Abstract

**Purpose:** This paper investigates whether the Stages of Change (SOC) model can be applied to working with offenders with learning disabilities (LD), and furthermore, to determine if it might be efficacious for this approach to be incorporated into a wider service model for this population. **Methodology:** This paper reports on the results of a consultation to a specialist forensic learning disabilities service in the South West of England. A two-pronged approach was taken to consult to the service in relation to the research questions. Firstly, a comprehensive literature review was undertaken, and secondly, other forensic LD teams and experts in the field were consulted. **Findings:** There is a dearth of research that has examined the application of the SOC model to working with offenders with LD, and as such, firm conclusions cannot be drawn as to its efficacy in this population. The evidence base for the SOC model in itself is lacking, and has been widely critiqued. However, there are currently no other evidence-based models for understanding motivation to change in offenders with LD. **Implications:** There is a clear clinical need for more robust theory and research around motivation to change, which can then be applied to clinical work with offenders with LD. **Value:** There has been a historical narrative in offender rehabilitation that “nothing works” (Burrowes & Needs, 2009). As such, it is more important than ever for the evidence base to enhance the understanding of motivation to change in offending populations.

**Keywords:** Offenders, offending, learning disabilities, intellectual disabilities, stages of change, motivational interviewing, motivation.
Examining the utility of the Stages of Change model for working with offenders with learning disabilities

Offenders with learning disabilities (LD) are at a high risk of re-offending because of unidentified needs, and a consequent lack of support and services (Freer, 2007). Moreover, it has been evidenced that they are unlikely to benefit from conventional programmes designed to address offending behaviours (Freer, 2007; Loucks, 2007). Cognitive Behavioural Therapy (CBT) interventions have been specifically designed for offenders with LD (Clare & Murphy, 2012), and there is some preliminary and tentative evidence for their efficacy (Murphy, in press). However, there is a lack of high-quality research that has examined intervention efficacy for offenders with LD (Ali et al., 2015). One approach that may have utility for use in this population is the Stages of Change (SOC) model, which is presented in Figure 1 (Prochaska & DiClemente, 1982, 1986).

The SOC model theorises five stages of change: pre-contemplation, contemplation, preparation, action and maintenance. The SOC model is part of the Transtheoretical model (Prochaska & DiClemente, 1986), which is a broader conceptual framework for understanding how people change. The model posits that by assessing a person’s position in the change process, an intervention can be matched to the person’s stage of readiness for change, and is thus more likely to be successful. The Transtheoretical model underpins motivational interviewing, which is an intervention aimed at eliciting behaviour change (Miller & Rollnick, 1991). The SOC model and motivational interviewing go hand-in-hand, in that once a client’s stage in the change
process is assessed, motivational interviewing techniques can be used to help the client to move further along in their journey towards change.

Figure 1. Stages of Change model, adapted from (Prochaska & DiClemente, 1983) here.

The SOC model could be advantageous for working with offenders with LD. Motivation to engage in therapy and to change behaviour has been suggested to be a key barrier for mainstream offender rehabilitation (McMurran, 2009b). Additionally, motivational interviewing techniques have been shown to successfully increase mainstream offenders motivation to commit to therapy (Walitzer et al., 1999). Moreover, it has been suggested that people with LD have low motivation to change behaviour (Lowe, 2004). As such, interventions aimed at enhancing the motivation of offenders with LD to engage in therapy and change their behaviour could be efficacious. However, an initial literature search found a lack of research about the application of SOC model to work with offender with LD.

As such, this paper aims reports on a consultation project to investigate whether the SOC model can be applied to working with offenders with LD, and furthermore, to determine if it might be efficacious for this approach to be incorporated into a wider service model for this population. This paper will address the following research questions:

- Is the SOC model applicable to working with offenders with learning disabilities?
• If so, how can we use the SOC model to work most effectively with this population?
• How could the SOC be incorporated into a service model for working with offenders with LD?

**Method**

**Design**

This paper reports on the results of a consultation to a specialist forensic learning disabilities service in the South West of England. A two-pronged approach was taken to consult to the service in relation to the research questions. Firstly, a comprehensive literature review was undertaken, and secondly, other forensic LD teams and experts in the field were consulted.

**Literature review**

A comprehensive literature review was undertaken to identify literature relating to the evidence base for the SOC model, and its application to working with offenders with LD. The search strategy comprised of searching of electronic databases, and scanning the bibliographies of retrieved papers. The following electronic databases were searched: Web of Science, Pubmed and APA Psychnet. No date or language restrictions were applied. To avoid missing relevant studies, search terms were broad and overly inclusive. Search terms used were as follows: (offenders OR offend*) OR (learning disabilit*, OR
SOC model and offenders with LD

LD) AND (motivational interviewing OR MI OR Stages of change OR motivation).

Literature searches were conducted during March 2017.

**Data collection**

In addition, semi-structured interviews were conducted with professionals from UK Forensic LD services. A semi-structured interview schedule was developed based on themes from the literature and the research questions of the study, and included questions about whether the service uses the SOC model, and how the model is used in work with offenders with LD. UK Forensic LD services were identified via professional contacts, searches of the literature, and online searches. A total of 11 forensic LD services were identified in the UK (Birmingham, Leicestershire, East Kent, Calderstones, Cheshire and Merseyside, Derbyshire, Hertfordshire, Fife, Surrey and Borders, Northumberland, and Greater Glasgow and Clyde), and of these, interviews were conducted with seven professionals from different services (Clinical Psychologists and Specialist Practitioner Nurses). Data collected from the semi-structured interviews were collated, summarised, and analysed descriptively.

In addition, experts in the field were consulted regarding their knowledge and experience both of working with offenders with LD, and work using the SOC model. One forensic expert was consulted regarding their experience and research on working with offenders using the SOC model. Furthermore, a local clinician with experience embedding the SOC model into a local service with a different client group was interviewed using a semi-structured interview schedule.
Results

Consultation with UK forensic LD services

Examples of the SOC model in use

Six out of the seven forensic LD services consulted expressed that they use both the SOC model and motivational interviewing techniques with clients on an individual basis. Moreover, two of the services reported that they run intervention groups which have a SOC/motivational interviewing element incorporated into them. The Northumberland Forensic LD service reported that they run a motivational interviewing preparatory course for their anger management group. Additionally, a pilot study of a group motivational interviewing intervention was run in a medium secure unit in Northumberland, Tyne and Wear for offenders with LD.

Barriers to using the SOC model with this population

Five of the services expressed an interest in using the SOC model and motivational interviewing interventions more often with offenders with LD, however, several barriers were cited. For one service, lack of resources and staff meant clinicians had less time for intervention work. Moreover, services discussed a lack of training on the SOC model and motivational interviewing; only one service expressed that their clinicians had received training. None of the services that were consulted reported that they had incorporated the SOC model into their service framework.

None of the services reported using any standardized measures of SOC, and none were aware of any measures adapted for use in LD. Services used clinical judgement to assess clients’ stage of readiness to change, which informed their intervention design.
Several services described challenges in meaningfully communicating the SOC model to people with LD. For example, the Northumberland, Tyne and Wear service reported difficulties with their inpatient motivational interviewing group pilot. They reported that it was unclear how meaningful the SOC model was for the people who attended. They also suggested that measuring the client’s position on the SOC model was challenging, and as such the group did not continue.

Consultation with experts in the field

An expert in the field was contacted via email, and expressed that they were not aware of any UK Forensic services (either LD or mainstream) which have incorporated SOC into their Service Model. Reasons cited for this were that the ‘stages’ in the SOC model have been argued to lack validity in the literature. It was expressed that clinicians across the UK tend to use motivational interviewing throughout their individual work with offenders with LD. However, there were issues highlighted with the consistency of the approach, the fidelity to the model, and the lack of evidence base for the model in offenders with LD.

An example of the SOC model incorporated into a service model

An example of a local service who have incorporated the SOC into their service model in a non-LD population is discussed here as an example of when this has worked successfully. A local Eating Disorder (ED) Service re-designed their whole service provision around the SOC model, based on preliminary literature from the US showing promising outcomes (Franko, 1997; Geller et al., 2003; Geller & Dunn, 2011; Geller et
al., 2005; Prochaska et al., 1992; Vitousek et al., 1998). In order to re-design the ED service, the team mapped their existing interventions onto the different stages in the SOC model, and developed new interventions so that they could offer treatment to patients at every stage. For example, the team developed a contemplation group consisting of 12 sessions.

The whole team received training on the SOC and motivational interviewing techniques. The team then developed their own assessment of patients’ SOC based on two Likert scale questions to be rated by patients from 0-10 (“How confident are you that you can make changes?” and “How much do you want to make changes”), and then used clinical judgment to assess their motivational stage. Following the re-design of the service, the team reported better outcomes from both their individual and group action interventions, better therapeutic relationships with clients, higher weekly weight gain in their inpatient services and reduced length of stay, improved engagement and attendance to appointments, and better staff retention (Jakubowska et al., 2013). The service also found that their contemplation group was well-received by patients, and that 70-80% of patients moved up a stage in the SOC model by the end of the group. One of the biggest challenges described in the re-design of the service model and delivery was in communicating the change in philosophy to other professionals (e.g. GPs), teams (e.g. MH services) and to clients and their family members. The team attempted to overcome this challenge by producing leaflets and literature to explain the SOC model and the rationale behind why the service had incorporated it into their service provision.
Literature review

The evidence base for the SOC model and motivational interviewing in non-offending mainstream populations

There is some evidence for the efficacy of MI, both as an intervention in itself, and as a precursor to other problem-specific interventions (Burke et al., 2003; Rubak et al., 2005). The evidence base is particularly promising for alcohol and substance use populations (Vasilaki et al., 2006), and for concordance in health populations (Knight et al., 2006). It has been argued that there is a lack of robust evidence of the efficacy of motivational interviewing when applied to populations other than substance misuse (Dunn et al., 2001; McMurran, 2009b). Nevertheless, it has been argued that tailoring interventions to a client’s position in the SOC model results in better outcomes in terms of behaviour change (Devereux, 2009; Prochaska & Levesque, 2002), though the evidence for this claim is lacking due to a dearth of high-quality outcome studies (Whitelaw et al., 2000).

Criticisms of the SOC model

Although the SOC model has proved popular, there has been extensive debate as to its utility and criticisms of its validity, evidence base, and conceptualisation of change (Burrowes & Needs, 2009). Bandura (1998) has widely criticised the structure of the SOC model for not having discrete stages (i.e. separate stages), for evidence of non-sequential movement through the stages (i.e. skipping stages; Martin et al., 1996), and for evidence of people reversing through the stages (i.e. moving from one stage to an earlier one; Norman et al., 1998). Research on the predictive validity of the SOC model is also
limited (Anstiss et al., 2011). Bandura’s criticisms of the SOC model have been extensively backed up by other research (Burrowes & Needs, 2009), and this has led to the argument that change is more usefully described as a continuum, rather than as discrete stages (Bunton et al., 2000; Williamson et al., 2003). It has therefore been suggested that the SOC is theoretically inadequate and far too simplistic, in terms of accurately describing and understanding behavioural change (Burrowes & Needs, 2009), and its utility in clinical practice has been called into question (Drieschner et al., 2004).

**The evidence base for the SOC model in offending populations**

The SOC model has been applied to working with: adolescent offenders (Hemphill & Howell, 2000); domestic violence perpetrators (Eckhardt et al., 2004; Scott, 2004); anger management programmes (Hird et al., 1997; Williamson et al., 2003); sex offenders (Tierney & Mccabe, 2004), and drug and alcohol rehabilitation (El-Bassel et al., 1998; Ginsburg, 2001). However, the outcomes of these studies have been mixed, and there is a lack of robust evidence to support the efficacy of motivational interviewing interventions in offending populations (McMurran, 2009b; Polaschek et al., 2010). Current research mostly consists of case studies (e.g. Mann & Rollnick, 1996) and small-scale designs (e.g. Anstiss et al., 2011; Austin et al., 2011; Ginsburg et al., 2002; McMurran et al., 1998), though arguably these studies do tentatively demonstrate some positive outcomes. As lack of motivation to change is considered to be a primary challenge in rehabilitating offenders (Ward et al., 2004), it has been argued that the SOC model provides a helpful framework for working with offenders (Day et al., 2006).
Criticisms of applying the SOC model to offender populations

Although the SOC model is the primary model utilised in relation to motivating offenders to change, there have been concerns about its validity for offending populations (Casey et al., 2005). For example, offending behaviour is complex and often infrequent in nature, and it has been argued that this makes it more difficult to measure and detect changes in offending behaviour, when compared to the substance use behaviors that the model was initially developed around (Casey et al., 2005). Furthermore, there is a lack of theoretical base regarding processes that underpin motivation to change in offenders (McMurran, 2009b; Ward & Eccleston, 2004). It has been argued that the SOC has not been validated in relation to changing offending behaviour (McMurran, 2009b), and there is a call for more empirical research about offender’s motivation to change (McMurran, 2009a; Yong et al., 2015).

The evidence base for the SOC model in LD populations

There is a lack of research which has examined the utility of the SOC model and motivational interviewing interventions for people with LD, and the evidence base mostly consists of case-study designs which present methodological issues and lack generalisability. However, there are some promising results, For example, good outcomes were reported in a case study that incorporated motivational interviewing techniques in an intervention surrounding weight reduction and challenging behaviour in an individual with LD and Prader-Willi syndrome (Rose & Walker, 2000). However, it has been suggested that people with LD generally have low motivation to change (Grolnick & Ryan, 1990; Kunnen & Steenbeek, 1999; Lowe, 2004). This might, in part, be related to
having little self-efficacy in their ability to change (Lowe, 2004), and self-efficacy has been evidenced to be a key factor in behaviour change (Noar, 2004). It has also been suggested that a key barrier to behaviour change in people with LD is that they do not perceive themselves as having problems which require change (Frielink et al., 2015).

Moreover, the meaningfulness of using the SOC model and motivational interviewing with people with LD has been called into question. It has been suggested that motivational interviewing is a cognitively based method, and requires at least some abstract reason ability (Lowe, 2004), which might present difficulties in an LD population. This has led some authors to suggest that motivational interviewing is not suitable for people with LD (Lundahl & Burke, 2009). However, the LD population is a heterogeneous one, and evidence from the CBT literature suggests that people with mild-moderate LD are able to engage in the cognitive elements of interventions (Willner, 2005). As such, other people have argued that motivational interviewing could be beneficial for people with LD with some modifications (Hensel et al., 2007; Taggart et al., 2007). There is a clear need for further research to examine the utility of the SOC model and motivational interviewing in LD populations, and to inform clinicians of how motivational interviewing techniques can be adapted for use in this population.

The evidence base for the SOC model in offenders with LD

There is a dearth of research which has examined the utility of the SOC model or motivational interviewing in offenders with LD. A literature search found two papers with case study designs which have examined motivational interventions in relation to this client group, and there are clearly limitations in the conclusions that can be drawn
from these studies. Firstly, promising results were found for a three session group motivational interviewing intervention for offenders with LD and alcohol related problems (Mendel & Hipkins, 2002). Moreover, Patterson and Thomas (2014) used a case study design to demonstrate that a life skills group incorporating a motivational component for offenders with LD resulted in increased readiness to change, and motivation to engage in the group. Though promising, this study did not examine if the increase in readiness to change resulted in an actual change in behaviour.

The evidence base surrounding measures of motivation to change

Measures that have been developed based on the SOC model have been argued to have poor construct validity (McMurran, 2009b), mostly due to theoretical issues with the SOC model itself. It has been suggested that using clinicians judgements of a client’s motivation to change is problematic, as it has been evidenced that they are often unreliable, and tend to overestimate clients’ readiness for change (Geller, 2002). Moreover, self-report measures of motivation that have been designed for offending populations are argued to be subject to social-desirability bias, as they are often completed by offenders who are extrinsically motivated to attend interventions (i.e. when in custody) (McMurran, 2009b). Furthermore, attempts at adapting existing measures of motivation to change for offending populations have proved difficult. For example, (McMurran et al., 1998) found that an offender-adapted version of the Readiness to Change Questionnaire (Heather et al., 1993) was inadequate and lacked validity. In addition, designing valid outcome measures for people with LD is in itself a difficult task (Jaydeokar et al., 2015), and this is likely to make it even more difficult to design appropriate measures for offenders with LD.
**Discussion**

This paper aimed to examine the efficacy of applying the SOC model to working with offenders with LD. It is concluded that there is a lack of evidence that has examined the application of the SOC model to offenders with LD, and as such, the efficacy of this approach is unknown. However, there is a lack of other models which specifically focus on motivation to change in this population.

Though not primarily focused on enhancing motivation to change, the Good Lives Model (GLM; Ward, 2002; Ward & Gannon, 2006) explicitly addresses client’s motivation as part of a wider strengths-based approach to offender rehabilitation. The GLM focuses on supporting people to achieve meaningful life goals which are incompatible with offending, and argues that work focused on moving towards valued goals is intrinsically more motivating than work focused on reducing offending behavior (Ward et al., 2007). However, though there is a motivational component inherent in the GLM model, it does not provide an explicit theoretical understanding of motivation, or a clear framework for enhancing motivation to change. It has been suggested that this approach may have some utility for work with offenders with LD (Aust, 2010; Lord, 2016), who often have limited opportunities to enabled them to achieve life goals (Scior & Werner, 2015). Initial studies suggest that using the GLM in mainstream offender rehabilitation work is efficacious (Willis & Ward, 2013). As such, the GLM might have some efficacy for use in work with offenders with LD. However, studies have yet to investigate the efficacy of the GLM in LD offender populations, and it would be useful for future studies to examine this.
Other models of motivation are emerging in the literature, such as the Readiness to Change Framework (Burrowes & Needs, 2009), which has particular strengths in that it was developed with offenders in mind, it makes explicit reference to the contextual and environmental factors of change, and it presents barriers to change which could become the focus for intervention work. It would be useful for future research to examine the utility and validity of other such models for conceptualizing and enhancing motivation to change in offenders with LD.

One of the limitations of this project is that offenders with LD were not consulted regarding their experiences of motivation to change, and it might be helpful for future research to do this. A further limitation of this work is that no other UK forensic services were identified who use the SOC model consistently in their service provision. As such, there was a lack of information about whether this model is applied in practice in forensic LD services across the UK.

There has been a historical narrative in offender rehabilitation that “nothing works” (Burrowes & Needs, 2009). However, more recently, offender rehabilitation programmes have been able to demonstrate significant reductions in recidivism (e.g. CBT; Friendship et al., 2002). As such, it is more important than ever for the evidence base to enhance the understanding of motivation to change in offending populations, particularly given that increasing clients’ motivation to change is likely to improve the outcome of costly, resource-intensive interventions targeted at this population. There is, therefore, a clear clinical need for more robust theory and research around motivation to change, which can be applied to clinical work with offenders with LD.
Conclusions and recommendations

There is a dearth of research that has examined the application of the SOC model to working with offenders with LD, and as such, firm conclusions cannot be drawn as to its efficacy in this population. The evidence base for the SOC model in itself is lacking, and has been widely critiqued. However, there are currently no other evidence-based models that focused explicitly on understanding motivation to change in offenders with LD.

As a lack of motivation to change has been argued to be one of the primary challenges in rehabilitating offenders, consideration of motivation is essential when working clinically with offenders with LD. Work around motivation to change as part of LD offender rehabilitation is likely to support and enhance the development of therapeutic relationships with clients, which has been evidenced to be the strongest predictor of treatment outcome (c.f. Ardito & Rabellino, 2011). Clinicians working with offenders with LD could look to the GLM literature as a treatment planning approach which incorporates a motivational element, though more research into the application of this approach for offenders with LD is required. To support work around motivation to change, inferences could be drawn from the emergent CBT literature for people with LD to inform how to adapt and use mainstream offender models, such as the GLM or the Readiness to Change Framework.

There is a lack of evidence to suggest that incorporating the SOC into a service model for this population would be beneficial. It should be acknowledged that this project found no other UK Forensic team (either mainstream or LD) that had incorporated the SOC into its service model. The lack of evidence base regarding the efficacy of the SOC
model, alongside its theoretical inadequacies leads to the conclusion that it would be problematic to re-structure service provision and delivery in line with this model. However, given the research demonstrating that motivation to change is a key factor in rehabilitating offenders, it would be advantageous to continue to conceptualise and enhance motivation to change when working with this client group.

**Conflict of interest**

None.
References


