees rely more on benefits and a long-term relationship, while part-
time employees focus more on hours worked and economic compensation (Conway and Briner, 2002b). The professional experience of academics impacts the development of the psychological contract types. Hence, HR managers should differentiate between the length of professional of academics and the impact these professional experiences have on the development of the psychological contract of academics.

HR practitioners should manage the inverse effect of part-time employment on the relational psychological contract. In addition, HR managers could also manage the inverse relationships between short-term and medium term employment on the relational and transactional psychological contract. The management of employees’ perceptions, should include the inverse effect the female gender and academics have on the balanced psychological contract. HR practitioners could apply HR practices such as training and development in building the relational or balanced psychological contract of employees. This could change the impact demographics and employee characteristics have on the psychological contract.

The research results indicated that the educational qualification and academic discipline of academics have no impact on the psychological contract. Hence, from an HR management perspective, while managing the employment relationship and understanding perceptions, there should be no need to consider education and academic discipline as demographics and job characteristics that impact the development of academics’ psychological contract.

7.5 Research Limitations
The research encountered some limitations relating to the use of a cross-sectional survey for a cause and effect study, the research approach to validating its findings, data reliability issues, the availability of official data, sampling approach, accessibility of respondents, Canada’s research policies and funding. However, the research findings have not been adversely affected by these limitations.
7.5.1 Cross-sectional Survey
The research applied a cross-sectional survey to gather data on the demographics of academics (age, gender, and education), job characteristics (employment type, professional experience, and academic discipline), psychological contract types (relational, transactional, and balanced) and employees’ perception of human resource practices (recruitment and selection, training and development, performance appraisals, and compensation and benefits). The primary sections of the survey comprised of the Psychological Contract Inventory (PCI) and HR Practice scale, which were proven tools in gathering data on the psychological contract of employees and employees’ perception on the HR practices, respectively.

In addition to the advantages and disadvantages of the cross-sectional survey in section 3.3.1, the research applied the cross-sectional survey with the aim of investigating the effect of employees’ perception of the HR practices on the psychological contract types. However, the cross-sectional survey tool is designed to collect data from respondents based on the current state of affairs and their experiences. The cross-sectional survey cannot be used to collect data over a period of time (Bryman, 2012; Lub et al., 2015), which is what is needed for a cause-effect research. Experimental design or longitudinal design could be more ideal in studying cause-effect relationships between variables (Bryman, 2012).

On the other hand, this research applied quantitative methods with the aim of generalising the findings. To generalise the findings, the quantitative methods requires the researcher upscale the study and involve a large number of respondents. Applying the longitudinal method would have restricted the research to a smaller sample and prevent generalisation of the findings. Hence, the cross-sectional survey made it possible to identify the types of psychological contracts of academics and the effects of HR practices of academics generally by focusing on a large sample of respondents.

7.5.2 Validation of Findings
There have primarily been six methods of researching the psychological contract; critical incident techniques, questionnaire surveys, case studies, daily diaries, scenario methodologies, and interviews (Conway and Briner, 2005). However, 80% of psychological contract research has been done using questionnaire surveys; thus,
approximately 70% of research on the psychological contract has involved quantitative studies, 10% has involved mixed methods, and 10% qualitative methods (Conway, no date). Although, the chosen method must be appropriate for the research (Conway and Briner, 2005; Edmondson and McManus, 2007) there have been calls for newer approaches to researching the psychological contract (Conway and Briner, 2005).

The research survey comprised of two prior surveys: the Psychological Contract Inventory of Rousseau (2000) and the HR Practice Scale of Geringer et al. (2002), in addition the survey included questions aimed at collecting data on the job characteristics of respondents and demographic data. Hence, the survey was long and this could have led to fatigue. The survey was designed to collect quantitative data, hence there was no opportunity for respondents to comment or elaborate on the answers they gave. The purely quantitative research did not allow for validation of findings from the respondents involved in the research.

The research approach was to execute an empirical research to verify the findings of prior conceptual and empirical research in the higher education context. Therefore, the research compared the quantitative findings to the literature from prior research. The prior research provided a clear standard for comparing the psychological contract concepts with the results. The limitations were that there is limited research done on the psychological contract of academics. Hence, the research could not undertake a detailed comparison of the findings of this research with other research on the psychological contract of academics in HEI. This limitation is controlled since the general psychological contract concepts provided the background and sources of research questions and hypotheses for this study. Summarily, these limitations have not compromised the quality of the results.

7.5.3 Data Reliability
The cross-sectional survey collected data on the types of psychological contract of respondents and their perceptions of the human resource practices of their employers. The survey included four questions on each of the three types of psychological contracts and three questions on each of the four types of human resource practices. A test of reliability was done on the survey questions to confirm that the questions
were consistent in testing the constructs that they were supposed to test. The results of the reliability tests indicated that one item in the recruitment and selection HR practice scale had very low alpha coefficients ($\alpha = 0.34$), hence one item from this scale was excluded from the data analysis. The item excluded was from a question that asked respondents how well having personal connections, such as friends and family contacts, affected the recruitment and selection process in their institutions. It is likely that the question was not properly understood or was poorly framed, hence the low reliability scale. Upon exclusion of this item from the recruitment and selection the data validity of the recruitment and selection improved ($\alpha = 0.75$). Hence, two items were used to measure the recruitment and selection HR practice, while three items each were applied in measuring the three other HR practices.

7.5.4 Official Data
The research was designed to explore the psychological contract of academics in higher education institutions. However, the research was executed in Canada. The research controlled for demographics (age, gender and education) and job characteristics (employment type, professional experience and academic discipline). There are no reliable and recent data on the population of academics in Canada. The Canadian Federal Ministry of Statistics, Statistics Canada, has data on the population of full-time academics but the most recent data is from 2010. There is no current source of data on the population of full-time academics, the data on part-time academics is no longer managed by Statistics Canada (Statistics Canada, 2016) and there is no known reliable source of this data.

The data on the population of Canadian academics was required to compare the proportional representation in the respondents with the official data. This included comparing the proportion of male and female respondents to the proportion of male and female academics in Canada. The absence of the demographics and job characteristics did not adversely affect the research since the research questions and hypotheses did not include a test for demographics and job characteristics of academic staff. In addition, the sampling technique, random sampling, was executed to ensure that the research sample was a representation and not necessarily a proportional representation of the population.
7.5.5 Sampling Approach
The research applied probability random sampling techniques to select Canadian HEI to approach for their academic staff to participate in the research. However, the actual process of obtaining approval from the HEI for their staff to participate in the research differed widely across HEI. Hence, the participation of academics was not strictly based on the sampling techniques; it relied on the approval processes within the individual institutions. In addition, the research contacted academics personally via their official email addresses listed on the institution’s staff directory. Therefore, there was an inconsistency in the approach for recruiting participants for the research. 66% of respondents were recruited through direct contact from the researcher while 34% of respondents were recruited through their employers. Those recruited through their employers were drawn from four Canadian HEI. The inconsistency in recruitment did not adversely affect the data collections, because all survey questions were the same and the higher education employers neither had access to the survey responses nor respondents.

7.5.6 Accessibility
The Canada’s Anti-Spam Legislation (CASL) came into effect on July 1, 2014. CASL was created to protect Canadians from spam email and other electronic messages. CASL requires individuals and business organisations to comply with three key requirements. First, the receiver of the emails must consent to receiving the messages. Second, the senders must identify themselves. Finally, the sender must provide an option for recipients of the emails to opt-out from receiving further emails. The senders of the emails are not allowed to send messages to recipients after the recipient has opted out of the emails. CASL focuses on commercial emails. However, there is ambiguity in the definition of what makes an email ‘commercial’, since the legislation states that commercial messages include messages where the sender has no expectations of profit. The legislation does not include a definition of ‘commercial’ (Toronto Public Library, 2015). CASL specifically states that an electronic message containing a hyperlink that leads to a website is regarded as an electronic commercial message (Harris, 2013).
This research was concerned about violating the CASL emailing requirements, as the research sent out emails with a hyperlink to a survey website. The research was unable to include ‘unsubscribe’ functionality within the emails sent out to participants. Unsubscribe functionality can only be obtained by using a commercial software. CASL legislation requires compliance from both individuals and business organisations and violations of CASL leads to an administrative monetary penalty (Service Canada, 2016). The research had to email surveys to potential respondents and send follow-up reminders; there was no way of knowing if the recipients wanted to ‘unsubscribe’ from the research emails. Hence, there was a lot of concern on the part of the researcher as to whether or not CASL was being violated. The research included a clear introduction in the invitation to participate, identifying the researcher and the objectives of the research. In addition, prospective participants were informed that they could opt-out of the research at any time and that completion of the survey by them was considered their consent to participate in the research.

7.5.7 Research in Canada
The Canadian Tri-Council is a coalition of three research councils in Canada. These are the Canadian Institute for Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC) and Social Sciences and Humanities Research Council (SSHRC) (Canada Tri-Research Council, 2010). The Tri-Council funds research in Canadian HEI and provides guidelines for Canadian HEI on research, including research that involves humans. Thus, the Research Ethics Board (REB) of Canadian HEI requires all research related applications to go through the REB at each respective institution. The researcher did the Tri-Council training and became certified, as this is a pre-requisite to making REB applications. However, one of the key requirements of several REBs was for the Researcher to produce evidence that the research had also received REB approval from the University of Bath. This was a challenge because the University of Bath research approval process for the researcher is not in line with that of the Tri-Council in Canada. To resolve this challenge, the researcher sought participants from those HEI that did not require an REB approval process from the University of Bath and the researcher also relied on participants’ that were solicited individually.
7.5.8 Funding
The funding for the research was provided solely by the researcher. Ideally, the researcher would have contacted the Research Ethics Board (REB) in various institutions and met them in person to submit an application to enable the HEI to distribute the research survey to their academics. However, all HEI were contacted via email, hence the impersonal approach to the REB application may have affected the responses from the HEI. The limited personal funds of the researcher prevented the researcher from physically visiting the HEI to request participation in the research. Hence, all prospective respondents either were contacted directly via email or received the survey email via their employers’ central emailing system. Contacting prospective HEI and individual academics via email reduced the cost of conducting the research.

7.6 Directions for future research
The following are recommended areas future research might focus on and how they might expand on and strengthen this study. This section is divided into three; to address they key areas of this research; the psychological contract of academics, HR practices in higher education and the application of research methods for future research.

7.6.1 Research on the Psychological Contract of Academics
This research involved a critical analysis on the psychological contract theory, considering the formation of the psychological contract, the individuality, perceptions and implicit nature of the contract. In addition, the literature review included analysis of the reciprocal nature and typologies of the contract. The research adopted earlier scholars and authors and applied that knowledge as the foundation for this empirical research. This research approach is valid, however, the context in which the psychological contract is study affects the outcome of the psychological contract (Rousseau, 1995; Rousseau and Schalk, 2000; Cassar and Briner, 2009).

To further develop the knowledge of the psychological contract in the higher education sector and specifically among academic staff of higher education, research would be needed to define the nature of the psychological contract of academics in higher education. Research have been done on developing the concepts of the psychological contract within specific industries with the aim of understanding how employees define
the psychological contracts, who they consider their employers to be and the content and perceptions within the contract. Hence, further research is required to articulate and define the concepts of the psychological contract of academics considering how academics define their psychological contracts. These research should also explore how academics define the explicit nature, if they consider their psychological contract to be based on explicit, implicit terms or a combination of both. Research should address who the parties are to academics’ psychological contract, for instance, elaborate on whom exactly in the higher education do academics consider being their employers and if the employers will differ based on the level of autonomy of the institution.

The further studies on the psychological contract of academics should also determine if, academics perceive the psychological contract to be based on a mutual exchange between employees and employers or based on a one-way relation or other dimensions of relationships. This research adopted a proven tool for gathering data on the types of psychological contract, the Psychological Contract Inventory (PCI) of Rousseau (2000). The PCI has been applied to collect data by having respondents answer question on their perceptions of what they owe their employer and what they perceive their employers owe them in return. There needs to be further research to determine if the PCI is adequate for collecting data on the psychological contract of academics. In addition, further research is needed to identify the best ways of measuring the psychological contracts within the higher education sector and among academics. Academics have been found to have longer careers than most other industries, hence it will be interesting to explore if the core perception of academics’ change over time.

The typology and classifications of the psychological contract have mostly been used to measure the psychological contracts, however, the psychological contract types are not distinct elements. Hence, this research recommends further research on the classification of the psychological contract of academics. Prior research on the psychological contract of academics have found academics to have either relational (Tipples and Krivokapic-Skoko, 1997; Tipples et al., 2007; Krivokapic-Skoko and O’Neill, 2008; Krivokapic-Skoko et al., 2009; O’Neill et al., 2010) or balanced psychological contracts types and contents (Hrabok, 2003).
The psychological contract depends on several factors including the social context in which the psychological contract is observed (Rousseau and Schalk, 2000). The psychological contract should be studied within a specific context and not from a universal approach (Rousseau, 1995; Rousseau and Schalk, 2000). Therefore, the context makes it possible to have comparative studies across contexts and research of the psychological contract across different contexts develops more knowledge of the contract (Cassar and Briner, 2009). There have been a couple of empirical research studies on the psychological contract within the higher education sector and even fewer on the psychological contract of academics. Most of the current research has been within higher education in Australasia; there are very few on the Canadian context. The context in which the psychological contract is studied has an impact on the outcome of the research (Rousseau, 1995; Cassar and Briner, 2009). Hence, this study recommends further research on the psychological contract of academics in higher education.

7.6.2 Research on HR Practices in Higher Education
The research involved a critical analysis of prior research on human resource practices, HR practices that are applicable across the HR management lifecycle (Armstrong, 2003) and the impact of the HR practices on the perceptions and the psychological contract of employees. The research focused on recruitment and selection, training and development, performance appraisals and compensation and benefits.

The application HR practices across industries and in the higher education sector could include differences generally and in each of the specific HR practices. Recruitment and selection in most industries involves the selection of individuals that have relevant experience and education in the jobs they seek, while recruitment and selection of academics usually involves and assessment of the academics’ contribution to knowledge and their academic disciplines. Likewise, training and development in higher education is structured different from what obtains outside the academia. This research found no relationship between performance appraisals HR practice any of the three psychological contract types. Considering that performance
appraisals are an important part of the recruitment and selection process, it is possible that the HR practice scale used in collecting data on HR practices did not consider the structure of HR practices across industries, even though the HR Practice Scale (Geringer et al., 2002) was created from data collected in multiple countries including Canada.

This research recommends further studies on the differences and similarities between HR practices within and outside higher education. In addition, further research should be done to develop data collection tools that will measure employees’ perception of HR practices in higher education. Further research should also be done on the effect of higher education HR practices on the psychological contracts, using typologies of the psychological contract that are directly applicable to higher education academics.

7.6.3 Research Method in Future research
To address the limitations experienced in this research, it is recommended that future research on the psychological contract in higher education should be executed targeting a smaller population. Hence, researchers could study the psychological contract within specific higher education institutions instead of targeting respondents across the country. Focusing on a smaller population of academics, within a specific case study HEI, would overcome the challenge of not getting demographic data, since individual HEI can provide data on the population of academic staff within their respective institutions. A more specific case study research will also increase the chances of generalising the research findings. Further research is required to investigate the impact of the Canadian Anti-Spam Legislation (CASL) on research that uses electronic means for distributing surveys. This research should also extend to countries that have similar anti-spam legislation.

The research applied two main tools in collection of data on the types of psychological contracts and the perception of employees on the HR practices in higher education. The two data gathering tools, the Psychological Contract Inventory (PCI) (Rousseau, 2000) and HR Practice scales (Geringer et al., 2002), were designed to collect data from industries generally and not from higher education institutions. The results indicated that there are peculiarities in human resource management in higher
education that are not common across other industries. For instance, Canadian academics have much longer careers than any other industries in Canada (Statistics Canada, 2015). Hence, the data collection tools might not have been adequate in collecting data from higher education institutions.

Research into the psychological contract would benefit more from a triangulation of approaches, that way findings from one approach can be validated using another approach. The triangulation of approaches will ensure that the weakness of a research tool is overcome by the strength of another tool (Thompson and Bunderson, 2003). This research collected data using a quantitative analysis tool and the findings were validated by comparing the data to the existing literature on the psychological contract theory. The data collected for this research was collected from academic staff of HEI, while the literature used to validate the findings was primarily from psychological contract research outside academia. The research of the psychological contract will benefit more if the validation of the data collected from the surveys was done using qualitative approaches such as interviews, daily diaries and focus groups to validate the responses from the quantitative surveys.

7.7 Conclusions
This research answered 5 research questions and tested 7 hypotheses with the objectives of exploring the types of psychological contract of academics and the effect of employees’ perception of HR practices on the psychological contract.

The psychological contract refers to the non-written contract comprising perceptions of what employees’ believe they owe their employers and what their employers owe them in return, within the employment relationship (Bal and Vink, 2011). Several researchers have indicated that there are several factors that have a relationship with the psychological contract. These include demographics (Lub et al., 2015), job characteristics such as employment type (Khasawneh, 2011; Rousseau and Wade-Benzoni, 1994; Conway and Briner, 2002b) and HR practices of employers (Aggarwal and Bhargava, 2009; Suazo et al., 2009; Marescaux et al., 2012). This research focused on the effect of HR practices on the psychological contract of academics as higher education employees.
The research aimed to carry out a quantitative measure of the psychological contract, hence, the typology of the psychological contract was used to better understand the perceptions of academics. The literature review indicated four types of psychological contract. Relational psychological contract, which relates to building a social relationship in the employment relationship. The transactional psychological contract, which focuses more on the economic relationship. The balanced psychological contract, which is considered as having facets of both the relational and transactional perceptions combined in one. Finally, the transitional contract, which comprises the perceptions an employee, has in an unstable work environment such as when a company is closing down. Since the transitional psychological contract did not apply, this research adopted the relational, transactional and balanced psychological contract types.

**Psychological Contract types of academics**

The research supported the related hypothesis, that academics are more likely to develop balanced psychological contracts than relational and transactional. This finding was supported by findings in prior empirical research (Hrabok, 2003). The research findings supported the hypothesis that academics are more likely to develop a balanced psychological contract. Prior literature indicate that academics developed either relational (Tipples and Krivokapic-Skoko, 1997; Tipples et al., 2007; Krivokapic-Skoko and O'Neill, 2008; Krivokapic-Skoko et al., 2009; O'Neill et al., 2010) or balanced contracts (Hrabok, 2003).

**Effect of recruitment and selection on the psychological contract of academics**

The results indicated that there are positive effects of employees’ perception of the recruitment and selection on the relational and balanced psychological contract of academics. The findings indicated a significant and positive effect of the employees’ perception of recruitment and selection on the relational psychological contract. This was supported by previous research that agree that recruitment and selection build relational perceptions among employees (Rousseau, 1990; Robinson et al., 1994; Rousseau, 1995; Millward and Hopkins, 1998; Suazo et al., 2009).
Effect of training and development on the psychological contract of academics

There is a positive effect of training and development HR practice on the relational and balanced psychological contracts. The research findings did not support the hypothesis that employees' perception training and development has a positive effect on the transactional psychological contract. The research findings supported the hypothesis that employees' perception of the training and development had a positive impact of the relational psychological contract of academics. The findings further indicated that training and development was the highest predictor of the relational psychological contract from among all HR practices. Improvements in employees' perception of HR practices have a positive effect on strengthening of the relational psychological contract of academics, thereby creating feelings of independence and commitment to their employers.

Effect of performance appraisals on the psychological contract types of academics

The research found that performance appraisals had no effect on the psychological contract of academics. The research findings did not support the hypotheses that employees' perception of performance appraisals has positive effects on the relational and transactional psychological contracts of academics. In fact, the findings indicated that there was no relationship between performance appraisals and any psychological contract type. The results were unexpected as performance appraisals and training and development are HR practices that work hand-in-hand. Training and development practices are used to remedy the outcome of performance appraisals.

Effect of compensation and benefits on the psychological contract types of academics

The research findings indicated that compensation and benefits have positive effects on the balanced psychological contract. However, compensation and benefits also have inverse effects on the transactional psychological contract. The findings did not support the hypothesis that employees’ perception of compensation and benefits had a positive effect on the relational psychological contracts. However, the findings indicated that compensation and benefits had positive effects on predicting the balanced psychological contract. Conversely, employees’ perception of compensation and benefits had an inverse predictive relationship on the transactional psychological contract and no relationship with the relational psychological contracts.
Effect of Job Characteristics on psychological contract of academics

The psychological contract as a framework has been used to explore the differences in the perceptions of employees with various employment types (Conway and Briner, 2002b). Full-time and part-time employees have differences at work. Although, research has shown that there are relationships between job characteristics of employees and the psychological contract (Rousseau and Wade-Benzoni, 1994; Guzzo and Noonan, 1994; Conway and Briner, 2002b; Kraimer et al., 2005), there have been other research that states that there is no relationship between employment type and the psychological contract of employees (Bal et al., 2013). Employees with long, medium and short-term experiences on their current jobs also have different experiences. The research also explored the relationship between the academic discipline of academics and their psychological contract. Hence, this research aimed at exploring the relationship between job characteristics of academics as higher education employees and their psychological contract.

The results of this research found inverse and significant predictive relationships between part-time employment and the relational psychological contract. The findings indicated that the short-term work experience positively affected the relational psychological contract, while medium-term experience has inverse relationships with the transactional psychological contract. The findings indicated that there was no significant relationship between the academic discipline of academics and any type of psychological contracts. Overall, the job characteristics did not impact the prediction of the psychological contract types as much as the HR practices.

The next and final chapter is an account of the researcher’s reflection of the Doctor of Business Administration (DBA) in Higher Education Management.
Chapter 8 - REFLECTIONS ON THE DBA

This chapter is in fulfilment of a requirement of Phase 2 of the DBA (HEM) guidelines. The guidelines require the DBA candidate to incorporate our personal account and reflections into the thesis, along with conclusions and recommendations deriving from the study. The following are my personal motivation, interest and framework for the assignments and the thesis.

8.1 Professional Motivation
My interest in the Doctor of Business Administration (DBA) in Higher Education Management has been to increase my knowledge and practice as a consultant. I have been an independent consultant, with primary focus on the change process in organisations. The change process has focused on information technology change, organisational design, learning and development, process improvement and reengineering. In relations to Higher Education, I have been involved in consulting on the establishment of a Nigerian private university and mostly on the design and implementation of learning management systems in the UK and Canada. My interest in the DBA has been to broaden the scope of the consulting practice, from its current focus of IT, organisational design and change management to a wider range of activities, such as human resource management and internationalization.

The selection of my assignment topics and the thesis topic were aimed at this same objective, building my knowledge and experience for improved services in higher educational consulting.

8.2 The DBA Programme
The programme was structured in two phases:

- Phase 1: Classroom-based sessions during the residential periods; assignments; interaction with other students in the cohort; and tutorials with faculty.
- Phase 2: The thesis.
8.2.1 The Residential Periods
The residential periods comprised of four residential sessions, out of which I attended only three. My absence from the first residential had a negative impact on my motivation and understanding of the structure of the DBA programme. However, the guidance I received from the DBA Director of studies at the time, Professor Jeroen Huisman, helped a lot in getting stability by the time I attended the second residential.

Each residential period was between one and two weeks in duration and included lectures, activities, discussions on a wide range of topics relevant to higher education from an international perspective. These sessions were led by academic scholars from the University of Bath and other universities. The discussions and contributions from my colleagues on the DBA 10 were particularly interesting and insightful.

One of the most interesting features of the DBA residential periods was the international scope of the class. DBA 10 participants were from over 15 different countries and had a wide range of experience and knowledge to share. The DBA class included participants from Nigeria, Canada, England, Namibia, South Africa, Ireland, Thailand, UAE, Syria, Barbados, Australia, Austria and the USA. The multiple international locations were not just based on where each person worked or lived, but also from the countries of origin and international work experience.

The DBA 10 class did a very good job in maintaining social interactions, communications and even in-person meetings and visits while we were away from the University of Bath. This enabled a very strong social support, which others and I benefited a lot from.

8.2.2 The Assignments
The topics I chose to write on for each of the assignments had a direct relationship to building on my knowledge, experience and practice in higher education consulting.

Assignment 1: Strategic Organisational Change in Higher Education
Higher Educational Institutions are impacted by internal and external factors that either aid or derail them from fulfilling their missions and organisational objectives. The management of changes resulting from internal factors and the adoption of key change
management strategies are fundamental to an HEI achieving its mission, improving their position and fulfilling the needs of all its stakeholders. This research reviewed the relevant issues and literature in managing internal change in HEI, analysed current change management strategies applied by institutions and tested the Kotter Change Management framework to determine its viability within the higher education context. The paper found that Kotter Change Management framework, after minor modifications, would be a viable strategy for managing change in Higher Education Institutions.

Assignment 2: Analysis of the university’s institutional alliances and partnerships using criteria derived from the literature.

The research studied partnerships and alliances between HEI and external organisations; the partnerships include those that are within a national context and international locations. The term internationalisation used in the research referred to international policies, practices and activities by higher education institutions while partnerships and alliances referred to institutional partnerships within the national and international context. The research was a case study research that interviewed academic staff involved in the management of a University’s partnerships. The managing executives in charge of the University’s internationalisation office and head of the Applied Research Institute (ARI) were also research participants. The results from the document analysis, interview analysis and internationalisation tracking measure survey served as an input to map the case study against the Knight Internationalisation Tracking Measure.

Assignment 3: Developing a conceptual and empirical analysis on the role of higher education in contributing to the economic and social development in a low income country (Egypt)

The University Company Association (Unico) identified eight metrics to evaluate Knowledge Transfer (KT) from HEI. They described each of the KT activities, stated qualitative and qualitative measures for each, and emphasised that only the qualitative measures are in use. Al-Azhar University, in Egypt, has a unique framework, though not formally defined, in managing knowledge transfer activities. The primary reason
for this is the University’s goal of societal transformation through its involvement in industrial activities, free education and training offered to students and non-students. The university operates on its own framework, which emanates from the ideological position of the institution and its role it has played in Islamic and conventional education for decades. The objective of this research was to compare the application of Unico's knowledge transfer approach to the existing knowledge transfer methods applied by Al-Azhar University.

**Assignment 4: Cross-border education: its significance for internationalisation of the curriculum and research in mainstream higher education institutions.**

While a lot of research has been done, and written on internationalisation, international education and cross-border or offshore branches and the rationales behind international branch campuses, limited work has been written on the enhanced benefits that cross-border education brings to internationalisation at the mainstream Multinational Higher Education Institution (MHEI). Hence the research focused on cross-border education; Staff mobility, Student mobility and Virtual mobility through E-Learning and the enhanced benefits that they bring to teaching and learning in terms of curriculum internationalisation and the internationalisation of Research and Development (R&D) at the mainstream MHEI. The research identified the significance of cross-border education to at-home internationalisation within the mainstream MHEI.

**8.2.3 The Thesis**

The four assignments were qualitative assignments while my thesis was a quantitative research. I learnt during the thesis stage that I should have used the assignment stage to build the required quantitative knowledge and skills needed for the thesis. Specifically, I should have done a quantitative research in assignment four (research methods) as an input to my thesis, this would have alleviated the stress of learning new quantitative methods, analysis and interpretation.

The thesis was aimed at investigating the implicit contractual relationship between employees and employers, the psychological contract. To determine the types of psychological contracts developed by academics and to investigate the effect employees’ perception human resource practices have on the psychological contract of academics. The research found that HR practices such as recruitment and selection and training and development, positively predict the relational and balanced psychological contracts of academics. Therefore, these HR practices could contribute to building loyalty, commitment and the need for professional development among academics.

The selection of the thesis topic was aimed at addressing two aspects of my professional life. First, as consultant, I have been a contingent employee at my clients’ site and have very different experiences from full-time employees. Hence, the psychological contract provided a framework to understand the differences and how institutions can leverage the benefits of those differences in fulfilling the collective organisational objectives. Second, higher education academics have a peculiar role in the creation and dissemination of knowledge, which can be of immense benefit to the individuals and communities. The psychological contract provides a framework for understanding the perceptions and motives of academics and how these can be managed for the institutions’ benefit and the society at large.

The DBA has given me the knowledge and confidence to build on my current consultancy practice, has broadened my perceptions and knowledge of higher education management.
BIBLIOGRAPHY


NARDI, P. M. 2006. *Interpreting data: A guide to understanding research*, Pearson/A & B.


Appendix 1 – Sample Email to Higher Education Institutions

Research on Academic Staff expectations and Human Resource Practices.

My name is Lawal Yesufu, I reside in Alberta, Canada and I am a doctoral student at the University of Bath, United Kingdom. My research Supervisors are, Dr. Zeynep Yalabik and Professor Rob Briner. As part of the requirements for the Doctor of Business Administration (DBA) degree in Higher Education Management, I am conducting a research on the expectations of Academic Staff and the effect of Human Resource practices in the Higher Education sector.

The prospective respondents to my research are academic staff of Canadian Higher Education Institutions. Hence, I am interested in involving academic staff of your institution in my research. The research will collect neither personal information of participants nor information about the Institution. All responses will be confidential and anonymous. If requested, the research will share only summaries of findings with participants and the Institution.

My primary interest is to be able to distribute a survey to academic staff or for you to distribute the survey to your academic staff on my behalf. The design of the survey is in three parts as stated below:

- Questions on employee characteristics, such as employee type (full-time, part-time), career experience and academic discipline.
- Employee expectations of their employers.
- Employee rating employers HR practices

The online survey is via a secure site, hosted by the University of Bristol in collaboration over 130 UK Universities including the University of Bath. Attached are:

1. A PDF file of the Survey and below is the web link to the online survey.
2. My TCPS2_core_certificate

Survey
https://bathreg.onlinesurveys.ac.uk/work-expectations-higher-education-academics

The University of Bath is committed to research integrity and the ethical conduct of research projects. If you have any concerns or complaints about the ethical conduct of this study, please feel free to contact the research supervisor, Dr. Zeynep Yalabik (Email: Z.Yalabik@bath.ac.uk).

Kindly consider my request and inform me if you require any additional information

Lawal Yesufu
Candidate; Doctor of Business Administration (DBA) in Higher Education Management
School of Management
University of Bath, UK
Canada Phone: +1-780-903-6984
Email: L.O.Yesufu@Bath.ac.uk
Appendix 2 – Sample Email to Individual Respondents

Invitation to Participate in Research

Good morning,

I got your contact details from your University's online directory.

I live in Edmonton and I am a doctorate degree researcher from the University of Bath, UK. I am doing my thesis on the expectations of Canadian academic faculty and would like to invite you to participate in my research by completing the online survey in the link below. The first page of the survey describes your rights to anonymity, confidentiality and absolute data protection. Participation is voluntary and forms part of the requirements for the Doctor of Business Administration degree (Higher Education Management). The survey will take approximately 20 minutes to complete.

Survey
https://bathreg.onlinesurveys.ac.uk/work-expectations-higher-education-academics

Please let me know if you have any questions or concerns.

Regards,

Lawal Yesufu
Candidate; Doctor of Business Administration (DBA) in Higher Education Management
School of Management
University of Bath, UK
Canada Phone: +1-780-903-6984
Appendix 3 – Research Survey Sample

Work Expectations of Canadian Academics

Page 1: Research Introduction

Research Survey on Academic Staff expectations and Human Resource Practices

The purpose of this research is to contribute to the knowledge on employee expectations and Human Resource (HR) practices in Canadian Higher Education. The research is self-funded, has neither commercial benefits nor conflicts of interest with my supervisors, institution and I. The research is part of the requirements for my Doctor of Business Administration degree in Higher Education Management. My research supervisors are Dr. Zeynep Yalabik and Professor Rob Briner, both from the University of Bath, UK.

Your rights as a participant

- The survey will collect information on your current position, experience and academic discipline and will require you to rate questions on the expectations you have of your employer and to rate the HR practices of your employer.
- You are under no obligation to participate; are free to withdraw at any time without prejudice to any pre-existing entitlement;
- You have the right to request withdrawal of data without any limitations;
- You will be given, in a timely manner throughout the course of the research project, information that is relevant to your decision to continue or withdraw from participation;
- You have the right to contact me at any time to discuss any aspect of the study, to find out about the results and to receive a summary of the study;
- You provide information on the understanding that it is completely confidential.

My role as the researcher

The responses are completely confidential and anonymous. If I decide to publish or share any results, with you or your employer these will only be in summary form;

- I will destroy the survey responses upon the completion of the study;
- The online survey will not collect any data on your location, IP addresses, your institution and the data collected will be stored in a secure site within the University of Bath;
- The results and analysis of the research findings will be based on responses to the survey collected from several Canadian Higher Education Institutions;
- I have the duty to disclose only a summary of the research findings as part of my thesis, to participants and employers.
If you would like to participate, please click ‘Next’ at the bottom of the page. If not close, the browser page and the survey will close.

Thank you for your participation

Lawal Yesufu
Candidate; Doctor of Business Administration in Higher Education Management
School of Management, University of Bath, UK
Canada Phone: 1-780-903-6984
Email: L.O.Yesufu@Bath.ac.uk

Page 2: Background

What is your gender?

☐ Male
☐ Female

How old are you?

☐ Under 20
☐ 20 to less than 25
☐ 25 to less than 30
☐ 30 to less than 35
☐ 35 to less than 40
☐ 40 to less than 45
☐ 45 to less than 50
☐ 50 to less than 55
☐ 55 to less than 60
☐ 60 to less than 65
☐ 65 and above

What is the highest level of education you have received?

☐ High School
☐ Bachelor's Degree (or Equivalent)
☐ Postgraduate Qualification (Non-Master's Degree)
☐ Master's Degree (or Equivalent)
Page 3: Employee Obligations
To what extent have you made the following commitments or obligations to your employer?

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<tr>
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<th>Not at all</th>
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<tr>
<td>Make personal sacrifices for this institution</td>
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<tr>
<td>Remain with this institution indefinitely</td>
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</table>

To what extent have you made the following commitments or obligations to your employer?

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<tr>
<td>I have no future obligations to this employer</td>
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<tr>
<td>Only perform specific duties I agreed to when hired</td>
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To what extent have you made the following commitments or obligations to your employer?

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<tr>
<td>Seek out developmental opportunities that enhance my value to this employer</td>
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<td>Build contacts outside this firm that enhance my career potential</td>
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</table>
Page 4: Your Academic Career

How long have you worked as an academic staff for your current main job?

- Under 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 7 years
- 7 years to less than 9 years
- 9 years to less than 11 years
- 11 years to less than 13 years
- 13 years to less than 15 years
- 15 years and above
Job assignments that enhance my external marketability
Page 6: Professional Background

On average, how many hours a week do you work for your main Higher Education employer?

☐ Less than 10 hours’ weekly
☐ 10 hours to less than 20 hours’ weekly
☐ 20 hours to less than 30 hours’ weekly
☐ 30 hours to less than 40 hours’ weekly
☐ 40 hours and above

What is your primary academic discipline?

☐ Personal improvement and leisure
☐ Education
☐ Visual and performing arts and communications technologies
☐ Humanities
☐ Social and behavioural sciences and law
☐ Business, management and public administration
☐ Physical and life sciences and technologies
☐ Mathematics, computer and information sciences
☐ Architecture, engineering, and related technologies
☐ Agriculture, natural resources and conservation
☐ Health and related fields
☐ Personal, protective and transportation services
☐ Other

If you selected Other, please specify:

What are your primary responsibilities?

Please select all that apply to you.

☐ Teaching
☐ Research
☐ Administrative
# Page 7: Rate Human Resource Practices

How accurately do the following statements describe your employer’s recruitment and selection practices? Recruitment and Selection decisions here are affected by:

Please don’t select more than 1 answer(s) per row.

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<tr>
<td>A person’s ability to perform the academic requirements of the job.</td>
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<tr>
<td>A personal interview</td>
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<td>Having the right connections (e.g. school, family, friends, region, government, etc.)</td>
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# How accurately do the following statements describe your employer’s training and development practices?

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<tr>
<td>Improve their employees’ job abilities.</td>
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<td>Improve employees’ interpersonal abilities, i.e. How well they relate to others.</td>
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<td>Remedy employees’ past poor performance.</td>
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How accurately do the following statements describe your employer’s performance appraisal practices?

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<td>Determine appropriate pay.</td>
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<tr>
<td>Document subordinate’s performance.</td>
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<td>Plan development activities for subordinate (e.g. training, new duties).</td>
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How accurately do the following statements describe your employer’s compensation and benefit practices?

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<tr>
<td>Pay incentives such as bonus or profit sharing are an important part of the compensation strategy in this institution.</td>
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<tr>
<td>The benefits are an important part of the total pay package</td>
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<tr>
<td>In this institution, a portion of an employee’s earnings is contingent on group or institution performance goals being achieved.</td>
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Appendix 4 – Tri-Canada Research Certification

Certificate of Completion

This document certifies that

Lawal Yesufu

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: 12 June, 2015
Appendix 6 – Exploratory Factor Analysis

1. Factor Analysis: PC Scale - Iteration 1

**KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .757 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1645.289 |
| df | 66 |
| Sig. | .000 |

**Communalities**

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Extraction Method: Principal Component Analysis.

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Extraction Method: Principal Component Analysis.
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<th>Component 3</th>
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<tr>
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Extraction Method: Principal Component Analysis.
a. 3 components extracted.

### Rotated Component Matrix

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<th>Component 1</th>
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<th>Component 3</th>
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<tbody>
<tr>
<td>XX_PCB Internal Career Opportunity</td>
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<tr>
<td>PCR Secure employment</td>
<td>0.794</td>
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<td>PCB Enhance external marketability</td>
<td>0.768</td>
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<td>PCR Responsive to me</td>
<td>0.745</td>
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<tr>
<td>PCT Limited involvement</td>
<td>0.791</td>
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<tr>
<td>PCT Only perform specific duties</td>
<td>0.739</td>
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<td></td>
</tr>
<tr>
<td>PCT No future obligations</td>
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<tr>
<td>PCT Short term employment</td>
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<tr>
<td>PCB Build external contacts</td>
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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Component Transformation Matrix

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<td>1</td>
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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

2. Factor Analysis: PC Scale - Iteration 2

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .723 |
| Bartlett's Test of Sphericity                  | Approx. Chi-Square 1146.520 |
| df                                              | 45 |
| Sig.                                            | .000 |

Communalities

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<td>.634</td>
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<td>PCR Secure employment</td>
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<td>.742</td>
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<tr>
<td>PCT No future obligations</td>
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<td>.505</td>
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<td>PCT Limited involvement</td>
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<tr>
<td>PCB Enhance my value</td>
<td>1.000</td>
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<tr>
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Extraction Method: Principal Component Analysis.
### Component Matrix

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Extraction Method: Principal Component Analysis.

a. 3 components extracted.

### Rotated Component Matrix

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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Component Transformation Matrix

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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

3. Factor Analysis: HR Scale - Iteration 1

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .866 |
| Bartlett's Test of Sphericity                   |     |
| Approx. Chi-Square                             | 2574.988 |
| df                                               | 55  |
| Sig.                                             | .000 |

Communalities

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<td>the job</td>
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<td>HRP3 Determine appropriate pay</td>
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<td>HRP3 Document subordinate’s performance</td>
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<td>HRP3 Plan subordinate development activities</td>
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HRP4 The benefits are important  1.000  .803
HRP4 Earnings is contingent on performance  1.000  .833

Extraction Method: Principal Component Analysis.

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Extraction Method: Principal Component Analysis.

a. 4 components extracted.
Rotated Component Matrix

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<td>HRP4 The benefits are important</td>
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<td>HRP2 Improve interpersonal abilities</td>
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<td>HRP3 Determine appropriate pay</td>
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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Component Transformation Matrix

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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Appendix 7 – Multiple Regression Analysis Models

1. Relational Psychological Contract

### Variables Entered/Removeda

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
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<tbody>
<tr>
<td>1</td>
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<td>Enter</td>
</tr>
<tr>
<td>2</td>
<td>Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopmentc</td>
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</table>

a. Dependent Variable: Mean_PCR
b. Tolerance = .000 limit reached.
c. All requested variables entered.

### Model Summaryb

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
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</thead>
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<td>.077</td>
<td>.559</td>
<td>.559</td>
<td>5.214</td>
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<td>2</td>
<td>.646*</td>
<td>.423</td>
<td>.409</td>
<td>.289</td>
<td>.288</td>
<td>73.676</td>
<td>4</td>
<td>392</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term
b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment
c. Dependent Variable: Mean_PCR

### ANOVAa

<table>
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<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>4.789</td>
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<td>Residual</td>
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<td>.000*</td>
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<tr>
<td></td>
<td>Total</td>
<td>402.053</td>
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a. Dependent Variable: Mean_PCR
b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term
c. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment

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a Dependent Variable: Mean_PCR
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### Collinearity Statistics

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**a. Dependent Variable:** Mean_FGR

**b. Predictors in the Model:** (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_PartTime, DV_45andOver, DV_Science, DV_Short_Term

**c. Predictors in the Model:** (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_PartTime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HR1RecruitmentandSelection, Mean_HR3PerformanceAppraisals, Mean_HR4CompensationandBenefits, Mean_HR2TrainingandDevelopment

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### Collinearity Tolerance

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**a. Dependent Variable:** Mean_FGR
### Residuals Statistics

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a. Dependent Variable: Mean_PCR

### 2. Transactional Psychological Contract

#### Variables Entered/Removed

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a. Dependent Variable: Mean_PCT
b. Tolerance = .000 limit reached.
c. All requested variables entered.

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b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment
c. Dependent Variable: Mean_PCT

#### ANOVA

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232
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a. Dependent Variable: Mean_PCT
b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term
c. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment

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<td>DV_Postgraduate</td>
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| DV_Short_Term | .021 | .127 | .010 | .164 | .870 | 0.595 | 1.707 |
| DV_Medium_Term | -1.200 | .123 | -0.867 | -10.81 | 0.000 | 0.774 | 1.292 |
| DV_SocialScience | -1.034 | .116 | -0.055 | -0.929 | 0.358 | 0.792 | 1.262 |
| DV_Science | .228 | .091 | .113 | 2.498 | 0.013 | 0.976 | 1.024 |
| DV_Female | .274 | .116 | .134 | 2.367 | 0.018 | 0.619 | 1.615 |
| DV_45andOver | -0.045 | .102 | -0.021 | -0.441 | 0.660 | 0.913 | 1.095 |
| Mean_HRP1RecruitmentandSelection | .052 | .052 | .060 | 1.188 | 0.235 | 0.775 | 1.298 |
| Mean_HRP2TrainingandDevelopment | .107 | .065 | .111 | 1.650 | 0.100 | 0.445 | 2.248 |
| Mean_HRP3PerformanceAppraisals | -0.003 | .058 | -0.003 | -0.056 | 0.956 | 0.524 | 1.907 |
| Mean_HRP4CompensationandBenefits | -2.71 | .645 | -3.53 | -6.086 | 0.000 | 0.595 | 1.681 |

a. Dependent Variable: Mean_PCT
### Excluded Variables

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a. Dependent Variable: Mean_PCT

b. Predictors in the Model: (Constant), DV_Postgraduate, DV_SocialScience, DV_MedicalTerm, DV_Female, DV_Parttime, DV_4andOver, DV_Science, DV_ShortTerm

c. Predictors in the Model: (Constant), DV_Postgraduate, DV_SocialScience, DV_MedicalTerm, DV_Female, DV_Parttime, DV_4andOver, DV_Science, DV_ShortTerm, Mean_HRP1Recruitment and Selection, Mean_HRP2Training and Development, Mean_HRP3Performance Appraisals, Mean_HRP4Compensation and Benefits, Mean_HRP5Career Development
3. Balanced Psychological Contract

Variables Entered/Removed*

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a. Dependent Variable: Mean_PCB
b. Tolerance = .000 limit reached.
c. All requested variables entered.

Model Summary2

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a. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term
b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment

c. Dependent Variable: Mean_PCB
### ANOVA

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a. Dependent Variable: Mean_PCB

b. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term

c. Predictors: (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment

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a. Dependent Variable: Mean_PCB
b. Predictors in the Model (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term
c. Predictors in the Model (Constant), DV_Postgraduate, DV_SocialScience, DV_Medium_Term, DV_Female, DV_Parttime, DV_45andOver, DV_Science, DV_Short_Term, Mean_HRP1RecruitmentandSelection, Mean_HRP3PerformanceAppraisals, Mean_HRP4CompensationandBenefits, Mean_HRP2TrainingandDevelopment
## Residuals Statistics

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a. Dependent Variable: Mean_PCB
### Appendix 8 – Paired Sample T-Test

#### Paired Samples Statistics

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#### Paired Samples Correlations

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#### Paired Samples Test

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