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Psychological resilience and youth offending: Can tailored interventions reduce recidivism?

Hodgkinson, Rowan

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**Psychological resilience and youth offending:
Can tailored interventions reduce recidivism?**

By Rowan E. Hodgkinson

Thesis submitted to Bangor University in fulfilment of the requirements for the
Degree of Doctor of Philosophy at the School of Sport, Health, and Exercise
Sciences, Bangor University.

July 2021

DECLARATION

This work has not previously been accepted in substance for any degree and is not being currently submitted in candidature for any degree.

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STATEMENT 1

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Thesis Abstract

Researchers have assessed resilience interventions in many potentially high risk or stressful settings such as the armed forces, business, sport, and academia, but to date little resilience research exists regarding youths who have offended. Further, evidence has suggested these youths are likely to have experienced above average levels of adversity, via potentially high risk or stressful situations such as childhood trauma, school exclusion, high crime neighbourhoods and court appearances. Given that resilience involves successfully overcoming adversity, this concept seems highly relevant to these youths. The current thesis therefore sought to address this research gap.

Following a successful funding application by the first supervisor Dr. Stuart Beattie and Gwynedd / Môn's Youth Justice Service Manager Mr. Stephen Wood to KESS2 (Knowledge Exchange Skills Scholarship) the current thesis sought to answer the question "Can a tailored psychological resilience intervention reduce recidivism in children and young people who offend". To answer this question, in Chapter 2 we conducted a systematic review using PRISMA guidelines. Our aim was to assess existing intervention literature related to youths who had offended that targeted resilience. As database searches were unable to identify any studies that targeted resilience interventions in this population or met our inclusion criteria (e.g., involved youths who had offended more than once, contained a control group, measured re-offending), we extended our database searches to include factors empirically linked with resilience (e.g., sense of coherence, self-concept). This systematic review identified just 14 studies worldwide, 7 of which included pre- and post-psychological assessments. However, those studies assessing psychological changes did this post-completion of the programme and did not conduct follow-up assessments. Therefore, it is unknown if the youths had sustained these changes 6 or 12 months later and we cannot therefore conclude whether they contributed to the sustained desistance.

In Chapter 3, we interviewed 12 Youth Justice case workers using in-depth semi-structured interviews. Our aim was to identify successful approaches that included psychological factors associated with desistance and other positive behavioural outcomes such as employment. Consultation between the PhD candidate and first and second thesis supervisors led to the decision to conduct an abductive data analysis, applying principles from both deductive and inductive approaches. ‘Critical friends’ meetings throughout the process enabled a critical stance, further strengthened by our different professional backgrounds. Use of directed content analysis allowed for assessment of the extent to which data agreed or disagreed with existing theoretical frameworks or theories. Thematic analysis then identified six key themes. Theme one involved factors relating to perceived low resilience such as negative self-concept and low comprehension. Theme two pertained to factors relating to perceived resilience which included adaptability and optimism. Themes three and four related to strengths-based individualised approaches and relationship-based working. Theme five outlined psychological changes associated with positive outcomes such as increased awareness and improved self-concept. Theme six related to factors contributing to continued offending which included hopelessness, defiance, and chaotic lives.

Chapter 4 involved developing psychological resilience interventions using findings from Chapters 2 and 3. This was followed by the development and delivery of training for Youth Justice case workers to pilot the interventions. This chapter therefore had two aims; firstly, to increase the confidence of Youth Justice case workers in delivering psychological resilience interventions, and secondly to increase resilience and reduce re-offending in the youths. Both studies used quantitative pre- and post-designs with control and intervention groups. Results showed staff who received the intervention training significantly increased their confidence over and above the control group ($p = .000$), and youths that then received the interventions significantly increased in resilience compared to their controls; ($p = .004$) according to staff scores and ($p = .012$) according to the youths own self-scores.

Overall, the findings of this thesis findings support strengths and resilience-based approaches with an emphasis on positive relationships with YJS staff. Interventions identified to be effective targeted self-efficacy, emotions, and sense of coherence. Improvements noted in the youths relating to resilience-based interventions included improved attachments to individuals and society, reduced defiance, more positive self-concept, and improved life outcomes.

Chapter 1

General introduction

Background and rationale

Youth crime is a leading public health concern due to the adverse impacts of crime on victims and communities alike (Department of Health (2012). Further, youth crime has severe consequences on the perpetrators as evidenced by estimations that youth crime is the 4th leading cause of death for youth worldwide, amounting to around 200,000 deaths annually (World Health Organisation, 2015). Economic costs of crime are also substantial; the cost of one youth committing twenty-three offences and having one custodial sentence in 2011 was £109,060 (Ministry of Justice 2011). In 2005, the average cost per offender aged under 18 was £20,184 (Ministry of Justice, 2011). Overall, research suggests juvenile prolific offenders are responsible for over half of all youth crime (Schaefer & Borduin 2005).

According to a leading developmental theory of crime, most youth ‘grow out’ of crime and anti-social behaviour (Moffit, 1993). However, there remains a small cohort who continue to offend, and who are likely to continue offending into adulthood (Moffitt, 2003). Varied interventions have been trialled with youth offenders, with mixed results.

Factors frequently identified in youth who re-offend include inadequate parenting, mental health issues, substance misuse and free time (Sapouna et al., 2015). Studies have found children and youths experiencing good life outcomes despite adversity, have drawn on internal (e.g., problem-solving) and / or external (e.g., a pro-social, caring adult) protective resources (cf. Masten et al., 2008). These factors, or utilisation of these factors, contributes to resilient outcomes. Studies have also suggested that when protective resources are low, significant childhood adversities are more likely to jeopardise positive life outcomes (Bellis et al., 2018). However, research on the usefulness, or impact, of increasing psychological resilience in youth who are prolific offenders remains sparse (Taylor, 2016) despite calls for identification of psychological factors leading to improved outcomes for these youth (Farrington, 2007). The purpose of this thesis is therefore to contribute to the limited research on psychological resilience and youth offending/desistance. The question we set out to

explore is, can tailored interventions aimed at increasing psychological resilience reduce re-offending?

Theories of Crime and Desistance

The competing criminological theories emanating from the Classical school, and the school of Positivism broadly reflect the dichotomy between justice and welfare approaches adopted worldwide. The Classical school aligns with the justice model, which believes offenders are responsible for their choices, and should receive proportional punishment. Bentham and other early philosophers believed individuals would refrain from offending for fear of potential punishment; the conceptual basis for the deterrence perspective in criminology (Bouffard & Wolf, 2007). Rational choice theory, suggesting we make informed choices about our behaviour, supports this model. Pioneered by Sociologist George Homans in 1961, rational choice stems from behavioural psychology (Kubrin et al., 2009). However, the notion of rational choice excludes those of limited cognitive ability (O'Grady, 2011). The school of Positivism supports welfarist interventions addressing the effects of environmental factors. It encompasses three overarching theories: biological, sociological (environmental / cultural) and interactionist (response to social roles / treatment by others) determinants of crime (Einstadter & Henry, 2006).

Emerging on the 1960's and 1970's, desistance theory became a major area of enquiry in criminal career research in the 1990s (cf. Maruna, 1997; Sampson and Laub, 1993). It focusses on the cessation of offending, which is seen as a gradual process rather than a specific event. As such it identifies factors likely to support a steady move away from crime. Desistance theorists therefore take an arguably salutogenic approach, focusing on potential remedies, rather than causes or symptoms. Acknowledging that there are practical challenges to verifying permanent cessation of offending, research has proposed a more descriptive classification to characterise the processes, for example the act of desistance (for non-

offending), may reflect a change of identity from offender to non-offender and a changed perception of others to view the individual as pro-social (Nugent & Schinkel, 2016: 570).

Biological Theories of Crime

One biological theory is genetic theory, suggesting people are born with criminal genes. This stems from the work of Cesare Lombroso (1835-1909) considered a founding father of criminology. His research found relationships between physical abnormalities and offending but a later study by Goring (1972) found no such correlation. However, contemporary methods such as neuroimaging have identified a relationship between psychopathy (disproportionately identified in adult criminals) and brain abnormalities in regions such as the amygdala (implicated in emotional and cognitive responses) (Yang et al., 2009). In addition, prison populations have higher than average levels of genetic abnormalities that exist from birth or later brain injury, along with mental illness and substance misuse (Williams et al., 2015). Traumatic emotional experiences can also lead to significant functional changes in the brain such as heightened amygdala response (Grant et al., 2011). An adoption study in Denmark of over 14,000 adoptees found that 20% of the sons whose biological parents were criminals, also turned to criminal activity (Mednick et al., 1983). Therefore, some evidence supports the contribution of genetic / physical links to criminal behaviour. However, Mednick's research also revealed that when both biological and adopted parents were criminals, children had even greater likelihood of engaging in criminal activity, suggesting nurture also plays a role.

A second biological age-related theory differentiates between 'adolescent limited' and 'life-time persistent' offending (Gottfredson & Hirschi, 1990). Their research noted that although many adolescents committed crime, fewer continued into adulthood (Monahan et al., 2013). Further studies identified key factors in 'growing out' of crime such as marriage and employment ('moral engagement') (Sampson & Laub, 2003). In addition, research has found normative psychosocial development led to greater impulse control and empathy, and

less susceptibility to peer influence (Schubert, 2016). Adolescence-limited anti-social behaviour affects approximately twenty five percent of the population, while six per cent of the population become 'life-course persistent' criminals (Moffitt & Harrington, 1996). Attempting to explain this, Gottfredson and Hirschi later developed a 'General theory of crime' (Gottfredson & Hirschi, 1990). This theory offers self-control as a generalised theory explaining the likelihood of why some individuals committed crime, and others refrained regardless of age (Akers & Sellers, 2004). The general theory of crime suggests the inclination to offend, and the extent to which an individual breaks the law, is dependent on propensity to act plus the opportunity to do so. As such, this theory sees crime as a by-product of low self-control and other high criminogenic propensities, plus simultaneous availability of illegal opportunities (Gottfredson & Hirschi, 1990).

Sociological Theories of Crime

Sociological theories of crime include social disorganisation theory, social learning theory, social control theory and strain theory. Social disorganisation theory, stemming from the Chicago school of criminology and the work of Clifford Shaw and Henry D. McKay in the 1940's, suggested that social disorganisation may have resulted from certain neighbourhood characteristics such as physical dilapidation, poverty, and higher levels of ethnic and cultural mixing. Later research found that these three factors did relate to high crime rates (Kubrin & Wo, 2016), suggesting crime therefore occurs via normal responses to atypical environments.

Social learning theory stemmed from Dr. Edwin Sutherlands' theory of differential association, which believed individuals learned crime via interactions with close associates (Scarpitti et al., 2009). Dr. Ronald Akers' further developed social learning theory from differential association, behavioural science, and the work of psychologist Albert Bandura (Scarpitti et al., 2009). The child copied those around them they saw as 'role models' through either internal motivation where they did it for the thrill, or external motivation which may be

prompted by positive or negative reinforcement. Praise and status for fighting provided positive reinforcement, while seeing someone punished was negative reinforcement (Stadden & Cerutti, 2003).

The theory of social control (developed by Ivan Nye in 1958) suggested law-breaking stemmed from feelings of disengagement from the wider society; therefore, strength of attachment to society determined behaviour (Pratt et al., 2011). This links to Laub & Sampsons' (2003) age related theory which found developing attachments to social institutions (which generally happened with age) correlated with desistance. Evidence for this theory focussed on three areas that correlated with higher crime rates: single parents, truancy, and unemployment (cf. Farrington & West, 1990). However, this demonised poorer families while ignoring the fact that white-collar (middle-class) crimes relied on strong social connections.

Strain theory (Akers & Sellers, 2004) suggested individuals aspired to culturally desirable goals while those who lacked the means to achieve these conventionally felt pressure, which caused 'strain' leading to appropriation via criminality. Robert Merton developed this theory in the 1930s to explain rising crime rates in the USA as a potential response to the idea of the American Dream. It therefore suggested that society encouraged deviance (Ritzer, 2007), and may link to poverty in the social disorganisation theory triad (Kubrin & Wo, 2016). Later developed into general strain theory, this is the only major criminal theory that considers how negative emotions such as anger or aggression may contribute towards delinquency (Agnew, 2001).

Interactionist Theories of Crime

The interactionist school of thought considers individual reactions to social influences, such as the greater likelihood of those in the lower classes experiencing negative police attention, consistent with labelling theory (Bernburg, 2009). Like social disorganisation theory (Porter et al., 2015), interactionism is based on environmental factors

but believes the development of criminality is due to labelling by authorities rather than poverty, ethnic mixing, or dilapidated communities. Several biographies support this theory including 'Sleepers' (Carcattera, 1995) and 'I am not a gangster' (Cummines, 2014).

Interactionism believes crime occurs due to micro-level interactions between certain individuals and authorities, rather than learned behaviour or strain. 'Deviant' labels engender further problems due to intrapersonal and interpersonal reactions to negative stereotypes, increasing the likelihood of deviant behaviour becoming stable and chronic (Bernburg, 2009).

Overall, the competing theories (apart from rational choice) suggest crime results from a combination of environmental and psychological factors that interact with each other cumulatively. However, not all young people who experience such adversities go on to offend.

Desistance Theory

Evidence to date suggests several promising avenues to desistance. These relate to tailored interventions (rather than one-size-fits-all), identification of the individuals' strengths and resources, a focus on increasing motivation, self-belief and hope, positive relationships between the worker and would-be desister, involving individuals in their own treatments, and developing social capital (rather than further stigmatising the individual) (McNeill et al., 2012). However, there is a strong relationship between maturity and desistance, and perhaps because of this, less desistance attention has been focused on youths. The sparse evidence to date suggests positive structural changes, agency, and supportive relationships support adolescent desistance (Bateman, 2021).

Socio-structural factors that appeared to be particularly instrumental in desistance of 'persistent and serious' youth offenders in one small study were education, training, employment, and reparation of family relationships (McMahon & Jump, 2018). Findings from the Sheffield Desistance Study also suggested reconciliation with family members was key to youth's desistance pathways (Bottoms & Shapland, 2016).

Qualitative interviews with New Zealand youth at risk of offending identified a search for agency (autonomy), via making sense of the world, having a voice, and acting on the world. Agency was central in their successful (i.e., non-offending) transition to adulthood (Munford & Sanders, 2015). Supportive relationships have also been evidenced as a protective factor against re-offending. For example, one study found healthy attachments to adults correlated with increased resilience and despite being ‘at risk’, these youths did not engage in delinquent activity (Bowen et al., 2008). Gray’s (2013) seven-year follow-up study of nine recipients of Intensive Supervision and Surveillance (ISSP) found that the bond with their worker was ‘the important factor’ in their compliance and subsequent desistance.

There is mixed evidence with regards to identity in youths. While Johns et al. (2017) and Beyond Youth Custody (2017) found transitions from a negative to more positive self-identity related to desistance, evidence also suggested this was not true of all youth who had offended (Beyond Youth Custody, 2017). Nevertheless, interactionism and the theory of labelling strongly suggests that positive relationships with pro-social adults is instrumental in offending cessation (Mincey & Maldonado, 2011).

There are also some similarities between desistance factors, and those associated with the process of resilience. These include hope, or optimism (Ungar, 2004), agency (Rutter, 2012), a strong identity (Cowan & Work, 1988), and supportive relationships (Luthar & Brown, 2007). Resilience could therefore usefully be framed as a quality that it is important to the process of desistance.

Resilience theories

Resilience has been alluded to as the end behaviour, or set of behaviours, that form a process leading to a positive outcome following adversity (Luthar & Cicchetti, 2000). Most criminal theories appear to rest on the premise of adversities that the individual was unable to overcome. Although many definitions of resilience exist, an encompassing definition relevant to this study is:

“Good psychological functioning & good behavioural outcomes despite adverse circumstances expected to jeopardise normative growth & adaptation” (Mukherjee & Kumar, 2017:3).

Although research has agreed on certain traits of resilient people, specifically above average intelligence, having a wide range of interest and activities, self-reliance, a positive outlook, and a strong sense of identity (Cowan & Work, 1988), studies also show resilience incorporates a set of skills that individuals can learn such as goal setting (Carroll et al., 2013) and self-regulation (Gardner et al., 2008). Self-belief is also paramount; Bandura’s theory of self-efficacy suggests that the extent to which individuals believe they are capable of successfully overcoming difficulties highly influences both goal setting, and the extent to which individuals seek or avoid certain situations (Bandura et al., 2001). Three main models have attempted to explain the process of resilience, and how it might develop (or not): Challenge, compensatory and protective (Fergus & Zimmerman, 2005). Other theories of resilience include the notion of social capital, the presence of an internal locus of control, and a strong sense of coherence. We will discuss these in turn.

Challenge Model of Resilience

The development of personal resilience normally presupposes the exposure to substantial risk or adversity (Luthar & Cicchetti, 2000; Masten, 2001). However, the challenge model of resilience suggests that exposure to either extremely low or high levels of risk related to negative outcomes, while moderate levels of risk related to more positive outcomes (Fergus & Zimmerman, 2005). For example, too little family conflict may not have prepared youths with an opportunity to learn how to manage interpersonal conflicts outside of the home, but too much may have a debilitating effect, leading to hopelessness and distress (Fergus & Zimmerman, 2005). In support of this model, Leys et al. (2020) argued that adversity does not necessarily need to be traumatic for the development of resilience, and everyday problems may suffice. Studies have tested the challenge model in relation to

adolescent outcomes including risk for victimisation, depression, and aggression (Christiansen & Evans, 2005; Slesnick et al., 2010). These studies considered risks (e.g., exposure to violence, family conflict) and factors promoting resilience (e.g., neighbourhood cohesion, task-oriented coping) and their findings supported the challenge model in that the more risk factors were present, the greater the likelihood of negative outcomes such as offending. More recent U.K. studies on adverse childhood experiences also arrived at this conclusion (Bellis et al., 2018).

Compensatory Model of Resilience

Compensatory models see resilience as a factor neutralising exposure to risk. Findings from a longitudinal study showed that four central compensatory characteristics emerged for the young adults labelled resilient; active problem-solving, a tendency to perceive adverse experiences in a positive light, ability to gain positive attention from others, and a strong reliance on faith to maintain a positive life view (Werner & Smith, 2005). Later studies identified optimism, empathy, insight, intellectual competence, self-esteem, direction, determination, and perseverance as compensatory factors (Ungar, 2004). The theory of dispositional optimism has maintained that expectancies of outcomes were important determinants of whether individuals responded to adversity by continuing efforts or by disengagement (Scheier et al., 1994). Compensatory factors have equal benefit for those exposed to adversity, and those not exposed to adversity (Ferguson & Horwood, 2003).

Protective Model of Resilience

The protective factor model of resilience suggested that interactions between protective and risk factors reduced the probability of a negative outcome, moderating the negative effects of the exposure to risk (O'Leary, 1998). The extent to which resilience developed depended on the existence of protective factors. For example, while youth living in poverty were more likely to commit violent behaviour than more affluent youth (Edari & McManus, 1998), positive adult role models may have compensated for the negative effects

of poverty. This model of resilience stems from developmental literature and systems theory. It indicates that protective factors foster positive outcomes and healthy personal qualities despite adverse life events (Bonanno, 2004; Ungar, 2004). Protective factors identified included emotional management, intrapersonal reflective skills, academic and job skills, ability to restore self-esteem, planning, and problem-solving (Ungar, 2004). While research has described both protective and compensatory factors as resilience factors, protective factors provided greater benefit in the event of exposure to adversity (Ferguson & Horwood, 2003). Several factors appear in both protective and compensatory models such as problem solving / planning, and self-esteem. The current study will use the term resilience factors to encompass those identified according to the various models of resilience.

Social Capital Theory of Resilience

Several factors relating to compensatory and protective models of resilience have also appeared in the literature relating to the theory of social capital, which theorised that resilience originated via relationships between individuals in social systems (Putnam, 2000). Studies have suggested social capital influenced resilience more positively than any other factor (Runyan et al., 1998). In their resilience review, Luthar and Brown (2007) concluded that resilience rests, fundamentally, on relationships. Psychological factors influencing ability / motivation to develop positive relationships included empathy, insight, emotional regulation, and good self-esteem, all of which enable appropriate behaviour in social situations (Kumpfer & Hopkins, 1993). In addition, task-oriented coping / active problem solving (managing stressors positively) and finding meaning in problems (e.g., transformational coping) were all associated with positive outcomes in life (Ungar, 2004).

Locus of Control

Several theories have attempted to explain how the development/presence of additional individual-level factors contributed to the overall ability to overcome adversity. One theory suggested resilience began with an ‘internal locus of control’ (Lefcourt, 1992).

This is the individual's belief that they, as opposed to external forces (beyond their influence), control the outcome of events in their lives. Studies suggest this sense of agency increased the likelihood of successful stress management (Rutter, 2012). One study found an internal locus of control correlated significantly with autonomy (Aghayani & Hajmohammadi, 2019). Deci and Ryan's theory of self-determination proposed that there were three determinants of motivation: Autonomy, competence, and relatedness (Deci & Ryan, 2008). Although motivation differs from resilience (it is based on an inner urge rather than a response to adversity or challenge) it is related to resilience in that it requires motivation to be resilient (Resnick, 2018). When individuals believe success is up to them, they are more likely to act.

Sense of Coherence

Only one theory of resilience included the notion of 'insight' or comprehension and that is 'sense of coherence' (SOC, Antonovsky, 1991). In attempting to explain why some child Holocaust survivors were able to adapt to life following their experiences, Antonovsky identified factors differentiating these individuals were their ability to a) comprehend events, b) manage situations (alone or with the help of others), and c) find meaning in experiences. The study found SOC moderated the association between experiences during the Holocaust and post-traumatic stress, buffering effect of trauma on child survivors in old age (Antonovsky, 1979). Those with lower SOC were at greater risk of post-traumatic ill health, especially if they had received lower levels of post-trauma care (Raalte et al., 2007).

Resilience Factors Against Offending

Studies have identified several resilience factors specifically contributing to either non-offending in at risk populations (i.e., those experiencing a high number of risk factors), or desistance in those who have offended. Enhancing the likelihood of positive outcomes, these factors encompass environmental (e.g., healthy attachment to caregiver, social capital,

community bonding) and psychological (e.g., self-regulation, self-efficacy, hope for the future, good decision-making, problem solving) determinants.

Environmental Resilience Factors

Attachment. Healthy attachments (meaningful relationships) are a powerful protective factor against criminal behaviour (Schofield & Beek, 2014). Both Ansbro (2008) and McNeill (2006) proposed that the development of a meaningful and trusting relationship between worker and client was crucial to the process of desistance. Another study, using three samples of youth who had offended, found strong social support and strong attachments to pro-social adults were significant predictors of desistance from violent re-offending in all three groups (Lodevijks et al., 2010). The measurement used was the Structured Assessment of Violence Risk in Youth (SAVRY, Borum et al., 2002) which included prosocial involvement, social support, strong attachments, positive attitude towards intervention / authority, commitment to school and resilient personality traits.

Social capital & community bonding. Social capital emphasises the importance of social cohesion within communities, specifically relations and interactions with the power to be transformative (Weller & Bruegel, 2007). One study found that greater bonding with school, and provision of pro-social opportunities had a greater effect in reducing violence among youths exposed to high levels of cumulative risk than among those exposed to lower levels of cumulative risk (Kim et al., 2016). In other words, in line with theories of social control and perhaps labelling, encouraging the development of social capital and engagement in pro-social opportunities was instrumental in reducing violent offending. Another study of 703 fourteen year old boys identified that engagement in structured leisure activities (as opposed to unstructured) related to low levels of antisocial behaviour (Mahoney & Stattin, 2000).

Psychological Resilience Factors

Self-regulation. Another factor that moderated the association of peer deviance with antisocial behaviour was self-regulation (Gardner et al., 2008). Studies have suggested that the negative emotional states and inability to manage these were key factors driving offending (negative) behaviour (cf. Day, 2009; Wolff & Baglivio, 2017).

Self-efficacy. Research has identified that perceived self-efficacy, in relation to self-regulatory mechanisms, was a key variable in the extent to which whole-school populations of boys and girls displayed transgressive behaviour (Bandura et al., 2001). One qualitative study found that desisting offenders expressed an exaggerated sense of self-determination, efficacy, and hope for their future (Maruna, 2010).

Hope for the future. In relation to the criminal literature, studies have described the notion of hope as ‘the perception of successful agency related to goals’ and ‘the perceived availability of successful pathways related to goals’ (Snyder et al., 1996). Qualitative interviews with youths (prolific offenders and those in the early stages of criminality) found a significant desistance factor was the potential loss of family/siblings or future goals (Boeck et al., 2008). Having ‘something to lose’ (suggesting the individual had hope for the future) therefore appeared to encourage positive behaviour. In addition, a U.S. study found the extent to which youth expected to achieve future goals reduced the negative impact of low self-control (a risk factor for offending, Gottfredson & Hirschi, 1990) on delinquency (Clinkinbeard & Zohra, 2012). A U.S. study of 5,378 youth on probation found while childhood maltreatment was related to mental health problems (moderated by social support), youth aspirations moderated the extent to which maltreatment and mental health problems interfered with probation (Logan-Greene et al., 2017). In other words, aspirations were a protective factor increasing the likelihood of treatment engagement.

Decision-making / problem-solving competence / self-esteem. A study of 197 youth leaving prison identified that decision-making success was a key factor in desistance (Evans et al., 2002). Another study used the SAVRY (Borum et al., 2002) to assess the interaction of

protective factors with risk of re-offending with 135 male youths in custody (Rennie & Dolan, 2010). The total number of protective factors significantly predicted desistance while ‘resilient personality traits’ constituted the only significant individual protective factor (Rennie & Dolan, 2010). Despite the word ‘traits’ this section of the SAVRY includes malleable resilience factors such as problem-solving, and self-esteem.

Risk Factors for Offending

Risk factors for persistent offending broadly reflected factors informing theories of crime, and factors contributing to low resilience. These fell into five areas, the first four were environmental: dysfunctional families/anti-social peers, weak community bonds, trauma, demographic factors, while the fifth area contained several psychological factors.

Environmental Risk Factors

Dysfunctional families / anti-social peer influence. Research has consistently demonstrated that poor family functioning and negative peer influences played a major role in both chronic and violent juvenile offending (Hawkins et al., 2000). Familial factors that related to offending behaviour included abuse/neglect, parental mental health issues, parental addictions, single parent families and parental incarceration (Local Government Association, 2018). One study identified that a significant number of youths who had offended and had experienced neglect, believed physical aggression was an appropriate response to resolve disagreement (Ryan et al., 2013). Furthermore, individuals gestationally exposed to alcohol experienced a multitude of socio-behavioural impairments, including deficits in adaptive behaviours such as social skills (Kully-Martens et al., 2011). A Joseph Rowntree Foundation report found parental drug addiction related to anxiety and social stigma in youths, and alcohol addiction to violence and abuse (Bancroft et al., 2004).

Little research identified in the current study specifically related to the contribution of delinquent peers to offending. One qualitative study found that gangs met needs for

belonging due to low family support, meaning that while they exerted a negative influence (i.e., many of the youths would not have offended alone) they were hard to leave (Johns et al., 2017). Another study found that after history of offending, the biggest predictors of future delinquency were family problems, delinquent peers, and ineffective use of leisure time (Cottle et al., 2001).

Weak community bonds. In support of Cottle et al.'s findings, a study of 14-year-old boys and their parents identified a link between low structured community activities and delinquency (Mahoney & Stattin, 2000). Taking part in anti-social behaviour from an early age is suggestive of the poor social bonds described in social control theory (Gottfredson & Hirschi, 1990). Many delinquent youths also experienced school problems, including poor attendance and exclusion (Bowen et al., 2008) which correlated with increased offending (*Trauma and Young Offenders*, 2016). Whilst school difficulties were suggestive of low bonds with society, cognitive difficulties in relation to the demands of school may also have been a contributing factor e.g., low literacy / numeracy is frequently identified in youth who offend (Snow & Powell, 2011).

Trauma. With regards to youth who offend, trauma appeared to occur within an inter-familial context. That is, the youths experienced trauma through parental physical or sexual abuse (Herzog & Schmaal, 2018), physical or emotional neglect (Logan-Greene & Semanchin Jones, 2015), and/or the witnessing of domestic violence (Johns et al., 2017). Specifically, one study of youth who had offended found 48% had witnessed family violence, 55% had experienced abuse or neglect and 79% had been involved with social services (Children & Young People First, 2014). Research has also associated youth delinquency with parental bereavement (Draper & Hancock, 2011).

A study in the USA between 1995 and 1997 coined the term 'adverse childhood experiences' (ACE's), making a significant contribution to understanding their impact on long-term health related behaviours such as smoking, drug-taking and eating disorders (Anda

et al., 2006). Studies have shown that chronic stress raised levels of cortisol and adrenalin, impairing healthy brain development and the ability to self-regulate (McEwen, 2008). This appeared to increase the likelihood of criminal behaviour as well as poor health-related behaviour. Specifically, a U.K. study found individuals who had experienced four or more ACE's were fourteen times more likely to have been a victim of violence; fifteen times more likely to have committed violence and twenty times more likely to have been incarcerated (Bellis et al., 2015).

Demographic factors. Black, Asian, and Minority Ethnic (BAME) youth are increasingly disproportionately represented within the youth justice system. Minority ethnic youth accounted for one quarter of those in custody in May 2005, but this had risen to 51% by the same month in 2019. In the same period, the white population of the secure estate declined by 80% but for BAME youth this reduction was just 38% (Bateman, 2021). Youth who have offended are also disproportionately male; in England and Wales, girls make up just one fifth of the caseload of youth offending services (*Girls in the Criminal Justice System*, 2014). A further factor common to justice involvement, relating to social disorganisation theory, is lower socio-economic status (Piotrowska et al., 2015).

Psychological Risk Factors

Negative/criminal self-identity. Often the strongest predictor of future offending identified in studies was prior incarceration (cf. Haines et al., 2015) and school exclusion (Ball & Connolly, 2000). School exclusion may have increased the likelihood of meeting other similar youth and developing a self-identity as a 'trouble-maker'. In addition, research has found unstructured leisure activities with deviant youths related to increased crime (Mahoney & Stattin, 2000). In examining a group of highly delinquent youths, Oyserman and Markus (1990) found imbalances between present and possible future selves, i.e., the perceived vast difference between current self-identity as an offender, and future possibility

of being employed, reduced motivation to work towards future goals (Oyserman & Markus, 1990).

Life experiences, including other people's responses, creates personal identities, and when these are negative, creates 'offender' identities, consistent with labelling theory and the interactionist theory of crime (Bernburg, 2009):

"Lots of lads identify themselves by their offence. They become their offence and don't allow themselves to step out into another identity." (Young Person, *Beyond Youth Custody*, 2017:8)

Attachment difficulties. Youth who had not experienced supportive or nurturing relationships often developed attachment difficulties (Fitzpatrick et al., 2016). The psychological theory of attachment, developed from the work of John Bowlby (1907-1990) posits that an emotional bond with the main caregiver is necessary for normal psychological and social development (Bowlby, 1988). Psychological issues due to poor attachment have included difficulties with trust, relationships, and empathy (Siegel, 2012). A meta-analysis on the relation between empathy and offending showed that juvenile delinquents exhibited less empathy than juvenile nondelinquents (Jolliffe & Farrington, 2004). Research has also shown that 52% of incarcerated youth had borderline or actual attachment difficulties (Moran et al., 2017). A meta-analysis by Hoeve et al. (2012) found that poor attachment to parents significantly increased delinquency in both boys and girls. Therefore, it appears that the impact of attachment on psychological functioning is such that without secure attachments delinquency is more likely (Zegers, et al., 2008).

Cognitive difficulties. Poor psycho-social development is common in youth who offend, and this may have related to the environmental risk factors discussed earlier. One study found youth with higher offending scores (violent and non-violent) performed worse on language measures than their counterparts who had relatively lower offending scores (Snow & Powell, 2011). Other factors identified in individuals who offend included poor emotional

understanding, particularly those who offend violently (Möller et al., 2014). Alexithymia (difficulties understanding one's own emotions) appeared to be a risk factor for offending for example an Australian study identified alexithymia in 59% of a sample of 100 offending youth (Snow et al., 2015).

Mental health. Studies show that a disproportionate number of youths who offend have mental health issues (Fougere et al., 2015). While poor emotional understanding may have reduced the youth's ability to manage their own emotions, failure to process negative emotions may have resulted in anxiety and depression (Stuart & Baines, 2004). Studies have found that both conditions related to low sense of coherence (Moksnes et al., 2012)). Interviews with youth who had offended and youth who had not (despite being at risk), identified a key factor in those who had offended was poor social cognition (ability to recognise, understand and consider emotions in interpersonal and social contexts (Moskowitz, 2005). The inability to regulate emotions is frequently identified in youth who offend. For example, Grieger et al. (2012) found lower levels of emotion regulation related to higher levels of re-offending for all forms of crime apart from property crime.

Poor problem-solving / hopelessness. One study drawing attention to the role of cognitive processes in the development of criminality found problem-solving skills were often deficient in youth who offend (Foglia, 2000). This may help explain the high levels of hopelessness found in youth in the criminal justice system (Shelton, 2004). Studies with incarcerated youth have discovered that increased problem solving (following targeted intervention) correlated with reduced anxiety, depression, and hopelessness (Biggam & Power, 2002). In support of these findings, Jolliffe and colleagues identified that depression and anxiety are in fact outcomes of offending (Jolliffe et al., 2019). Poor problem solving therefore appears to contribute to negative emotionality leading on to offending; however, the study by Biggam and Power (2002) did not measure re-offending. One study identified three groups in a whole-school population; well adjusted (low depressive symptoms, low daily

hassle), resilient (high daily hassle, low depression), and vulnerable, and found resilient youths had higher scores on problem-solving coping strategies than those in the two other groups, but conversely that resilient and vulnerable adolescents engaged in more illegal activities (Dumont & Provost, 1999).

Substance use is often a response to unresolved trauma, or emotional problems the individual has been unable to solve (Dube et al., 2003). Research shows that substance use strongly predicts recidivism despite prior delinquency, gender, ethnicity, or age (Stoolmiller & Blechman, 2005). With regards to personality theory, it also appeared to relate to individuals with higher reward sensitivity; studies found chronic drug abusers demonstrated a motivational bias for immediate gains, suggesting the promise of positive reward may be more influential than risk concerns (Yechiam et al., 2005). This may support the control theory of crime, asserting that strong impulses predicted delinquent behaviour (Gottfredson & Hirschi, 1990).

Theories of Child and Adolescent Development

Several of the protective factors detailed above may contribute to, or depend on, normative cognitive development, consistent with both biological and sociological theories of crime. For example, traumatic experiences such as abuse or neglect (disproportionality experienced by youths in the justice system) may have adversely affected typical adolescent development such as ability to self-regulate, impacting on impulse control, empathy, and susceptibility to peer influence (Schubert et al., 2016). A 4-year study on youths' pathways in and out of crime identified that attachment with a trusted adult increased desistance, via the youth making positive decisions, and accessing material and social resources (social capital) (Boeck et al., 2008). Similarly, poor attachment is a risk factor for offending (Moran et al., 2017), and youths living in communities that are socially disorganised or in families disengaged from society, as outlined in several sociological theories of crime are less likely

to learn pro-social skills or develop good attachments due to a greater likelihood of factors such as parental addiction and/or poor mental health (e.g., Bowen et al., 2008).

Theory of Cognitive Development

In relation to psychological protective factors, good self-esteem and decision-making / problem solving related to Piaget's theory of cognitive development. Jean Piaget (1896 – 1980), one of the most well-known and influential child development specialists, outlined developmental changes from age 11 or 12 to adulthood. These involved the development of deductive logic, enabling the youth's assessment of likely outcomes of a given situation depending on how they changed or manipulated variables, and subsequent arrival at logical or sensible decisions (Egan, 1997). Piaget also coined the phrase 'personal fable' to describe how youths may begin to see themselves as the same, or different, to others around them and believed that in adolescence, these beliefs often led to feelings of either superiority or inferiority to others (Smetana et al., 2009). In relation to the personal fable, one study found that seeing oneself as invincible related to higher levels of risk-taking (Alberts et al., 2007). Research also shows that inflated self-esteem (superiority) is associated with repeat offending through reduced responsiveness to intervention (Baumeister et al., 2000).

Theory of Moral Cognitive Development

Kohlbergs (1984) theory, built upon that of Piaget, also links to cognitive growth via six levels of moral development. The first level involves learning right and wrong via actions leading to punishment or reward, while also realising that more than one view of right and wrong exists. At the second level, authority is internalised, and reasoning develops based on the values of the individual's family. The youth desires others to view them as good, but also becomes aware of rules governing wider society, normally abiding by these to avoid guilt. This theory therefore relates to Bandura's theory of social learning (Bandura, 1977, 2001). The final level is where the individual has consolidated their ideas of what is right and fair, and developed the understanding that while laws exist for the greater good, they may not

serve everyone. Therefore, an individual's moral guidelines may or may not fit the law (Shaffer, 2004).

Theory of Psychosocial Development

Erik and Joan Erikson identified the impact of social experiences across the life course, occurring in eight separate stages (Erikson & Erikson, 1998). They proposed that the individual must complete each stage successfully to achieve the next stage. The two first stages (age 0-3) relate to Bowlby's theory of attachment, whereby trust and self-esteem develop through consistent and nurturing parenting (Bowlby, 1988). The third stage, 'initiative/guilt' occurs between the ages of age 3-5 and is consistent with Kohlberg's 'preconventional' stage where children learn right from wrong, influenced by the wider family, community, and main care giver (Kohlberg, 1984). Youth within YJS age 6-11 are in the fourth stage; 'industry/inferiority'; and those age 12-18 are in the fifth stage; 'identity/role confusion'. Research suggests youths in the criminal justice system may not have completed all previous stages successfully, due to early life family problems and/or traumatic experiences (cf. Jolliffe et al., 2017). Adolescence is also the time when many youths naturally experiment with drugs, alcohol, and criminal activity in line with the 'age-related' theory of crime (cf. Moffitt, 1993). At this stage, unlike Kohlberg, Erikson believes influence comes largely from peers as they explore their independence, and that their sense of self develops through peers (Erikson & Erikson, 1998). For youth who have offended, issues such as school exclusion and anti-social peers may contribute to their development of negative personal narratives consistent with Piagets' 'fables', increasing the likelihood that youths may continue experimental behaviour into adulthood, going from adolescent-limited to life-time persistent offending (Moffitt, 1993)

Theory of Social Cognitive Learning

Albert Bandura introduced the concept of social learning theory in 1977, based on the premise that children learn through observing. As such, youths in households where

criminality is acceptable may develop different views to those from conventional families. For example, flawed reasoning such as viewing aggression as viable coping strategy may have stemmed from cognitive processes developed from a mental script learned in childhood (Jacoby, 2004). Conversely, individuals with sound (learned) cognitive processes may be more likely to make reasoned judgments when faced with emotional events (Siegel, 2008).

Bandura (1986) further developed this theory, renaming it social cognitive theory. This emphasised how, in addition to observational learning, a cognitive factor he termed self-efficacy contributed to how individuals interacted with their environments. Self-efficacy is the extent to which individual feel they are competent, and able to succeed in any given area, and as such it is a key motivating factor in the amount of effort individuals are willing to give to making positive changes and then sustaining the necessary actions (Bandura, 1997). Identified as a protective factor in relation to offending, self-efficacy may therefore also relate to other resilience factors such as aspirations, and hope for the future. According to social cognitive theory (Bandura, 2001), seeing someone punished provides negative reinforcement. However, several studies have found antisocial youth showed reduced responsiveness to cues signalling impending punishment (cf. Fairchild et al., 2008; Syngelaki et al., 2013). One study found that anti-social youths with high reward sensitivity were more likely to pursue immediate rewards, despite the possibility of punishment, which led the authors to suggest that a low physiological response when punished hindered their ability to form associations with cues of impending punishment. (Byrd et al., 2014).

Available Interventions

Studies have evaluated numerous approaches, reporting varying degrees of success. Research has generally found that punishment alone, e.g., incarceration, is ineffective (Lambie & Randall, 2013) and that it may re-traumatise individuals experiencing, or who have experienced, adversity (Armstrong & Weaver, 2013). High reward / low punishment

sensitivity (cf. Gray & McNaughton, 2000) may also partially explain why the classical punishment-based ‘justice’ model has often been ineffective. Most treatments, therefore, have their roots in the school of positivism, addressing offending via welfarist interventions. These included mentoring (cf. Newburn & Shiner, 2006), restorative justice (involving, where appropriate, the youth making amends for their behaviour) (cf. Livingstone et al., 2013), Cognitive Behavioural Therapy (CBT) which aimed to improve competence by increasing cognitive ability (cf. Lipsey et al., 2001; Landenberger & Lipsey, 2005), and Intensive Surveillance and Supervision (ISS), a multi-systemic community-based intervention aimed at serious and persistent offenders (Gray, 2013; Wiebush et al., 2005). Additionally, studies have evaluated several family interventions including Multi-systemic Therapy (MST) (Henggeler & Schoenwald, 2011), Functional Family Therapy (FFT), a less intensive alternative to MST (Alexander et al., 2013) and Family Integrated Transitions, differing to MST and FFT through its involvement of a team of staff, and its target group of youths leaving custody with co-occurring mental health and substance use disorders (cf. Butler et al., 2017).

This study aimed to identify successful interventions targeting the individual, rather than systemic approaches, for several reasons. Research findings cannot agree on whether family/community-level or individual-level factors have related more significantly to re-offending (cf. Farrington, 1995; Stouthamer-Loeber et al., 1993, 2002). However, while some studies evaluating family interventions have reported success, a recent UK trial of MST showed no significant changes in self-reported delinquency, leading the authors to suggest that during adolescence, parents may have less of an influence, and targeting individual factors may be more effective (Humayun et al., 2017). A systemic U.S.A intervention, although it stressed the need for intervention in all areas, also reported that family and peers were consistently the most difficult areas in which to effect change (Wiebush et al. 2005) and another study reported similar issues (Hanlon et al., 2002). Additionally, while

social/environmental (e.g., legal employment) and psychological (e.g., changes in criminal attitudes, psycho-social development) factors influenced desistance (Schubert et al., 2016), it appeared that cognitive awareness (e.g., Bak et al., 2015) and understanding of available resources (e.g., Boeck et al., 2008) enabled successful navigation of both predictable and unpredictable environments and utilisation of available resources. A recent meta-analysis by Mier and Ladny (2017) supported the centrality of self-belief in reducing reoffending, an individual level factor that individual level intervention may affect. The current study aimed to identify how individualised intervention may support youth to become more resilient despite potentially difficult backgrounds, and whether a relation existed with re-offending.

Thesis Objectives

In relation to the research reviewed thus far, the aim of this thesis was to examine whether a targeted psychological intervention increased resilience, and whether changes in resilience related to reduced re-offending in young people who had offended. As noted in this introduction, resilience is a multi-faceted construct. One reason for the lack of focus on resilience in youth offending literature may be its complex construction and numerous definitions. However, psychological resilience is a key factor in youth who have experienced positive outcomes despite adversity (Rutter, 2006) and as youth in the justice system have frequently experienced above average levels of adversity (Bowen et al., 2008), resilience seems pertinent to attempt to intervene upon. The overarching aim of the thesis was therefore to develop a psychological resilience intervention (Chapter 4). Following scrutiny of extant research (Chapter 2) in-depth interviews with Youth Justice case workers attempted to determine current application of resilience strategies (Chapter 3).

The thesis began with a systematic review of individualised interventions targeting or measuring psychological variables related to resilience which concurrently reduced offending (Chapter 2) This review attempted to identify successful interventions worldwide that had

increased psychological resilience, excluding family interventions, or those that were systemic in nature and included only re-offending measures. The aim was to identify specific individual-level approaches, and specific changes in psychological resilience increasing the likelihood of positive outcomes such as reduced offending.

It was also imperative to understand what existing stakeholders (i.e., Youth Justice case workers) knew about psychological resilience and how they already implemented such interventions. I therefore next conducted in-depth qualitative interviews with Youth Justice case workers to determine their current knowledge and application of psychological resilience interventions (Chapter 3). That is, could we learn from practitioners on the ground anything above that identified by the systematic review. The objectives of Chapter 3 were to identify psychological changes related to desistance, and potential mechanisms by which these occurred.

Findings from Chapters 2 and 3 informed the development of a psychological resilience intervention for one Youth Justice Service to pilot. Chapter 4 outlines intervention design, provision of training for Youth Justice case workers, and piloting of the intervention with youths. This chapter therefore contains two studies. Firstly, an assessment of the effectiveness of the resilience training via quantitative pre- and post-assessments of YJS case worker confidence to deliver psychological interventions. Secondly, an assessment of the effectiveness of the intervention with youths who had offended using a validated measure of resilience. Due to Covid-19 restrictions and the slower than anticipated completion of the pilot, we will collect the remaining resilience and re-offending data at a later date, as not all of the youths had completed the intervention at the time of writing. This data will be added to that presented in the current study, to identify if increased resilience reduced re-offending, the results will be published.

Chapter 2

Psychological Resilience Interventions to Reduce Recidivism in Young People: A Systematic Review

Abstract

“Diversion” schemes encouraging children and young people away from offending have successfully reduced the numbers of young people within the youth justice system. However, for those not successfully diverted, recidivism remains obstinately high. Many of those remaining in the youth justice system appear to have complex psychological needs. Research has also shown that many of this group have experienced a high number of adverse childhood experiences. Investigation into the potential consequences of these experiences suggests the potential disruption of normative adolescent psychological growth. Domains may include emotional, cognitive, behavioural, and interpersonal development. This review assesses the effectiveness of individual interventions that had a psychological focus and succeeded in reducing recidivism. A systematic research review from 2000 – 2019 yielded 206 studies for youth offenders, and of these, 14 met the criteria for inclusion. Sample size varied greatly, from 17 to 3,038. Research design, follow-up period and intervention content also varied greatly. Further, intervention success for recidivism ranged from almost total desistance to changes (increased time to re-offend) affecting only 50% of the intervention group. Psychological changes as a result of intervention included an increased sense of coherence, improved emotion recognition, more positive decision-making, increased self-concept, and reduced defiance. However, none of the studies conducted follow-up psychological assessments post-intervention. Although youth crime is a priority for policy makers, so far research has fallen short of fully examining how the development of psychological resilience via interventions may help reduce persistent offending.

Introduction

Due to the overall success of youth justice diversion schemes such as counselling and victim awareness, the pool of young people within the youth justice system is no longer “watered down” by less serious or “adolescent-limited” youth offenders (Moffitt, 2003). This phenomenon has highlighted the complex needs of those individuals who remain in the youth justice system, many of whom become repeat offenders. Research shows that this population experience high levels of trauma, difficulties understanding emotional states, substance misuse, and mental health issues (Mallet et al., 2018). Re-offending rates are high, suggesting a distinct need for focused research attention on this worldwide concern. However, despite the notable psychological difficulties experienced by those who re-offend, there has not been a systematic review of psychological interventions that have succeeded in reducing re-offending. This study, therefore, aims to address that research gap by identifying successful interventions world-wide and reporting on the psychological changes occurring along with reduced re-offending.

Definition of “Young Offender”

A “young offender” is a child, or a youth convicted or cautioned by the police. The age of criminal responsibility varies between countries. In Europe and Asia, it is 12 – 14. In England, Wales, and Australia it is 10. However, in the U.S.A., 33 out of the 50 states set no minimum age but instead apply a capacity test. Of the 17 that do, North Carolina has the lowest at 7, and Wisconsin has the highest at 10. In Scandinavian countries which include Denmark, Finland, Norway, and Sweden, the legal age of criminal responsibility is 15. In most countries, youth justice services can work with individuals until they turn 18 (although the United Nations class a “youth” as between the ages of 15 and 24, Factsheet on Juvenile Justice, 2008). In the UK, a “prolific young offender” is an individual aged between 10 and 17 who has more than 25 separate offences (Johns, 2018).

Global Youth Justice report that that over the last five years, the most common reasons for convictions / cautions of children and youth worldwide consisted of theft, vandalism, underage drinking, disorderly conduct (e.g., fighting or assault), marijuana possession, underage smoking, curfew violation, school disciplinaries and traffic violations (e.g., underage driving) (Top 25 crimes, offences, and violation, 2018). While youth diversion schemes are effective at ensuring a high number of children and youth do not go on to commit further or more serious crime, they are not always successful (Wilson et al., 2013). For example, a 2015 report from the U.S.A. compiled data from the 39 states that track recidivism found that 76% of first-time offenders re-offended within three years, and 84% within five years (MST Services, 2018). In the U.K., re-offending rates are similar, especially for youth leaving secure institutions where over two thirds reoffend within 12 months of release (Youth justice facts and figures, 2020).

“Serious” crimes committed by children and youth are often associated with gang involvement, e.g., knife crime or violent crime (Association of Directors of Children’s Services, 2019). “Less serious” offenders are those that have committed offences considered to be non-violent in nature such as property crimes (Turner, 2015). Those who commit serious crimes are less likely to receive diversion options such as restorative justice schemes. There are many crimes other than violent listed as “serious” in various legislations worldwide, but these are more likely to be committed by adults, e.g., drug trafficking, people and arms trafficking, prostitution and child sex offences, armed robbery, bribery, computer misuse offences and environment offences (Serious Crime Act, 2007).

Child and Adolescent Psychological Development

Adolescence is a crucial period when cognitive and emotional skills develop for successful transition into adulthood (Wood et al., 2018). However, research has shown that children and youth in the criminal justice system are more likely to experience delayed cognitive development, evidenced by factors such as poor emotional regulation and low

academic attainment (Wolff et al., 2017). Consequently, this may lead to low levels of psychological resilience, e.g., inability to successfully overcome difficulties. Further, measures of re-offending and resilience do not always go hand in hand, meaning the relationship between psychological development/resilience and reduced offending is unclear (cf. Daykin et al., 2017).

One cause of delayed cognitive development in young people is the experience of trauma. For example, studies report that these individuals often have difficulties in recognising emotions in others, or in identifying and describing their feelings (alexithymia) in themselves (Möller et al., 2014). An inability to recognise emotions may be one of the ways in which traumatic experiences impede normative psychological development (Eichhorn et al., 2014). Delayed cognitive development such as language impairment has also been specifically related to children and youth who offend (Snow et al., 2015). Overall, research finds that experiencing trauma at a young age often leads to higher levels of negative emotionality such as anger, greater levels of anxiety and depression, and low levels of relatedness and self-concept (Gibson et al., 2017).

Psychological trauma can result from adverse childhood experiences such as loss of a parent or experiencing violent events, as well as responses to chronic or repetitive experiences such as child abuse, neglect, urban violence, violent relationships, and chronic deprivation (Committee on Child Maltreatment Research, Policy, and Practice for the Next Decade, 2014). Sudden changes such as loss or bereavement may also include having to leave the family home due to conflict, abuse, or overcrowding (Diaz, 2005). Incarceration also signifies sudden loss of the familiar, a potentially traumatic experience related to separation pain (Armstrong et al., 2013). Research has also shown that the combination of trauma previously experienced by many of those incarcerated with further deprivation experienced as part of the prison environment, can lead to further traumatisation (Armour, 2012). Therefore, incarceration for youth who may already lack resilience may further delay psychological

growth, hindering normative adolescent development and potentially contributing to difficulties transitioning to adulthood.

General strain theory may help explain why negative childhood experiences lead to offending behaviour in some individuals (Agnew, 2001). This predicts that delinquent behaviour occurs when there are disconnections between common goals and the availability of legitimate ways of reaching those goals. Goals may include desire for material items or need for status. For example, deviant subcultures may arise from the need for social recognition (Barry, 2006). Gang membership provides an achievable means of meeting this need (U. S. Department of Justice, 2015). One study examined the effect of eight strain factors on delinquency including both general and specific factors. Results showed negative relationships with adults and parental fighting combined with other negative life events and life hassles were significantly associated with delinquency (Agnew et al., 1992). Other studies suggest youth who have experienced childhood adversity are more likely to experience frustration or difficulties dealing with emotions (i.e., negative emotionality) which often manifests into aggressive behaviour (Wolff et al., 2017). In other words, without necessary skills to manage emotions or achieve goals/basic needs via conventional channels, youth may utilise unhelpful methods to meet these needs such as through violence and/or gang membership.

Development of Psychological Resilience

However, not all children and youth who experience significant childhood trauma will go on to engage in anti-social behaviour. Research suggests that the concept of psychological resilience and its development during adolescence, may serve as a protective factor in those who experience trauma that do not offend (Agaibi et al., 2005). The concept of psychological resilience followed in this review comes from a theoretical model incorporating stress, emotions, and behaviour whereby processes of belief, appraisal, and coping mediate the stress responses arising from the individual's environment. This in turn can lead to positive or

negative responses, feeling states, and outcomes (Fletcher et al., 2010). A chronically negative response such as anger or aggression may indicate low psychological resilience. Positive emotional states can also act as a moderating attribute, influencing the extent to which trauma affects behaviour (Infurna et al., 2015).

Within the literature, researchers often define resilience as the interplay between risk and protective factors (e.g., Stoddard et al., 2013). Although many definitions of resilience exist (e.g., Luthar et al., 2000), perhaps most pertinent to children and youth who offend is that those deemed resilient have “good psychological functioning and good behavioural outcomes despite adverse circumstances expected to jeopardise normative growth and adaptation” (Mukherjee et al., 2017, p. 3). Findings from resilience research acknowledge that resistance to adversity may derive from a range of physiological or psychological coping processes rather than external protective factors (Rutter, 2006). That is, the extent to which youth develop psychologically during the critical period of adolescence, may be paramount to how well they are able to create and take advantage of protective factors in times of adversity (Steinberg et al., 2004). Given the complex psychological profiles of children and youth who offend, understanding the effectiveness of psychological interventions aimed at reducing offending in this population is paramount. While studies increasingly find that individuals can develop these resources at any stage in life, research generally finds antisocial individuals tend to have a better response to intervention in early developmental stages such as adolescence (Salekin et al., 2015).

Current Study

Several researchers have conducted reviews on the efficacy of various interventions for children and youth engaging in delinquent behaviour. For example, studies show that factors determining intervention success included intervention type, methodological rigor, intervention design, demographics, extent of supervision and intervention philosophy

(Lipsey, 2009). Other research finds psychosocial interventions that reduced aggressive and violent offending were effective providing they contained elements of emotional self-management and focused on increasing interpersonal and social problem-solving skills (McGuire, 2008). However, McGuire (2008) stopped short of outlining exactly how these variables related to reduced offending. Therefore, despite research evidence indicating that effective psychological interventions reduce delinquent behaviour, and that psychological resilience may offer protection from the adverse effects of trauma, there is a need to systematically review this evidence to better inform researchers and practitioners of best practice.

Method

Search Strategy

We followed guidelines from the Preferred Reporting Items for Systematic Reviews and Meta-analyses Statement (PRISMA, Moher et al., 2009) which enabled systematic selection of studies for this review. In July 2019, databases searched consisted of Psycinfo and ASSIA (via the Proquest platform), PubMedCentral, Wiley, Taylor & Francis, JSTOR, Cochrane Central, Sage and PsycNet (APA). These databases allowed full text searches, enabling identification of articles omitting key words in their titles and abstracts. The PhD candidate initially read and checked all titles and abstracts against the eligibility and exclusion criteria listed below. Focusing on psychological interventions for repeat offenders that had reduced offending and included psychological measures, searches included studies published between 2000 and 2019 and written in the English language.

Initial specific search terms identified empirical research on psychological interventions for children and youth who offend, and further search terms emerged during the iterative searching process. We used the following search terms: (adolescen* OR youth OR young OR teen* OR juvenile OR offend* OR persistent OR conduct OR delinquen* OR

problem) AND (intervention OR program* OR treat* OR measure OR outcome OR evaluation) AND (resilien* OR protective OR cognitive OR self-regulation OR self-efficacy OR strengths) AND (individual OR self OR behav* OR psychological) AND (recidiv* OR desist* OR justice OR re-offend*). Full-text data-base searches were key to identifying relevant articles as this enabled the inclusion of articles where key words did not appear in the title or the abstract.

We followed up the database searches with backwards and forwards reference searches to identify further relevant articles. The backwards searches involved scanning reference lists for further eligible studies, and the forwards searches used the “cited by” function provided by the database used. Documents searched consisted of reviews, systematic reviews and meta-analyses identified during the database searches, as well as the intervention studies selected for the review. In addition, we conducted searches in several key organisations’ websites (Youth Justice Board, Home Office).

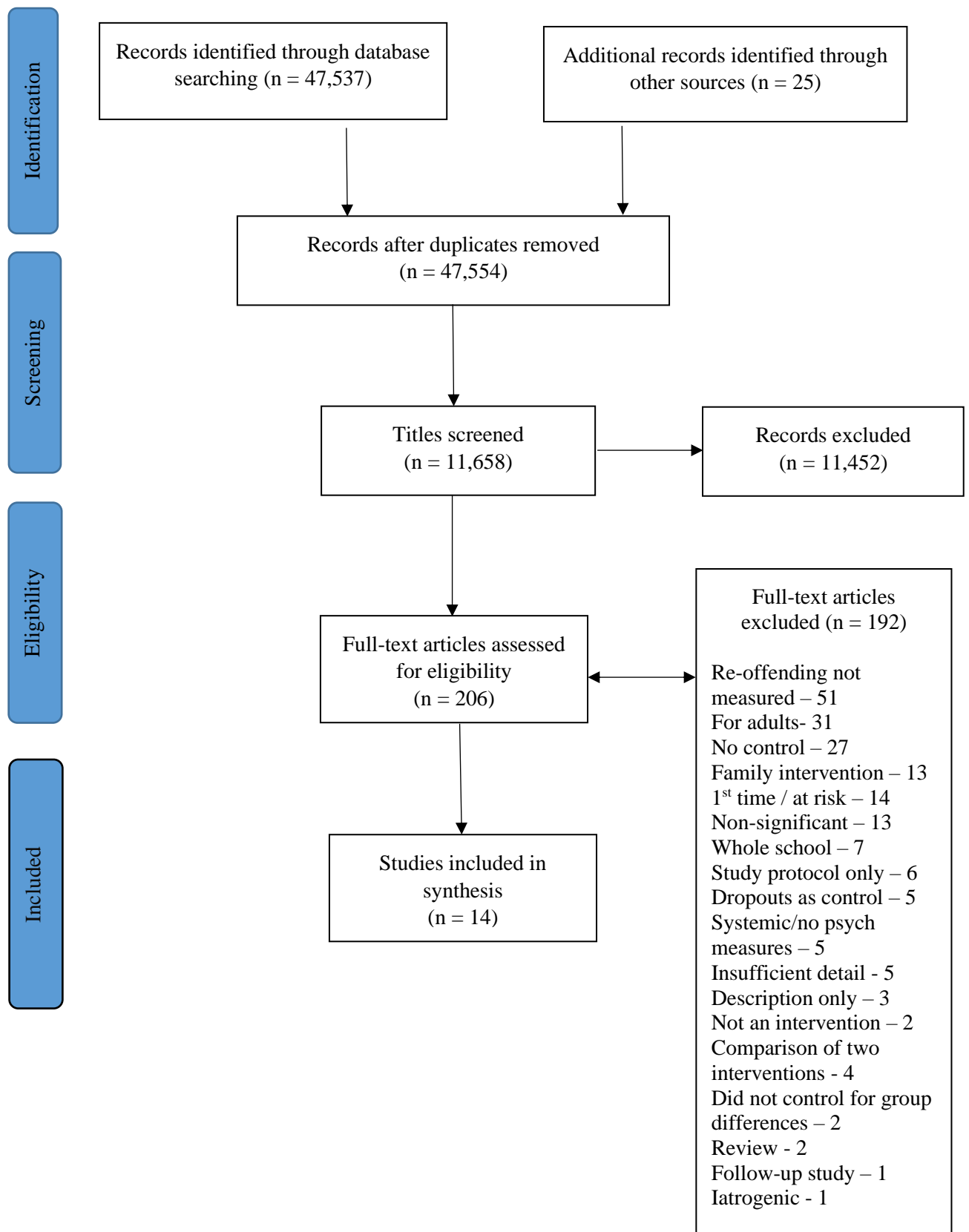
Inclusion and Exclusion Criteria

The current review included evaluations of: (a) psychological interventions for children and youth who offend or systematic interventions that included measures of psychological change targeting specific psychological variables; (b) journals written in the English language; (c) children and youth who have offended more than once or are experiencing a disproportionately high risk for doing; (d) interventions that included a control group; (e) interventions that demonstrated a reduction in the amount of offending, time between offending episodes, or a reduction in the seriousness of offending; (f) papers published from the year 2000. The reason for this selection was that interventions after the year 2000 had to meet the first set of National Standards specific to the Youth Justice Board for England and Wales (a government body introduced under the Crime and Disorder Act (1998) to oversee the Youth Justice system). Its overall aim is to prevent children and youth from offending or re-offending, to ensure custody is safe and secure, and to address

underlying causes of offending behaviour (Youth Justice Board, 2018). Studies excluded were those which were systemic in nature (i.e., targeted many areas of the individual's life) *and* did not utilise psychological questionnaires, as it would not be possible to surmise what psychological changes occurred along with reduced offending. Other studies excluded were those for sex offenders due to the specific nature of this offence and the large number of interventions for this population suggests a separate review.

Following examination of the effect of attrition rate (i.e., individuals not completing a programme) and in line with Evans-Chase et al. (2014), we decided to exclude studies with attrition of 40% or higher. This is because attrition rates may bias outcome evaluations as participants may have lacked motivation to engage with interventions, reducing their success (Hatcher et al., 2012). Figure 1 on the next page shows the PRISMA flow chart detailing the review and selection process.

Figure 1. PRISMA Flow Chart



Assessment of Study Quality

There were notable variations in group sizes, intensity, follow-up periods, and reported outcomes. Therefore, a meta-analysis was not possible. Instead, we used a 16-item quality assessment tool to assess overall study quality in studies meeting eligibility and inclusion criteria (QATSDD; Sirriyeh et al., 2012). The QATSDD contains a list of criteria for quantitative and qualitative studies rated on a 4-point scale, ranging from 0 (*not at all*) to 3 (*complete*). Relevant criteria's i.e., those applying to quantitative, qualitative, or mixed method designs included "Clear description of research setting"; "Detailed recruitment data"; "Strengths and limitations critically discussed". Division of the total score for each study by the maximum possible score resulted in a percentage for standardisation purposes. The PhD candidate and the first two supervisors assessed study quality. Specifically, the PhD candidate, first supervisor and second supervisor each scored ten research studies (i.e., two authors assessed each study). Subsequent discussions resolved any disagreements. Table 1 at the end of this chapter presents all studies reviewed along with quality scores.

Reliability

Following the screening of titles in 12 database searches conducted by the PhD student, the first supervisor re-screened 6 randomly selected database searches (totalling 4279 titles) to assess interrater reliability. This process did not identify any additional titles. The PhD candidate next read the abstracts of all titles identified and selected 181 for full-text analysis. The PhD candidate then selected 99 titles for full-text analysis. To ensure agreement on the decision-making process, the first supervisor read 40 randomly selected article abstracts from the 181 selected and specified which articles they would select for full-text analysis. Subsequent discussions resolved any disagreements. Finally, the PhD candidate and first supervisor read all 99 articles, to reach full agreement on which studies to include in the review based on the inclusion and exclusion criteria reported above. This agreement consisted of verifying through discussion whether the article fully met all criteria.

Results

The database searches in July 2019 identified 47,537 records. Reference and citation searches identified a further 25 records. After removing 8 duplicates and screening a total of 11,658 titles, the PhD candidate read 206 abstracts. Full text was next assessed in 99 research studies by the PhD candidate and the first supervisor. Subsequently, fourteen interventions met the inclusion criteria. These fourteen studies report on twelve different interventions (four studies assessed the same intervention twice with different sample; Bahr et al., 2015; Burraston et al., 2014; Caldwell et al., 2001, 2006). The fourteen studies included in the review have an asterisk in the bibliography.

Study Design

A total of thirteen studies used quantitative approaches and one used a mixed method (Burraston et al., 2014). With regards to control group selection, twelve studies used a matched control, one used random allocation (Bahr et al., 2015) and one randomly selected the control group (Forgays & DeMilio, 2005). However only six of those studies using matched controls controlled for baseline differences (Caldwell et al., 2001, 2006; Farrington et al., 2002; Haines et al., 2015; Hoogsteder et al., 2018; Strom et al., 2017).

Settings

Of the studies identified, five were based in the community (Bouffard & Bergseth, 2008; Burraston et al., 2014; Forgays & DeMilio, 2005; Haines et al., 2015; Hubble et al., 2015). However, one of those studies contained youth nearing the end of their custodial sentence before continuing in the community (Bouffard & Bergseth, 2008). Participants in seven of the studies resided in custodial placements. That is, three studies used participants from standard “young offender institutions” (Cann et al., 2005; Farrington et al., 2002; Hoogsteder et al., 2018), one examined participants from placements described as “residential homes” (Strom et al., 2017), and three consisted of therapeutic custodial placements (Caldwell et al., 2001, 2006; Ford & Hawke 2012). The two remaining studies recruited

youth from both the community and custodial placements (Bahr et al., 2015; Lindblom et al., 2017).

Country of Origin

Of the interventions, eight originated from the USA (Bahr et al., 2015; Bouffard & Bergseth, 2008; Burraston et al., 2014; Caldwell et al., 2001, 2006; Ford & Hawke 2012; Forgays & DeMilio), 2005; Strom et al., 2017), four from the UK (Cann et al., 2005; Farrington et al., 2002; Haines et al., 2015; Hubble et al., 2015), one from the Netherlands (Hoogsteder et al., 2018), and one originated from Sweden (Lindblom et al., 2017).

Population

The number of intervention participants totalled 2,837, and the number of control participants totalled 2,715 making a total of 5,552. Of those detailing gender, five of the studies contained male participants only totalling 3,582 (Caldwell et al., 2001, Caldwell et al., 2006; Cann et al., 2005; Farrington et al., 2002; Hubble et al., 2015) and nine included both genders of which 1,587 were male and 337 females (Bahr et al., 2015; Bouffard & Bergseth, 2008; Burraston et al., 2014; Ford et al., 2012; Forgays & DeMilio, 2005; Haines et al., 2015; Hoogsteder et al., 2018; Lindblom et al., 2017; Strom et al., 2017). Across all reported studies, there were 5,169 male participants and 337 females. Missing data regarding gender totalled 36 participants. One study was not able to specify the gender of 10 participants (Haines et al., 2015). One study did not report control group gender (Forgays & DeMilio, 2005).

Across all studies, age ranged from 14 to 21 years old. In the eight studies that reported age of both intervention and control groups, the average age of the intervention group was 16.17 and the average age of the control group was 16.72. Finally, one study did not report age at all, simply stating participants were “juvenile” (Ford & Hawke 2012).

With regards to offending histories, eleven participant groups met the criteria for persistent or repeat offenders meaning they had offended at least once previously (but usually

more than once). Participants from one group were in the “early stages” of delinquency (Lindblom et al., 2017). One intervention did not include details of previous convictions but did take place in a young offender institution suggesting the youth were either serious offenders, or had offended more than once (Cann et al., 2005). One intervention described the offences as “relatively minor but leading to a reprimand or final warning from the police” (Haines et al., 2015, p. 127). Participation appeared to be voluntary for seven of the intervention groups (Bahr et al., 2015; Burraston et al., 2014; Cann et al., 2005; Farrington et al., 2002; Ford & Hawke 2012; Haines et al., 2015; Lindblom et al., 2017). For five, it appeared to be compulsory (Caldwell et al., 2001; Caldwell et al., 2006; Forgays & DeMilio, 2005; Hoogsteder et al., 2018; Strom et al., 2017). It is unclear whether the intervention was voluntary or compulsory for the remaining two groups (Bouffard & Bergseth, 2008; Hubble et al., 2015).

Race

One study reported that 86.6% were Scandinavian, 6.7% were East European and 6.7% were African (Lindblom et al., 2017). Another study reported that 29.5% were Dutch, 23.8% were Moroccan, 15.2% were Surinam, 6.7% were Turkish, 6.7% were Dutch Antillean, 2.9% “other: western” and 15.3% “other: non-western” (Hoogsteder et al., 2018). Of the 8 studies conducted in the U.S.A., 5 report race. That is, one recorded their sample as being 49.5% black, 29.2% white, 5.6% Hispanic and 15.7% “other” (Strom et al., 2017). One study noted that their sample contained 43% African American, 32% Hispanic and 24% white (Ford & Hawke 2012). Other studies contain less detail; one stated that participants were 55% white and 45% non-white (Bahr et al., 2015). Another study reported race as 40.5% white and 59.45% non-white (Bouffard & Bergseth, 2008). Finally, one study recorded the race of their intervention group as 85% white and 15% “other” (Forgays & DeMilio, 2005). Although they used race to match intervention and control groups, two studies did not include this data in their articles (Burraston et al., 2014; Caldwell et al., 2001,

2006). Of the four studies from the U.K, two include race data. One study recorded participants race as 87.7% white and 12.3% non-white (Farrington et al., 2002). The second study recorded participants as 69.6% white, 20.1% non-white / “mixed” and 10.3% as “other / other European” (Haines et al., 2015). Although it used race data as a variable for regression analyses, one study did not report participants race, or whether this affected intervention outcomes (Cann et al., 2005). Finally, one study did not specify race in relation to either participant matching or intervention outcomes (Hubble et al., 2015). Overall, in the USA, studies reported 46% participants as white and 53.06% as non-white, while in the U.K. these figures were 78.65% and 21.35% respectively. However, the U.K. figures do not necessarily give a true picture as overall in the UK, 40% of young people in custody are from black, Asian and minority ethnic (BAME) backgrounds (Ministry of Justice, 2016).

Pre- and Post- Psychological Measures

Five of the research studies identified reported pre- and post-psychological assessment for both intervention and control groups (Farrington et al., 2002; Haines et al., 2015; Hoogsteder et al., 2018; Hubble et al., 2015; Lindblom et al., 2017). A further two studies reported pre- and post-psychological assessment for the intervention groups only (Bouffard & Bergseth., 2008; Strom et al., 2017). A further four studies reported pre-intervention psychological assessment but not post-assessment (Caldwell et al., 2001, 2006; Ford & Hawke, 2012; Forgays & DeMilio, 2005). The remaining three studies did not include any measures other than re-offending, but nevertheless targeted predominantly psychological factors in the intervention. As these studies showed a reduction in re-offending and focused specifically on cognitive and emotional well-being, these studies met the criteria for inclusion (Bahr et al., 2015; Burraston et al., 2014; Cann et al., 2005).

Attrition

Seven studies reported on participant dropout (Bahr et al., 2015; Burraston et al., 2014; Caldwell et al., 2001; Cann et al., 2005; Farrington et al., 2002; Forgays & DeMilio,

2005; Hubble et al., 2015). One study reported that 14 participants began but did not complete the study, either because they moved out of state or decided not to continue (excluded from the final analysis) (Bahr et al., 2015). Another study reported that just 2 control and 4 intervention participants dropped out from their study (i.e., moved away from the area) leaving a final sample of 70 (Burraston et al., 2014). One study reported that no participants left the intervention group (Caldwell et al., 2006). Another reported that 14% (220) of programme starters dropped out (subsequently excluded from the analysis) (Cann et al., 2005). One study reported that out of the 176 who started the programme, 71 did not complete (Farrington et al., 2002). Although this gives an attrition rate of 40.34%, the decision to include this study relates to its valuable psychological pre- and post-measures. Another study reported that 26 out of the 27 repeat offenders appeared for their Teen Court sentence and their final analysis consisted of 24 (81%) participants who completed their sentences (Forgays & DeMilio, 2005). The final study to report attrition stated that no participants dropped out (Hubble et al., 2015).

Intervention Type and Efficacy

The types of intervention employed largely addressed areas such as cognitive abilities, mentoring and to a lesser extent, restorative justice. Interventions therefore varied greatly in content, sample size, location, and measurement of efficacy. To examine the effectiveness of the interventions reported, the results section below first discusses studies that utilise psychological assessments pre- and post-intervention, followed by those using pre-assessment only. Finally, the results section discusses interventions using no pre- or post-assessments. Although it may appear that reporting on such studies may be counter-intuitive, they do fall under the category of studies which show promise.

Studies Reporting Pre- and Post-Psychological Measures on Both Intervention and Control Groups

One intervention consisted of using a facial emotion recognition tool in the form of computerised slides to assess emotional recognition in others (Hubble et al., 2015). At pre-test, results revealed both groups (intervention and control) were poor at recognising fear, sadness, and anger in others. A 2-week course then trained participants to recognise facial expressions. At post-test, the intervention group significantly improved their ability to recognise facial expressions of fear, anger, and sadness, while their controls either remained the same (in relation to fear and anger) or worsened (in relation to sadness). Results showed the volume of re-offending in both groups significantly decreased 6-months post-intervention. However, offences committed by the intervention group decreased significantly in severity.

Another study to utilise a pre- and post-measure design tested the efficacy of a 25-week High Intensity Training (HIT) intervention (Farrington et al. 2002). In addition to daily military-style training, this intervention also consisted of Enhanced Thinking Skills in conjunction with a 1-week outward-bound style camping expedition that culminated in a work placement. Outward bound interventions may help youth who have experienced difficulties by providing an environment that contains a sense of stability which fosters positive interactions between staff and youth (Trundle et al., 2020).

The assessments conducted on both intervention and control groups included emotion control, adaptation (assessing how well both groups adjusted to incarceration), and criminal thinking styles. Results revealed that the intervention group reported better control of aggression and being less anti-staff (indicating greater levels of adaptation) than the control group. In concert, these findings suggested a more positive adjustment to the custodial and the HIT regime for the intervention group. The authors also noted that there were increases for the intervention group in impulsivity, justification of crime, and belief society owed them a living. These changes were significant at $p = 0.085$ and $p = 0.008$ respectively. Control youths also decreased in self-concept, while the intervention group increased, while neither

change was statistically significant, these findings were nevertheless noteworthy (Farrington et al., 2002). Even so, following the HIT regime, predicted re-offending compared with actual re-convictions showed that re-convictions were significantly lower for the intervention group compared to the control group 12 months later. There were no differences in offending outcomes for violent/non-violent offenders. However, 24-months post-intervention these differences were no longer statistically significant in either group (i.e., both groups re-offended as predicted) (Farrington et al., 2002).

The third study to use a pre- and post-measures matched group design tested the efficacy of “A New Direction” (Lindblom et al., 2017). Psychological aspects of this intervention included promoting life ambitions, challenging criminal ideas, cognitive behavioural therapy, increasing empathy (effects on the victims of crime) and problem solving. In addition, it addressed advantages and disadvantages of crime, communication with family and friends, and general social skills training over 9 – 30 weeks. To assess psychological changes, the authors examined sense of coherence, which assesses whether life makes sense, is manageable, and has meaning (Eriksson, 2016). The authors also assessed criminal thinking styles (Walters, 2002). Compared to their controls, the intervention group experienced significant reductions in criminal thinking and a significant increase in sense of coherence. The authors report no significant changes in the control group. Twelve months later, the intervention group continued to show sustained desistance in that just one out of the eleven participants had re-offended. By 24 months, out of the 8 in the intervention group for whom data were available, none had re-offended. In the control group, during the 12 months following the intervention, 50% had re-offended and at a higher rate (Lindblom et al., 2017).

A study evaluating an intervention called Responsive Aggression Regulation Therapy (Re-ART) which specifically targets aggressive behaviour, included pre- and post-measures of violence risk, and incidence of re-offending, to assess its efficacy (Hoogsteder et al., 2018). Participants received core training in areas such as motivation, aggression, self-control

and group work, plus optional modules which they could choose from (reducing stress, controlling impulses, re-interpretation of events, regulating emotions, conflict management and a systemic family module). The intervention also included a focus on drama and mindfulness classes. Pre- and post-measures revealed significant reductions in risk, suggesting more pro-social coping and stress management was a contributing variable. After 1 year there were no significant reductions in recidivism; improvements only became apparent 2 years following the custodial placement. At this point, the authors noted a significant reduction in general recidivism in the Re-ART group compared to the control group ($p < .001$), whereby 82.1% of the control group had reoffended with a general offense compared with 44.4% of the Re-ART group. In the same time period, there was also significant reduction in violent recidivism for the Re-ART group compared to the control group ($p < .05$). After 3 years, both reductions remained significant ($p < .05$). The groups did not differ on recidivism regarding property crimes with violence after 1, 2 or 3 years (Hoogsteder et al., 2018).

The final study to use a pre- and post-test matched group design examined the benefits of a mental health diversion intervention (Haines et al., 2015). This intervention involved targeting children and youth with mental health and/or developmental problems as soon as they entered the Youth Justice system. Youth practitioners referred participants to one of four Youth Offending Teams engaged in this study. Participants then received improved access to specialised services such as the Child and Adolescent Mental Health Services (CAMHS) and/or referral to other relevant statutory or voluntary agencies. The authors regressed data gathered from the Youth Offending Teams' own database pertaining to "areas of concern and vulnerability" in relation to both mental health and other risk areas against re-offending for the entire sample. Results revealed that the only variable that significantly positively correlated with continued offending was previous offending. However, mental health factors, specifically being unhappy, dissatisfied, and having low self-

esteem had positive relationships with re-offending. Following the mental health diversion intervention, analysis of re-offending data 15 – 30 months later took place. Despite re-offending rates remaining equal in both intervention and control groups, the intervention group took significantly longer to re-offend than their controls in two of the Youth Offending Teams (580 days vs 334 days and 220 days vs 84 days) (Haines et al., 2015).

Studies Reporting Pre- and Post-Psychological Assessment for Intervention Groups Only

A study assessing the impact of Value-based Therapeutic Environments (VBTE) on re-offending employed a pre- and post-test matched group design (Strom et al., 2017). VBTE is a multi-purpose hybrid behavioural model incorporating both value-based and skills-based CBT components via an individualised approach. VBTE teaches participants ten key life skills through a rewards system that includes tolerating feedback, accepting “no” for an answer, asking permission, following instructions, developing conversation and disagreement skills, ignoring inappropriate behaviour of others, and respecting and helping others. Programme length varied from one month to one year, and the youth received four months of aftercare on their return to the community. In terms of psychological changes, the authors report significant improvements in self-image, goal orientation, honesty, empathy, positive decision-making, and personal development. The largest improvement was in positive decision-making which increased from 4% to 43%. In terms of re-offending, results revealed that the number of days until the first re-offence was significantly greater for the VBTE group (214 days) than the control group (182 days). Further, 57% of high risk/need youth in the VBTE group re-offended compared to 73% of high risk/need youth in the control group. The programme also reduced the likelihood of a violent re-offence charge by 67% and any new charge by 49%. In other words, those youth whose risks and needs were greater benefitted more from the programme (Strom et al., 2017).

An evaluation of the impact of a “Re-entry” intervention also used a pre- and post-test matched group design with a control and an intervention group to test its impact on re-offending (Bouffard & Bergseth, 2008). This intervention involves transitional coordinators (paid mentors) building a relationship with the youth while they are in custody and then continuing this mentoring for six months following their release. During this time, the mentor coordinates re-integrative community activities relevant to the young person. In terms of psychological change, there was a significant reduction in risk/need scores of 17% for the intervention group. However, the study did not state which specific social or psychological risks/needs reduced and as the control group did not receive the same assessment, we cannot say with certainty that these changes were due to the intervention. In terms of re-offending, results following the re-entry intervention showed that during the six months following release from custody, a statistically significant between group difference occurred where 37% of the intervention group re-offended compared to 49% of the control group. However, as there are no re-offending results following the cessation of the mentoring support it is unclear if changes sustained beyond the 6 months (Bouffard & Bergseth, 2008).

Studies Reporting Psychological Measures Pre-Intervention Only

A pilot evaluation of “Teen Court”, normally utilised with first time offenders, demonstrated success in reducing recidivism with repeat offenders (Forgays & DeMilio, 2005). The aim was reintegrating the individual into society through reparation activities, described as being “socially and personally” challenging for the youth, but ultimately empowering (e.g., writing letters of apology). A unique factor in this Teen Court was that following successful completion of their sentence, participants could then become peer judges themselves. Teen Court Jurors may therefore include former youth who have offended. In this study, self-worth profiles assessed prior in the intervention group showed that these youth had low self-acceptance (suggesting they would like to be different from how they were) (Harter, 1985). Following their sentencing, a significant and unexpected number

of participants chose to continue their involvement as peer jurors. Re-offending results showed that just 12% of the intervention group had re-offended 6-months later (mostly theft related). In the control group, 38% re-offended with theft or assault. The authors surmise that low self-worth, coupled with a desire to change, offered a possible psychological explanation for the effectiveness of this Teen Court (Forgays & DeMilio, 2005). This led the authors to suggest that the role of personal empowerment may help enable anti-social youth to adopt prosocial values via accessible pro-social opportunities (cf. Mohajer & Earnest, 2009).

A further study to employ a matched group design tested the efficacy of Decompression Treatment (DT) on re-offending (Caldwell et al., 2001). This design included two control groups whereby one received standard therapeutic intervention services in the same juvenile center as the intervention group, while the second was based in a conventional correctional facility. DT focuses specifically on reducing defiance and targets the hardest to manage youth who are unresponsive to standard therapeutic intervention. The programme developers theorised that punishment increased anti-social behaviour and served to further increase antagonism towards society. Decompression therefore refers to the method of breaking this cycle of aggressive behaviour (Caldwell et al., 2001). This in turn should reduce defiance and aggression to the extent that the individual can then access rehabilitative interventions. As well as a behavioural outcome, a reduction in defiance also suggests an improved psychological state in the context of a custodial placement. Re-offending data showed that after 532 days post-intervention, 10% of the DT intervention group re-offended, 20% of those receiving standard therapeutic intervention had re-offended, and 70% of the control group receiving standard correctional rehabilitation had re-offended (Caldwell et al., 2001).

A further evaluation of DT with a larger sample matched intervention and control groups on predictions of re-offending, IQ levels, conduct disorder symptoms and substance abuse (Caldwell et al., 2006). Both groups indicated high probability of re-offending, below

average IQ levels, high conduct disorder symptoms and extremely high levels of substance abuse. Results two years following DT showed that 57% of the intervention group re-offended in the institution or community compared with 78% of their controls. This between group difference was significant at the $p < .01$ level. However, following the use of propensity score matching, the intervention showed no impact on general recidivism in the community. Nevertheless, the effects on violent re-offending remained significant (see Table 1). Specifically, two years after release, 10% of the control group accounted for 16 homicides while none of the intervention group received homicide charges (Caldwell et al., 2006). Although both studies draw attention to the relevance of reduced defiance, they did not specify the therapeutic intervention received following DT, nor conduct post-measures, hence it is difficult to pinpoint distinct psychological factors following the intervention that led to the reduction in criminal activity.

A final study to utilise psychological assessment pre-intervention only also utilised a matched-group design to assess the impact of Trauma Affect Regulation Guide to Education and Training (TARGET) on re-offending (Ford & Hawke, 2012). TARGET in youth justice settings follows the assumption that problems causing youth to engage in delinquent behaviour are largely a result of unrecognised stress reactions (Andershed et al., 2008). Participants received up to 10 TARGET sessions which included training in self-regulation, trauma processing and strengths-based reintegration. To increase sense of control, awareness and safety, TARGET also included memory re-examination procedures which aimed to decrease rumination (dwelling on past upsets), panic or dissociation. To act as role models, all staff members (including caretakers and administration staff) underwent TARGET training by learning and practicing the techniques along with the youth. In addition, those youth who had completed several sessions could act as peer coaches for new participants. The authors reported that re-offending declined significantly following implementation of TARGET but did not provide specific data. In addition, the study only included recidivism

data for those youth who returned to the community, excluding those who moved to another detention centre. After controlling for differences between the groups, results revealed that participating in a single session of TARGET in the first 14 days of detention was associated with .53 fewer disciplinary incidents and 69 fewer minutes of disciplinary seclusion (Ford & Hawke, 2012).

Studies Measuring Re-offending Only

The following studies did not use psychological assessment to record pre- or post-intervention changes, but they did implement psychological interventions that showed reduced re-offending.

An evaluation using a matched group design to evaluate two CBT interventions, whereby one group received Enhanced Thinking Skills (ETS) and the other received Reasoning and Rehabilitation (R&R), showed that only ETS reduced recidivism (Cann et al., 2005). Participants receiving ETS took part in a group-based programme for 20 x 2-hour sessions where they learnt thinking patterns and cognitive skills through impulse control, flexible thinking, values and moral reasoning, interpersonal problem solving, social perspective taking, and critical reasoning. R & R taught participants to address their emotions using reasoning instead of risky or violent behaviour over 36 x 2-hour sessions. Re-offending results 12 months later showed that there was no significant reduction in re-offending in the group who received R&R compared to their matched comparisons, even after excluding programme dropouts. Of those who completed ETS (i.e., excluding programme dropouts), 31.4% re-offended compared to their controls of whom 35.5% re-offended (between group effect was significant at the $p < .05$ level). Conversely, programme dropouts across both samples increased their offending by 47%. However, two years later the positive effects noted in the ETS group had disappeared leading the authors to conclude that further refresher sessions may be necessary to increase the likelihood of sustained change (Cann et al., 2005).

An initial evaluation of the efficacy of a CBT programme called RealVictory, showed that engagement in 6 x 90min cognitive behavioural training sessions followed by daily automated phone calls for a year, reduced subsequent arrests by 51% (Burraston et al., 2012). In this study, 39 youth received the RealVictory programme which included personal support in creating individualised long-term goals. Following this, 28 youths received cell phones and received a twice daily phone call regarding goal progress for one year. The remaining 11 formed a “class-only” intervention group who did not receive the phone option. The control group contained 31 youths who received standard probation intervention (Burraston et al., 2012). A further interpretation of the impact of the phone calls involved dividing those who received phone calls into two groups: “High” (answering over half their phone calls) and “low” (answering less than half of their phone calls). Results showed that after 12 months, those who answered more than half their daily calls had the lowest re-arrest rate of 39%. Those who answered less than half their calls had a re-arrest rate of 80%, a similar rate to the control group receiving standard probation who had a re-arrest rate of 90%. The group who participated in the intervention only (i.e., did not receive a cell phone) had a re-arrest rate of 55% (Burraston et al., 2014).

A replication of the RealVictory intervention employed an RCD approach with a much larger sample (Bahr et al., 2015). However, results showed that after 12 months, the group receiving ‘RealVictory’ plus phone calls did not reduce their re-offending compared to the control group. To determine whether the number of calls answered had any relationship with re-offending, the authors undertook further analysis. This analysis revealed the total number of calls answered by the RealVictory group, although it did not achieve statistical significance in relation to general recidivism, it did significantly reduce felony arrests. Specifically, for every additional 100 calls answered, the likelihood of a felony arrest significantly reduced by (Bahr et al., 2015)

Discussion

Research has shown that experiencing psychological trauma at a young age can hinder normative adolescent psychological development, leading to low levels of self-concept and poor emotional regulation (Gibson et al., 2017). These factors have been associated with youth who offend and may be a pre-cursor to delinquent behaviour such as avoidant coping (e.g., taking drugs) or aggression (Carr et al., 2001). Hence, the purpose of this article was to systematically review relevant interventions targeting the development of specific psychological characteristics hypothesised to reduce re-offending. A total of 14 studies containing 12 different interventions met the criteria for inclusion. These studies showed that re-offending reduced in interventions that demonstrated significant increases in psychological resources. However, it was not always easy to identify which areas of psychological development were associated with reduced re-offending (e.g., Bahr et al., 2015; Bouffard & Bergseth, 2008; Burraston et al., 2014; Caldwell et al., 2001, 2006; Cann et al., 2005; Ford & Hawke, 2012; Forgays & DeMilio, 2005; Haines et al., 2015).

Other studies were much clearer in demonstrating this link. For example, the programme “A New Direction” increased sense of coherence (SOC) and reduced criminal thinking styles leading to near total desistance up to 2-years post-intervention (Lindblom et al., 2017). A recent systematic review found that youth who were depressed or anxious, misused drugs and alcohol, had poor social skills or conduct problems, or engaged in delinquent behaviour were also more likely to have low SOC (Lansimies et al., 2017). Despite SOC developing during adolescence, studies have reported that SOC (and reductions in re-offending) can increase following intervention with adult men (Lindblom et al., 2018). Furthermore, in a study of incarcerated women, increased SOC related to a significant decrease in global emotional distress (Höjdahl et al., 2015). Therefore, SOC appears to have strong grounding for subsequent intervention work in these at-risk populations.

One study reported that increasing the ability to recognise facial expressions (fear and anger) led to reduced severity of re-offending (Hubble et al., 2015). Related research provides further evidence for the benefits of emotion skills training for youth with callous-unemotional (CU) traits (Lui et al., 2019). Specifically, intervention participants significantly increased perspective-taking compared to their controls. Further, the control group reported lower levels of self-reported empathy and pro-social behaviour, whereas the intervention group either declined less or had minimal change (Lui et al., 2019). These results reflect those reported in the results section, whereby emotional skills training appeared to have prevented deteriorating symptoms of CU (Hubble et al., 2015). Programmes to augment the emotional development of youth may result in increased likelihood of empathising with and behaving pro-socially towards others thus decreasing the likelihood of antagonistic behaviours (Lui et al., 2019). Relatedly, the Decompression Treatment intervention also found targeting of defiance plus therapeutic intervention reduced the severity of re-offending (Caldwell et al., 2006).

In contrast to the New Directions intervention, the HIT intervention found certain aspects of criminal thinking such as justification of crime did not reduce (Farrington et al., 2002). However, it did provide further evidence that psychological improvements (e.g., being less anti-staff, having better control of aggression and a more positive self-concept) related to reduced re-offending. In line with strain theory, increased pro-social behaviours may enable youth to achieve goals via agreeable ways such as through pro-social relationships (Boeck et al., 2008). For example, the evaluators of the Re-entry intervention suggest its success may have been due to a specific focus on facilitating community networking (Bouffard & Bergseth, 2008). Similar intensive aftercare programmes that were not successful in reducing re-offending did not implement the creation of community support networks in any systemic way (Wiebush et al., 2005).

Both the Re-ART and VBTE interventions clearly demonstrated that improvements in negative attitudes, personal development and positive decision making related to a significant reduction in offending. Specifically, Re-ART succeeded in reducing violent and general re-offending across the sample (Hoogsteder et al., 2018). VBTE succeeded in reducing re-offending only in participants with a higher risk of re-offending and reported the largest improvement was in positive decision-making (Strom et al., 2017). Re-ART's programme evaluators suggest its success may be due its responsivity-focused approach, which connects to the adolescent's frame of reference (Hoogsteder et al., 2018). This approach involves staff seeing the youth's perceptual world as they do, facilitating affinity with their frame of reference (e.g., Bowen et al., 2013). The cultural training provided also enabled programme staff to include ethnic sensitivity into their approach.

The TARGET intervention, which focused on psychological well-being and included the opportunity for youth to become peer mentors following participation, reduced subsequent disciplinary problems in those participating (Ford & Hawke 2012). A separate study evaluating TARGET in a youth detention centre reported both decreased negative affect (e.g., depression, defiance, aggression) and increased positive affect (e.g., optimism) for the intervention group only (Marrow et al., 2012). A further strength of TARGET is that all staff members and those youth who had completed several sessions can act as peer coaches for new participants, thereby increasing the support networks available.

A potential moderating variable applicable to all intervention success is the individual's motivation to engage (Bahr et al., 2015; Burraston et al., 2014; Cann et al., 2005). One way to increase motivation to change is to increase empowerment, via for example perceived power and control (Mohajer & Earnest, 2009). The Teen Court reported on in this review offered participants the opportunity to become peer judges following sentence completion, suggesting increased perceptions of empowerment may have led to the higher than expected number of youths taking this opportunity (Forgays & DeMilio, 2005).

Empowerment is an additional theoretical perspective to those normally cited for Teen Courts (peer/procedural justice, deterrence, labelling, restorative justice, law-related education, and skill building; Butts et al., 2002).

This review has highlighted the importance of matching interventions to individual needs. For example, intensive aftercare programmes seem more effective when they include community integration and R & R has greater success with adults. Likewise, Teen Courts appeared more effective with repeat offenders rather than first-time offenders (who normally receive this intervention). A meta-analysis of Teen Court reported non-significant treatment effects, but in looking specifically at those including repeat offenders, effects become significant (Bouchard et al., 2017). This draws attention to the relevance of matching intervention content, style, and intensity to each youth on a case-by-case basis and may help to explain discrepant findings in intervention studies.

No Consensus in Reporting Recidivism / Little Consideration of Psychological Changes

Of the studies reviewed, follow-up data regarding re-offending post-intervention varied from 6-36 months. Intervention success (re-offences recorded) and the definition of assessment of intervention success also varied from study to study. That is, some recorded the number of re-offences over a set time period (e.g., Farrington et al., 2002). Some reported the number of days before the first re-offence (e.g., Haines et al., 2015). Several researchers implied intervention success by noting reductions in the severity of the re-offence or separated violent from non-violent re-offending (e.g., Caldwell et al., 2006). All studies except one used official arrests or court data that mostly consisted of police records. However, offence reporting systems may mean inflated intervention success due to the length of time between the actual offence being committed and the criminal charge made (St. James-Roberts et al., 2005). In future, it is likely that studies should report intervention success by several outcomes (e.g., time and severity) using both official and self-report.

Fundamentally, no interventions assessed long-term psychological changes post-intervention. In other words, it is difficult to know how long intervention effects lasted. Therefore, it is not possible to ascertain whether re-offending was due to the loss of psychological skills developed, or ineffective intervention designs. Previous studies have argued that using only recidivism to measure success is of limited use, and that identification of factors such as psychological resilience related to desistance may improve both measurement of success, and understanding of desistance (Farrington et al., 2000).

Additional Support Post-Intervention Increases Success

One other potential moderating factor to successful intervention outcome is the inclusion of additional support post-intervention. For example, participants in the VBTE study benefited from four months of aftercare after returning to the community (Strom et al., 2017). The Re-entry intervention utilised paid mentors (Bouffard & Bergseth., 2008). Evaluation of RealVictory found that individual telephone calls reinforcing goal setting reduced re-offending (for those motivated to answer) (Bahr et al., 2015; Burraston et al., 2014). In line with strain theory, youth returning to communities where opportunities for crime thrive may require greater support against anti-social influences than those experiencing fewer negative influences (Agnew et al., 2001). Several intervention evaluators noted this issue (Caldwell et al., 2006; Hoogsteder et al., 2018; Strom et al., 2017). Adolescence is a time of exceptional psychological development, and further scaffolding and support via environments that bolster opportunities to thrive may be fundamental to sustained change (National Academies of Sciences, Engineering, & Medicine 2019). Future studies should therefore conduct follow-up support and psychological assessment, along with re-offending data at 3-6 monthly intervals over a prolonged period (three years is the maximum follow-up period noted in this review). For example, a reassessment of the long-term benefits of the HIT intervention ten years post-intervention found intervention effects in reducing reoffending diminished after four years (Jolliffe et al., 2013).

Interventions Successful in Reducing Severity of Re-offending

This systematic review has also shown that some interventions are successful in reducing the severity of the criminal activity itself. For example, several studies found that while levels of re-offending did not change, violent or serious recidivism reduced significantly following intervention (Bahr et al., 2015; Caldwell et al., 2006; Hubble et al., 2015; Strom et al., 2017). Commentators describe both resilience and desistance as dynamic and cumulative processes involving a series of positive repercussions or chain reactions (e.g., Goldstein et al., 2013). Reductions in severity of offence may therefore form the beginning of the desistance process in some populations.

Need for Cultural Tailoring

With regards to race, our findings overall suggest that individual ethnic needs are largely unaddressed. In support of this observation, a 10-year review on evidence-based interventions for ethnic minorities found that very few studies analysed the effects of cultural tailoring on programme engagement, outcomes, and mechanisms of change (Pina et al., 2019). In the present review, only 1 out of the 14 studies discussed the importance of cultural sensitivity and provided training for therapists (Hoogsteder et al., 2018). Of the six studies that included race as a variable in their analysis, only two reported on those findings. First, evaluation of the HIT intervention demonstrated it was more successful with non-white youth (predicted re-offending was at 42.7% while actual re-offending was at 16.7%) (Farrington et al., 2002). Second, assessment of Re-ART, shows that race did not moderate its success (Hoogsteder et al., 2018).

Therefore, researchers should consider individual ethnic needs in future interventions. This becomes especially important when considering the disproportionate numbers of black youth in the Youth Justice system. For example, the number of black youths in custody in the UK increased by 6% from 2018 to 2019, accounting for 28% of the total youth custody

population (Youth Justice Statistics 2018-2019). In the U.S.A., while 14% of all youth under 18 are black, 42% of boys and 35% of girls in juvenile facilities are black (Sawyer, 2019).

Need for Strong Evaluations of Interventions for Females

Another important finding was that most participants in the studies reviewed were male. Specifically, out of the studies that reported gender, 93% were male and just 7% female, meaning that findings in this review may not generalise to females. Research evidence on whether interventions need to be gender specific is mixed. For example, some studies showed male and female adolescents had different risks and needs (cf. Vitopoulos et al., 2012). Others found that although male and female youth had differing protective factors related to desistance (e.g., religion and positive school experiences for females but not for males) these differences were not statistically significant (Hartman et al., 2009).

Nevertheless, there is a clear need for robust evaluations of interventions aimed at female youth. In the U.K., of the 11,900 first-time entrants into Youth Justice Services in England and Wales 2,142 were female (Youth Justice Statistics 2018-19). In the U.S.A in 2015, of the 884,900 individuals going through juvenile courts, 244,000 were female (Ehrmann et al., 2019).

Counterproductive “One-Size-Fits-All” Nature of Interventions

Across the studies identified, intervention length and type of psychological assessments used varied considerably. In other words, most studies are standalone programmes with little common ground. It is also clear interventions generally used a “one-size fits-all” approach in that everyone received the same intervention (more or less). Such approaches may be counter-productive for youth who have potentially diverse needs, where some may benefit more from individualised interventions in line with any specific developmental needs. For example, CBT programmes (apart from those including post-intervention support) are generally more successful for adults, perhaps because cognitive abilities are generally more developed in this population (Mitchell et al., 2004). Youth may

benefit more from interventions which include a focus on skills normally developed in adolescence, for example perspective taking and abstract thinking (Blakemore et al., 2006).

Importance of Independent Replication

A further limitation of the interventions in this review is that programme developers evaluated most of the interventions. Specifically, of the fourteen studies identified that successfully reduced re-offending, time to re-offend or violent re-offending, the programme developers were heavily involved in nine (64%) of these. Of the four evaluated by independent researchers, two reported less significant findings overall (Cann et al., 2005; Haines et al., 2015). Hence, replication and reliability of the findings remains uncertain. Independent replication of interventions is vital to assess programme reliability (cf. Petrosino et al., 2005). Further, through replication and extension, practitioners can modify and tailor those interventions towards different populations with diverse needs. While the performance of an intervention under ideal and controlled circumstances demonstrates its efficacy, “real-world” conditions (i.e., when the study is not a demonstration by its developers) enable assessment of overall effectiveness (cf. Fritz et al., 2003).

Conclusion

This study sought to address the research gap concerning development of psychological resilience via interventions, and its contribution to reduced re-offending. No review has previously attempted to identify contributing psychological changes across different studies. Despite some limitations, findings from the fourteen studies reviewed showed that increasing psychological resources related to reduced re-offending rates, increased time to re-offend, or reduced severity of such offences. Overall, increases in positive affect and coping, and decreases in negative affect and aggression positively related to reduced re-offending. The mechanisms by which these changes took place appeared to include cognitive function such as positive self-concept and reduced negative attitudes. These

processes may be in turn be instrumental in supporting a successful transition into adulthood. For example, a positive self-identity along with reduced antagonism may enable the attainment of goals legitimately through the cultivation of mutually beneficial pro-social community networks. Going forward, tailoring individualised interventions toward cognitive training, while also focusing on the development of inter-personal skills, opportunities for learning and identification of personal strengths and support systems seems fruitful. Although individualised approaches may be more costly and more time consuming than the one size fits all approaches seen in the current review, the long-term effects may just be transformational.

Table 1. Summary of Interventions

Author Year Location	Participant information M = Male; F = Female		Study Design	Description of intervention	Reductions in offending	Psychological measures utilized	Key findings	Quality score (0-100%)
Hubble et al. (2015)	Sample size Intervention M = 24 Control M = 26 <i>Total sample size: n = 50</i>	Mean Age (SD) 16.08 (1.2) 16.35 (1.2) Ethnicity Not reported	Quasi-experimental pre- and post-test matched group design Controlled for baseline differences	Two-week computerised intervention which teaches youth to recognise facial expressions	6-month follow-up; volume of offending reduced for both intervention and control group Adjusting for baseline differences showed severity of re-offence reduced for intervention group only and this was significant at the (p = .04) level	Facial Emotion Recognition Measure (Bowen et al., 2013)	Intervention group participants significantly increased ability to recognise facial expressions while the control group remained the same or worsened Ability to recognise facial emotions correlated with less severe (violent) re-offences	78%
Farrington et al. (2002)	Sample size Intervention M = 125 Control M = 125	Age range (Mean/SD not given) 18 – 21 18 – 21	Quasi-experimental pre- and post-test matched group design	25 weeks containing 5 parts; enhanced thinking skills, outward-bound style camping expedition, daily military-style physical training, life-skills, and a work placement	1-year offending intervention group: Predicted: 47.2 % Actual: 34.7 % This is significant at the (p = .015) level 1-year offending control group:	The Emotion Control Questionnaire (ECQ; Roger & Masters, 1997; Roger & Najarian, 1989) The Custodial Adjustment	Borderline significant differences: Intervention group improved emotion control and less anti-staff; the intervention group increased in self-	67%

	<i>Total sample size: n = 250</i>	Ethnicity 87.7 white, 12.3 non-white	Controlled for baseline differences		Predicted 56.1% Actual 55.1% Actual reconvictions about the same as predicted At 2-year follow-up both intervention and control groups had re-offended as predicted	Questionnaire (CAQ; Thornton, 1987) The Psychological Inventory of Criminal Thinking Styles (PICTS; Walters, 1995a, 1995b, 1996):	concept in relation to control group. Significant increases for the intervention group in impulsivity, justification of crime, and that society owed them a living Most effective for 'other' offences (predicted 60.5%, actual 31.1%; chi-squared = 6.42, p = .011); least effective for violent offences (predicted 33.3%, actual 28.9%)	
Lindblom et al. (2017)	Sample size Multi-week intervention M/F = 15/2 Multi-week control M/F 13/1	Mean age (SD) 16.9 (1.1) 18.2 (2.2)	Quasi-experimental pre- and post-test group design	Over 9 – 30 weeks; promoting life ambitions, challenging criminal ideas, cognitive behavioural therapy, increasing empathy, problem solving, advantages and disadvantages of	6 – 24 months later; multi-week intervention group reduced re-offending, and this was significant at the $p < .0001$ level Multi-week control group did not	Sense of Coherence (SOC-13) (Antonovsky, 1991) Psychological Inventory of Criminal Thinking Styles (PICTS, Walters, 2002)	SOC increased significantly from pre- to post-measure for the multi-week intervention group but not for any of the other three groups	83%

	<p>Total sample size: n = 31</p> <p>NB: Only participants from the multi-week groups with convictions before the study were included in the analysis, reducing the number of participants.</p> <p>Included in final analysis:</p> <p>Intervention: 11</p> <p>Control: 6</p> <p>Total sample size: 17</p> <p><i>NB there was also a 1-week intervention and a 1-week control (n = 30), but as no changes occurred in this group,</i></p>	<p>Ethnicity</p> <p>86.6 Scandinavian, 6.7 East European, 6.7 African</p>		<p>crime, communication, and social skills training</p>	<p>significantly reduce re-offending</p> <p>The analysis only included participants from the multi-week groups with previous convictions, reducing the number to 17</p> <p>No data for one-week intervention and one-week control groups as their SOC / PICT did not change</p>		<p>PICT significantly decreased from pre-to post-measure for the multi-week intervention group but not for any of the other three groups</p>	
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	<i>they were excluded from the analysis by Lindlblom et al. (2017)</i>							
Hoogsteder et al. (2018)	<p>Sample size</p> <p>Intervention M/F = 59/4</p> <p>Control M/F = 20/8</p> <p>Total sample size: n = 91</p>	<p>Mean age (SD)</p> <p>17 (1.2)</p> <p>16.63 (1.3)</p>	<p>Quasi-experimental pre- and post-test group design, controlling for differences using ANCOVA and Cox regression analysis</p>	<p>Average intervention length for Re-ART participants was 46.86 weeks (<i>SD</i> = 23.46). Core training in motivation, aggression, self-control and group work, optional modules (reducing stress, controlling impulses, interpretation of events, regulating emotions, conflict management and a systemic family module). Re-ART also included drama and mindfulness classes</p>	<p>2 years later; intervention group compared with control group committed less violent crimes and less property crimes, significant at the ($p = <.05$) level, and less general crimes, significant at the ($p = <.001$) level</p> <p>3 years later only reductions in violent crimes and general crimes remained significant at the ($p = <.05$) level</p>	<p>Structured Assessment of Violence Risk in Youth (SAVRY, Borum et al., 2002))</p>	<p>Significant between group difference pre-test to post-test indicating a reduced risk of re-offending for the intervention group, suggesting better coping and stress management</p>	<p>79%</p>
		<p>Ethnicity</p> <p>29.5% Dutch</p> <p>23.8% Moroccan</p> <p>15.2% Surinam</p> <p>6.7% Turkish</p> <p>6.7% Dutch Antillean</p> <p>2.9% "other: western"</p> <p>15.3% "other: non-western"</p>						

Haines et al. (2015)	Sample size	Mean age (SD)	Quasi experimental matched group design using TREND multi-level modelling approach	Youth with mental health and/or developmental problems. Those included entered between January 2009 and March 2010, but length of intervention not specified. Intervention provided improved access to specialised services such as the Child and Adolescent Mental Health Services (CAMHS) and/or referral to other relevant statutory or voluntary agencies	15-30 months later, no statistical differences between the groups re-offending rates. However, those who received the diversion took significantly longer to re-offend in two of the sites (580 days vs 334 days and 220 days vs 84 days respectively)	Projects own national Youth Justice Service database measuring psychological, environmental, historical, and social risks	The only risk variable to correlate at a borderline significant level with re-offending was 'being unhappy, dissatisfied, and low self-esteem' Previous history of re-offending significantly correlated with subsequent offending	73%
	Site 1 Intervention M/F = 31/21	14.41 (1.82)						
	Site 1 Control M/F = 31/21	15.67 (1.52)						
	Site 2 Intervention M/F = 18/14	14.81 (1.38)						
	Site 2 Control M/F = 20/12	15.95 (1.10)						
	Site 3 Intervention M/F = 86/14	14.60 (1.59)						
	Site 3 control M/F = 80/15	15.67 (1.40)						
	Site 4 Intervention M/F = 12/17	14.84 (1.83)						
	Site 4 Control M/F = 9/7	15.79 (1.25)						

	<i>Total sample size: n = 408</i>	Ethnicity 69.6 % white 20.1% non-white / mixed 10.3% other / other European						
Strom et al. (2017)	<p>Sample size</p> <p>Intervention M/F = 206/52</p> <p>Control M/F = 212/46</p> <p><i>Total sample size: n = 516</i></p>	<p>Mean age (SD)</p> <p>14.4 (1.09)</p> <p>14.4 (.38)</p>	Quasi-experimental design with a matched sub-sample using propensity modelling to match pairs	Programme length varied from 1 month to 1 year, and it also provided 4 months of aftercare once the youth returned to the community. VBTE teaches participants ten key life skills through a rewards system including tolerating feedback,	<p>Time to re-offending was greater for VBTE youth (214 days) than the comparison group (182 days) and this was significant at the $p < 0.05$ level</p> <p>Higher risk individuals benefited more; 72.8% of high risk in the</p>	Methodist Home for Children's own Risk and Protective Factors instrument measured: Positive self-image, goal-oriented behavior, honesty, empathy, positive decision-making, and personal development	Improvements from pre to post were statistically significant in each of the six areas measured ($p < .05$)	71%

		Ethnicity 49.5% black, 29.2% white, 5.6% Hispanic 15.7% other		accepting “no” for an answer, asking permission, following instructions, developing conversation and disagreement skills, ignoring inappropriate behaviour of others, and respecting and helping others	comparison group re-offended compared to 57.5% of high risk in the VBTE group Violent re-offending significantly reduced for VBTE participants, being 39% lower compared to 48% lower for the control group			
Bouffard & Bergseth, (2008)	Sample size Intervention M/F = 45/18 Control M/F = 36/13 <i>Total sample size: n = 112</i>	Mean age (SD) 16.32 (1.42) 16.75 (1.32) Ethnicity 40.5% white, 59.45% non-white	Quasi experimental matched group design	Transitional Coordinators (paid mentors) build a relationship with the youth while they are in custody and then continue this mentoring for six months following their release. During this time, the mentor coordinates re-integrative activities relevant to the youth and supports the keeping of appointments with other agencies	Immediately after mentoring ended 37% of re-entry services had re-offended compared to 49% of the probation-only group and this difference was significant at the (p = .10) level (analysis excluded status offences) The re-entry group also took significantly longer to re-offend (p = .08) Those whose previous offence was person-related took even longer, significant at the (p = .04) level	Youth Level of Service / Case Management Inventory (YLS/CMI, Hoge & Andrews, 2002) The article did not provide citation for the above inventory	Pre- and post-YSL/CMI changes are only available for 46 of the intervention group. But did show a reduction of 17.3 % in risks and needs as measured by the YLS/CMI Urine analysis - between release and 6 months in the community, revealed that 62.17% of control group tests were positive for drugs compared to 34.27% of the intervention group	51%

Forgays & DeMilio, (2005)	<p>Sample size</p> <p>Intervention M/F = 17/9</p> <p>Control M/F not specified = 26</p> <p><i>Total sample size: n = 52</i></p>	<p>Mean age (SD) 15.42 (1.45)</p> <p>Age not specified</p> <p>Ethnicity (Intervention group; data not given for control group) 85% white 15% other</p>	<p>The study reports on all 26 youths referred to this pilot Teen Court – the Intervention group</p> <p>The study randomly selected the control group from all those referred for 1st time non-felony offences</p>	<p>Teen Court - A jury of peers decides on the sentence (reparation activities) including opportunities to volunteer following sentence as Peer Judge. Average sentence length 3 months</p>	<p>Teen Court offenders less likely to reoffend than their controls; difference statistically significant at the (p< .06) level</p> <p>Teen Court offenders also more likely to complete their sentences than their controls; statistically significant difference at the (p< .001) level</p> <p>NB: Re-offending data was only available for 18 participants from the control group</p>	<p>Harter Self-Perception Profile (Harter, 1985) pre-intervention only with the 23 of the intervention group who agreed to compete this. The control group did not receive this opportunity</p>	<p>The Harter profile revealed low self-acceptance in the intervention group (control participants did not complete it)</p> <p>The Teen Court intervention provided the opportunity to make changes through restorative justice, and volunteering as a Peer Judge following sentence completion</p>	56%
Caldwell & Van Rybroek (2001)	<p>Sample size</p> <p>Intervention Decompression M = 10</p> <p>Intervention Mental Health M = 10</p> <p>Control M = 10</p>	<p>Mean age / SD not specified</p> <p>‘Juvenile’</p> <p>‘Juvenile’</p> <p>‘Juvenile’</p>	<p>Quasi-experimental matched group design using propensity scoring</p>	<p>Decompression Treatment (DT) aims to break the cycle of aggressive behaviour which in turn should reduce defiance and aggression to the extent that the individual can then access rehabilitative interventions</p> <p>The study does not describe the</p>	<p>532 days (SD = 267) following the intervention: 1 in 10 of the DT group re-offended 2 out of 10 of the Mental Health intervention group re-offended 7 out of 10 in the assessed only group (receiving standard services) re-offended Effect size not reported</p>	<p>Pre-only: The Hare Psychopathy Checklist: Youth Version (Forth et al., 2003) (in press at the time)</p>	<p>The study only reports re-offending outcomes</p>	58%

	<i>Total sample size: n = 30</i>	Ethnicity Not reported		interventions at the Mendota Juvenile Treatment Centre delivered following DT				
Caldwell et al. (2006)	<p>Sample size</p> <p>Intervention M = 56</p> <p>Control M = 85</p> <p><i>Total sample size: n = 141</i></p>	<p>Mean age (SD)</p> <p>17.2 (1.0)</p> <p>Not stated</p> <p>Ethnicity</p> <p>Not reported</p> <p>The study did however include ethnicity as a variable in the stepwise logistic regression analysis</p>	Quasi-experimental matched group design using propensity scoring	As above	<p>2 years following release there was no impact on general recidivism in the community.</p> <p>However, there was a clear effect on violent crime - 21% of MJTC violently re-offended compared to 49% of controls. Effect size of violent re-offending = $p < .05$</p>	<p>Pre-only: Psychopathy Checklist: Youth Version (Forth et al., 2003)</p> <p>Young Offender Level of Service inventory (YO-LSI; Shields & Simourd, 1991)</p>	The study only reports re-offending outcomes	73%
Ford & Hawke, (2012)	<p>Sample size</p> <p>Intervention M/F = 179/18</p> <p>Control</p>	<p>Mean age (SD)</p> <p>14.4 (.98)</p>	Quasi experimental matched group design	Self-regulation, trauma processing and strengths-based reintegration, memory re-examination to	6 months later (data included only those released into the community), re-offending 'declined significantly' however	Pre-only: Traumatic Events Screening Inventory–Child/Self-Report (TESI–C/SR; Ford et al., 1999)	The study only reports re-offending outcomes	59%

	M/F not specified = 197 <i>Total sample size: n = 394</i>	Age not specified Ethnicity 43% African American 32% Hispanic, 24% white (figures add up to 99)		decrease rumination, panic, or dissociation Those youth who had completed several sessions can act as peer coaches for new participants	the study provides no further details	Massachusetts Youth Screening Instrument, Second Version (MAYSI-2; Ford, Chapman et. al., 2008) The study does not provide citations for the above inventories		
Cann et al. (2005)	Sample size Intervention M = 1,534 Control M = 1,534 <i>Total sample size: n = 3,068</i>	Mean age at discharge (SD) 20.40 (1.6) 20.50 (1.79) Ethnicity Not reported However, ethnicity was included as a variable in the logistic regression analysis	Matched group design	Enhance Thinking Skills (ETS) – 20-22 sessions. Group intervention teaching thinking patterns and cognitive skills through impulse control, flexible thinking, values and moral reasoning, interpersonal problem solving, social perspective taking, and critical reasoning Reasoning & Rehabilitation (R&R) - 36 sessions. Group intervention teaching how to address emotions using reasoning instead of risky or violent behaviour	Only ETS showed reduced offending, but only for programme completers; one-year reconviction rate for those completing was significantly lower than the matched comparison group, significant at the p=0.05 level. However, after 2 years these differences had ceased to exist R & R showed no significant improvements even after excluding dropouts	None	The study only reports re-offending outcomes. Authors suggest it would have been useful to control for motivation to change; only programme completers improved while dropouts increased their offending	62%

Burraston et al. (2014)	<p>Sample size</p> <p>Intervention – Class plus 1 year of phone calls M/F = 20/8</p> <p>Intervention – Class only M/F = 10/1</p> <p>Control M/F = 27/4</p> <p><i>Total sample size: n = 70</i></p>	<p>Mean age (SD not provided)</p> <p>16.1</p> <p>16.5</p> <p>15.7</p> <p>Mean ages taken from the initial report (Burraston et al., 2012)</p>	<p>For the first two groups the study used random assignment, then for the next three identified matched controls</p> <p>Of the 39 in the intervention group, the researchers gave a phone to 28. The remaining 11 made up the ‘class-only’ group</p>	<p>6 x 90min cognitive behavioural training sessions aiming to create individualised long-term goals</p> <p>Those chosen to be in the phone-coach group received automated twice-daily phone calls for a year</p>	<p>1 year following the intervention, mean days to re-arrest were 278 for the class plus cell phone group, 191 for the class-only group, and 106 for the control group</p> <p>Those who attended the class but did not receive phone calls had significantly fewer total rearrests than the control group (45%) but due to the small sample size, this difference was not statistically significant</p> <p>39% of those in the class plus phone group who answered at least half of their daily calls were re-arrested, this was a</p>	None	<p>The study only reports re-offending outcomes. The authors conclude that it would have been useful to use recognised measures of internal motivation to change, as the positive outcomes may be due to pre-existing motivation to change rather than the programme</p>	60%
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		Ethnicity Not reported			<p>statistically significant at the $p = 0.83$ level</p> <p>80% of those in the class plus phone group who answered less than half their phone calls were re-arrested</p> <p>55% of those receiving the class-only were re-arrested</p> <p>90% of the control group were re-arrested</p>			
Bahr et al. (2015)	<p>Sample size:</p> <p>The authors report on the demographics of three separate groups that intervention and control participants came from:</p> <p>Probation = 73</p> <p>Rural programmes = 57</p>	<p>Mean age / SD</p> <p>16.07 (1.33)</p> <p>16.65 (1.28)</p>	Random assignment for all participants apart from 20 assigned by the court specifically to the intervention condition	As above	<p>Overall offending did not reduce compared to the control group.</p> <p>However, in those receiving phone calls, every additional 100 calls answered significantly reduced the likelihood of a felony arrest by 36%, and this was significant at the $p < .01$ level</p>	None	Authors concluded it would be useful to measure motivation and determine whether phone-coach involvement is associated with motivation, and whether the association between calls answered and rearrests is different for individuals with low compared with high motivation	68%

Chapter 3

“Going wild when things don’t go their way”:

**Youth Justice staff perspectives on psychological resilience, interventions
and outcomes in children and young people**

Abstract

Research has suggested that resilience is an important protective factor in youths to prevent reoffending. In this study, we examine Youth Justice staff's current understanding and application of strategies to improve psychological resilience in youths who had offended. In addition, we also examined which factors relating to psychological resilience led to successful outcomes such as attending college or reduced re-offending. To answer these questions, we conducted in-depth semi-structured interviews with 12 Youth Justice case workers (totalling more than thirty hours) based in the community in Wales. Abductive data analyses revealed six key themes: (1) Factors relating to perceived low resilience included low self-belief, negative self-concept, low comprehension and negative home lives: (2) Factors relating to perceived resilience included adaptability, optimism, empathy and supportive homes: (3) Strengths-based approaches were utilised to increase self-belief: (4) An individualised, relational approach was key to the youths engagement and successful outcomes: (5) Several psychological changes were associated with positive outcomes: (6) Several psychological and environmental factors related to continued offending. Our findings offer a valuable insight into effective interventions and methods of delivery, psychological changes related to desistance and potential future considerations relating to youth who continue offending.

Introduction

Resilience is a complex and multifaceted construct, which overall describes overcoming adversity and in turn, achieving relatively healthy functioning (Bonnano, 2004; Rutter, 2006). The literature relating to youth who offend often presents resilience (or lack thereof) as the result of an interaction between ‘protective’ and ‘risk’ factors (Kim et al., 2016). These protective and risk factors may work at the individual level, the familial level, or the societal level (Zimmerman, 2013).

Compensatory and protective models of resilience (e.g., Fergus & Zimmerman, 2005) suggest the availability and utilisation of protective factors such as psychological and environmental resources counteract the effects of stress (i.e., risk factors). Studies have named specific resources that have reduced the likelihood of re-offending in young people. For example, Stouthamer-Loeber et al. (2002) found high accountability, trustworthiness, ability to feel guilt, school motivation, and a non-disadvantaged neighbourhood had a strong protective effect on preventing serious delinquency for children aged 7-13. While for those aged 13-19, factors were high accountability and a good relationship with parents. Psychological factors identified that have reduced the likelihood of re-offending include problem solving abilities (Dumont & Provost 1999), hope, self-efficacy, remorse, developing alternative identities (LeBel et al., 2008), and an internal locus of control (Bowen et al., 2008). According to research, one of the most important environmental resources for children who achieve good outcomes despite large amounts of adversity is at least one supportive, reliable pro-social adult (Rennie & Dolan, 2010; Werner, 1989).

In addition to protective factors, studies have also found several psychological and environmental risk factors relating to offending in youth. Psychological factors included poor management of emotions (Wolff & Baglivio, 2017), defiance (Guebert & Olver, 2014), low self-concept (Dumont & Provost, 1999), low self-worth (Emler, 2001) and sensation seeking,

a personality trait associated with impulsivity (Ebstein & Belmaker, 2002). Environmental factors related to offending included anti-social peer groups (Huijsmans et al., 2019) and weak community bonds (Laub & Sampson, 2001).

It is important to note that risks (psychological or environmental) and resources interact and affect each other as part of a dynamic developmental process (Cicchetti, 2013). This interaction tends to be cumulative, i.e., the more risk factors experienced over time the greater the likelihood of a negative outcome, and the more protective factors, the greater the likelihood of a positive outcome (Bellis et al., 2018). Factors may be internal or external to the individual. For example, the 'Pathways to Desistance' longitudinal study of 1,354 serious adolescent offenders by Mulvey and Schubert (2012) identified both social/environmental (e.g., legal employment) and psychological (e.g., changes in criminal attitudes, psycho-social development) factors influencing desistance (Schubert et al., 2016). Further, studies suggest that cognitive awareness (e.g., Bak et al., 2015) and understanding of available resources (e.g., Boeck et al., 2006) both enable successful navigation of both predictable and unpredictable environments. In support of this, LeBel and colleagues (2008) found that the subjective negative state of the individual upon leaving custody caused or worsened social problems. On the other hand, individuals accepting the institutional rules and feeling a sense of satisfaction at the end of their sentence reduced re-offending (Born et al., 1997).

The challenge model of resilience (see Chapter 1) suggested that too much or too little adversity can impair the development of resilience (Fergus & Zimmerman, 2005). This point is of particular interest in relation to youth who offend, as studies show most youths who offend have experienced higher than average levels of adversity. For example, reviews suggest that between 33% and 92% of youth in custody have experienced some form of maltreatment (Day et al., 2008). This percentage is far greater than the general population average which suggests that between 3% and 14% of young people have experienced

adversity or abuse (Cawson et al., 2000). Furthermore, many studies have found strong and positive correlations between the extent of childhood adversity and persistence of offending (e.g., Baglivio et al., 2014; Basto-Pereira et al., 2016).

Research from the perspective of resilience, and potential protective resources relating to youth who offend, has grown considerably in recent years (cf. Kim et al., 2016). However, few studies have attempted to identify whether specific psychological improvements related to reduced re-offending. Evidence strongly suggests psychological resilience increases the likelihood of positive life outcomes (such as reduced offending, see Sapouna et al., 2015). It therefore seems apt that research investigates how targeted interventions may increase resilience and subsequently reducing re-offending.

We therefore sought to expand the current research base through exploring Youth Justice case workers' current understanding and application of strategies to improve psychological resilience in the youths they worked with. We also explored potential mechanisms by which positive changes might come about in relation to delivery approaches. Additionally, we sought to determine any psychological changes noticed by staff following interventions that appeared to relate to positive outcomes e.g., reduced offending.

Method

Philosophical Orientation

Guided by a constructivist theoretical orientation (Creswell & Poth, 2018), we wished to identify overarching themes relating to how staff perceived the youths, the interventions selected, how staff delivered these, and their efficacy. Additionally, we sought to identify perceived psychological factors associated with both positive and negative outcomes (e.g., continued offending). We therefore adopted a relativist approach to data analysis, which proposes that knowledge is subjective (i.e., constructed from the lived experiences of

individuals, Guba & Lincoln, 1994). As individuals view reality as relative, there can be no absolute objective truth as everyone will have different experiences and perspectives of what is true or not true.

In attempting to understand the phenomena being studied, we understood that views of how we create and give meaning to our social experience may involve ‘multiple realities’ (Denzin & Lincoln, 1998). Timmermans and Taveroy (2012) posited that it is often through divergences between different perceptions, and interactions between frameworks of professional and intellectual fidelities, that innovations may arise. In the current study, the researchers came from a variety of backgrounds including youth work, performance psychology, and social work. The multiple realities stemming from the backgrounds of the researchers meant we viewed data through different professional lenses allowing for greater depth in data interpretation (Smith & McGannon, 2017). In addition, the complementary experiences and expertise of the researchers meant it was less likely that we missed vital themes during data interpretation and discussion, helping to reduce potential researcher bias.

Participants

We felt that Youth Justice case workers were the most appropriate group to gain answers to our questions from as they routinely select and deliver interventions and spend a great deal of time with the youth and sometimes their families. It is they who witness the youth’s journey into and out of Youth Justice Services (YJS). Youth Justice managers in Wales (UK) identified a purposive sample of twelve case workers in six selected Welsh Local Authorities across Wales. We provided potential participants with information sheets outlining the purpose of the study and the methodology. The YJS provided the PhD candidate with contact details, who then made contact at an agreed time to provide further information and obtain informed verbal and written consent prior to commencing the interviews. All twelve staff consented to take part in the study. Nine staff were female ($M_{age} 41.7$, $SD =$

11.03) and three were male ($M_{age} = 58.6$, $SD = 5.85$). All identified as either White British ($n = 7$) or White Welsh ($n = 5$). Nine case workers were social work trained, three were probation trained and all had over five years' experience in the field of Youth Justice. The geographical spread of authorities enabled data collection from case workers working across urban and rural localities.

Ethical Approval

The University's School provided ethical approval for the study. All participants received a participant information sheet prior to the proposed interview, outlining the purpose of the study (to gain insight into the role of resilience in their work with youth) and what we required of them (to take part in an in-depth interview at a location and time convenient to them). Each interview began with an informal discussion about the research, following which the PhD candidate secured informed written consent (cf. Munford & Sanders, 2015).

Interview Schedule

We chose semi-structured interviews as an appropriate way of describing, interpreting, contextualising, and gaining in-depth insight into specific concepts or phenomena (Rabionet, 2011). Semi structured interviews have been utilised to good effect in offending research previously (cf. May et al., 2010). We developed an in depth semi structured interview schedule (see Appendix A) to cover key areas identified through a previous systematic review (see Chapter 2) specifically related to psychological interventions for young people who offend (Hodgkinson et al., 2020). The PhD candidate then asked staff questions pertaining to seven different areas; the background of the youth, their psychological profiles, their relationships with others, interventions utilised, how staff delivered these, how the youth responded, and psychological / behavioural changes noted. Use of open-ended questions to elicit insights also allowed respondents to use their own language, express their

own views and potentially discuss general issues related to the research questions (cf. Jamshed, 2014).

Data Collection and Analysis

Data collection. The PhD candidate initially piloted the semi-structured interview schedule with three YJS managers in North Wales and made minor adjustments as necessary. After gathering pilot data and feedback from managers, and implementing a supervisory team, 12 YJS case workers subsequently attended individual interviews. These took place in person with the PhD candidate between November 2018 and February 2019. Interview duration ranged between two and three hours with an overall average of 148 minutes ($SD = 27.5$). The researcher clarified to participants that we had designed the questions to enable discussions to develop in any direction, and that there were no right or wrong answers. At the end of each section of the schedule the researcher asked interviewees if there was anything else that they wished to add. Interviews were audio-recorded and professional transcribers employed to transcribe the data verbatim, resulting in 1,230 transcript pages (99,582,200 words).

Data analysis. Data analysis comprised several distinct phases consistent with an abductive approach (cf. Hardy et al., 2017; Webster et al., 2017). As an abductive approach in research does not limited itself to any specific methodology, we were able to flexibly apply principles from different qualitative approaches (Lipscomb, 2012). First, we utilised directed content analysis, which seeks to validate or extend existing theoretical frameworks or theories (cf. Hsieh & Shannon, 2005). We were thus able to assess the extent to which specific psychological (or other) protective factors that we had already identified in Chapters 1 and 2, appeared in our data. We analysed each transcript, identifying constructs consistent with those established in the literature. Categories included a total of 18 deductively derived

constructs of interest relating to risk factors and 14 relating to protective factors. We subsequently extracted corresponding excerpts from the data.

We next re-analysed the data using an inductive process of thematic analysis to identify and define the profuse themes grounded in the data (Braun & Clarke, 2006). To build on our initial, deductive understanding of the data, the first researcher scrutinised the interview transcripts line by line, memoing the data, assigning preliminary initial codes, and noting developing areas of interest following each transcript. ‘Critical friends’ meetings sought to maintain a critical stance throughout this process, attended by the PhD candidate and the first and second supervisors who compared data and categories in relation to the research question, and challenged perceptions and assumptions (Rossman & Rallis, 2017). Revisiting the data allowed us to reach saturation, whereby no new themes emerged (Francis et al., 2010). All involved reached agreement regarding identified themes. As highlighted previously, engagement of multiple authors enabled an interpretivist approach through the different but complementary professional understanding of the researchers (Timmermans & Taveroy, 2012). Through comparing themes from both inductive and deductive analysis we were able to produce meaningful groups of data.

Credibility and Rigour

Drawing from Guba’s model for identifying rigour in qualitative research, we chose the term ‘rigour’ rather than ‘validity’ or ‘reliability’ which includes truth value, applicability, consistency, and neutrality (Guba, 1981). Truth value refers to the fact that the data are rich, reflecting participants' knowledge. Therefore, multiple realities may exist depending on individual experiences (Noble & Smith, 2015). To ensure credibility, we implemented several strategies. Campbell et al. (2013) suggest that different researchers may unitise the text differently, making it almost impossible to identify the appropriate unit of analysis. Therefore, the PhD candidate coded all the data, whilst holding regular ‘critical

friends' meetings with the second supervisor to discuss themes, analyse data, and agree on meanings. Chosen in place of inter-rater reliability, this approach allowed us to consider potential methodological bias by outlining personal experiences and perspectives that may influence our interpretation (see Rossman & Rallis, 2017). In addition, the PhD candidate, who experienced prolonged engagement with all participants, kept a reflective journal to avoid influencing the research process (cf. Moser & Korstjens, 2018).

To enhance the trustworthiness (credibility) of this study, we used member reflection, defined as "taking data and interpretations back to participants in the study so they can confirm the credibility of the information and narrative account" (Creswell & Miller, 2000:127). This approach provided interviewees with an opportunity to reflect on our 'synopses' of the interviews, as opposed to them needing to member check (read) the entire verbatim interview and our associated interpretations (Braun & Clarke, 2013). We therefore chose member reflection over member checking. Member reflection considers several factors that member checking ignores (e.g., that questions are context specific, people's reality changes from day to day depending on mood), meaning that it is a more appropriate method in terms of verification, rigour, or reliability (Smith & McGannon, 2017). To support our interpretation and explanation and to further increase trustworthiness, we used participants verbatim words in the results section (Yin, 2011).

Applicability (also known as transferability) refers to the extent to which results of the research can be utilised in similar contexts with similar participants. So that the reader can determine whether results may be relevant to their setting, a clear description of the demographics of the participants is outlined in the method section. The techniques used for data analysis aimed to ensure interpretations have logical and clear linking associations, suggesting that another set of researchers may arrive at similar conclusions.

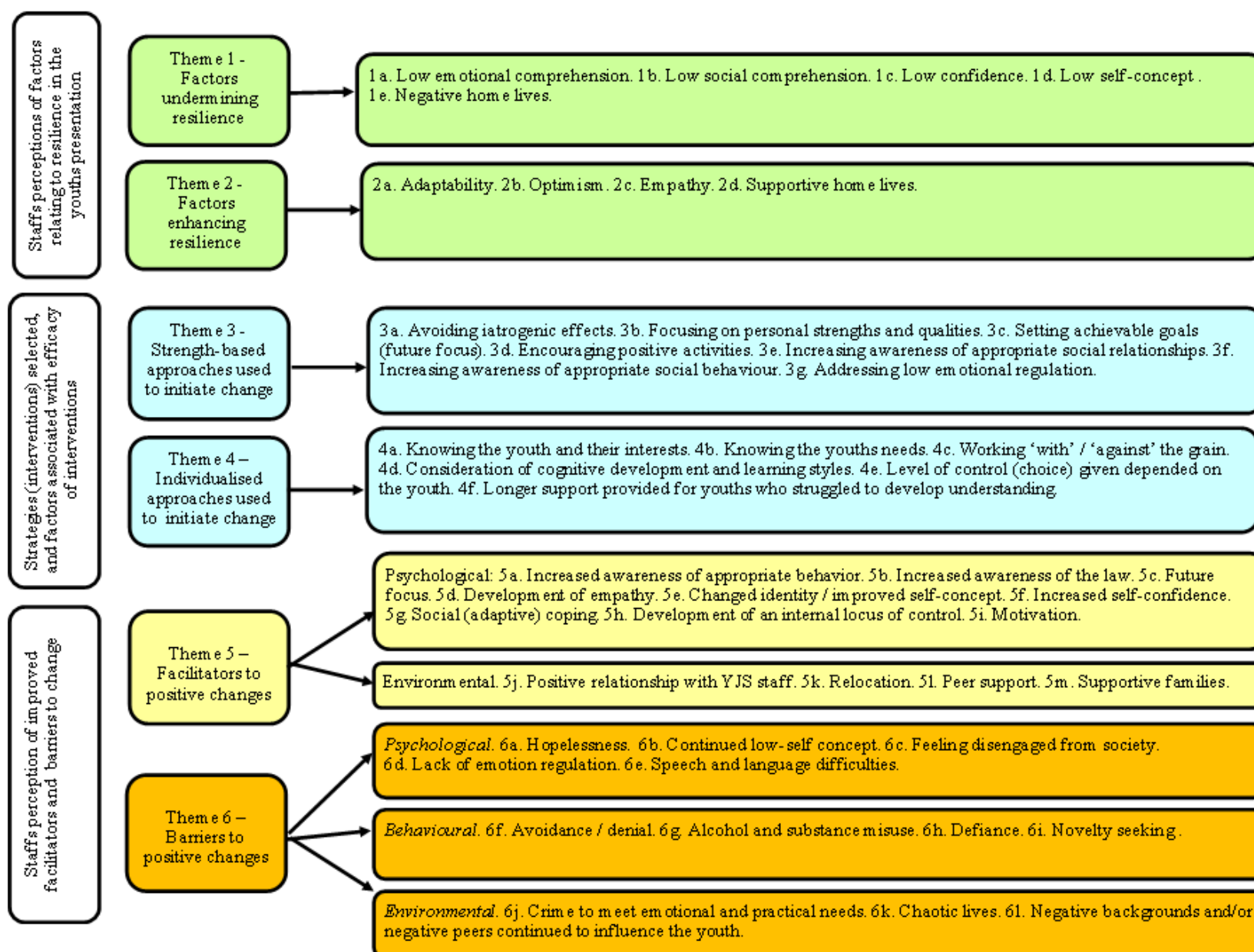
Results

The semi structured interviews provided a substantial amount of rich information on the perceptions and insights of staff working in Youth Justice Services, yielding 1,230 pages of data in total. The data collected and analysed went far beyond the scope of the current study and therefore we decided to present the results of three key areas: Psychological factors in the youths relating to resilience; the type of interventions used and how staff delivered these; and changes noticed (or lack thereof) in young people following interventions¹.

The six relevant themes related to these three key areas are summarised in Figure 1 for ease of comprehension. Overall, two themes describe staffs' perception of resilience in the youth. The first contains staff's descriptions of factors related to low resilience including the youth's, low self-belief, negative self-concept, low comprehension, and negative home lives. The second relates to youths who staff perceived as resilient and describes those youths managing adversity as 'survivors' while attributing the resilience of others to supportive home lives and positive role models. A further two themes outline the application of resilience and associated strategies, and factors which determined intervention efficacy. These themes relate to strength-based working, and staff individualising interventions so that they were relevant to the youths. A factor highlighted by each participant was also the crucial role of developing a trusting relationship and getting to know the youths. The final two themes relate to (i) factors that staff perceived to correlate with reduced offending and other positive outcomes, such as increased awareness and self-belief, and (ii) factors staff associated with lack of changes, such as the youths continued use of unhelpful coping strategies, plus several psychological and environmental factors. We will discuss each theme in turn.

¹ We plan to present additional results in future papers.

Table 1. Youth Justice staff perceptions of resilience, resilience-based interventions, delivery, and change: Emergent themes and sub-themes based on analysis of open-ended responses



Theme 1. Factors Relating to Staff's Perception of Low Resilience in the Youths

A recurring theme that every participant described was the youths poor understanding, lack of self-awareness and generally low comprehension of themselves, and the world around them. Another strong theme was the low self-concept, and low self-belief of the youths. Staff also noted that most of the more prolific offenders tended to come from dysfunctional families, where their basic needs had been unmet.

1a. Low emotional comprehension. Nearly every staff member spoke of poor emotional understanding in the youths, which led to situations in which they were likely to offend, or little understanding of the harm they had caused:

"A lot of young people will say, "Oh, it's not okay to be angry." And they will become angrier and more frustrated then because they feel like they are doing something negative." (Participant I)

"There is a huge lack of, not necessarily responsibility but, understanding into the severity of the offence and the harm that's been caused". (Participant E)

1b. Low social comprehension. Staff perceived the youths to have extremely low understanding of appropriate behaviours, language, and relationships. In addition, many of the youths were also largely unaware of which activities could get them arrested:

"Some don't know where the line [appropriate social relationships] is, what is in public and what isn't." (Participant C)

"I did one session and we had to really break it down, he didn't really understand why you had to have a driving licence. So, it was going over the importance, the legislation around having a driving licence, how old you have to be, how old you could be to have a provisional, you know, going through just very basic things." (Participant F)

1c. Low self-belief. In addition to low awareness, all participants described the youth's low self-belief. This contributed to the youth's negative expectations of the future, reducing their likelihood of identifying achievable goals:

"A lot of these kids have got low self-esteem and self-worth and don't actually realise what they're good at, because they're always told what they're not good at, or what they've done wrong." (Participant F)

"[There is] the possibility of failure isn't there [if they set goals]? If that's something that they have experienced quite a lot of, and...believe that it will, why would you put yourself in the position where you could fail?" (Participant E)

"I think there is and remains a small culture of, 'I'm not good enough for that. I can't do that. They'd never give me a job,' kind of thing, so there are issues of esteem, etc." (Participant A)

1d. Low self-concept. Staff gave accounts of the youth's poor self-concept throughout the interviews, which they saw as another significant barrier to the youths setting conventional goals:

"They think, 'I'm not good enough, I didn't get any qualifications, I didn't do school.'" "Nobody is taking any interest; I'll never get anywhere in my life.""
(Participant C)

1e. Negative home lives. Staff attributed the concepts outlined above as largely being related to the youth's negative previous experiences. For example, staff said many of the youths came from families where they had received little care or positive attention or may have witnessed domestic violence and/or drug abuse. Many of the prolific offenders had also encountered negative experiences at school:

“So, with physical abuse, I think it teaches them that how you deal with your emotions is by striking out as well. Attack is the best form of offence. You attack first.”

(Participant B)

“Generally, what you find very often is you see that the support network that they should have isn’t there . . . they may well have family, but they may be using drugs.

The parents may be in that situation through no fault of theirs, but the fact of the matter is, their focus is getting the heroin. It’s not on the kids”. (Participant A)

“I think, sometimes, their education; you’re written off if you’re a young person like that and told, “You’re not going to amount to anything.” You believe that don’t you?”

(Participant H)

Theme 2. Factors Relating to Staff’s Perception of High Resilience in the Youths

2a. Adaptability. Staff spoke of youth who displayed positive coping skills such as recognising opportunities (including those provided by YJS) and having independence skills:

“A lot of the young people that we deal with are very resilient, they’re survivors and can take advantage of opportunities.” (Participant B)

“They’ve learned to fend for themselves. Young people come to adapt to living in those [unsupportive] environments.” (Participant C)

“In lots of ways they are very good copers, they’re very resilient, very resourceful, capable of ... travelling around, things like that.” (Participant D)

2b. Optimism. Research has previously identified that optimism related to resilience (Panchal et al., 2016). Staff expressed admiration for those youths who persevered despite adversity, and maintained hope for the future:

“I think in most of the kids we work with, for the fact that they’ve gone through so much and they’re still getting on with it ... I suppose it’s about optimism, in a way, some semblance of optimism.” (Participant H)

[Talking about reasons for change] “That they want to be able to get a job and have normal things, a place to live. Some of them, despite what they might’ve grown up in, know that they don’t want that - they know that they want something else.”

(Participant J)

2c. Empathy. Staff believed the youths were more able to manage difficulties when they had some understanding of other people’s needs or feelings, and of reasons for certain behaviours:

“He fully understands his mother’s mental health issues and he is empathic in terms of his mother in that situation.” (Participant A)

2d. Supportive home lives. While staff described specific resilience factors in youths who overcame adversities, they also saw youths who had supportive and stable home lives as resilient, due to their support networks. Staff perceived these youths to have positive and pro-social role models, and/or families who met their basic needs:

“The children that have had a more positive upbringing . . . they’ve got more positive role models, whether that’s family or friends, or the local sports coaches or teachers.” (Participant I)

“When you’ve got those basic needs met and things are settled outside of Youth Justice in their home life, and the environmental factors are quite settled, you can do some quite good work with them here.” (Participant G)

“Even if their carer had been quite chaotic, they were able to provide love and warmth and attention and food when it was needed . . . that has now meant that they are that little bit more resilient, despite the fact that they’ve experienced all these traumas.” (Participant I)

Theme 3. Application of Strength and Resilience-based Strategies

3a. Avoiding iatrogenic (made worse by treatment) effects. Staff believed that the low self-worth and low self-belief highlighted in Theme 1 was a key barrier to initiating change and felt addressing this was important. Staff therefore typically adopted a strengths-based approach, identifying what the youth could do well rather than focussing solely on their negative behaviour (cf. Friel 2019):

“We have to do work upon it, but I think we’ve all found that if you just carry on constantly, constantly talking about their bad behaviour, the negative behaviour, then that’s not going to get anywhere, is it, really. And they feel ashamed, don’t they, and embarrassed, you can see that.” (Participant J)

The main reason staff felt that offence focused work alone was insufficient to bring about positive changes was because it was likely to reinforce the youth’s negative self-concept as an ‘offender’. Several staff also said they were concerned punitive approaches may further traumatise those youths who had experienced trauma:

“There is a thing that you can take them into... it simulates an accident. Which might be quite hard to see, but this [young person] ... came from a really traumatised [background] and I thought, “I don’t want to traumatise her any further.”
(Participant H)

On occasion, such as with one youth who enjoyed thrill-seeking, staff felt that targeting this specific behaviour was unhelpful:

“I don’t think our motor crime workbook is ... very effective, given the cohort of young people you’ve got still committing [motor] crime. I’ve got one person in particular; it’s made no impact at all on him ... he becomes very animated doing it, and I’m thinking you’re getting a buzz off just writing about this ... I stopped doing it in the end.” (Participant F)

Staff also explained how, although there were no specific strength-based programmes designed for YJS, they often drew on models from previous employment. One of these was the Integrated Family Support Services (IFSS), which utilises a strengths-based approach to working with families where addictions are an issue:

“I quite like to do strengths-based interventions with these young people, motivational interviewing, SFBT [solution focussed brief therapy] style... I don’t do the standard miracle question, because that can be quite abstract for these young people. But I’ll often do, what would you like your life to look like in six months’ time? “I’d like to be working. I’d like to have a girlfriend, I’d like to have my own place”, “I don’t want to get into trouble anymore,” and then I will do the scale, “Where would you put yourself now?” Then we break it down into even smaller steps of how are we going to slowly achieve our way up the scale.” (Participant J)

3b. Focusing on personal strengths and qualities to increase self-belief. Staff saw strengths-based working as an effective way of initiating change through increasing the youth’s self-belief. Staff found identifying what the youths were good at, and their personal strengths, helped cultivate self-belief that they could achieve and therefore consideration of better outcomes:

“In my work, it’s about getting them to recognise their strengths. I think that’s key really, because if they recognise [their strengths] I think, naturally, their confidence, their self-worth ... their goals, their aspirations, everything else increases.”
(Participant E)

“What are your strengths?” “Strengths? Don’t know, none.” “When you come and meet with me in the centre, you’re always there, aren’t you?” “Oh yes.” “You’re reliable, aren’t you? That’s a strength.”” (Participant C)

As well as focusing on specific strengths and abilities, staff also made a point of providing positive regard to the youths in line with their child-centred approach. Staff believed their support and acceptance helped counteract the youth's beliefs that they were a 'bad' person, and increase positive self-concept:

"Always, 'I've been really looking forward to seeing you today; I enjoyed our chat last week. How are you getting on?'" Just little things. If they think they're good to talk to and I enjoy spending time with them...they're like, "Oh, I must be OK. I can't be that bad."'" (Participant H)

3c. Setting achievable goals to empower the youths. The youth's low self-belief combined with little understanding of how they might achieve goals led to staff providing targeted support to work towards pro-social (as opposed to anti-social) goals. To counteract the youth's inability to navigate their social systems, staff worked with the youths to identify how they could potentially reach their goals. Staff felt an important part of their work was helping the youths identify achievable future goals, and this was a strong theme throughout the interviews:

"I think it's because they don't know what to do to change. They know what they want their end goal to be. But "What's your plan? How are we going to get there?" "I don't know "You want to reduce by half, what are we going to do to help you achieve that?"'" (Participant E)

"With all young people whether you're high-end or not high-end, I think looking at what you want from life and your aspirations and your goals, and then making those achievable, because if you say, "I want to get a job," but you've got no qualifications, that seems like, "I can't achieve that." But if we start breaking it down into really small achievable bits, I think it motivates them because it is achievable. You're kind of empowering them, "No, actually you can do this."'" (Participant F)

3d. Encouraging positive activities to increase positive self-concept / future

opportunities. Another strategy staff frequently used to address low self-concept and self-belief was the encouragement of positive activities. For example, they encouraged the youths to access community resources such as gyms and youth clubs or apply for a job. Staff felt this strategy also served to promote the replacement of antisocial or criminal behaviour with more pro-social activities:

“It’s nice to try and talk about some of the things they like doing, that are more constructive, they’re not easy to find sometimes.” (Participant D)

“Even some of the more prolific ones, we’ll try and get them engaged in things. Like there’s a football team which has been a really positive thing, that a couple of the workers here have set up for lads in the local area, to go once a week. That has worked really well.” (Participant J)

“Some of the lads will be, “I want to get my CSCS card,” ... We do sessions here on training for it, and then we get involved in ... an outside agency that funds the projects. Because if you’ve got ...a legitimate income, you’ve got employment, you’re not bored, those things are going to desist you from offending, not keep going over victim empathy, because yes, it’s good for the young person to have knowledge of that, but it’s not making changes.” (Participant F)

Once the youths had engaged in an activity, staff were then able to focus on how well they had done, thus building on positive changes:

“I usually do work with young people on their self-perception. I definitely try to tell people what I recognise in them or what I’ve seen in them that’s really positive. It’s also really good if they do work with other support members of staff, I can say, “Oh, [staff name] said you did amazing the other day.” [or] “He said you worked really hard.”” (Participant G).

Staff often needed to provide a lot of encouragement before the youth would take part in new activities:

“At one point early on we were still going to the house, still building a rapport, we offered this young person a chance to go go-karting, so a colleague went and took him, it took him three goes to actually get him out to go and do it, but part of it’s been, do this first with us, as an activity, and we’ll leave those other things a little later.” (Participant D)

“I’m always so keen for young people to get involved in anything like that [dance classes, boxing]. I have taken young people to youth clubs and things... I do that quite often. Just because I know it’s quite daunting for a young person to walk into somewhere on their own. Because I just think if you can engage somebody in something like that then that can be really powerful.” (Participant G).

Occasionally staff incorporated ‘reward’ activities, either after a youth had successfully addressed their offence focused work (e.g., dangerous driving) or as a ‘carrot’ to encourage completion of orders. However, if a youth had a particularly chaotic life, sometimes the chaos of that youth’s life made it harder to participate in extra activities:

“I think [rewards work better with] the ones that aren’t so dysfunctional or chaotic. They must have some form of stability...the ones that are more affected, probably not really. It can be disappointing for them. At the end of the day, if they’re trying and... Even if they miss a couple of appointments, they [are still allowed to come], but they can’t come to the go karting or the climbing frame, it’s a huge disappointment. You know what, they’re used to disappointment.” (Participant C)

3e. Increasing awareness of appropriate social relationships. To counteract the youth’s lack of relationship skills, staff felt that a focus on healthy and appropriate

relationships was important, even if this factor was unrelated to offending. Staff believed this was necessary to counteract the youths lack of positive role models:

“We like to do a lot of that kind of work with them as well. What makes a good relationship, what makes a good partner, what makes a not so good partner.”

(Participant H)

“I suppose that maybe some of it is about what they’ve learned growing up, what they’ve seen within their own family. If their parents haven’t got the capacity to show them how to deal with situations or emotions or whatever in a positive and productive way.” (Participant B)

Theme 3f. Increasing awareness of appropriate social behaviour. Staff described the youths use of inappropriate language, such as racist or homophobic language or swear words. Staff believed this was important to address to increase the youth’s future employment prospects. To counteract the youths lack of awareness that certain attitudes, beliefs, or words were socially inappropriate, they used various approaches:

“It’s an ongoing assessment, the assessment is never just done, something else might come up. For example, I was talking to a boy about consequences or something the other day, and he started talking about, coming out with these really racist kinds of views, but I don’t think he fully- So, anyway, that, led on, we did a session on that then.” (Participant H)

“We will tolerate the language and it doesn’t really matter. Then, we get off the bus and say, “You’re in the community now.” It’s some understanding ... It’s trying to walk down the streets with those kids and teach them how to interact because they’re so far off interacting.” (Participant K)

The youths sometimes engaged in group work with YJS, with reparation teams, or with resource staff at intervention centres in the more urban areas. Participants felt this

provided a valuable opportunity for those staff to role model positive behaviour, and challenge any negative behaviours displayed by the youths:

“The staff there [at the intervention centre] are basically all male, and they’re able to know how to behave appropriately then in different situations. Because I know that, if they start to be a bit aggressive or dominant or whatever, they accept staff saying, “What’s going on here? Eh, wind your neck in now. We don’t behave like that.””

(Participant B)

“A lot of young people, boys now I’m thinking, haven’t got a positive male role model. I think again that ties in with why a lot of the time they work so well with the reparation staff.” (Participant G)

Staff also described youths who were socially awkward and lacked confidence in social situations. Methods staff used to address this included facilitating real-life situations to increase the youth’s confidence:

“I’ve done quite a lot of work with two specific people, who’ve got very low self-esteem, self-worth. They don’t go out and they won’t order their own drink or their own food or speak to anybody. So, we’ve done role modelling... I’ll go to Costa Coffee and then I’ll buy the coffees a couple of times and then it’s like, “Well, you have a go now. I’ll go with you, but you’re going to order for us this time,” and they engage in that social interaction. It can take a while sometimes.” (Participant F)

3g. Addressing low emotional regulation. Staff believed the youths limited understanding of both their own, and other people’s emotions were often the cause of the offending, or poor behaviour at school. To counteract low emotional understanding, and frequent displays of anger, staff felt it was important to address the youth’s emotional management:

“And then, you know, exploring what you can. It’s okay to be angry, everyone’s allowed to be angry, being angry is good. Sometimes being angry gets things done. But what we do with that is the problem.” (Participant I)

“They take their behaviours from home into school, and ... they get expelled, they’re suspended, or they’re put in a class with other people who display similar behaviours.” (Participant B)

“We have an emotional well-being worker over at the intervention centre. I know one of my young people spoke about him before ... [he was] asked to visualise what makes him angry and punch a punch bag and things like that.” (Participant H)

““How are you feeling when you do that? What does this mean? What does that look like? What might someone’s body language or voice tone or facial expression be like if they were talking about that?” Yes, just making them more aware of emotions and different emotions or feelings in the body... “When you’re feeling like that do you feel hot, do you feel shaky, does your heartbeat faster, do you feel sick?” So, they’re more aware of their own emotions and ... other people’s as well.” (Participant A)

Theme 4. Individualised, Relational Approach Associated with Intervention Efficacy

Rarely did youths receive the same package of interventions; staff ultimately individualised both intervention content, and delivery style. Staff highlighted several factors informing their decisions to ensure the relevance and appropriateness of interventions, depending on the presentation of the youth. Fundamentally, the data suggested these factors related to getting to know the youths as individuals. Strategies commonly selected included addressing low comprehension and encouraging reflection. Staff also frequently encouraged the development of discrepancy, a technique used in motivational interviewing that encourages the individual to consider the differences between their current and desired behaviours (e.g., Miller & Rollnick, 1991). Strategies also included consequential thinking,

often used in Cognitive Behavioural Therapy (cf. Beck, 2011). This approach involved encouraging the youth to consider potential effects of further criminal or antisocial behaviour on themselves and the victim by assessing the advantages and disadvantages of the outcomes.

4a. Knowing the youths' interests. Staff felt that identifying the youth's interests enabled delivery of interventions in ways that were meaningful to the youths, which had a positive influence on engagement:

"I think that's the most important thing. As a practitioner, if you know that young person well you can guide them because you can, like I said, elicit that information from them using prompts and what you know of that young person." (Participant E)

"I downloaded a load of colour pictures from the comics of Harley Quinn and the Joker and that's what I used to do knife crime with her. And we talked about what's in there, and she's like, "That's abusive, that is" ... You have to tailor your intervention. If you want them to engage, it has to be something that they're invested in."

(Participant A)

Staff said they also often used their knowledge of what was important to the youths, for example their future interests, to ask the youths what impact their offending might have on their goals:

"You try to see what their interests are and where they want to be in the future. Then you say, "How are you going to get there in the future? If you keep on going the way you're doing ... you'll be back in court and you're going to get another order and you're going to get a criminal record." "Then you go for an interview to work on a building site, you've got your CSCS card, what happens when they look at the young person who has got no criminal record and the one that has?"" (Participant C)

Knowing who was important to the youths meant staff could encourage the youths to reflect meaningfully on their behaviour. For example, staff described a general lack of victim

empathy and found this was often hard for the youths to develop. However, through knowing who the youths cared about, staff were able to encourage the youths to think more deeply about the effects of their behaviour (consequential thinking):

“I find as well, a lot of the young people here say, you’re discussing motor offences, if you say, “You could have crashed your car into somebody, a pedestrian or another driver,” don’t get anything. If I say, “That could have been your sister driving down that street, somebody could have crashed into your sister,” and then it’s like, “Oh, that’s not okay.” “How would you feel if that had happened?” “I’d be devastated. I’d have been upset.” That’s when you get the emotion from them.” (Participant F)

4b. Knowing the youth’s needs. Staff provided support for the youths with a range of issues in addition to offending. Overall, staff felt this helped the youths to build a good relationship with YJS, and increased the likelihood of their meaningful engagement:

“I find a lot of the time, even if they are open to other agencies, because they do see us more often, we are usually the ones that they tend to turn to. If there are practical things that a young person needs to do, like register with a doctor or open a bank account, I quite like to incorporate those into the sessions to give them extra support.” (Participant G)

“We address a lot of welfare concerns here, and I think these kids see that “Actually, I’ve come in for offending but ... you’ve helped me get a job, you’ve helped me sort my benefits out, you’re trying to sort things out at home, you’re promoting the relationship with my parents.”” (Participant F)

4c. Working ‘with’ or ‘against’ the grain. Staff described strategies they used in relation to the personality and views of the youths, or in ways that went against beliefs and inclinations (cf. Hardy et al., 2017). Staff attempted to work ‘with’ the grain when considering where to deliver the intervention, and whether the youth might respond better to

formal or informal settings. While most youth responded well to informal settings, such as walking, or driving in the car, there were those that preferred a more formal setting.

Likewise, while most youths responded better to indirect challenging, staff felt they needed to directly challenge some youths:

“Driving in the car is usually the best time to have difficult conversations with young people, to discuss and have conversations and think about things. It’s that, no eye-contact ... feeling less on the spot. Going for a walk, things like that.” (Participant I)

“Some respond more to formal, if they’ve had more education, so with some of them, “Yes, let’s do it in the office.” ... Some of them, they’ll say, “You’ve done F-all with me,” because we’ve done it through the stealth route. “You haven’t done nothing.” So those want to be seeing things are being done to them.” (Laughter) (Participant K)

“I don’t often challenge directly. There’s been one occasion recently where I have. He had said to the recreation facilitator, “I didn’t come in last week because I was tired, and I couldn’t be arsed.” I thought, “That attitude is not okay.” “I think you learn to understand what style suits them. Some young people respond well to the more direct approach, others don’t. I had to take a more stern approach with this particular young person ... He did apologise and has not missed an appointment since.”

(Laughter) (Participant E)

Additionally, staff often worked ‘against’ the grain to directly challenge the youth’s views and beliefs. For example, many youths believed crime was an acceptable way of earning an income, violence was supportable, and drinking to excess was normal. These beliefs and behaviours were often deeply engrained:

“They ... make this world, this criminal world, seem amazing – “Why are you still here? You can earn that money in a night.” “But the difference is, I’m not paranoid, I haven’t got to worry about when the police are going to come and arrest me, because

they will be arresting you at some point, I haven't got to worry about grassing, I know who my friends are.” Going all through that with them – really, is that a life that you want to continue living?” (Participant F)

““Yes, I went and downed a bottle of vodka.” I'm like, "That's not the normal way." Not in those words but just challenging that and going, "You downed a bottle of vodka? You could have died. Not everybody does that.”” (Participant H)

4d. Consideration of cognitive development and learning styles. Staff ensured interventions were cognitively appropriate. For example, youths who were embarrassed about their spelling, or averse to sitting around a table often responded well to a walk, or activity:

“We’ve got different programmes, that even if they’re 14, 15, these are aimed at 9, 10, so we can use those. Just because someone is of a chronological age, their level of understanding may be way below that.” (Participant I)

“He was a kid that was reluctant. A very rural area, a lot of effort to get into the office. By the time he gets into the office he’s had enough. So [staff member] walks the dog for an hour, the kid is like, “Yes, I like this.” The kid is doing more work, he doesn’t think he’s doing it.” (Participant K)

4e. Level of control (choice) given depended on the youth. Staff believed a lot of the youths felt they had no control, especially those living in foster care, or children’s homes. Staff therefore attempted to give those youths a degree of control, for example by giving them a choice of where to meet:

“Pretty much, they’re struggling for control, I think, they’re not doing what they want to do, it’s been taken away from them.” (Participant D)

“I think an important thing, to try and get them engaged in the first place, is to [help] them feel that ... they’re not so powerless. So, as opposed to going on, “Right, I’m

going to see you every Tuesday. You have to come here.” I’ll say “What is going to work for you? Where can we meet?”” (Participant J)

Staff felt that other youths might benefit more from firm boundaries:

“He tried to control every session we had. I had to retain a lot of that control because he wasn’t willing to explore certain behaviours, so would try and steer the session in a way that would suit him. There are times where you can’t allow the young person to have full influence over the session.” (Participant E)

“He wasn’t willing to come to see me. I said, “Look, I’m more than willing to come down and see you, but I’m not coming every time. You need to make the effort as well.”” (Participant A)

4f. Longer support provided for youths who struggled to develop understanding.

The average length of time that case workers worked with the youths for was 6 months.

However, if a youth had particularly complex needs, and needed more time to address these, YJS could use their discretion to extend the length of the order:

“Even with a conditional caution, we should be looking at about three months really, that’s the kind of guide. But it’s not written in stone and I will always advocate for any young person with particular difficulties that may take them a bit longer to grasp it all.” (Participant A)

Theme 5. Staff’s Perception of Positive Psychological Changes and Behavioural

Outcomes in the Youths

Psychological improvements in those youths who successfully completed their orders and reduced or stopped their offending consisted of development of awareness (of themselves, others, and the world), which was perhaps the most frequently described psychological change. Other key psychological changes illustrated by staff included the development of a future focus, more empathy, improved self-concept, greater self-belief,

social (adaptive) coping, an internal locus of control, and more motivation to make positive changes. Achieving such changes required perseverance on the part of staff, due to the youths engrained beliefs, behaviours, and backgrounds generally unfavourable to the development of psychological insights. Environmental factors contributing to positive changes were positive relationships with YJS staff, re-location, peer support and supportive families.

5a. Increased awareness of appropriate behaviour. Through working with YJS staff, some youths went on to say they would never let their little brother / sister do what they had done. Others spoke of how they would treat their own children different to how their parents had treated them. The youth's development of alternative beliefs and behaviours often took time, and staff perseverance:

"He's recognised - "This is not right ... His father, he considers him like a thug basically. He doesn't want to reflect the way his father is." (Participant C)

"He went back to college and he's doing really, really well. Just constantly having those conversations, "No, that's not right. That's not the way that you should be living; you shouldn't be having fights every week. You shouldn't be threatening to hit teachers over the head. You don't do that." ... I worked with him for 3 years."

(Participant H)

5b. Increased awareness of the law. Staff found that many youths had poor understanding of legal systems. Some said they did not know why they had to have a driving license to drive a car. Others struggled to grasp 'guilty by association', i.e., that their presence at the scene of the crime, even though they had not committed the crime themselves, could lead to their arrest. Staff explained how the criminal justice system worked, and how easy it was to end up in prison. For some, the fear of prison was enough to cause them to desist:

“I think a lot of them have got quite distorted views of what the law is and what is and isn’t legal ... I think quite often, just the knowledge that we’re able to teach them ... can stay with them. That can serve as a factor to change.” (Participant G)

“I said, “The thing is, you think it’s okay to wind up security guards and get a chase off them and mess around with the police. You do understand that your anti-social behaviour will rack up and it will come up every time you commit an offence.” “No.” I said, “And do you know that anti-social behaviour can actually take you to court, and a prison sentence?” Hasn’t been any since because he’s terrified of going to prison and he’s terrified of being in court.” (Participant A)

5c. Future focus. Youths who developed an understanding of the potential adverse effects of offending on their futures were more likely to make positive changes. However, believing they had something to lose was key. Those who valued their health were more likely to reduce their consumption of alcohol or drugs. Those who believed they could have a job, their own family, holidays abroad, or a driving licence, were more likely to make positive changes:

“Drinking alcohol every night, the way I sell that as well... Their organs haven’t even developed fully until they’re 25, so you’re destroying them before you’ve given them a chance. Likewise, with smoking cannabis...it attacks the lower part of your lungs like ordinary cigarettes, nicotine. So I say, “You said you want to do sport and go to the gym or go in the army, how are you going to do that trek, that run, to get passed for it?” They hadn’t realised.” (Participant C)

“It just changed for him. He got a job, he met somebody, they had a child, and for him, that was it for him.” (Participant J)

“He’s got a goal. Although it’s not brilliant, he is massively on the police radar at the moment, [and] we are targeting [his behaviour] through antisocial behaviour

workshops. But he's not driving cars. It doesn't look like it's a positive because he's obviously still offending, however, he does want to get his provisional licence, and this is something that we can work towards." (Participant F)

5d. Development of empathy. Giving the youths the opportunity to reflect on their behaviour, and consider the victim, enabled some to develop empathy. Staff saw this psychological factor as key in subsequent behavioural changes:

"I think the ones that stop are the ones that have seemed to have had a grasp of how their behaviours affect others." (Participant J)

With youths who may have experienced trauma, staff believed they sometimes needed to develop empathy in relation to themselves first:

"We look at the victim and we look at them as victims as well, and it's something they've never thought about before, and they can identify the emotions they would go through themselves if it happened to them. We say, "Well, how do you think the victim felt when it happened to them?" and they've never connected." (Participant B)

5e. Changed identity / improved self-concept. Self-concept encompasses how individuals see themselves, and how they feel others see them. Staff described how identifying strengths, and encouraging positive activities enabled the youth to have a more positive self-concept:

"He had a DTO, a Detention Training Order, so he's been in a youth offending institute. He was quite prolific in nature, but he did this exercise and he said, "An offender, that's what I do, it's why I'm here, isn't it?" Then when we started to explore it... "Actually, you've got a mum, so you're a son. You've got your brothers, so you're a brother yourself. Your brothers have got children, so, you're an uncle. How good do you think you are at these roles?" When he thought about it he was like, "Ah, yes, actually I am." Where it started off is like, 75% offender, it just got smaller

and smaller and smaller, until he realises that's only a very, very small part of his life." (Participant E)

"I think you would see young people becoming more confident, more positive about themselves, feeling like they belong in some way, shape or form, whether that's because they've got into some training ... or engaging with a service that is meeting their needs in terms of substances." (Participant I)

5f. Increased self-belief. Staff described several youths who went on to engage in training, or gain employment, and how this appeared to stem from increased self-confidence and the belief that they could achieve, and that they deserved what others had:

"Going to college, for him, was the making of him. Just his confidence in coming in and speaking to reception staff, his whole appearance, the way he held and carried himself and looked after himself. He'd made friends for the first time in years, got a girlfriend." (Participant G)

"If they've managed to get a job, it's their self-confidence, their self-esteem. When they're on an order and somebody's giving them positive reinforcement, "You are worth it, you are valuable. You deserve what other people have got; you can achieve it." They think, "Yes, I can."" (Participant B)

5g. Social (adaptive) coping. A key adaptive coping strategy staff noted was the youth's increased ability to recruit social support. Staff felt having a positive experience of YJS support, and developing good relationships with YJS staff, meant some youths were then more willing to accept support from other services. Others became more willing to talk to other adults, including their parents:

"One young person started hanging around with another young person because his dads got a building site. So, he's done a bit of work through that. He's got a bit of money coming in and they've developed a friendship from that." (Participant F)

“Some of those young people might leave us and then might come back, I’m thinking of young people who come back sometimes and say, “I’m trying to get my CSCS card,” it might be like five months after they’ve left us.” (Participant I)

“They’ve gone through this support and it’s been positive, so they’ll be like, “Oh yes, maybe I do need.”... They’re more willing to be transitioned on to other things then.” (Participant H)

“A lot of them will say, ‘I’ll think about things more. I’ll talk to my family more about-’ because they’re used to talking in here, with us... That seems a small thing, but that’s quite significant, really.” (Participant J)

5h. Development of an internal locus of control. Those who have an internal locus of control believe they are in control of their destiny, and their behaviour. Staff described youths who had gained a sense of perceived control, and how this seemed to relate to improved self-confidence:

“I think you see young people who are more responsive to their own needs and not looking to other people to solve things for them. They’re feeling like they have some self-autonomy, and they can make decisions themselves.” (Participant I)

If necessary, staff offered continued support on a voluntary basis, meaning the youths were able to decide when they were ready to leave. This choice may have contributed to the development of an internal locus of control in some youths:

“If we see somebody’s finding it a little difficult and panicking about their order coming to an end, “What am I going to do now? Who will I talk to?” or whatever. [We say] You can come back on a voluntary basis. Your order has finished. [A lot] choose to do that, but not for long ... They come back a couple of times until they’re feeling more confident and say, “Right, I can cope.”” (Participant B)

5i. Motivation. In those youths who were ready to change, belief that change was possible was a key factor. YJS staffs' belief in the youths appeared to help increase their self-belief and motivation to act:

"It's whether they're ready to change, as well. Some are." (Participant G)

"We're saying, 'We can help you,' and a lot of them, when we say, 'What is it you want?'" "I'd like a part-time job" ... we help them with that." (Participant J)

"We've given him accreditations around carpentry and bricklaying. He's going to college. We're taking him every day and now he's getting the bus." (Participant K)

5j. Positive relationship with YJS staff. YJS staff are in a unique position whereby a court order has required the youths to work with them (unless the order is voluntary). Staff were able to fulfil the role of a positive and trustworthy adult, and they felt most of the youths benefitted from and appreciated this:

"[She said] to me quite late on ... 'People here are nice', she was quite pointed the way she said that 'Everyone here is nice' [talking about] I think everyone she'd met, me, the staff at the place, whereas maybe where she lives every day there's always an edge of aggression." (Participant D)

"I think they all really appreciate us being here because we are a semblance of normality and a positive adult in their life that they don't have". (Participant H)

"You've built that trust. I think they feel it, so they can confide, and they can trust in you. If they need help and support, they come down here for it". (Participant E)

5k. Re-location. Staff also spoke of successful relocation of youths, and how at times this related to positive changes. Changes might occur through provision of appropriate support, or the opportunity for the youth to develop a new identity:

“A change has come about in him simply by being placed in a supported house that suits him down to the ground, that’s come about by something finally being right in his life, in the placement.” (Participant D)

“They move her out of county and she’s doing really well because there was an expectation on her to be that person [where she lived], and so she would be that person. I said to her, “This is the best thing that could happen to you because you can just be you.”” (Participant A)

5l. Peers as a protective factor. Although not specifically related to positive changes, peer support may have prevented situations deteriorating at times. Staff spoke of how peers provided support for each other in difficult time, for example when they experienced problems at home:

“As much as peers can be negative ... for a lot of these young people, they are the people that will help them in times [of need] ... despite everything, they are the people they can go to and that they trust.” (Participant J)

5m. Supportive families. Case workers noted that youths they did not see again (i.e., those who refrained from re-offending) generally had parents who worked well with YJS and took the offence seriously. Additionally, such families took responsibility for, and interest in, their child’s behaviour:

“[Some] parents are so grateful. I had one, “I’ve grounded her. I’ve grounded her until September.” It was flipping June or something. “Yes, and I’ve taken his phone off him. Those are the young people that we never see again, by and large.”

(Participant A)

“If I do have a young person who has got a close relationship with a family member, and that family member has expressed disappointment in their behaviour, then that I always see as a really good factor for desistance.” (Participant G)

Theme 6. Staff's Perception of Psychological, Behavioural, and Environmental Barriers to Desistance

In addition to factors associated with successful outcomes, staff also discussed factors in those youths whom staff perceived as not having made any improvements. Psychological factors related to the youth's initial low resilience that remained unsolved, involving hopelessness, continued low self-concept, suggestions of being excluded from society, lack of emotional regulation, and speech and language difficulties. Behavioural factors involved continued use of unhelpful coping strategies such as avoidance / denial, alcohol or substance misuse, defiance, and novelty seeking. Whilst effective short-term, these strategies were unlikely to lead to positive outcomes long-term. Environmental barriers to change included the use of crime to meet needs, chaotic lives, and the continued influence of criminal communities and negative peers.

6a. Hopelessness. Staff believed hopelessness, and a belief that things could not get better, contributed to some youth's lack of motivation to attempt to make positive changes. Hopelessness, also linked to a fixed mind set (cf. Mullarkey & Schleider, 2020), may also have related to general disinterest in attempting to effect changes:

"They don't see the point. They've got to the point where they've been let down so much, they don't see the point, what's the point in trying? Just this constant feeling of, nothing can get better so why should I try?" (Participant I)

"I've had a young man still on the PlayStation at 18-years-old. I could probably go up to [place name] soon, he's still there sitting. Some people don't change ... you've tried but it hasn't worked". (Participant C)

6b. Continued low self-concept. Staff described youths who continued to have low self-concept, despite extensive YJS intervention. Staff believed this impacted significantly on

the youth's ability to create a new, non-offending life for themselves, but also reduced the likelihood of other positive outcomes such as healthy relationships:

"Six months later, "Oh, I shouldn't be here." He's in college and he's like, "I can't. They just look down on me."" (Participant K)

"A young person I worked with who was using heroin, but I felt very much [this was] because there was a history of it in the family, but also because she feels like she belongs there. People already tell her that she's various words to describe someone who uses substances. As much as you can see positive in someone, you can't make them see positive in themselves...it's very difficult to change that." (Participant I)

"They might not be out and about in the community offending, but they're spending all of their time with a controlling partner. I don't always think that the previous offending behaviours are replaced by positive things." (Participant J)

6c. Suggestions of being excluded from society. Staff described many youths that appeared to feel 'set apart' from the wider society, and how this seemed to prevent them accessing community venues or engaging in more pro-social activities. These feelings of being excluded from society also gave some youths the excuse to commit crimes:

"I think a lot of it comes down to feeling quite disengaged, from what I said before. They think that it's other young people who get to do those things and who do those things, and it's not something that they do. That's just how they perceive themselves." (Participant G)

"I think a lot...feel very different to the general public. They can't associate their lives with [them], or the people they see on TV. They see themselves as very much a different culture, a different group of people. So, I think sometimes that allows people to be aggressive and violent to members of the public because they don't feel like they have anything associated with them." (Participant I)

6d. Lack of emotional regulation. Staff felt some youths ‘went wild’, perhaps in attempting to gain a sense of control over situations they perceived as difficult. The youths lack of ability to manage strong emotions, or their use of unhelpful coping methods such as anger and aggression, then contributed to the offending behaviour:

“They have coped, and they’ve demonstrated elements of resilience there, but then often I find they’re maladaptive coping strategies. You’ve got the lack of emotional regulation, “We’ll go wild when things aren’t going our way.”” (Participant F)

“I think to some [aggression] comes from a sense of being noble and loyal, and sticking by that person and doing right by that person, but then they inevitably get themselves into more trouble, which isn’t great.” (Participant G)

“The immediate response is anger, do drugs, commit crime, get so off that you commit crime. How do you deal with feelings? “Oh, I punch walls, I kick doors.” ... in the opposite way, positive emotions and feeling happy are met in the same way, going out and doing drugs.” (Participant H)

6e. Speech and language difficulties. Staff felt that some youths had lower than average levels of understanding. Some had received official diagnoses, but not all. Often, waiting lists for learning assessments were long. Rather than choosing to not engage, or choosing to continue offending, staff believed that some youths may not have grasped the seriousness of the situation:

“I’ve got one in very similar circumstances to another. One takes full responsibility, one absolutely doesn’t and doesn’t realise the seriousness. [The latter is the] one with ADHD, and speech and language and communication needs.” (Participant E)

“[They have] a low understanding of their contribution to whatever offence they’ve committed... quite limited in that and quite limited understanding of the consequences of what they’ve done and consequences for themselves.” (Participant D)

6f. Avoidance / denial. Staff spoke of youths who continued to deny what they had done or claimed they could not remember doing it. Others lacked basic coping abilities and avoided facing up to their problems. Many youths who used avoidance had experienced childhood adversity, and staff believed they wished to present a ‘strong’ face to the world rather than admit to problems and face up to them:

“I can think of two that I’ve had that just never- even though it’s blatantly clear that, “You’d done that. It’s there on CCTV,” but no, it’s always somebody else’s fault. He was with us until he was 18 and then over to probation.” (Participant J)

“[They] quite often say, “I can’t remember.” That’s a massively common one. “I can’t remember, I went blank.” Or “I did so many drugs, I can’t remember.” So, they are unwilling to visit it and reflect upon it. Whether they can remember, I don’t know.” (Participant H)

“I think we quite often see if something goes wrong in a young person’s life it goes to crisis point quite quickly, and they’re not able to effectively manage those situations. For example, I’ve had a young person whose tenancy was at risk. So then suddenly they fall out with all their family members. They stop engaging with all the support services. Which only makes things so much worse.” (Participant G)

“These kids are usually, in lots of ways they’re all alone, and I think they want to maintain a certain face to the world, there’s a loyalty, there’s a lot of self-denial, I think . . . I think it’s almost protective as well, to not acknowledge ... the truth of it really.” (Participant D)

6g. Alcohol and substance misuse. Most staff spoke of this significant barrier to positive changes, and believed it related to chaotic lives. Such lifestyles also reduced the likelihood of the youths attending appointments and completing their orders with YJS. Youths often used alcohol or substances to manage feelings of stress, anxiety, or depression:

“There is one young person ... who is very close to breach through repeated failures to attend. That is due to excessive crack cocaine and cannabis use, and NPS [new psychoactive substance] Spice use. Ultimately, we’re not a priority within his day.”

(Participant E)

“Addictions are huge things, substance use. They may not be capable of engaging. It’s not that they don’t want to, it’s just that they can’t.” (Participant B)

“Things will go really, really well and I actually, got him into college and he was doing so well. Then, his brother got put into custody and he thought he was going to get moved away. His coping mechanism was to go out and get off his face. Then, when he got off his face, he would do silly things.” (Participant H)

“Things like depression and anxiety as well, I think there’s more of that than what we know. Again ... a lot of them might self-medicate with cannabis.” (Participant J)

6h. Defiance. Staff spoke of some youths who were generally resistant to boundaries and rules. These youths did not like adults telling them what to do. Staff felt that for some, this may have been a way of avoiding having to do things they did not want to such as school:

“Some of the young people who continue to offend will say, “Well, it is just life. It’s just what I do. Stop telling me what to do. I’m going to do it anyway.” (Participant I)

“For a lot of them, you can learn that you don’t have to go to school if you’re aggressive. People don’t bother you if you refuse to do things. So, it’s a good strategy, isn’t it? He’s been in custody, he did nothing prior to that but he gets away with it because people say, “Oh, no, he’s too challenging.”” (Participant K)

“There’s obviously quite an anti-authority attitude that you come across after a while, some just don’t like school and don’t like having to learn, because learnings a hard thing.” (Participant D)

6i. Novelty seeking. Staff said a small but significant group of youth engaged in offending for the thrill. While most would not have been able to afford to participate in pro-social high-risk activities, staff described at least one youth who came from a family who could have funded this, but it did not interest him:

“There are the occasional cases where they need that [thrill]. They need that constant stimulation and that outdoors and the activity, and if they’re not getting it in their community, then they’re going to resort to offending to get that.” (Participant J)

“He was from an affluent family. He could have afforded those adrenalin sports, but it just didn’t interest him.” (Participant A)

6j. Crime to meet emotional and practical needs. Another strong theme was staff’s descriptions of how the youths engaged in anti-social behaviour and crime to meet their needs. These needs were varied and (as well as the novelty-seeking described above) included positive regard, status, desirable material possessions, or simply survival:

“They make him feel good and they egg him on...and that makes him feel good. I suppose then you are going to keep wanting to do it, aren’t you?” (Participant H)

“To some, custody really isn’t a deterrent and if anything [it] is actually a badge of status.” (Participant G)

“They will be part of the group. It’s about them needing to belong, and they don’t belong in their home. That’s what they feel. They don’t belong in their home, so they have their home outside.” (Participant A)

“They are just trying to protect that person that should be protecting them. So, for instance, stealing food because their parents weren’t able to provide food.”

(Participant I)

6k. Chaotic lives. Staff frequently described the chaotic lives of many of the youths and felt this related strongly to poor engagement. However, staff also described a small but

significant group of youths who, although they responded well to the rules in prison immediately resumed chaotic lifestyles when they returned to the community:

“He’s sofa-surfing at the moment. So, in terms of keeping track of days and times when he doesn’t have a phone or a watch, it can be quite difficult. It’s the ones who have chaotic circumstances who are the less compliant.” (Participant E).

“In prison, they comply. They go platinum in prison [To the regime]. They come out and they’re a nightmare. They respond well to that degree of control, but they couldn’t in the community. [In prison] they know that this is when we have meals, this is what we do, this is- They can manage it there, but you can’t do that in the community.” (Participant K)

6l. Negative backgrounds / negative peers continued to influence the youth. We have used the term ‘negative background’ to describe environments that provided little support for the youths. Staff also spoke of youths whose parents had been in trouble with the police and saw crime as normal. These families were often wary of services. Staff described communities in which youths felt being a ‘grass’ as a worse sentence than going to prison. Staff believed negative peers were a key factor in the youths continuing to offend. The availability of criminal opportunities and temptation of earning ‘easy’ money was also too great a temptation for some, and others felt they were better off on state benefits:

“I picked up one young man from custody the other day ... he said, “I’ve got no support.” None of his family were there...he just said, “The only support I’ve got is from Youth Justice.”” (Participant F)

“It’s difficult when you’re here a couple of hours to try telling them that behaviour is wrong when mum and dad are expressing the same views.” (Participant F)

“I think it’s just normalised, to a lot of young people, the offending behaviour. A lot of them have had family members who’ve been to custody.” (Participant G)

“If their ... parents have a negative view of services, or experiences with services, the young person is going to pick that up, or they’re going to tell the young person, “They can’t help you. They’re useless.”” (Participant C)

“One young person ... was looking at going to prison for a very long time. He would not grass on his friends. I’m like, “But this is your life,” and he’s like, “Yes, but I’d rather do my time than have to come back into this community with them knowing what I’ve said. My life’s going to be hell.”” (Participant F)

“I said to one, “I’m so disappointed. You’ve got so much potential. You could have got that job ... and now you’ve got your PIP [a form of disability benefit] and you think you’ve made it.” That PIP is the golden ticket.” (Participant K)

Discussion

This study examined YJS case workers’ understanding and application of the concept of resilience, and their rationale for intervention strategies selected. We also identified factors that staff felt contributed to, or prevented, positive youth outcomes. Abductive analysis enabled us to verify the relevance of a range of group factors with strong empirical and theoretical ties to resilience and youth offending. This approach also enabled identification of previously unrecognised protective factors (e.g., self-belief) and risk factors (e.g., unhelpful, or absent coping strategies) relevant to participants perceptions of both positive and negative youth outcomes.

Staff described several risk and protective factors which did seem to support previous work and theory such as negative self-concept, low self-control, hopelessness, empathy, and optimism. Additionally, self-belief appeared to be paramount to the youths achieving positive changes. Staff perceived that those who believed they were capable of success (i.e., had high self-efficacy in their ability to achieve their goals; Bandura, 1997) increased their likelihood

of achieving a successful outcome. While interview data suggested the opposite beliefs (i.e., hopelessness, negative self-concept) reduced their chances of success.

Perceived Resilience and its Relation to Intervention Selection

Case workers perceived that optimism related to resilience, and therefore sought to encourage a positive future focus in the youths. However, this necessitated first addressing the youths' frequently negative self-concept and low self-belief. Understanding negative identity (negative self-concept) as a risk factor for offending is consistent with previous research (Le Bel et al., 2008; Maruna, 2010). Thus, case workers sought to increase positive self-identity to address the youths' perceived insurmountable differences between their present self (e.g., offender) and future self (e.g., employed, driving legally). Previous research has identified that if this discrepancy was too great, it greatly reduced the youth's consideration of achieving goals pro-socially (cf. Oyserman & Markus, 1990). Our data suggested positive identity development occurred largely via strengths-based approaches, and the setting of small achievable goals, including participation in pro-social work and leisure activities. Staff felt that constructive leisure activities helped build confidence and provided a useful motivational resource to encourage positive changes (see also Gray et al., 2005).

Case workers believed that strength-based approaches appeared to contribute to positive outcomes, leading to them often choosing this in place of 'short sharp shock' interventions or excessive focus on negative behaviour, is consistent with previous studies. For example, an evaluation of successful projects for youths who had offended identified that increased self-confidence, resilience, and/or self-efficacy were fundamental to successful outcomes such as employment, or desistance from offending. The study concluded that such interventions were preferable to punitive or reactive interventions which may have re-traumatised those youths who had experienced trauma (Liddle et al., 2016).

A criminal justice model pertaining to individual risks, needs and responsivity (RNR) clearly informed the approaches case workers used (Bonta, 2007). For example, staff provided more intensive intervention for youths with higher risks, and targeted specific needs. Although at times this was not appropriate, such as when one youth became animated whilst doing a dangerous driving intervention. In relation to responsivity, case workers used pro-social modelling, direct or indirect approaches, and considered individual learning styles. However, as discussed earlier, staff also identified the youths' individual strengths, and implemented interventions to increase personal skills and abilities such as gym passes or music sessions. Previous research has also found that interactions between solution focused approaches (focussing on the solution rather than the problem), the persistence of staff, and their belief in the ability of the youth to change for the good were key to intervention success (Nugent, 2015).

Resilience Factors Associated with Positive Changes

Case workers felt that increased self-belief appeared to relate strongly to behavioural changes. Our interview data also suggested that increased confidence particularly related to the development of a more positive future focus in youths who subsequently desisted from crime or anti-social behaviour. This confidence was frequently evidenced, from case worker accounts, in the belief developed by the youths that they had something to gain, or something to lose. This gain/loss may relate to the same factor; for example, motivation to reduce offending appeared to relate to the extent to which the youths believed they could gain employment, or their own car, and that they would lose this opportunity if they got a criminal record. However, data suggested believing they had something to gain or lose required the youths to be confident that they could achieve their goals in conventional (i.e., not criminal) ways. For some, the potential loss of their freedom should they end up in prison appeared to influence their decision to desist.

It appeared case workers felt that youths often needed to develop empathy for themselves (they were often victims as well as offenders) as well as their victims, to be able to change negative behaviours. To increase empathy staff therefore focused on improving the youth's emotional awareness of themselves and others. Staff utilised their knowledge of what was important to the youth to develop their empathy, such as asking those engaging in dangerous driving to imagine how they might feel if a fast car had harmed a loved family member. Interview findings are consistent with previous studies showing that increased empathy related to reduced offending (Bottoms & Shapland, 2010).

Data also suggested that youths experiencing positive outcomes such as staying in college, improved relationships, or reduced offending also developed better management of emotions (e.g., lower anger or hostility). This is consistent with previous findings that low emotional self-control related to violent re-offending (Grieger et al., 2012). Research has also identified emotion regulation is an important protective factor against the negative influence of anti-social peers, suggesting it is a meaningful area for intervention (Gardner et al., 2008). However, staff sometimes felt that the youth's low cognitive ability prevented them from benefitting from work on emotional control.

Increased comprehension of potential consequences of their behaviour, and increased understanding of the law were key interview themes relating to greater likelihood of positive outcomes. Previous studies noted that an individual's comprehension (of themselves, others, and the world around them) is a central component of resilience (cf. Kumpfer & Hopkins, 1993), and our data is consistent with this finding. For example, research findings in Chapter 2 included the relationship of a strong sense of coherence (which includes comprehension) to desistance (cf. Lindblom et al., 2017). Further studies found low sense of coherence related to anti-social behaviour (Lansimies et al., 2017),

The experience of a positive relationship with their case workers appeared to increase the youth's likelihood of seeking social support in the future. A recent review of resilience studies concluded that "resilience rests, fundamentally, on relationships" (Luthar & Brown, 2007, p. 780). Staff's demonstration of positive regard to the youth appeared to be a contributory factor in the youths improved self-concept. Specifically, staff did not judge the youths, but treated them as children first, offenders second in line with the Positive Youth Development model of justice (Case & Haines, 2014; Drakeford, 2010). Our findings suggested that increased support seeking appeared to relate (at least in part), to the youth's experience of having a positive relationship with YJS staff. For example, some returned to YJS to access further support after their orders had ended, indicating increased use of adaptive coping, in this case accessing social support (Carver, 1997). Staff noted that youths who desisted were also more likely to communicate more with their parents, consistent with previous research (Stouthamer-Loeber et al., 2002). Social bonds, social support and a positive relationship with an adult are key themes in empirical research relating to desistance and positive outcomes (e.g., Werner et al, 1989). Findings of the current study also suggested greater self-belief related to increased likelihood of seeking social support.

Case worker interview data also suggested an increased internal locus of control (i.e., the youth's belief that they could affect outcomes) contributed toward to goal attainment. One review of literature relating to child resilience identified locus of control as a consistent factor, unaffected by socio-demographic factors (Luthar & Zigler, 1991). Arguably, a locus of control also relates to a degree of self-belief, making a strong case for interventions that encourage this eventuality.

Factors Associated with Lack of Positive Changes

Staff perceived that many youths who re-offended continued to use avoidance-based coping strategies such as substance abuse or denial, or other unhelpful strategies such as

aggression or defiance. Several factors may have related to this, for example defiance has been associated with trauma-related “survival” coping (Ford, 2005). Staff also thought some youths needed others to perceive them as ‘strong’, which may link to poor attachments, difficulties with trust and viewing the world as an unsafe place (Bowlby, 1988). Thought to stem from low trust in others, a need for control is at the core of criminal thinking (Mandraccia et al., 2007). Thus, perceived unhelpful coping strategies may be an attempt to control the anxiety often experienced by offending youths (Stuart & Baines, 2004). The youths (and their families) low trust, according to staff, also related to services, which staff believed was potentially due to negative experiences of services in the past. This appeared to contribute to the non-engagement of some youths. The youths may also have wished to avoid addressing painful emotions (Edland-Gryt & Skatvedt, 2013).

Low trust may also have related to staff’s suggestions that many youths (and their families) felt ‘outside’ of society. As a result, youths felt more comfortable with peers from similar backgrounds who also engaged in anti-social behaviour. Based on these beliefs, staff felt these youths were also less likely to engage in pro-social leisure activities and more likely to continue offending. Previous research has found that engaging with anti-social peer groups constituted a significant risk factor (cf. Huijsmans et al., 2021). Consistent with strain theory, those youths engaging in anti-social or criminal behaviour may have been attempting to address unmet needs for care and attention (Akers & Sellers, 2004). For example, staff felt engagement with anti-social peers met the youths needs for belonging, positive regard, and status (see also Johns et al., 2017) meaning peers were a difficult issue to address, and a rationale for staff’s adoption of strengths-based approaches including promotion of training or positive activities to help address the youth’s needs, and increase future aspirations (Boeck et al., 2008).

To an extent, case worker interview data substantiated the challenge model of resilience that proposes a curvilinear relationship between risk factors and resilience (Fergus & Zimmerman, 2005). That is, youths with many risk factors (e.g., unsupportive homes, negative school experiences, and poor emotional and social comprehension) were also likely to be those who did not achieve positive outcomes. Overall, these findings suggest that high levels of adversity impaired the psychological development of resilience in some youths. This also supports previous research that identified strong and positive correlations between the extent of childhood adversity and persistence of offending (Baglivio et al., 2014; Basto-Pereira et al., 2016). Results were therefore consistent with previous research findings that conditions which failed to support normative psychological development, and perhaps included experience of trauma, constituted risk factors relating to poor outcomes such as aggression or relationship difficulties (Saarni, 2008). Those youths who (perhaps) due to high levels of adversity were unable to develop the social or emotional skills arguably necessary for consideration of conventional goals, were at greater risk of continued offending.

An interesting finding in the current study was that staff spoke of a small but significant sub-group of offenders thrived in custodial placements by responding well to order, structure, and routine of prison or incarceration. It is possible that these settings met their needs for social structure and discipline. However, on return to their communities' staff expressed disappointment that their chaotic lives resulted in re-offending. Case workers spoke of some youths for whom fear of prison led to desistance, but others who saw custody as a 'badge of honour'. Therefore, staff generally felt that although custodial sentences were an effective deterrent for some youths, alternative ways of gaining status (other than a custodial sentence), or the development of social structures and routine may be more effective for others.

Staff's Perceptions of Successful Interventions

Our data analysis also identified a small difference in the accounts of those staff with different training backgrounds on what they regarded as successful outcomes. That is, probation workers were more likely to measure success through re-offending alone. While social workers felt that YJS should assess and give more focus on the young person achieving or understanding healthy relationships. Social work staff felt that youths who had stopped offending but remained in a controlling relationship or wished to remain in receipt of state benefits, failed to fully achieve success. However, in addition to reducing negative behaviour, both disciplines discussed the importance of supportive mentoring-style relationships, individualised approaches, and focusing on the youth's strengths. This may in part due to training between the two disciplines being not dissimilar, but also because all staff we spoke to had over 5 years of experience working within the YJS and thus adopted the cultural norms of the service. Staff with less experience or from different professional backgrounds may have reported something different. These would be interesting avenues for future research.

Strengths and Limitations

A strength of the study was that it included male and female Youth Justice case workers who varied in age and were from different professional backgrounds. Additionally, we included staff from both North and South Wales. These two areas of the country share similarities but also have marked cultural differences, most notably the spread of urban and rural practice locations. Thus, using staff from both areas helps with the generalisability of the findings. This research was also subject to potential limitations. One of the limitations was that we did not interview the youths themselves. Doing this may have allowed us to gain valuable insight. A second limitation was that case workers Ethnicity was white British or white Welsh, so it is unclear as to whether results would have been the same if staff had been sampled from different ethnicities.

Implications for Practice

Staff felt interventions that were successful were those that sought to replace negative with more positive behaviour, such as by drawing out the youth's strengths, and working with them towards constructive leisure or employment goals. Thus, we recommend that YJS staff focus more on strength-based approaches as opposed to those which are more punitive. If Youth Justice do use rewards, for them to have the desired effect of motivating the youths and seeking to avoid entrenching negative self-concept, they should be effort based and not outcome based. However due to current economic climates YJS may not have the staffing or financial resources to provide such activities. Nevertheless, these findings are important to include and may provide useful research evidence for any future funding applications for new projects.

Relationship building as the establishment of trust with the young person was central to effective engagement and positive outcomes. An individualised approach enabled staff to consider the personality and interests of the individual to achieve meaningful engagement. Knowing the youths also allowed staff to challenge directly or indirectly the youth's beliefs and inclinations, thus raising their awareness and understanding of their own responses and behaviours. As such, it appears paramount that staff spend time developing relationships with their clients to be better able to focus on individual needs. Finally, increased awareness and confidence in the youths appeared to relate to reduced offending via increased motivation to change. Interventions likely to improve awareness and self-efficacy include mindfulness (Costello & Lawler, 2014), understanding emotions (Hoogsteder et al., 2018; Hubble et al., 2015), positive self-talk (Treadwell & Kendall, 1996), and staffs use of empowering questions (Palmer et al., 2012)

Implications for Research

We have identified several key avenues for further research. For example, research should fully explore the fundamental differences in youths who failed to develop the

psychological resilience relating to positive outcomes, compared to those that did (despite experiencing similar levels of adversity). It would also be extremely useful to interview the youths themselves, and perhaps their families, to identify their views on YJS interventions. For example, what aspects of the intervention they felt benefited them the most and whether there might be additional approaches that would further increase intervention efficacy. Finally, targeted training for YJS case workers using tools and techniques specifically designed to increase constructs of psychological resilience such as self-efficacy (self-belief), optimism, and emotional regulation may be a useful development. Future evaluations of such resilience and strengths-based approaches in comparison to control groups are necessary to draw any firm conclusions in this area. To deepen our understanding of the relationship between increased psychological resilience, psychological development, and behaviour change, there is a need to fully assess interventions that aim to increase psychological resilience. As the YJS moves towards a more resilience-based approach, implementing empirical evidence that informs such changes are paramount.

Conclusion

Research into what works to increase positive outcomes such as reduced offending in Youth Justice is profuse, global, and has identified numerous contributory psychological and environmental factors. It is therefore unlikely a single model of intervention would be able to provide everything needed to elicit change for the better as this would likely depend on individual risks and needs. We would therefore fully recommend an individualised approach. Our comprehensive analysis of interview findings, and the importance of emphasising strengths and pro-social activities, in addition to addressing risks and needs, was key in initiating positive change. This can be utilised by those developing future services and

policies to increase the prospects of youths and increase the likelihood of positive psychological and behavioural outcomes.

Chapter 4

A Two-Part Experimental Study:

1) Examining the feasibility of Psychological Resilience Intervention

Training for Practitioners:

2) Examining Practitioner-led Interventions with Youth who have

Offended to Assess Effect on Psychological Resilience and

Recidivism

Abstract

This chapter develops and tests the efficacy of an applied psychological resilience intervention for youths who have offended in North Wales. The purpose was two-fold. First, we aimed to increase Youth Justice case workers knowledge and confidence in delivering psychological interventions to young people who offend through providing targeted training to one Youth Justice Service (YJS). Second, we aimed to significantly increase psychological resilience of the youths with an outcome aimed to reduce recidivism. There are therefore two parts to this study.

In Part 1 of the study, we assessed training efficacy using a quantitative pre- and post-design. We compared confidence to deliver psychological resilience interventions in an experimental sample of ($n = 9$) case workers and a control group of ($n = 9$) case workers from a separate YYS. Although heavily hampered by Covid-19 restrictions, our initial findings indicate a significant group x time interaction on staff confidence, where staff who received the intervention training significantly increased their confidence over and above the control group ($p = .000$).

In Part 2 of this study, we assessed the effectiveness of applying the intervention by case workers with youths who had offended. To do this, we assessed pre- and post-measures of youth resilience – via two viewpoints: Youth self-report and YYS case worker report on the youths. We also examined official re-offending data post-intervention. Using a quasi-experimental pre- and post-research design, we compared an experimental group of youths ($n = 13$) with a matched wait-list control group ($n = 6$) from a separate YYS. At the time of writing, pre- and post-resilience and offending data was available for ($n = 5$) of the experimental group and ($n = 4$) of the control group. According to case worker and self-reported resilience, a significant interaction occurred where youths in the experimental group significantly increased in resilience between Time 1 and Time 2 (the interactions were

significant at the $p = .004$ and $p = .012$, respectively). Youths in the control group did not significantly increase in resilience. After completing the intervention, a mean of 92 days later, none of the youths in the experimental group had re-offended. Further, according to official data a mean of 59 days later, two of the youths in the control group who had completed their standard interventions had re-offended.

Introduction

Definition & Relevance of Psychological Resilience

Research shows that despite considerable adversity, resilient individuals tend to achieve better outcomes than those who are less resilient. In a longitudinal 30-year study examining risk factors and life outcomes, Werner (1989) found that young people ‘at risk’ of poor life outcomes were living in poverty, with mothers who had little formal education, and in families involving discord, desertion, divorce, alcoholism, or mental illness. Interestingly, of this cohort, 1 in 3 children went on to become ‘resilient’ adults defined as those who were employed, not in prison, married and without mental health issues. Werner reported that possible antecedents of resilient outcomes were due to higher autonomy, better communication skills, greater reading and reasoning skills, more engagement in positive activities, positive self-concept, and an internal locus of control compared with those did not become resilient adults (Werner, 1989).

As noted throughout this thesis, the current study followed the definition of psychological resilience as “*Good psychological functioning and good behavioural outcomes despite adverse circumstances expected to jeopardise normative growth & adaptation*” (Mukherjee & Kumar, 2017; p. 3). However, to have “good psychological functioning”, the individual must have a range of psychological strategies to use at their disposal. For example, Fletcher and Sarkar (2013) in their review and critique of psychological resilience posited that despite its various definitions, most involved the core concepts of adversity and positive adaptation. In other words, resilience is the ability to use personal qualities to withstand pressure. Further, these qualities include the ability to sustain wellbeing under pressure and return to a state of normal functioning following adversity (Fletcher & Sarkar, 2013).

A central principle of the concept of resilience is therefore sustainment of, or an increased likelihood of, positive outcomes after adversity (Luthar & Cicchetti, 2000). In

support of theories of resilience, a report from Public Health England suggested resilience may be a contributing factor in the development of healthy behaviours, achievement of higher qualifications and skills, and improved mental wellbeing (Allen, 2014). Overall, resilience appears to be a multi-faceted ‘umbrella’ term covering a wide array of concepts and processes that allow one to overcome adversity. Factors associated with resilience that increase the likelihood of positive outcomes despite adversity include self-efficacy (Bandura, 2001), self-regulation (Gardner et al., 2008), and an internal locus of control (Bowen et al., 2008; Werner, 1989).

Researchers believe that resilience develops through the experiencing of and overcoming of adversity (e.g., Cicchetti, 2010). The challenge model of resilience describes it as an ‘ongoing developmental process’ (Yates et al., 2003:112). Specifically, regular low levels of adversity enable youths to build resilience but regularly experiencing high levels of adversity compromises the development of resilience in some individuals (Luthar & Zelazo, 2003). In other words, an inverted U relationship exists between adversity and resilience.

Backgrounds and Profiles of Youths who Prolifically Offend

Repeat or prolific offenders have often experienced above average levels of adversity, and research has shown that these individuals tend to lack psychological resilience (Bowen et al., 2008). These youths also frequently display poor social (e.g., school failure) and cognitive (e.g., inability to regulate emotions) outcomes (Liddle et.al., 2016). This suggests an increased likelihood of YJS case workers working with youths at the upper end of the challenge model (i.e., those who have been unable to successfully overcome high levels of adversity).

Complex and chaotic lives reported in relation to youths who have offended are common and are a potential impediment to meaningful intervention (Skuse & Matthews, 2015). Chaotic lives include numerous foster placements, witnessing domestic violence, and

being subject to abuse and neglect (Beyond Youth Custody, 2020). One large study found that in a sample of over 25,000 youth, adverse childhood experiences had a direct effect on re-offending via negative perception of others and their environments, and an indirect effect where re-offending stemmed from an inability to regulate negative emotions (Wolff & Baglivio, 2017). Wolff and Baglivio (2017) found difficulties processing emotions such as frustration and hostility, led to increased engagement in antisocial behaviour. School difficulties in youths who had offended such as exclusion are also common and as a result, academic attainment is often poor (Bell & Romano, 2015). A Ministry of Justice report revealed that half of 15–17-year-olds who had offended had the literacy or numeracy levels of an average 7–11-year-old (Ministry of Justice, 2016, Table C1b). It is possible that higher levels of adversity experienced by this group resulted in poor cognitive development. Therefore, YJS may need to tailor interventions to this reading age where appropriate. Studies also show that high levels of resilience can help individuals to overcome life difficulties (Gloria & Steinhardt, 2016).

Problem Statement (Step One)

Although traumatic childhood experiences and negative psychological states frequently relate to persistent Youth Justice involvement, few interventions have aimed specifically to increase the psychological resilience of youths who have offended. Even fewer have examined whether increasing psychological resilience via intervention contributed to reduced re-offending. In Chapter 2, we were only able to identify two studies that measured the relationship between resilience and offending². First, in a boot camp intervention, Benda et al. (2002) found increased resilience (using a non-validated questionnaire) related to reduced re-offending. However, other factors such as less susceptibility to anti-social peer influence, and their belief in the treatment programme, had a stronger relationship with re-

² Neither study met the criteria for the Systematic Review

offending. Benda et al. (2002) concluded that future interventions should include elements pertaining to factors known to increase susceptibility to peer influence such as low self-esteem. However, lack of a control group and the use of non-validated questionnaires makes it hard to draw firm conclusions.

Second, Fougere et al. (2015) found no relationship between resilience and re-offending following a standard detention centre programme of treatment. However, the authors suggested that the youths may not have the level of awareness required to accurately self-report socio-psychological factors and thus potentially have over-estimated or under-estimated their resilience (Fougere et al., 2015). Additionally, Fougere and colleagues reported that PhD researchers (i.e., strangers) completed the assessments with the youths and it may be possible the youths had not established the level of trust required for honest self-reflection. These findings warrant further research in this area.

Method (Step Two)

Experimental Study 1 - Intervention Development & YJS Staff Training

Our aim was therefore to increase psychological resilience in young people via a psychological resilience intervention delivered to the young person's case worker within the YJS. The intervention was developed from our systematic review of evidence (Chapter 2) and qualitative data collection (Chapter 3). It was also informed by qualitative research evidence containing the voice of the youth, and the 'what works' literature.

Systematic review of psychological interventions. Firstly, the intervention drew evidence from our published systematic review of successful psychological interventions for youth who had offended in Chapter 2 (Hodgkinson et al., 2020). Falling under the broad umbrella of resilience, several factors stood out in relation to the youths achieving positive outcomes (e.g., reduced offending) which appeared also to relate to improved cognitive

functioning. For example, one Swedish study found that ‘sense of coherence’ (SOC) (cf. Antonovsky, 1979) correlated with near total desistance albeit in a small sample (Lindblom et al., 2017). A Dutch intervention called Re-ART found that social information processing, CBT, and psychological strategies such as mindfulness led to significant and sustained desistance post-intervention (Hoogsteder et al., 2019). Ford and Hawkes (2012) identified that a strengths-based approach including a combination of CBT and psychoeducation, was successful in reducing violent incidents and subsequent re-offending. Hubble et al. (2015) reported that improvements in facial emotion recognition (FER) reduced violent re-offending. Additional psychological factors relating to reduced offending included increased positive decision making (Strom et al., 2017), reduced defiance (Caldwell et al., 2006), increased self-concept, better adaptability, and greater control of aggression (Farrington et al., 2012).

Qualitative findings from Youth Justice case workers. Further informing the theoretical underpinnings of the intervention, in-depth interviews with Youth Justice case workers revealed several key themes relating to both positive (non-offending) outcomes and improved psychological resilience. Interventions and delivery methods associated with positive changes addressed low self-concept, low comprehension, and perceived stigma. Staff did this by focussing on the youth’s strengths and encouraging positive activities. The psychological changes associated with these methods in those youths achieving positive outcomes (such as staying in college, employment, or reduced offending) included increased awareness, development of future focus, empathy, adaptive coping strategies, improved self-concept, and greater self-confidence. Findings regarding the effectiveness of strength-based working, as opposed to solely focussing on what the youths had done wrong (deficit-based) validates the Child First, Offender Second model. This model avoids adulterating children and instead, seeks to foster the youth’s motivation and commitment by identifying and

encouraging positive interests (Drakeford, 2010; Haines & Case, 2014). Liddle et al. (2016) also recommend a strengths-based rather than punitive approach.

Staff also highlighted the centrality of a trusting relationship for meaningful engagement of the youths. It is likely that the prosocial bonds created strengthened the likelihood of successful reintegration into conventional work and leisure activities, making desistance more likely (e.g., Bouffard & Bergseth, 2008). An individualised approach was also key to effective engagement. Staff did not treat each youth in the same way, but depending on the youth's personality, abilities, and psychological profiles, utilised formal or informal approaches, verbal discussions, and different activities. To increase the youth's agency which case workers often perceived as low, they selected interventions based on the youths presenting needs. Many case workers also attempted to give the youth an element of choice (in line with a child-centred approach). An adaptive coping strategy relating to resilience that some youths developed, was an internal locus of control (LOC) (i.e., the belief they had some control over their lives). This is consistent with previous studies identifying an internal LOC positively related to desistance (Bowen et al., 2008). In those youths that were not able to change, or said they did not want to change, staff described continued low comprehension, low self-concept, unhelpful coping skills, and dysfunctional family backgrounds as potential barriers.

Qualitative literature: Voice of the youth. The voice of the youth (as well as staff) is often absent in the literature on intervention development. A brief overview of the evidence in relation to desistance revealed several overarching themes supporting the importance of a trusting relationship with staff. Successful graduates from residential programmes in the U.S. study said that a good relationship with their worker was key to their successful transition out of offending (Mincey & Maldonado, 2011). Positive relationships may have helped negate experiences of previous negative labelling. In developing trust, youths spoke of workers who

provided a ‘tough love’ approach, increased their insight, helped them overcome problems, showed compassion, interest, and respect (Mincey & Maldonado 2011). Barnert et al. (2015) echoed these findings where young people said they wished for love and attention, discipline and control, role models, and perspective. Interviews with U.K. youths suggested that normalising relationships with Youth Justice staff were central to their development of a positive identity (Johns et al., 2017).

A further theme from the qualitative literature related to the youths need for autonomy or agency (suggestive of an internal locus of control). For example, a U.K. study found that a lack of trust in adults and feelings of powerlessness were key contributory factors in those leaving care who had offended (Day, 2017). Data gathered from youths interviewed by Wainwright (2013) suggested that self-determination theory (comprising autonomy, competence, and relatedness, Deci & Ryan, 2008) were extremely important in their transition away from offending. A thematic analysis of New Zealand youth at risk of offending revealed that a search for agency (autonomy) was central in their successful (i.e., non-offending) transition to adulthood (Munford & Sanders, 2015). Reflected in three thematic clusters, the autonomy they described involved making sense of the world, having a voice, and acting on the world (Munford & Sanders, 2015).

‘What Works’ literature: Youth offending. Maruna and Mann (2019) reviewed the ‘what works’ literature (i.e., desistance) on interventions within both youth and adult justice systems. Their findings revealed that most effective interventions targeted higher risk individuals and taught cognitive skills such as emotional regulation and perspective taking (Maruna & Mann, 2019). Previous research has also concluded that as desistance is a highly individualised process, one-size-fits-all interventions are less effective (McNeill et al, 2012). However, individuals who are sufficiently motivated to change and optimistic about their future are more likely to successfully desist from offending (Sapouna et al., 2015).

Summary of Theoretical Findings: Rationale for Psychological Resilience Interventions

Overall, several approaches appeared to be particularly effective in enabling the youth to develop resilience and achieve positive outcomes. Following findings from Chapters 2 and 3, plus the voice of the youth, and the ‘What Works’ literature, the current intervention broadly fitted into three main topics covered in three separate workshops. The first workshop focused on methods to increase sense of coherence (SOC, Antonovsky, 1991) in young people such as emotion recognition, psychoeducation (teaching the brain) and identifying available resources. The second workshop focused on Strengths-based approaches including strength-based CBT© (Padesky & Mooney, 2012), plus elements from traditional Cognitive Behavioral Therapy (Beck, 2005). A resiliency paradigm involves the overcoming of difficulties through use of resources including internal (e.g., strong identity) and external (e.g., social support) assets (Zimmerman et al., 2013). Identifying competencies is also likely to increase motivation (Deci & Ryan, 2008). The third workshop included applying a process model of resilience that may be relevant to youths who have offended. As well as managing and recovering from adversity (normally a focal point of reactive resilience definitions), this model also incorporates the processes of anticipation and minimisation of adversity (proactive responses to potential adverse situations) which may be particularly relevant to youth who have offended (Alliger et al., 2015; Petit et al., in prep). Additional techniques included in the third workshop included mindfulness and self-talk.

Rationale for workshop one: Sense of coherence. Due to our findings that increased SOC (finding life ‘comprehensible, manageable and meaningful’, Erikson, 2016) was associated with desistance via both our systematic review (Hodgkinson et al., 2020) and according to data from our qualitative interviews with YJS case workers, we decided the first workshop would include methods to increase SOC. Overall, a strong SOC helps individuals to comprehend problems (internal or external), identify and draw on necessary resources

(internal or external), and find meaning in life experiences. Believed to develop in adolescence, SOC relates to the development of cognition through learning and understanding (Moksnes et al., 2012). A systematic review found low SOC related to aggression, substance misuse, and dropping out of school (Lansimies et al., 2017). Our case worker interviews also highlighted that these factors related to continued offending. Other studies have suggested SOC may provide a promising avenue of therapeutic intervention for childhood trauma (van der Hal-van Raalte et al., 2008).

SOC involves identifying and drawing on resources from eight different areas. These areas pertain to knowledge, identity, coping, social support, cultural roots, material resources, preventative health, and state of mind. We utilised adaptive coping as a protective factor necessitating the use of available resources (Cicchetti, 2013; Troy & Mauss, 2011; Zimmerman et al., 2013). While the illustration of potential resource areas may itself be a useful tool, the current intervention draws from three of them; knowledge, identity, and state of mind.

Firstly, a lack of emotional comprehension (knowledge) is frequently identified in youth who have offended (Möller et al., 2014) and may reduce the youth's ability to engage in psychological interventions. Therefore, it seemed pertinent to address this factor first. For this intervention, we included (with kind permission) the Cardiff Emotion Recognition Training (CERT; Hunnikin et al., 2021; Wells et al., 2020). We also created a pack of feelings and emotions flashcards and suggested several ways in which case workers could use these to engage the youth in discussions regarding emotional understanding. Increasing emotion recognition (comprehension) may also help address the social information processing deficits often found in youth who had offended (Hoogsteder et al., 2018) thus improving behavioural responses to social situations (Salekin, 2015). Our qualitative interviews with case workers (Chapter 3) identified that youths often used unhelpful coping

strategies such as aggression and use of substances to manage emotional and situational difficulties. Studies show that self-regulation (necessitating emotional understanding) is also a protective factor against offending (Gardner et al., 2008). Inability to manage emotions is suggestive of low self-control and a precursor of anti-social behaviour, therefore techniques to manage emotions are particularly relevant to youths who have offended (Gottfredson & Hirschi, 1990). We therefore included simple ways that case workers could enable the youths to better understand their 'alarm' (limbic system) and help the thinking part of their brain (cerebral cortex) take control. Comprehension (of themselves, others, and the world around them) is a central component of resilience (cf. Kumpfer & Hopkins, 1993).

Secondly, we included techniques to enable the youth to strengthen their self-identity. Comprehension (including of oneself) is a central component of resilience (cf. Kumpfer & Hopkins, 1993). As well as being a resource related to SOC, self-identity occurs via normative adolescent development (Erikson & Erikson, 1998). A poorly developed self-identity has been associated with susceptibility to peer influence (Dumas et al., 2012). As studies show many youths who have offended have had disrupted childhoods, self-identity may therefore be a key area for intervention.

Finally, we included empowering techniques to increase self-belief, i.e., a positive state of mind. Super et al. (2006) recommend the use of empowerment and reflection to increase SOC in general populations. That is, empowerment affects behaviour through increasing the individual's likelihood of using their resources when faced with difficulties, and reflection increases understanding of adversity and resources available. Case workers regularly encourage reflective work with the youths. An understanding of SOC, identification of potential deficiencies, and a focus on methods to strengthen these may further enhance this process, enabling the youth to reflect and find meaning in situations. We therefore included a set of empowering questions to encourage the youths thinking in terms of future possibilities.

Rationale for workshop two: Strengths-based approaches. Liddle and colleagues (2016) have recommended strengths-based approaches for youth who have offended. Research has also identified low self-concept is a risk factor for poor life outcomes, while increased self-concept related to reduced offending (Farrington et al., 2002; Werner, 2005). In Chapter 3, YJS case workers also adopted a strengths-based approach which they believed counteracted the low self-concept they perceived in the youths. From findings in Chapter 3 case workers felt strengths-based working and increasing the youth's positive self-concept related to positive outcomes, the intervention therefore included a CBT technique adapted by several clinicians. Strengths-based Cognitive Behavioural Therapy (SB-CBT©, Padesky & Mooney, 2012) is an alternative to traditional CBT. The difference is that SB-CBT seeks to increase positive core beliefs, while the focus of conventional CBT is to change negative core beliefs (Padesky & Mooney, 2012). Studies found SB-CBT was successful with individuals with learning difficulties and those on the waiting list for psychotherapy (Padesky & Mooney, 2012; Victor et al., 2016). As many youths who have offended have (un)diagnosed mental health issues and speech and language difficulties, we considered it may also be useful for our population (Fougere et al., 2015; Snow et al., 2015).

SB-CBT© is a 4-step process that involves the individual developing general resilience strategies and using these in an area where they have been experiencing difficulties (Padesky & Mooney, 2012). This technique may also therefore increase the autonomy or agency in youths through its focus on the participant creating their own unique resilience strategies (e.g., Munford & Sanders, 2015). This process may help youths to develop adaptive coping strategies (via self-efficacy) to increase resilience (e.g., Bandura et al., 2001). Research has also identified that adaptive coping strategies such as self-regulation and task-oriented coping contributed to resilient outcomes in whole-school samples (Dishion &

Connell, 2006). Overall, SB-CBT© provided a specific strengths-based intervention that YJS case workers could incorporate into their tool kit.

When combined with other approaches, traditional CBT has been successful in reducing offending (e.g., Hoogsteder et al., 2018; Lindblom et al., 2017). We therefore also included elements of traditional CBT including understanding of core beliefs, and identification and reframing cognitive distortions (cf. Schönenberg & Jusyte, 2013). Although not strictly a strengths-based approach, identifying and addressing unhelpful thoughts may potentially contribute towards the youth's increasing self-identity and self-understanding.

To further enable the youths to identify their unique qualities and strengths, an additional strength-based technique included in this workshop was the character strengths survey (Via Institute on Character, 2021). This strengths-based profiling intervention significantly increased resilience following the use of a range of methods to build on individual character strengths for homeless youths (Cooley et al., 2019). An adaptation of performance profiling used in sports psychology (cf. Weston et al., 2011), strengths profiling is a useful tool to increase the effectiveness of goal setting through increasing self-awareness and motivation.

Rationale for workshop three: A new process of resilience. A NASA study of how individuals coped in high-risk environments identified that resilient individuals were able to anticipate and minimise problems, manage in the moment, and mend or recover quickly following adversity (Alliger et al., 2015). The disproportionate number of youths in the Youth Justice system reporting adverse childhood experiences suggest many reside in high-risk environments (cf. Bowen et al., 2008). Alliger et al.'s process of resilience has been further developed by a PhD thesis (Petit et al. in prep), which formally separated the process of anticipate and minimise (these were described as a single process in Alliger's work).

Specifically, Petit and colleagues developed a 13-item scale to measure how well an individual engages with each stage of the four-stage process.

The elements of anticipating and minimising problems may be particularly pertinent to youths considering the impulsive behaviour often noted in those who offend (e.g., Ebstein & Belmaker, 2002). Additionally, numbing of fearful emotions (often due to previous trauma) and low sensitivity to cues of impending danger, has been strongly associated with all types of delinquency (Allwood et al., 2015). Previous research identified that improved problem solving was a protective factor contributing to a range of positive outcomes including reduced offending (Masten et al., 1990). Studies have also identified that in adults, problem solving correlates strongly with the presence of an internal locus of control (i.e., a belief in own ability to control life events; Konan, 2013). Studies have shown an internal locus of control is also a characteristic of resilient individuals (e.g., Luthar, 1991). The 13-item resilience process scale developed by Petit et al. (in prep) will provide a useful tool for case workers to identify where the youth may require further intervention (i.e., anticipation of threat, minimise the potential consequences of upcoming threat, manage in the moment, and recovery from adversity). As with all the tools and techniques throughout the workshops, the process of resilience is a prompt to encourage discussion, understanding, and development of resilience.

The third workshop included several further tools and techniques for case workers to select from in addition to those from the first two workshops. These techniques included mindfulness, which increases the ability of the individual to be present in the moment increasing attention and awareness (White, 2014). Studies have also shown that mindfulness can reduce anger and stress (Costello & Lawler, 2014).

Another technique incorporated was the CBT traffic light system (Reiner, 2018). This is a useful framework for self-regulation whereby the youth can identify whether they are in

green (feeling positive emotions), yellow (need to assess how they are feeling), or red (out of control) zones. This strategy may help youths to minimise problems by noticing when they may be at risk of losing control. We also included a discussion of how emotions can be helpful or unhelpful, but we also stressed the importance of emphasising to the youths that no emotion is ‘bad’.

The intervention also included ‘self-talk’, that is the importance of being aware of one’s internal narrative (Burnett, 1994). Negative self-talk may diminish confidence, while studies find positive self-talk increases confidence (Burnett, 1994). Confidence is paramount in affecting performance (Baumeister, 1996), and according to our case worker interviews in Chapter 2, confidence was a key factor for the youth considering changing behaviour from negative to positive and then acting towards this change. Theoretically, self-talk might act as a source of verbal persuasion increasing perceived self-efficacy to ‘manage’ in the moment (i.e., when problems occur that they have not been able to minimise). Self-talk may also assist with the ‘mend’ part of the process (e.g., “I will be stronger from this”).

Rationale for Individualised Interventions

Thesis findings so far suggest that interventions are more likely to be successful if they are individualised and include elements of motivation to change (e.g., Deci & Ryan, 2008). Studies show that pathways to desistance are a highly individualised process (e.g., McNeill et al., 2012). A meta-analysis concluded that CBT was most effective when sessions were individualised and delivered on a one-to-one basis, rather than group sessions (Landenberger & Lipsey, 2005). Interviews with Youth Justice case workers in Chapter 3 found that individualised approaches were essential to engage the youths meaningfully.

Study Design & Evaluation for Experimental Studies 1 and 2

The current study used a pre- and post-experimental matched group design to assess the efficacy of both studies, i.e., the initial training and the case workers subsequent

intervention application with the young person. We chose this method rather than a randomised design due to ethical and practical considerations. For example, using a wait-list control group meant that control group staff and youths could then receive the training, thus avoiding withholding interventions that may prove beneficial. In addition, the limited sample size of both case workers and youths (due to the predominantly rural nature of Wales) meant randomisation would have been nearly impossible to achieve.

To provide comprehensive evidence of research impact, the current study adopted a 5-step mixed-methods protocol specifically designed for services wishing to reduce crime and re-offending (Bisset, 2016). This model offers alternatives to evaluation using randomised groups for intervention development and includes an outcome focused planning tool (Bisset, 2016). Step one of the protocol consisted of identifying the problem. In this case, repeat offending. Step two involved reviewing research evidence to develop a theoretical understanding of the likely processes of change (i.e., increased resilience). Steps three and four involved the development of the intervention, outlining change processes and the outcomes expected (e.g., reduced re-offending). Step five consisted of evaluating the extent to which the processes had achieved the outcomes anticipated, and we can make how improvements (see Figure 1).

Experimental Study 1: Participants

Pilot Youth Justice resource staff. We initially piloted the intervention with five female Youth Justice resource staff from one Youth Justice Service. The role of the resource staff was to provide targeted support for the youths, such as victim awareness, restorative justice, and health and wellbeing. The training consisted of piloting the three 4-hour workshops at Bangor University throughout November and December 2019. The resource staff received an intervention manual that contained all the resources for each training session

for them to feedback on. Staff verbally discussed with us the level and detail of the intervention and where we could make improvements.

Experimental group Youth Justice case workers. Following the pilot training, we next delivered the three 4-hour intervention workshops to a group of nine Youth Justice case workers. Their average age was 42.3 years old ($SD = 12.29$). Of the group, six staff were male and three were female. Four staff described themselves as White Welsh and five as White British. The role of case workers involves provision of support throughout the youth's orders. They also have responsibility for overall management of each 'case'. Following ethical approval from Bangor University's School, we delivered the training at Bangor University throughout February and March 2020. The case workers agreed to use the intervention tools and techniques with youths they worked with as an individualised approach. The case workers also received a manual for each workshop to keep, plus four packs of laminated flash cards. Following the workshops, we amalgamated the key tools and techniques from each resilience training session and each manual into one Resilience Resource Pack for YJS Case Workers (see Appendix C).

Control group Youth Justice case workers. A total of nine case workers from a neighbouring Youth Justice Service agreed to act as the control group. Their average age was 41.8 ($SD 10.42$). Of the group, two staff were male and seven were female. One described themselves as White Welsh, seven as White British and one as Mixed Race.

Experimental Study 2: Participants

Youth experimental group. The Youth Justice case workers who had completed the intervention training recruited sixteen youths to participate in the intervention. Case workers gave the youth and their parent/caregiver a participant information sheet outlining the aims of the intervention, and what taking part would entail. Both the youth and their caregiver, if they agreed to participate, then signed the consent form. Although the study did not legally require

parent/caregiver to consent if the youth was over 16, we felt it was good practice to request this (and the parent/caregiver may then be more supportive of the project). Staff also informed youth participants that they could opt out of the intervention without giving a reason at any time. All youths approached agreed to take part. This voluntary aspect follows previous research where participation was voluntary (e.g., Lindblom et al., 2017). Use of this approach provided the youth a modicum of control which is an important aspect of increasing resilience and motivation (Munford & Sanders, 2015). Case workers gave all experimental youths a Youth Resilience Pack containing resilience exercises and sessions (see Appendix D).

Of those that agreed to take part, three youths dropped out of the intervention having decided to disengage from all support provided by YJS and other agencies. One was male and two were female. All were on (voluntary) prevention orders suggesting they were not serious offenders. Two were White Welsh and one was White British with a mean age was 16.66 ($SD = 0.57$).

Of the 13 that continued to participate in the intervention, eleven were male and two were female. Six were white Welsh, one was Mixed Race and six were White British. Four were prevention cases (which are voluntary), four were on youth rehabilitation orders (usually involving higher risk offenders) four had been referred for community resolution plus (where the youth has admitted to a - usually first time minor - offence and been referred to YJS via the Police) and one had received a youth conditional caution (usually given for a more serious offence, and has conditions attached which if not met can result in a more severe sentence). Their mean age was 14.38 ($SD = 1.89$). At the time of writing, pre- and post-resilience and re-offending data was available for ($n = 5$) of the intervention group and

($n = 4$) of the control group.³ Of the intervention group included in the current analysis, one was a prevention case, one was on a youth rehabilitation order, two were community resolution plus and one was on a youth conditional caution. All had been referred for a specific offence, as opposed to being ‘at risk’ of committing an offence.

An important gauge of the success of an intervention and a good indicator of re-offending are completion rates (Bottoms & Shapland, 2010). Our intervention retention rate of 81% at the time of writing compares favourably with previous intervention evaluations (cf. de Vries et al., 2018).

Case workers in the experimental group met the youths receiving treatment as usual (TAU) plus the intervention on average once a week for approximately 1 hour. Having completed an initial resilience orienting session with the youth to ensure their understanding of resilience, staff selected the tools and technique from the intervention that they felt would most benefit the youths (i.e., using an individualised approach). We suggested that staff began with the Cardiff Emotion Recognition Training (CERT, Hunnikin et al., 2021; Wells et al., 2020) to ensure basic emotional comprehension.

Youth control group. The Youth Justice case workers who had acted as the control group in Experimental Study 1 from a neighbouring Youth Justice Service recruited six youths who acted as a controlled wait list. Case workers utilised the same information and consent process as those in the experimental group, but also offered a £10 High St. Voucher to youths to volunteer as a participant (to motivate the youths as they were not receiving the intervention). Participation in the control group only consisted of completing the resilience questionnaire at two different time points. All youths approached agreed to take part. Five were male and one was female. Five were White British and one was White Welsh. Three

³ Due to Covid-19 restrictions, intervention roll-out was slower than anticipated and exceeded the timeframe of the thesis

were prevention cases and three were on youth referral orders. Their mean age was 15.2 (*SD* = 0.83). The control group of youths received treatment as usual (TAU) only, and staff also met the youths on average once a week for approximately 1 hour. We matched the groups as closely as possible on variables of age, gender, ethnicity, order, and youth offender group reconversion scale (YOGRS) (which assesses the risk of re-offending). At the time of writing pre- and post-resilience and re-offending data was available for ($n = 4$) of the control group. Of these four, three were prevention cases and one was on a youth referral order.

Expected Outcomes (Step Three)

Experimental Study 1: Short-term expected outcomes for case workers. We hypothesised a two-way interaction where case workers in the experimental group would significantly increase in confidence to deliver psychological interventions compared to those in the control group.

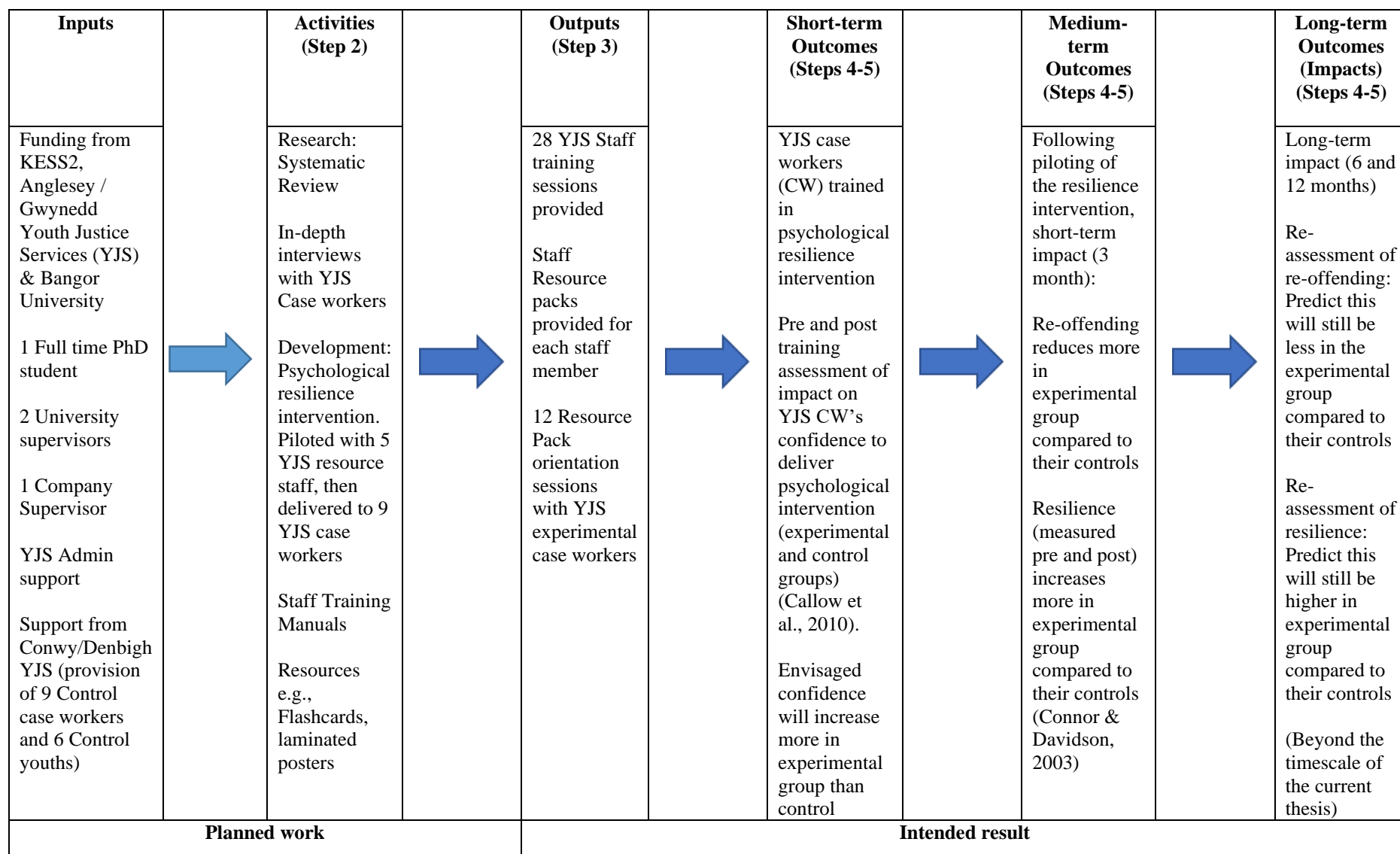
Experimental Study 2: Medium-term expected outcomes for youths. We hypothesised a two-way interaction where youths in the experimental group would significantly increase in resilience compared to those in the control group. However, we also expected that youths in the control group would not stand still in this regard due to the ways in YJS staff already work and would also show an increase in resilience (albeit a smaller increase). We also hypothesised that recidivism in the intervention group would decrease more than in the control group. We also expected other positive observational behavioural outcomes to change in the intervention group. For example, the intervention group may choose different friends and move away from antisocial peer groups, make improvements in school or work, or develop better relationships with significant others.

Experimental Studies 1 and 2: Long-term expected outcomes. As we conducted regular researcher and case worker meetings to discuss the implementation of the intervention along with follow-up workshops, we expected that case workers in the experimental group

would fully embed the resilience strategies into their everyday practice. We also expect that long-term offending rates should be higher for the control group youths than they are for the Experimental group youths given the cumulative nature of resilience. Long-term assessment outcomes following completion of the current study will occur at 6- and 12-month post intervention.⁴

⁴ This timeframe will go beyond the current timeline of the thesis.

Figure 1. 5-Step mixed methods protocol outcomes focused planning tool for intervention development and evaluation



Delivery of Resilience Intervention Training to YJS staff (Experimental Study 1)

We began the intervention training by providing case workers with a brief overview of the research and the rationale for the intervention. We first focused on its strength-based approach (rather than directly addressing negative thoughts/behaviours) with the overall outcome of increasing case worker knowledge, and the resilience of the youths they worked with. We illustrated how strengths-based working links to resilience using the following explanation: *'People who are resilient are more able to overcome obstacles in their lives and knowing what your strengths are means you are more likely to use these in areas where difficulties are experienced. We all need strengths to overcome difficulties, and when we are more able to overcome difficulties, we are more resilient'*. We then briefly highlighted how the theoretical and evidence-based tools and techniques they already used overlapped with aspects of the content we delivered.

In each workshop, we highlighted how the theoretical underpinnings of the systematic review and case worker interviews related to the skills we were teaching them. For example, in the SOC workshop, we asked staff to reflect upon how anxiety, poor social skills, smoking, dropping out of school, and conduct problems related to low SOC in whole school populations and how that related to their own work (Lansimies, 2017). To further expand this link, we referred to verbatim quotes from the interviews with the case workers themselves to further reinforce the positive work that they do to increase their confidence.

In relation to the concept of resilience, we used a resilience quiz to highlight its complex nature. Workshops included a discussion of the relevance of several different research definitions of resilience (Mukherjee & Kumar, 2017; Rutter, 1985; Yi et al., 2008). We asked staff to think about a time when they had been resilient and a time when they had not. We then asked staff to identify which of the four parts of the process of resilience may have underpinned their resilience (or lack of) at that time (i.e., anticipate, minimise, manage,

and mend strategies). We also introduced a useful visual resilience analogy for staff to use with the youths (Johnstone, 2010; see Appendix D). Following the workshops, case worker feedback furthered our development of a resilience orienteering session for use with the youths.

To further enable the transfer of theory into practice when working with potentially challenging youths, we suggested techniques such as the use of smiling when using Strength-based CBT to pair a positive verbal effort with a positive non-verbal effort and discussing times when it is not appropriate to smile as advised by Padesky & Mooney (2012). In relation to visualisation, we explained why images can come to our mind faster than words. For supporting the youths to practice this and gain confidence in reporting their imagery, we suggested the case workers ask the youths to imagine a dragon, and then ask for more detail about the dragon before congratulating their ability to use imagery. We developed four sets of flashcards relating to resilience, feelings and emotions, strengths, and positive self-talk, for case workers to use as prompts in their sessions.

We also introduced the VIA character strengths survey to identify the youths personal character strengths so that the case workers could build on these (Via Institute on Character, 2021). We used videos to demonstrate how participants may implement psychoeducation and strength-based working (Dovetail Qld., 2019; FloorPlay Coaching, 2018) and the impact of identifying character strengths in individuals who have experienced adversity (VIA Strengths, 2011). We asked staff to rate themselves on various self-report questionnaires that they would be assessing the youths on. Case workers practiced the assessments on themselves during the workshops and we discussed how they may be useful in their work. We used the case workers own examples to discuss the different approaches throughout.

In the final workshop, we again highlighted that we had designed the intervention for Case workers to be able to choose specific strategies and techniques that would suit relevant

individuals. The number of techniques selected would likely depend on length of the youth's order, and the youth's needs, risks, and strengths. We also tried where possible to highlight common theoretical and applied links throughout the workshops, depicted below:

Table 1. Intervention Training Workshops Theoretical and Applied Links

Resilience Process	Sense of Coherence	Strength-Based CBT	Additional resilience tools & techniques
<i>Anticipate</i> To consider problems before they occur.	<i>Comprehension</i> - Needed to be able to anticipate problems, recognise feelings & emotions.	<i>Step 3</i> - Identifies a problem area – anticipation.	<i>To increase comprehension:</i> Increasing youth awareness of resilience (analogy & quiz/cards) Cardiff emotion Recognition Training (CERT)
<i>Minimise</i> To take steps to reduce the likelihood of the problem occurring.	<i>Comprehension</i> - Needed to be able to minimise potential problems.	<i>Step 3</i> – Aims to minimise problems by identifying ‘hidden’ strengths (<i>Step 1</i>) and choosing Resilience Strategies (<i>Step 2</i>) to use in the problem area.	Emotions & Feelings flashcards Teaching the Brain & Traffic light system Personal identity wheel Empowering questions
<i>Manage</i> We cannot anticipate or minimise all problems. Then, we need the ability to manage in the moment.	<i>Manageability</i> – The ability to identify & utilise our internal & external resources from the eight different areas.	<i>Step 4</i> – Aims to manage problems identified by planning and visualising resilience and using Resilience Strategies.	Mindfulness <i>To increase ability to manage & reflect</i> VIA Character strengths survey Strengths flashcards
<i>Mend</i> To recover following adversity. To assess what helped, and what might help next time.	<i>Meaning</i> – Recovering from problems successfully includes learning from them / finding meaning in them (thus mending).	<i>Step 4</i> – De-briefing, beginning to anticipate how to overcome future problems.	Self-talk flashcards Visualisation Reflection Core Beliefs & Cognitive distortions

We ended the intervention training by emphasising the cyclical nature of the process of resilience. This workshop ended by re-capping on all three workshops and reiterating that we had designed the intervention for staff to choose techniques from, depending on the needs of each youth. See Appendix B for Psychological Resilience Intervention Workshop Content.

Results (Step Four)

Experimental Study 1: Effect of Intervention Training on YJS Case Worker Confidence to Deliver Psychological Interventions

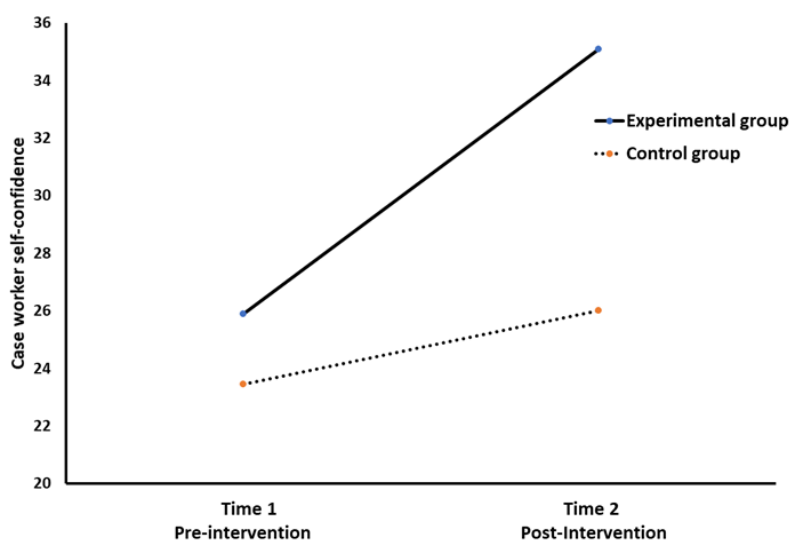
Questionnaires. We piloted the intervention training with resource staff and assessed confidence to deliver psychological resilience interventions pre- and post-intervention training using a single factor 5-item questionnaire (Callow et al., 2010). Scores ranged from 0 (not confident) to 10 (highly confident). An example item included “*How confident are you in suggesting to your young people the sorts of thoughts / behaviours they could practice in order to increase their psychological resilience?*”.

After incorporating pilot resource staff feedback into the intervention, we then delivered the intervention training to the experimental case workers. We used assessment pre- and post-intervention training of the effect of the training on their confidence to deliver psychological resilience interventions (Callow et al., 2010). The control group completed the same assessment at two time points without receiving the intervention training. See Table 2 for an overview of the changes in confidence in both groups, including the mean values at Time 1 and Time 2.

Effect of training on staff confidence to deliver resilience interventions. Using IBM SPSS Statistics version 27, we conducted a two-way mixed model ANOVA to examine the interaction between time (pre- and post-intervention) and group (intervention vs. control group). Results revealed a significant main effect for Time $F(1, 15) = 63.8, p = .000 (\eta^2 = .81)$. There was no significant main effect for Group $F(1, 15) = 2.68, p = .122 (\eta^2 = .15)$. More importantly, the Time x Group interaction was significant $F(1, 15) = 21.30, p = .000 (\eta^2 = .58)$. To better understand the interaction, we conducted paired sample t-tests on the main effect for Time (using Bonferroni adjustments to the alpha level i.e., $p = .05 / 2$). Results revealed a non-significant increase in confidence for the control group $t(8) = -2.71, p$

= .026 (Cohen's $d = 2.69$). Further, there was a significant increase in confidence in the intervention group $t(7) = -7.89, p = .000$ (Cohen's $d = 3.27$). We have plotted this interaction below in Figure 2.

Figure 2. Group x Time Interaction upon Case Workers Self-confidence to Deliver Psychological Resilience Interventions



Initial quantitative results in relation to the effectiveness of the intervention training are promising. As illustrated above, changes in the control group also increased (although this increase was small). However, is not uncommon for studies to report unanticipated control group improvements (Waters et al., 2012). It may be that control group engaged in some self-presentation reporting as they knew we were comparing them against an experimental group. We require further research, and further evaluation with case workers in other YJS offices may enable us to draw a firmer conclusion.

Qualitative feedback from staff following intervention training. Qualitative feedback from those in the case worker experimental group suggested several beneficial outcomes of the intervention. For example:

“Asking the young person what they think needs to change in their lives rather than making the decision for them”.

“The Anticipate/Minimise/Manage/Mend process will be of value when assessing cases and putting interventions in place. To me, it allows practitioners and young people to pinpoint where issues lie and to develop strategies for coping/developing resilience under the specified circumstances.”

“The emotions and feelings flashcards are a good talking point as the young people seem to struggle to identify these”.

“Recognising the positives in the young person’s life and building on this”.

“Imagery and visualisation has the potential to be very useful to reduce offending. I think that imagining things happening can be very powerful”.

“Self-talk / affirmations will be very useful for some of the young people”.

Table 2. Study 1 Results: Experimental and Control Case Worker Confidence to Deliver Psychological Interventions

	Time 1 date	Time 2 date	Time 1 confidence	Time 2 confidence		Time 1 date	Time 2 date	Time 1 confidence	Time 2 confidence
1	21.02.20	12.03.20	38	43	1	21.04.20	23.06.20	28	35
2	21.02.20	12.03.20	22	37	2	21.04.20	23.06.20	19	19
3	21.02.20	26.02.20	21	33	3	21.04.20	23.06.20	27	30
4	21.02.20	26.02.20	25	33	4	21.04.20	23.06.20	15	15
5	21.02.20	26.02.20	25	33	5	21.04.20	24.06.20	28	29
6	21.02.20	11.03.20	21	38	6	29.04.20	23.06.20	23	29
7	04.05.20	15.05.20	32	39	7	29.04.20	08.07.20	21	25
8	24.2.20	26.03.20	24	35	8	29.04.20	29.06.20	40	40
					9	21.04.20	23.06.20	10	11
			Mean 26.00 (<i>SD</i> = 6.00)	Mean 35.12 (<i>SD</i> = 4.54)				Mean 23.44 (<i>SD</i> = 8.70)	Mean 25.88 (<i>SD</i> = 9.40)

Experimental Study 2: Intervention Effects on Youth Resilience

Due to Covid-19 restrictions, we paused the roll out of the intervention for 6 months. Consequently, throughout the months of July, August, and September 2020, having adjusted the workshops to enable virtual delivery, the PhD candidate provided refresher training to the same group of experimental case workers. The present study therefore reports on resilience and offending data collected between 19th November 2020 and 23rd June 2021 for ($n = 5$) of the experimental and ($n = 4$) of the control youths (see Table 3).

Questionnaires. To assess youth resilience, case workers used the 10-item Connor-Davidson Resilience Scale (CD-RISC, Connor & Davidson, 2003). The CD-RISC's operational definition of resilience is the ability to 'thrive in the face of adversity'. It measures resilience through how well individuals bounce back after stressful events, tragedy, or trauma. It is a single factor questionnaire based on 10 items scored from 0 (not true at all) to 4 (true nearly all the time). Examples of the items are: *"I believe I can achieve my goals, even if there are obstacles"* and *"I am able to handle unpleasant or painful feelings like sadness, fear, and anger"*. Campbell-Sills & Stein (2007) reported a Cronbach alpha coefficient of 0.85 for this measure.

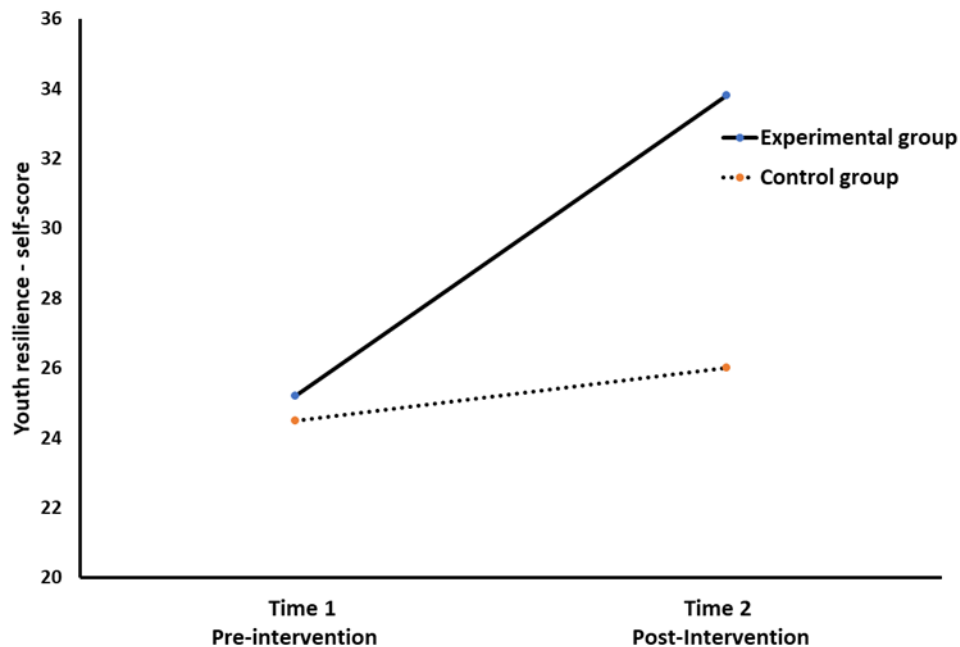
The youth and their case worker in both experimental and control groups assessed the youth's resilience in both the experimental and control groups of youths at Time 1 (at the pre-order which included either intervention + treatment at usual (TAU), or TAU only) and Time 2 (post-order). Further, we used two points of assessment where the youth completed their own CD-RISC with their case worker's support, and where case workers completed a CD-RISC based on their perceptions of the youth's resilience. Previous studies showing that self and other reports led to different conclusions on delinquency guided the decision to utilise more than one information source to estimate the value of a programme (Asscher, 2014).

The current analysis contains pre- and post-data for five participants in the experimental group and four participants in the control group. Table 3 presents the characteristics of the two groups included in the current analysis. The average length of treatment time for the experimental group was 92.4 days (*SD* 16.6). The average length of TAU treatment time for the control group was 67.75 (*SD* 23.59).

Using IBM SPSS Statistics version 27, we conducted a two-way mixed model ANOVA to examine the interaction between time (pre- and post-intervention) and group (intervention vs. control group). We conducted two analyses where we examined the dependent variable (i.e., resilience) via the case worker assessment of the youth's resilience, and the youth's self-assessment of their own resilience. We hypothesised that there would be a significant interaction between time and group upon resilience (i.e., resilience would increase more in the experimental group than in the control group regardless of the source i.e., case worker or the youth).

Effect of intervention training on youth resilience: Self-report. Results for the youths' data revealed a significant main effect for Time $F(1, 7) = 15.22, p = .006 (\eta^2 = .68)$. There was no significant main effect for Group $F(1, 7) = 1.58, p = .248 (\eta^2 = .18)$. More importantly, the Time x Group interaction was significant $F(1, 7) = 7.52, p = .029 (\eta^2 = .52)$. To better understand the interaction, we conducted paired sample t-tests on the main effect for Time (using Bonferroni adjustments to the alpha level i.e., $p = .05 / 2$). Results revealed a non-significant increase in resilience for the control group $t(3) = -1.50, p = .391$ (Cohen's $d = 3.00$). Further, there was a significant increase in resilience in the intervention group $t(4) = -4.37, p = .012$ (Cohen's $d = 4.39$). We have plotted this interaction below in Figure 3.

Figure 3. Group x Time Interaction upon Youth Resilience (Self score)



Results according to self-report data therefore show the youths in the experimental group increased significantly in resilience (but not those in the control group). However, the difference in the length of treatment time was notable, with the experimental youths having a mean of 92.4 treatment days and the control youths just 57.6. The differences in the length of time may explain why the youths in the experimental groups increased more in resilience. For example, we know from our interviews in Chapter 2 that the way in which YJS staff already work is likely to increase resilience (e.g., strengths-based). Additionally, YJS staff provide valuable positive regard and pro-social role modelling that may increase the youth's self-belief that they can achieve pro-social outcomes.

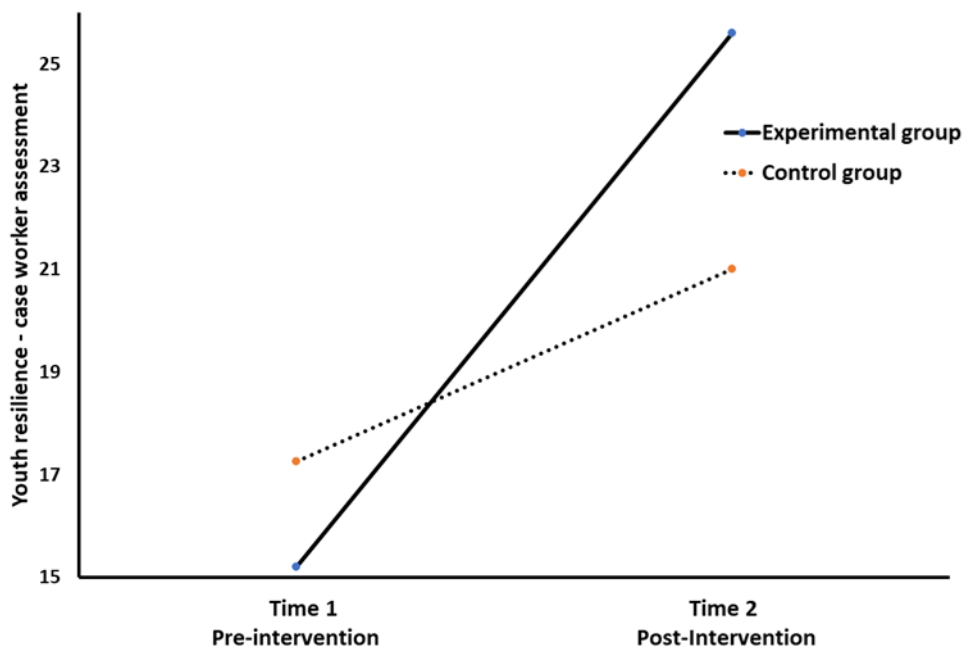
Table 3. Study 2 Results: Experimental and Control Youth Resilience: Self-scores and Case Worker Scores

Experimental Group								Control Group							
Code	Age	Order / YOGR if applicable	Gender	Ethnicity	CD- RISC	Time 1	Time 2	Code	Age	Order / YOGR if applicable	Gender	Ethnicity	CD- RISC	Time 1	Time 2
Int/01	17	YRO (ISS) YOGR: 67%	Female	White Welsh	Own Staff	19.11.20 28 13	10.3.21 37 28	Con/01	16	YRO (ISS) YOGR: 66%	Female	White British	Own Staff	3.12.20 28 16	28.1.21 28 26
Int/02	11	Prevention	Male	White British	Own Staff	18.12.20 21 17	24.3.21 36 28	Con/02	15	Prevention	Male	White British	Own Staff	15.3.21 17 12	26.4.21 17 13
Int/03	16	Community Resolution +	Male	White Welsh	Own Staff	11.1.21 33 18	14.4.21 38 24	Con/03	16	Prevention	Male	White British	Own Staff	16.3.21 23 17	28.5.21 29 22
Int/04	13	Community Resolution +	Male	White Welsh	Own Staff	11.1.21 24 16	17.3.21 28 23	Con/04	14	Prevention	Make	White British	Own Staff	17.3.21 30 24	23.6.21 30 23
Int/05	16	Youth Conditional Caution	Male	White Welsh	Own Staff	21.12.20 20 12	24.3.21 30 25								
Mean values & SD's					Own	25.20 (SD = 5.35)	33.80 (SD = 4.49)	Mean values & SD's					Own	24.50 (SD = 5.80)	26.00 (SD = 6.05)
					Staff	15.20 (SD = 2.58)	25.60 (SD = 2.30)						Staff	17.25 (SD = 4.99)	21.00 (SD = 5.59)

Effect of intervention training on youth resilience: Case worker report.

Results for the case workers data revealed a significant main effect for Time $F(1, 7) = 23.9, p = .002 (\eta^2 = .77)$. There was no significant main effect for Group $F(1, 7) = 5.29, p = .582 (\eta^2 = .045)$. More importantly, the Time x Group interaction was close to being significant $F(1, 7) = 23.9, p = .055 (\eta^2 = .43)$. To explore this borderline interaction, we conducted paired sample t-tests on the main effect for Time (using Bonferroni adjustments to the alpha level i.e., $p = .05 / 2$). Results revealed a non-significant increase in resilience for the control group $t(3) = -1.5, p = .220$ (Cohen's $d = 4.85$). Further, there was a significant increase in resilience in the intervention group $t(4) = -6.04, p = .004$ (Cohen's $d = 3.84$). We have plotted this interaction below in Figure 4.

Figure 4. Group x Time Interaction upon Youth Resilience (Case worker score)



While according to case worker report, the youths in both groups increased significantly in resilience, this was significantly higher in the experimental group. One

contributing factor may have been the experimental youths having more self-awareness due to the resilience work, and a greater understanding of their own resilience; control group case workers noted increased resilience in the control youths while the control youths noted this less.

Attrition. Three out of the original sixteen youths in the intervention group dropped out of the study. One dropped out after 109 days and two dropped out after 64 days. A consistent finding from the What Works literature is that “those who fail to complete programmes have worse reconviction results than those who complete and usually worse than control groups” (Hedderman & Hough, 2004; p. 153). However, at the time of writing the three youths who dropped out of the experimental group had not reoffended. This may suggest that these youths had already made their minds up not to offend or found additional opportunities to help them desist. In any case, according to the Risk Needs Responsivity principle, interventions are more effective when they match individual risks and needs (RNR, Andrews & Bonta, 2007). In support of RNR, the three youths were ‘prevention’ cases i.e., the work was voluntary due to extremely minor offences and as such, YJS interventions may not have been necessary because the risks and needs were low. However, as the study is not completed and more youths may yet drop, it is difficult to draw any firm conclusions regarding attrition.

Effect of intervention participation on youth re-offending. Recidivism was measured according to official police reports, i.e., it included any offence reported to and acted on by the police. Case workers accessed this data via Senior Administration Officers in their respective Youth Justice Services, who then relayed the anonymised offending data to the research team. None of the participants in the intervention group had re-offended following the completion of the intervention (an average of 92 days later ($SD = 13.09$)). Data received for the experimental group recorded ‘date of last offence’ and all cases these

offences had all occurred prior to beginning the intervention. In the control group, after an average of 59 days ($SD = 60.09$) from completing the second resilience measure, two had re-offended, one 16 days following treatment and one 140 days later. The remaining two in the control group had not reoffended after an average of 40.5 days ($SD = 41.71$). Therefore, the experimental group had not offended in the 92 days after completing the second resilience questionnaire, while the control group had re-offended in a much shorter time.

Additional positive outcomes following youth participation in the intervention.

The PhD candidate identified several factors relating to the intervention that may have contributed to increased resilience through weekly researcher / case worker meetings. For example, according to staff feedback, several of the youths revealed an extremely low initial understanding of the relevance of resilience to positive / negative outcomes during the resilience orienteering session. Therefore, increasing the youth's comprehension of themselves (part of sense of coherence) may have increased their ability to be able to overcome problems, e.g.:

“He seems more confident in himself and more aware of his emotional state of mind. I was quite concerned about him before Xmas.”

Staff also fed back that one youth developed better decision making and chose to spend their time with a pro-social girlfriend rather than with anti-social peers. Another youth started to take full responsibility for their actions and wanted to pay their fine (approach focused coping):

“He keeps saying that he is now responsible for his own behaviors. He said, “I can’t blame others, I’m in charge of what I do””.

For another, the ‘penny dropped’ when they developed personal resilience strategies based on their ‘hidden’ strengths using SB-CBT©. This person realised they could transfer these strengths to a ‘problem’ area. Staff fed back that other youths enjoyed the opportunity

to discuss feelings and emotions and developed some emotional articulation (often lacking in youths, particularly boys cf. Goodey, 1997):

“He likes the work – he has never had an opportunity to discuss feelings and emotions and why he feels the way he does.”

Others appeared to develop in confidence and internal locus of control (perhaps from increased comprehension), and one appreciated the focus on what was positive about them (i.e., their strengths) as part of the work. This initially anti-authority youth later commented that they had ‘warmed’ to the YJS suggestive of reduced defiance, which is a protective factor against re-offending (Caldwell et al., 2001, 2006). The youth in question said they did not feel ‘judged’, suggesting the focus on their strengths and avoidance of reiterating the ‘offender’ label was effective in treatment amenability and their subsequent increases in resilience:

“At the end they said, ‘I’m beginning to warm to YJS”. They felt able to explore problems without being judged. I think it was the resilience work and not going over what they had done”.

In the control group, positive outcomes for one youth who desisted included attending school, working with CAMHS, and keeping a positive mind set. The other who desisted had to end their order unexpectedly, is hoping to attend college in September, but continued to have poor relationships with their parents. One of the youths who re-offended (albeit 140 days later) had completed a college course and gained employment, while the fourth had re-offended at a higher rate. However, the two who desisted in the control group had not increased in resilience according to self and staff scores. While those who re-offended had either not increased or increased somewhat in resilience, according to their own scores. Collecting the remaining Time 2 data (resilience, offending, and other outcomes) from both

groups over the next 12 months will enable us to draw a firmer conclusion to inform the decision on whether to roll out the intervention to other Youth Justice Services.

Qualitative feedback from staff following use of the interventions. Case workers delivering the intervention to the youths found the experience overall a positive one. Many found the resilience prompts such as the flash cards helpful in opening conversations with the youths:

“One thing I’ve liked about the resilience project is the different ways you can engage a young person in a session and get them thinking about their own answers, rather than us just talking at them all the time”.

It was interesting to note that staff also felt the resilience work enabled them to ‘listen’ more to the youths. Research shows that active listening, including reading between the lines, is one of the most important coaching skills and a key feature in building trust and connection (Hunsaker & Allessandra, 1986). We saw from our qualitative staff interviews those positive relationships with YJS staff were central to the youth’s self-belief and motivation to change and are also key items on the CD-RISC resilience scale (e.g., *“I can deal with whatever comes my way”* and *“I believe I can achieve my goals, even if there are obstacles”*) (Connor & Davidson, 2003).

Several commented on the impact of the clear improvements evidenced by the Connor-Davidson resilience assessment. They also felt this was a useful way of enabling the youths to see how well they had done and where they had made improvements:

“The resilience assessment is an extremely important part of the assessment process to identify change in the young person. Before, this went unrecorded. This resilience assessment gives more clarity and shows the young person how well they have done.”

Staff also fed back that they preferred to focus on the youth's strengths rather than their offending as they felt this was a more effective way of engaging the youths and generally for a better response than focusing on what they had done wrong:

“This to me is the way forward. We need to improve the young persons’ ability to refrain from offending, not focus the offence.”

Programme Integrity

Research suggests the extent of adherence to intervention integrity affects treatment outcomes (e.g., Landenberger & Lipsey, 2005). Programme integrity refers to the delivery of the intervention as intended, including its content, duration, frequency, and scope (Duerden & Witt, 2012). To ensure programme integrity, the PhD candidate met with each case worker delivering the intervention on a weekly basis to discuss which techniques they had used and to ensure their implementation as intended (i.e., with a focus on increasing the psychological resilience of the youth). From the experimental group, staff reported using the online Cardiff Emotion Recognition Training (CERT, Hunnikin et al., 2021; Wells et al., 2020), and assessed character strengths and self-identity. They also used the sense of coherence scale (SOC-13, Antonovsky, 1993) and the 4-step resilience process model (Petit et al., in prep). Techniques included use of empowering questions, positive self-talk, Strengths-based CBT© (Padesky & Mooney, 2012), teaching the brain, and identification of generalised resistance recourses (Antonovsky, 1991).

During these meetings, we made several improvements to the intervention. These included the refinement of a Resilience Pack for the youths and the addition of an intervention to help the youths develop self-identity. This intervention was an Identity Wheel; a tool for self-understanding. The identity wheel focuses on how the youth sees themselves, how they perceive others see them, and how aspects of themselves may help or hinder positive change. We designed the identity wheel for use as a prompt for the discussion of

resilience and solutions to potential problems. Self-identity occurs via normative adolescent development and pro-social identities are a protective factor against offending (Maruna, 2010).

Discussion (Step Five)

The purpose of study was twofold. First, the aim of Experimental Study 1 was to identify whether training YJS case workers to deliver psychological resilience strategies in their everyday practice would increase their confidence to use these strategies with the youths they worked with. Supporting the effectiveness of the training, several staff fed back following the workshops that they had also practiced the resilience techniques on themselves and/or family members. Further, being aware of when and how they were resilient further strengthened their confidence to use resilience-based techniques in practice.

Second, the aim of Experimental Study 2 was to identify whether case workers use of the intervention impacted on the youth's resilience, and subsequent re-offending. Due to the success of the intervention, and despite severe restrictions on face-to-face working due to Covid-19, YJS case workers were able to increase the psychological resilience of the youths they worked with.

In Study 1, use of well-established resilience techniques in the workshops and provision of research evidence (along with staff qualitative data) to back intervention use and efficacy, may have increased staff trust that these methods would be effective. Scaffolding used throughout the training meant that participant feedback helped to shape the workshops, further increasing confidence and efficacy in their use (cf. van de Pol, & Elbers, 2013). During the workshops, it was stressed that we had partly built the resilience interventions on what case workers already practiced. Further, in theory, developing a deeper understanding of models of resilience and techniques associated with building resilience would allow staff to

be more confident in their approaches. In addition, staff were aware that their own Service Manager fully supported and partially funded the resilience training programme.

In Study 2, the small sample so far also indicates a positive relationship between increased resilience, reduced re-offending, and other positive outcomes. As far as the PhD candidate is aware, this intervention is one of the first in the world to examine a direct link between psychological resilience interventions along with quantitative and qualitative assessments of resilience and official re-offending reports in young people who have offended. Findings in the second part of the study are consistent with previous research using the SOC-13 measurement (associated with resilience due to its role in overcoming adversity), that found an increase in SOC also related to total desistance (Lindblom et al., 2017). Although the current study used a different measurement to that used by Lindblom and colleagues, both SOC-13 and the CD-RISC-10 scale we used assess ability to thrive in the face of adversity. They both assess adaptability, purpose, and management of emotions. However, the SOC-13 also assesses comprehension, management of social situations, and the degree to which the youth ‘cares’ about what happened. While the CD-RISC includes the use of humour to cope alongside self-belief.

The differences in the length of treatment time for each experimental youth group is noteworthy, with the intervention group having received an average of 92.4 days (*SD* 16.6), and the control group an average of 67.75 days (*SD* 23.59). This equates to an average of just over 13 weeks for the intervention group and just under 10 weeks for the control group. It is unclear why the difference in treatment time existed (apart from the understanding that one youth in the control group had to unexpectedly finish their order earlier). While no firm conclusions can be drawn from such a small sample, findings suggest that longer treatment time is likely to lead to significant increases in levels of resilience.

Although our youth sample size was small, we may draw some tentative conclusions regarding the challenge model of resilience which surmises that too much adversity may impair resilience (Fergus & Zimmerman, 2005). For example, one youth who successfully completed the intervention, increased in resilience, and desisted from re-offending, remains a concern for their case worker. This is due in part to unaddressed emotional trauma stemming from early childhood adversity. In other words, this youth seemed to have experienced a significantly larger amount of childhood adversity than others in this group. Their case worker is therefore concerned that this unaddressed trauma may at some point impact on their future maintenance of positive behaviour.

Overall, both quantitative and qualitative thesis findings support the recommendations that interventions should focus on the positive aspects of the youths (e.g., Liddle et al, 2016). There is a real need for more child-centred working, focusing on the welfare and rights of the child such as that outlined in the ‘Child First, Offender Second’ model which seeks to avoid a reductionist and risk approach (Case & Haines, 2015; Drakeford, 2010;). More recently, Case and Haines (2021) take their argument further, calling for a complete re-think of the current Youth Justice system, with more focus on the evidence-based Bureau model (presently used for first-time offenders) for all youths who offend (Case & Haines, 2021). Encompassing a positive rather than a negative approach, the Bureau promotes positive behaviour, engagement, and diversion (Case, 2016).

It appeared from our meetings with case workers that one of their biggest challenges was increasing autonomy (e.g., through offering choices) to the youths. This may relate back to the structures under which they operate which while allowing for strength-based working, do not yet quite allow for youth autonomy. Staff also used the weekly researcher/case worker meetings to discuss the use of psychological techniques and some case workers took longer to align to these new ways of working (case workers have not received specific therapy

training). It may be that as staff become more confident in using the psychological resilience strategies, they will be more confident to offer a choice of intervention to the youths, and to use more of the psychological techniques. Previous research has shown that CBT para-professionals experienced outcomes on a par with trained professional CBT therapists, meaning that one did not need professional training as a therapist to achieve impressive outcomes (Montgomery et al., 2010). Our findings to date have been consistent with the findings of Montgomery and colleagues. A further difficulty (also highlighted in case worker interviews, Chapter 3) was in keeping the focus of the session on resilience when the youths presented with a crisis. New ways for staff to appropriately use crises to discuss and develop resilience may be a valuable addition to the intervention training. Additionally, from the qualitative interviews in Chapter 3, it appeared that simply engaging the youths in positive activities is potentially therapeutic, and it may be that the benefits of such engagement to staff are emphasised in future resilience training. Case workers delivering the intervention said many of the youth just liked to walk and talk, but presently there were fewer positive leisure activities available due to Covid-19 restrictions. It may be that a further improvement to the intervention would also be to highlight parts/adapt parts specifically for everyday activities.

Strengths and Limitations of the Study

There are several strengths to the study. Firstly, the intervention was based on a host of applied research information stemming from an initial systematic review and in-depth interviews with case workers. Second, we have tested the intervention in real world conditions, whereby youths had the opportunity to try new strategies where many opportunities for anti-social behaviour existed in their communities. Third, by maintaining constant communication links with the YJS case workers, we were able continually tailor the intervention. Being able to meet regularly with staff during the implementation of the intervention (rather than just leaving them to it), further guided them and enhanced the

development and delivery. Case workers fed back that this was extremely useful, and some felt an essential component to training.

Findings are also consistent with previous research findings where interventions can improve psychological functioning (in this case resilience) in young, disadvantaged people (e.g., Farrington et al., 2012; Hoogsteder et al., 2018). As results from previous research and the current study are promising, further development of resilience strategies will provide valuable insight as an avenue for intervention. Furthermore, the success of the intervention in increasing psychological functioning has to date, led to total desistance in the experimental group. Future evaluations over longer timeframes will provide greater insight into the extent to which these effects continue.

However, despite these strengths there were some limitations. As noted by McNeill (2015), a difficulty in programme evaluation is whether the intervention itself, or some unknown factor directly increased youth resilience and desistance. For example, there may have been uncontrollable variables such as family or social support that we had not accounted for. This may make drawing firm conclusions about the effectiveness of the intervention difficult. Also, we were not able to randomise participants, which may have biased the sample. Although we matched the groups on demographics and severity of offending, and pre-resilience scores were relatively similar, there may have been potentially confounding variables that we did not consider such as substance use, or speech and language difficulties. Potentially confounding variables noted during regular researcher / case worker meetings included a supportive home life in one experimental youth who desisted, and high levels of support in school for another desister. Despite gaining employment and a successful college application, one recidivist control youth committed two further offences post-intervention. Another control youth was forced to end their order unexpectedly early, meaning they may not have received sufficient youth justice support. At the time of writing this youth had not

reoffended, but nevertheless numerous factors may have influenced offending and other outcomes above and beyond YOT intervention. A further important limitation to the current study is that staff recruited youth (in both groups) on a voluntary basis. Some researchers suggest that this may mean they are already more likely to change than those who refuse, which can bias treatment results (cf. Jonas-van Dijk et al., 2020). However, staff offered the control group participants a high-street voucher for their participation. The youths also gave informed consent and knew that they were not receiving the intervention. These factors may have affected our results in that control group participants may have been less likely to change, as rather than agreeing to contribute to a research project for altruistic reasons they were agreeing in return for a voucher.

The largest difficulty faced in conducting the current study was the Covid-19 restrictions, which meant that staff were initially unable to work face to face with young people. Staff fed back that even prior to restrictions, it was hard to establish a relationship over the phone or virtually. It is likely that working over the phone or virtually prevented some youths from building the rapport and trust necessary for effective work, identified as a vital precursor to intervention success in Youth Justice Services by both our qualitative interviews and previous research (cf. Skuse & Mathew, 2015). Other youths may have benefitted from virtual working, as interviews with case workers in Chapter 3 also identified that some youths responded well to less direct approaches. However, some youths did not have access to an internet-connected device which put them at a disadvantage. Half-way through the case workers delivery to the youths, we developed a Covid-19 risk assessment in partnership with the case workers which did allow for more face-to-face working. However, it did not include visiting the youths in their homes and as many of the community centres normally used by YJS staff remained closed, staff continued to experience difficulties.

Finally, the small sample sizes in the current study make generalisability difficult. Even once we have gathered and analysed the resilience and re-offending data for the youths in the current group ($n = 7$ experimental and $n = 2$ control) the sample size will still be small. We therefore plan to do a second evaluation of both the intervention training for case workers and the use of the resilience strategies with youths who have offended, with a larger sample. Specifically, in the near future, the plan is to train the control group case workers who agreed to act as a second experimental group following this initial study to use the resilience strategies with the youths they support. This will allow the collection of additional staff confidence, and youth resilience / re-offending. We also plan, should the second study prove effective, to provide ongoing refresher training for both Youth Justice sites. Nevertheless, the interventions warrant a larger scale study.

Conclusion

Part one of this study found that staff in the intervention training programme significantly increased their confidence to deliver resilience interventions compared to their controls. Part two of the study found that case workers use of psychological resilience strategies with young people led to significantly increased resilience, desistance, and positive behaviours. Due to Covid-19 restrictions, increasing the timeframe required to deliver the interventions will allow for completion of assessments of resilience and re-offending with both groups over the coming months. To further examine the effectiveness of psychological resilience and offending, we will compare changes in resilience scores in both groups to police offending reports 6 and 12 months later, and the possible use of self-reports of subsequent re-offending,

Chapter 5: Thesis Discussion

Thesis Objectives

This chapter first reminds the reader of the main objectives of the current thesis, before summarising the results obtained from Chapters 2, 3 and 4 in a broader theoretical context. Then follows a discussion of the theoretical and applied implications of the thesis, and its overall strengths and limitations. The last section outlines potential directions for future research before concluding on the findings from the thesis.

This thesis aimed to extend our understanding of how targeted interventions can increase psychological resilience in youths who have offended with an overarching aim of reducing reoffending rates. Specifically, the thesis focused predominantly on: (a) the extent to which existing psychological interventions worldwide increased psychological resilience and concurrently reduced re-offending; (b) understanding how Youth Justice case workers' use of psychological resilience-based interventions reduced reoffending, their application of strategies to initiate positive change, and psychological factors associated with such changes; and (c) the development of a resilience-based and individualised programme of interventions for case workers to apply with youths in one Youth Justice Service.

Summary of Results

In Chapter 2 we systematically reviewed psychological intervention studies that had successfully led to a reduction in reoffending. The purpose of this review was to identify approaches associated with psychological and behavioural changes that led to reduced reoffending that we could use in subsequent chapters of this thesis. Psychological factors measured or targeted that correlated with reduced offending included increased sense of coherence, improved emotion recognition, improved self-concept, more positive decision-making, and reduced defiance (Hodgkinson et al., 2020).

Chapter 3 had three main objectives: (a) to examine Youth Justice case workers' understanding of psychological resilience and their perceptions of its impact on the youths; (b) to understand how case workers' understanding of resilience informed their application of interventions and approaches, and (c) to identify how factors relating to high resilience (e.g., positive self-concept) or low resilience (e.g., lack of decision-making ability) impacted on subsequent outcomes for the youths. The qualitative interviews revealed several key themes. Case workers largely perceived the youths to be extremely low in resilience evidenced by their use of a range of unhelpful coping strategies, such as aggression, denial, and substance use. In addition, staff described the youths generally low comprehension, self-belief, and self-concept. However, staff also identified several factors in some youths relating to resilience such as optimism and empathy.

To counteract the effects of the risk factors they perceived, case workers adopted an individualised approach using largely strengths-based interventions. Their aim was to help the youths develop awareness and confidence and improve their management of emotions. Factors relating to positive outcomes (e.g., reduced re-offending, attending school) included an increase in awareness, empathy, self-belief, self-concept, and improved relationships. In those youths who were not able to change, or said they did not want to change, staff described continued use of unhelpful coping strategies, low comprehension and self-concept, chaotic lives, and dysfunctional family backgrounds.

Chapter 4 contained two studies. The first aim of Study 1 was to develop an individualised psychological resilience-based intervention for youths who had offended. The second aim was to provide intervention training for Youth Justice case workers. The final aim was to assess case workers' confidence to deliver psychological resilience interventions. The second study first aimed to support case workers to pilot the interventions, and secondly assess the effectiveness of the interventions on the youth's resilience and behaviours. Due to

Covid-19 restrictions delaying the intervention, we were only able to examine some of the data pertaining to increased resilience and reduced offending or other positive outcomes in a small number of the experimental and control groups⁵.

Results from Chapter 4 provided preliminary support for the effectiveness of the intervention. Specifically, in Study 1, staff in the experimental group significantly increased their confidence to deliver psychological interventions compared to the control staff (who also increased in confidence but at a lower rate). In Study 2, according to both staff and youth self-report, youths who then received the psychological interventions significantly increased their resilience compared to those in the control group, who also increased but again at a lower rate. Additionally, in relation to re-offending, none of the five youths in the experimental group had re-offended three months later, while two out of the four in the control group had reoffended two months later. Overall, despite the problems that Covid-19 brought to this project, engagement to the intervention was positive. Specifically, 90% of experimental staff used the interventions and just 20% of the experimental youths dropped out of the programme.

Theoretical Implications

Several theoretical implications have arisen from the thesis. These largely pertain to attachment theory, relationship-based working, and strengths-based working. Additionally, research studies have identified several risk and protective factors which distinctly relate to youths who have offended. We will now discuss these implications in turn.

Attachment

⁵ We have included all data received so far in this thesis. When collection is complete, we will analyse the full data set for publication.

A clear theoretical implication from the thesis pertains to attachment (Bowlby, 1988). Attachments are the mechanism by which caregivers meet the child's basic needs. Attachment theory suggests that high-quality relationships, especially early in life, are essential to normative psychological, social, and behavioural development. However, studies show that caregivers of youths who had offended often had addictions, mental health issues, and volatile relationships (cf. Bowen et al., 2008). Such difficulties are likely to reduce the caregiver's ability to provide the consistent nurturing required for establishing a secure attachment with their child (i.e., an emotional bond). One study identified two outcomes stemming from childhood maltreatment: Disrupted motivation to establish safe, secure relationships with adults, and disrupted motivation to explore the world in a 'competency-promoting fashion' (Aber & Allen, 1987: p. 406). Lack of secure early life attachments may therefore make it harder for these children to later develop conventional bonds to individuals or society through education, employment or leisure activities or other available resources, which all act as protective factors against offending (cf. Pratt et al., 2011; Sampson & Laub, 2003). This may be due to difficulties trusting adults, or failure to learn appropriate behaviour. In support of attachment theory, research shows a clear relationship between school exclusion and increased offending (Farrington & Loeber, 1999). Integration into society is key to individuals accessing the external (e.g., material, and social) resources key to the development of resilience (Runyan et al., 1998).

Relationship-based Working

Our findings in relation to attachment theory may help us understand why relationship-based working was so effective for YJS. By focusing on effective relationships, YJS staff were likely to achieve good outcomes because they were in effect, providing the stable basis to help meet the hitherto unmet needs of some youths. Only 28% of the studies reviewed in Chapter 2 discussed the importance of relationships. Consistent with previous

qualitative studies, we identified in Chapter 3 that trusting relationships were key to positive outcomes (e.g., Mincey & Maldonado, 2011). Specifically, such high-quality relationships helped meet the youths (potentially unmet) needs for acceptance and safety, which is crucial for normative psychological development of empathy, self-confidence, and decision-making ability (Egan, 1997). Our findings are consistent with previous research identifying that positive relationships were a strong desistance factor (e.g., McNeill, 2006).

An additional benefit of relationship-based working may have been the opportunity it provided for the youth to be able to accept (or ask for) help, from developing a trusting relationship with YJS staff. For example, in Chapter 3 we saw that following a positive experience with YJS, youths were more willing to work with other support services, or they might return to ask YJS for help with accessing training. It therefore appeared that effective relationships helped address a key barrier to making positive changes identified in Chapter 3; the youths' need to appear 'strong' and not admit that help might be useful. This desire to appear strong may also have linked to the unhelpful coping strategies identified in Chapter 3, such as avoidance or defiance. Perhaps stemming from early-life adversity such coping strategies, while effective short-term, ultimately reduced the youth's likelihood of seeking or accepting help (e.g., Bowen et al., 2008).

In addition, the development of a healthy attachment with a pro-social adult in a statutory organisation may have helped strengthen the youth's bonds to society. The strengths-based working adopted by staff outlined in Chapter 3, involved first developing a positive relationship (attachment) with the youth. This in turn increased the likelihood of the youth's consideration of the pro-social leisure activities, training, or employment (attachments to institutions) encouraged by YJS staff as a key technique to initiating change.

Strength-based Working

Case workers interviews in Chapter 3 strongly suggested strengths-based work helped counteract the low self-belief and negative self-identities frequently identified in youths who had offended. Staff utilised strength-based approaches which they believed increased the youth's resilience via increasing their self-concept and self-confidence. Staff felt low self-concept and offending behaviour had often stemmed from communities, professionals, or even parents labelling the youths as 'bad' (cf. Bernburg, 2009). This finding contrasts with social disorganisation theory which blames physical factors such as poverty, ethnic mixing, and dilapidated communities (Porter et al., 2015). In truth it is likely that authorities are more likely to label youths from such communities as 'bad' due to stereotyping. Therefore, positive relationships with YJS (a statutory body) are a powerful mechanism via which case workers may increase the youth's positive self-identity / self-concept. One reason strengths-based working may be effective with youths who may have low self-confidence is through its potential to empower. Researchers also recommend empowering techniques for increasing sense of coherence (Super et al., 2016).

Relationship of Psychological Risk and Protective Factors to Resilience in Youths who have Offended

Several psychological factors appeared to act as either risk or protective factors depending on the extent of their presence. Specifically, self-efficacy, self-regulation, self-identity, self-concept, and optimism either contributed to negative life outcomes (school exclusion, re-offending) or positive (employment, college) depending on whether the youth was able to develop or utilise these factors.

Bandura (2001) describes perceived self-efficacy as a situational form of self-confidence that relates to an optimistic belief that one can complete a particular task successfully. A longitudinal study found that perceived academic and self-regulatory efficacy reduced the likelihood of youths engaging in anti-social behaviour. The mechanism by which

this appeared to occur was the youths successfully interacting with their environments and developing the belief they could succeed, which also motivated them to act (Bandura, 2001, 2003). However, low perceived self-regulatory self-efficacy acted as a risk factor for offending via, for example, susceptibility to negative peer influence (Bandura, 2003).

Research shows that low emotional regulation ability is a risk factor for offending (Gardner et al., 2008; McGuire, 2008; Wolff & Baglivio, 2017). However, while studies generally agree that resilience stems from overcoming ‘adverse’ experiences, (which will usually involve a significant emotional element), emotional regulation does not feature heavily in the resilience literature. Troy and Mauss (2011) seems to be the only published article explicitly connecting specific emotion regulation strategies with resilience, which they suggest occurs via attentional control and cognitive reappraisal. Their framework proposes that emotional regulation is a moderator, suggesting individuals with good emotion regulation ability were more likely to display resilience following adversity compared with those with low emotion regulation ability (Troy & Mauss, 2011).

Self-identity may be a protective or a risk factor depending on whether it is positive or negative. Understanding one’s unique identity develops greatly according to Erikson & Erikson (1998) during the ages of 12 – 18. As our study involved 12–18-year-olds, a disruption in this age range such as a criminal record would therefore be likely to impact on their identity. In the context of youth who have offended, the high incidence of previous adversity such as abuse or neglect may have resulted in a negative self-identity, compounded by offending behaviour and subsequent arrest. While a key desistance (protective) factor in older adults is a shift in self-identity, from ‘offender’ to ‘non-offender’ (Maruna, 2010). In relations to adolescents, a poorly developed self-identity can also be a risk factor for offending via increased susceptibility to negative peer influence (Dumas et al., 2012). Studies show that resistance to anti-social peer pressure increases linearly between ages 14 and 18,

but not earlier (age 10 – 14) or later (18 - 30) (Steinberg & Monahan, 2007). One study found self-identity affected aspirations, specifically youths who perceived their ‘current’ selves as vastly different from their desired ‘future’ selves had less motivation to work towards future goals (Oyserman & Markus, 1990). Improving positive identity via resilience and strengths-based working may therefore increase motivation to change. This is a case in favour of interventions that focus on the youth’s strengths and skills (positive identity), rather than solely on offending behaviour (negative identity).

While the notion of self-concept does not appear regularly in the literature on youths who have offended, longitudinal studies have shown a consistent association between school failure, low achievement, and offending (Farrington & Loeber, 1999). According to General Strain Theory, positive emotions generated by good self-concept such as interest may contribute to consideration of ways to achieve conventional goals pro-socially, as opposed to negative emotions generated by low self-concept such as frustration which may lead to crime to achieve goals (Agnew, 2001).

A further risk factor for re-offending identified by Boeck and colleagues (2008) was the sense of having ‘nothing to lose’, or hopelessness, potentially impacting upon motivation to make changes or set goals. While a protective factor was aspirations (i.e., belief in future success, optimism, and goal setting), through increasing engagement with the Youth Justice system, particularly in youths who had experienced childhood trauma (Logan-Greene et al., 2017). Optimism has also been related to compensatory resilience i.e., it has equal benefit for those exposed to adversity, and those not exposed to adversity (Ferguson & Horwood, 2003). Optimism is also a protective factor against re-offending (Logan-Greene et al., 2017) and the opposite of hopelessness, a risk factor for re-offending (Boeck, 2008).

Throughout the thesis, empowerment via strength-based working was an effective medium through which to strengthen the aspects discussed in this section. Strength-based

approaches help to facilitate mastery experiences, which are the strongest source of efficacy (Bandura, 1997). Considering the findings of the thesis in concert, certain psychological factors that normally develop during childhood or adolescence when the conditions are suitable also seem to act as protective factors in relation to offending and negative peer influence. For example, consistent with Bandura's (2001) theory of self-efficacy, youth growing up in environments not conducive to normative development, either through experiencing maltreatment or witnessing familial violence, may not have had the opportunity to develop self-efficacy, resulting in offending.

Applied Implications

Protective Factors Identified (Chapters 2 and 3) and Intervened Upon (Chapter 4)

Our systematic review in Chapter 2 and qualitative interviews in Chapter 3 identified several factors that appeared to contribute towards positive behavioural outcomes such as desistance. We developed and piloted a resilience intervention targeting aspects consistent with those identified in the available literature, such as self-efficacy, self-concept, and emotional regulation. We also targeted factors that featured less in the literature but appeared to be strong protective factors such as sense of coherence, emotion recognition and reduced defiance. Following use of the 10-item CD-RISC (Connor & Davidson, 2003) in Chapter 4, we found all experimental group participants who did not re-offend had also increased in resilience. Despite the extremely small sample size, this is encouraging in terms of developing future resilience interventions for the YJS.

Increasing self-efficacy and self-concept via empowerment / strength-based working. One of the most consistent findings throughout the thesis refers to the construct of self-efficacy. As identified in Chapter 2, few studies specifically intervened upon self-efficacy. However, we identified that successful interventions often contained elements of

empowerment which may have increased self-efficacy (e.g., Ford & Hawke, 2012; Forgays & DeMilio, 2005). These findings are consistent with studies suggesting that empowerment via enhancing perceived power and control (i.e., self-efficacy, but also relating to a more internal locus of control) increases motivation to change (Mohajer & Earnest, 2009).

We targeted self-efficacy with a predominantly strengths based, and empowering approach known as strengths-based CBT© (Padesky & Mooney, 2012). In addition to identifying ‘hidden’ strengths, SB-CBT© allowed the youth autonomy in identifying their personal resilience strategies. Using the strategies successfully was then an effective medium through which to increase the youth’s self-efficacy. For one youth this was particularly transformational, as they developed an understanding of their ability to manage a difficult situation. In addition, the flash cards detailing many different strengths allowed the youth a sense of control, which is an empowering technique. We identified that increased resilience, empirically linked to self-efficacy, also related to desistance in the experimental youths (Schwarzer & Warner, 2013). Increasing the youth’s belief in their own ability to handle situations and make positive decisions is likely to positively impact their willingness to set further strategies and goals.

A further key finding refers to self-concept. In Chapter 2, one study found that the control group decreased in self-concept and increased in re-offending, while the experimental group increased in self-concept and decreased in re-offending (Farrington et al., 2002). Our qualitative data in Chapter 3 suggested continued negative self-concept was a risk factor for continued offending, while the development of a more positive self-concept was associated with desistance and consideration of pro-social goals. In Chapter 4, following use of strategies such as SB-CBT© and self-talk, all youths increased in resilience, which is suggestive of a more positive self-concept as evidenced by items on the resilience scale such as *“I think of myself as a strong person when dealing with life’s challenges and difficulties”*.

Staff fed back that several of the youths had also found the self-talk strategies useful and understood the potential benefits of changing their thoughts from negative to more positive.

Emotional regulation. Emotional regulation highlights the relationship between comprehensibility and manageability parts of sense of coherence, whereby understanding one's own and other's responses to a situation is necessary to successfully managing it. Two of the interventions we reviewed in Chapter 2 focused specifically on emotional welling via emotional management using psychoeducation and understanding of emotions (Ford & Hawke, 2012; Hoogsteder et al. 2018). The study by Hoogsteder and colleagues reported the strongest effect on reduced offending. However, most of the successful interventions also included elements of emotional understanding, through inclusion of approaches such as CBT (Bahr et al., 2016; Farrington et al., 2002) and empathy (Lindblom et al., 2017). Our findings in Chapter 3 identified that a key risk factor for continued offending was difficulty managing emotions. These youths were likely to continue to use unhelpful coping strategies such as substances or aggression to manage their emotions. Whilst the research literature normally references negative emotions and suggests that positive emotions aid in building the capacity for resilience (Fredrickson et al., 2003), our study in Chapter 3 identified that a small number of youths also used unhelpful coping strategies (e.g., drugs or alcohol) to cope with positive emotions which led to police arrest. In the context of youths who have offended, it therefore appeared that emotional resilience, perhaps via emotional regulation was a key area which required and benefitted from intervention.

We therefore addressed emotion regulation in Chapter 4 via several approaches. For example, staff included elements of traditional CBT such as 'cognitive distortions' to help the youth identify thoughts which may lead to an unwanted emotional response, and strategies to combat these. Additionally, in the context of the youth's own experiences, staff discussed examples of the benefits of emotion regulation and consequences of low emotional

regulation. The youth's response in the current small sample was positive, and each experimental youth had increased in resilience according to the Connor-Davidson scale which includes the item "*I am able to handle unpleasant or painful feelings like sadness, fear, and anger*". These findings suggest that emotion regulation should therefore be integral to the work undertaken by YJS staff due to its potential to increase overall resilience.

Sense of coherence (SOC). Believed to develop during adolescence (Super et al., 2016), SOC is the ability to find life comprehensible, manageable, and meaningful. (Antonovsky, 1993). In our systematic review of the literature in Chapter 2, one study found that increased SOC led to near total desistance (albeit with a small sample size) (Lindblom et al. (2017). Additionally, a later study with a larger sample size of adult participants identified that increased SOC related to reduced re-offending (Lindblom et al., 2018). Although it does not feature regularly in the desistance literature, our qualitative interviews in Chapter 3 also highlighted SOC as a strong protective factor. Specifically, staff interviews revealed that factors related to positive changes included increased awareness and understanding (of self, others, and the world). For example, successful outcomes appeared to occur through better emotion understanding and management, or increased understanding of the law. Previous research has suggested that comprehension (i.e., of the self, others, and the world around oneself) is a key component of resilience (cf. Kumpfer & Hopkins, 1993).

We therefore applied interventions designed to increase each part of SOC in Chapter 4. To increase comprehension, we incorporated a 'resilience orienteering' flashcard session, teaching emotions and feelings, and teaching the brain. It appeared that increasing the youth's comprehension of resilience using 'resilient' and 'non-resilient' flashcards and discussion was useful and may have explained why fewer youths in the control group increased in self-report resilience than in the experimental group. Staff noted that several youths in the intervention group appreciated the opportunities to discuss feelings and emotions, hence

increasing their emotional understanding through indirect methods. Several staff fed back that the ‘understanding the brain’ session was particularly well-received by the youths. Staff focused largely on the first part of SOC (comprehension), as they perceived the youths’ general understanding was low. It appeared that the youths particularly benefited from intervention to increase comprehension. We also included two further interventions to increase comprehension; facial emotion recognition via the CERT (Hunnikin et al., 2021; Wells et al., 2020) and an Identity Wheel.

Emotion recognition. A protective factor that features seldom in the criminal justice literature is emotion recognition, relating strongly to the ‘comprehension’ part of SOC. In Chapter 2, a stand-alone intervention called the Cardiff Emotion Recognition Training (CERT, Hubble et al., 2015) found increased emotion recognition related to reduced violent re-offending through increased comprehension (the first part of SOC) of facial expressions (Hubble et al., 2015). This was a novel finding, especially as it was a short (2-week) intervention that was simple to administer. A more recent study has evaluated the CERT and found it significantly reduced children’s behavioural problems and improved their mental health and well-being according to the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997; Wells et al., 2020). Findings from Chapter 3 suggested many youths had low understanding of both their own and other’s emotions. In Chapter 4, we advised staff to begin the resilience interventions using the CERT and staff fed back they found it a useful and indirect way of discussing emotions and increasing the youth’s emotional recognition. It had the added benefit of being an on-line intervention that staff could deliver virtually.

Self-identity. Ego-identity is one of the internal resources described by Antonovksy (1993). In Chapter 2, just one intervention (Real Victory, Bahr et al., 2016) discussed the relevance of improved positive identity to the process of change. Our staff interviews in Chapter 3 found that those who did not develop a positive self-identity were likely to

experience poor outcomes such as unhealthy relationships and unemployment. They were also likely to continue to succumb to negative peer influence. However, our interviews also found increased positive identity achieved via relational and strengths-based working appeared to be a key factor encouraging more pro-social attachments to both individuals and society. In Chapter 3, we also identified that youths who offended often came from neighbourhoods with high crime, potentially exacerbating the likelihood of negative influences to contend with (Johns et al., 2017). In Chapter 4, we therefore included an Identity Wheel, to enable the youths to consider their own identity, and increase their awareness of the role of friends, acquaintances, family, and role models in their own identity development. Staff fed back that this was particularly effective medium through which to increase the youths understanding of themselves. One staff member fed back that a youth they were working with initially had a strong self-identity as an ‘offender’. But following the resilience work, they developed a more positive self-identity and remained in education despite an impending potential custodial sentence (for a crime committed before their order).

To increase the youth’s ability to manage, the second part of SOC, we also included an exercise where they were able to identify their personal internal resources (e.g., calmness, determination, or optimism) or external resources (e.g., social support, training, or positive leisure opportunities). Both Strengths-based CBT© (Padesky & Mooney, 2012), and the process of resilience also addressed the ‘managing’ part of SOC. Managing pertains to decision making ability, which arguably necessitates a degree of cognitive awareness or comprehension (e.g., Bak et al., 2015), and an understanding of available resources (e.g., Boeck et al., 2006), both related to SOC. According to Piaget’s theory of cognitive development, decision-making ability develops during adolescence, and therefore chaotic or unsafe homes that impair normative cognitive development may compromise this ability. In

support of this theory, in Chapter 2, one study identified that increased ability to make positive decisions following intervention related to desistance (Strom et al., 2017).

In relation to SOC, ‘meaning’ involves believing that challenges are worthy of overcoming and provide an opportunity to learn. In the context of youths who have offended, our qualitative interviews in Chapter 2 found that willingness to attempt to overcome challenges necessitated the youths having self-belief. Therefore, while interventions aimed at increasing SOC provide a promising avenue of increasing resilience and reducing reoffending, it may be that not all aspects of SOC apply equally in this context. In relation to youths who had offended, a focus on personal empowerment, via the comprehension and manageability parts of SOC, may be the most important factors to address, at least initially. With this point in mind, future research testing the impact of SOC on resilience would be worthwhile.

Reduced Defiance

Defiance, although a key finding in both Chapters 2 and 3, also features seldom in the literature on risk and protective factors in relation to youth who have offended. In Chapter 2 Caldwell et al. (2001, 2006) targeted defiance which subsequently reduced re-offending. In Chapter 3, staff revealed that continued defiance was a contributing factor to re-offending through the youth’s dislike of obeying rules and boundaries. The positive relationships identified in Chapter 3 as a protective factor may have helped to reduce defiance in some youths. Strength-based approaches, rather than offence focused, are more likely to encourage treatment amenability and less likely to instigate defiance in the youths. We found this to be the case; in Chapter 4 staff fed back that once youth who was particularly resistant to YJS and anti-authority said following the resilience work that they had ‘warmed’ to the YJS.

Challenges to Intervention Design in Criminal Literature

Studies with youths who have offended that include a control group generally use a quasi-experimental matched-group design. This is a rigorous design, as it matches participants and controls for any baseline differences. However, both participants and those evaluating impact know who is in which group, creating a large margin for bias. For example, staff are more likely to report an increase in resilience if they think somebody is judging their work with the young person. We did indeed find that case workers were slightly more likely to record increases in resilience in control group participants than the youths themselves. Going forward, this is a difficult point to reconcile but an important consideration, nonetheless. We might address this by emphasising that the evaluation assesses interventions, not staff. The researchers could also suggest techniques for staff to avoid bias such as discussing their assessments of the youths with their managers, or a colleague.

Challenges to Intervention Delivery

Engaging the youths. Resilience work specifically involves the youths being honest about themselves and how they see themselves. The outcomes of any intervention should be clear and stated upfront. For example, do they genuinely not want to stop offending, or is it that they want to avoid the possibility of failure should they apply for a job or college? An additional factor that may be worthy of future consideration is the effectiveness of staff delivery and their meaningful involvement with the youths. At the first point of contact, case workers have the (sometimes difficult) job of engaging the youths. Intervention success is at least as much to do with ‘who works’ as ‘what works’ (McNeill et al., 2005). These fewer tangible aspects of programmes call for specific skills around building effective relationships with youth (Henry et al., 2015). As a relationship with just one supportive pro-social adult is a huge protective factor (Werner, 1989), it is striking that more studies do not include a discussion of the significance of positive relationships with the Youth Justice worker as an outcome variable. In addition, there is little guidance for staff on gaining the involvement of

youths, despite effective practice literature stressing its importance (e.g., Prior & Mason, 2010). As far as the PhD candidate is aware, YJS do not provide regular training for staff in methods to successfully engage youths. Specific techniques could include encouraging the youth's active participation in their intervention plan, inclusion of exercises that help staff identify what is important to the youth and perhaps art-based techniques which are particularly effective in engaging youth who have mental health and emotion regulation issues (cf. Rapp-Paglicci et al., 2012). Many offending youths struggle with oral and written communication, and such engagement techniques may also be empowering.

Positive relationships, although seldom addressed in the intervention literature, significantly contributed towards the youth's making positive changes via their increased positive self-identity and self-concept. This factor should not be under-estimated. Staff may enhance such relationships through use of interventions that seek to identify the youth's positive qualities and discuss their application to everyday life. For example, via discussion of the youth's self-identity using a Personal Identity Wheel, or via identifying their own resources, or their hidden strengths and applying these to problematic situations. Using a responsivity-focused approach, staff could connect to the adolescent's frame of reference and see the youth's perceptual world as they do, thus facilitating affinity (e.g., Bowen et al., 2013). The Re-ART intervention, one of the most successful out of those reviewed in Chapter 2, used this approach (Hoogsteder et al., 2018).

Finally, we saw in Chapter 3 that engaging the youths in positive activities on either a group or one-to-one basis was a powerful way of building a positive and trusting relationship. However, a further challenge is the lack of availability of pro-social leisure activities in rural areas which are important for reducing youth crime (Meak, 2006). The thesis worked with staff in both rural and populated areas. We noted that even prior to the Covid-19 restrictions, one rural Council had plans to close a substantial number of the Youth Clubs due to budget

cuts (Wyn-Williams, 2016). While case workers we interviewed in Chapter 3 in urban areas were able to set up football clubs and workshops for the youths, this was not the case in rural areas. Research shows that when youths engage in activities lacking structure and support, the risk of offending increased (Mahoney & Stattin, 2000). This issue requires further attention from both policy and research, especially given the cost of youth offending. The cost of one youth committing twenty-three offences and having one custodial sentence in 2011 was £109,060 (Ministry of Justice 2011). Research shows that numbers of youths in detention, and the length of their sentences is increasing and while prevention interventions may be expensive, they may be less than the cost of a placement within a detention centre.

Crisis management impeding the work. In Chapter 3, we identified that chaotic lives severely hampered the work that case workers had planned with the youths, with ‘crises’ often taking over the sessions. In Chapter 4, we identified that at least one case worker found it initially difficult to implement the resilience work due to the youth’s extremely stressful personal situation. In other words, case workers felt they had no option but to focus on the problem which they described as ‘fire-fighting’. Therefore, the concept of inability to cope impacting on resilience-based working is noteworthy. This area warrants future research, as staff perceived this complication as insurmountable. Lazarus and Folkman's (1988) theory of psychological stress and coping may be a useful addition to the intervention training workshops. The ways people cope with the demands of a stressful event are likely to make a difference in how they feel emotionally. If the youth is coping poorly during a crisis, they are more likely to feel worse, while overcoming problems is likely to increase resilience. Our future workshops therefore need to include ways in which staff can conduct resilience work using the youth’s current crisis as an opportunity for growth.

Giving the youths autonomy. Several case workers also appeared to have some difficulty implementing the element of choice for the youths regarding which interventions to

use. Agency contributed to changes in self-narrative from ‘offender’ to ‘non-offender’ (Maruna, 2010), while an internal locus of control related to resilience (Lefcourt, 1992), and in Chapter 3 appeared to increase acceptance of support. We therefore designed the intervention so that the youth could have some say in their intervention plan. The extent that this did not happen in the way we intended was an interesting finding, and one which will inform future delivery of the intervention training for staff. For example, we could include a session on agency and autonomy and ways in which case workers can address this via the intervention. While relational and strengths-based working meet the competence and relatedness aspects of Deci and Ryan’s (2008) self-determination theory of individual motivation, there is also a need for autonomy. It may be necessary to include YJS Managers to a greater extent in the resilience work so they can support staff to work in what may be quite different ways. Additionally, staff resource packs could include focus on the usefulness of giving youths choice, and youth resilience packs might contain a choice related exercise.

YJS culture of risk. It may be that certain tendencies within the Youth Justice system make it harder for staff give the youths autonomy and focus on increasing their resilience. For example, the role of risk in relation to problem behaviours has led to a preoccupation among agencies with reducing risk as opposed to providing opportunities for growth and development (Early & Glenmave, 2000). While recommendations such as the 2016 Taylor Report call for more strength-based working, this can be difficult to implement with youths who have low levels of resources and perhaps low levels of understanding. One study found youths judged to have more strengths had more strength-based interventions in their service plans, but those with more vulnerabilities did not have more interventions targeting their vulnerabilities (Singh et al., 2014). This is a difficult issue to overcome but nonetheless requires attention due to the potential barrier it creates regarding resilience-based interventions.

The current thesis shows that interventions which focused on the youth's strengths and qualities and taught useful ways to manage emotions, appeared to be more likely than offence-focused working to reduce re-offending. According to Caldwell et al. (2001, 2006), punitive and offence focused approaches simply serve to increase defiance against authority and laws. Case and Haines (2021) have called for YJS to use 'Bureau' models for higher risk offenders as well as lower-level prevention cases, effectively replacing current offence focused YJS systems. Bureau approaches are a form of 'positive youth justice' (rather than negative, which labels children, often treating them like adults) which seeks to promote positive behaviour, rather than focus on the negative. The Bureau approach accepts that crime, for most, is a normal part of growing up.

Individual versus group-based interventions. Due to its individualised nature, we decided in consultation with the YJS Service manager that case workers would pilot the intervention via one-to-one working. While group sessions may save time for YJS, and be a more cost-effective option, not all youths would be comfortable in a group due to extreme shyness or low confidence. In addition, not all topics may suit group discussion, for example personal resilience strategies or discussion of strong emotions – especially if the youth have unresolved trauma. However, once case workers have helped the youths increase their confidence via individualised one-to-one working, groups may provide a great opportunity for further resilience-building in a safe environment and may also be resource efficient. Some youths may always prefer one-to-one working, but for those willing to engage in group work, groups can provide a great motivational resource where youths can learn from each other. Discretion to ensure anti-social partnerships did not ensue would be essential, and while in one sense a group may save time, a group session also needs adequate staffing to facilitate positive interactions between individuals. Another advantage of group work is that it can be a good way to introduce youths to positive leisure activities (e.g., bouldering, fishing, cookery,

and bike-riding), increasing the youths trust in YJS, their self-efficacy, and providing an experience for personal growth.

Length of time needed to embed new ways of working. Case workers fed back that they would benefit from more time to fully embed the new intervention into practice. While designed to build on ways in which staff were already working, some aspects of the intervention were new and novel to staff. Regular evaluation of success may also be of benefit so that staff can see the effects of resilience building with the youths across time.

Booster sessions. In keeping levels of staff motivation high, the intervention will remain open to provide opportunities for case workers and managers to feedback as they have done throughout the pilot and inform programme development. Regular staff refresher sessions may help to ensure case workers continue the resilience work. New ways of working are also a challenge for Managers who supervise the case workers, and it is our belief that we should also make refresher sessions available to Managers. Along with First Aid or Manual Handling refresher training, services and companies could also provide refresher sessions in Resilience skills (and others extensively used). This is especially pertinent in the field of youth resilience, where research studies constantly add to this body of knowledge. Anecdotally, there is a need for more refresher training for staff who find the content of interventions new and novel.

As risk and protective factors that affect resilience are cumulative and dynamic, once the youths begin to increase in resilience, they are likely to continue provided the skills and reinforcement also continues. It therefore seems pertinent to provide opportunities for practice and maintenance of psychological skills post-intervention. The psychological sports skills coaching literature often makes similar arguments (e.g., Callow et al., 2010).

Challenges to Intervention Evaluation

Barriers to using resilience assessments with offending youth. When using the Connor-Davidson Resilience Scale in Chapter 4, in some cases there was a discrepancy between the youths self-scores and the case worker scores, with youths scoring themselves much higher. This may be suggestive of the ‘bravado’ identified in Chapter 3, whereby ‘appearing strong’ acted as a protective coping mechanism. Individuals who perceive themselves as stigmatised are often unwilling to admit that they may need support (Williams & Mickelson, 2008). The PhD candidate therefore recommended staff use the term ‘mental toughness’ instead of resilience with one of the youths who was particularly hard to engage and who fit the criteria of a youth exhibiting bravado. This approach was successful, and the youth completed the resilience process assessment and chose several self-talk strategies.

In contrast, other youths scored themselves much lower than their case worker. One reason for this could be feelings of depression or anxiety stemming from the experience of arrest. Additionally, Fougere et al. (2015) suggested that youths who had offended may not have the level of awareness required to accurately self-report resilience and thus potentially over or under-estimate it. Fougere and colleagues believed this may have contributed to their findings that resilience was unrelated to re-offending. Therefore, in Chapter 4 we asked staff to begin with a resilience orienteering session so that the youths had a better understanding of this concept when they completed the scale at Time 1.

Another factor that may have impacted assessment of resilience was trust. Research has shown that youths who have offended often have low trust in others (Skuse & Matthews, 2015). This is likely to be an issue throughout research with youth who have offended, and we may surmise that Time 2 scores (when the youth has hopefully established a trusting relationship with the case worker), are the more reliable. In future it may be worth including a third perspective (i.e., parents or teachers scores) or matching resilience with objective behavioural outcomes

Studies show that that half of 15–17-year-olds who had offended had the literacy or numeracy abilities of an average 7-11 year old (Ministry of Justice, 2016, Table C1b). While previous studies have used the Connor Davidson resilience scale successfully with youths of age 10-18, anecdotally staff piloting the intervention fed back that one or two youths may not have fully grasped the questions despite staff's efforts to simplify them. It may be that these youths would have suited a measure such as the Children and Youth Resilience Measure (CYRM) for ages 5-9 (Jefferies et al., 2018). However, we chose the Connor-Davidson Scale due to its operational definition of resilience as the ability to 'thrive in the face of adversity' as well as its inclusion of an item relating to emotional regulation (Connor & Davidson, 2003). While emotional regulation is particularly important in youths who have offended and neither the CYRM for children nor the adolescent version include this factor. However, the CYRM does include items relating to relationships which are also important for resilience.

Definition of resilience. Overall, we were not able to identify a measure of resilience that contained all the factors relevant to successful outcomes in youth who had offended. Considering the frequently problematic upbringings, and subsequent difficulties experienced by many youths who had offended, increasing their psychological resilience seemed to be a key area for development. However, the literature largely defines resilience as 'bouncing back', suggesting the individuals 'return' to a place of strength (e.g., Smith et al., 2008). It is likely that youths who offend may need to 'bounce forwards'. To successfully measure resilience, it is vital that youths and practitioners agree on its definition and operationalisation.

Factors that may support this positive bounce forward for the current population group include increased sense of coherence (particularly comprehension), positive relationships with YJS staff, improved self-concept, and stronger self-identity (cf. Johns et al., 2015; Luthar & Brown, 2007). Additionally, increased ability to regulate emotions and

reduced defiance were key to positive outcomes (Caldwell et al., 2006; Ford & Hawke, 2012). A key factor is also the ability to be able to ask for help when needed. Both our study in Chapter 3, and previous research has found that protective factors contributing to increased support seeking are higher self-efficacy and an internal locus of control (Schonert-Reichl & Muller, 1996). Such increases have the potential to increase optimism and therefore motivation to make positive changes. While measures such as the Resilience Scale include purposefulness and self-belief (Wagnild & Young, 1993), as far as we are aware, no resilience measure includes all elements relevant to youth who had offended. We therefore recommend that future studies develop a resilience measurement for youths who have offended including these items.

Measuring additional positive outcomes. In Chapter 2, we searched for interventions worldwide that examined the relationship between psychological assessments and assessments of behaviour change but identified very few. In the few studies that did examine this relationship, the only behavioural outcome measured was re-offending. No study measured positive behavioural changes such as involvement in education, pro-social activities, or developing healthier relationships. According to the case worker interviews in Chapter 3, reduced offending or anti-social behaviour was not the only important point of reference. Staff also measured success via improved attendance at school or college, engagement in positive activities, or improved relationships. However, staff did not see youths who had stopped offending but remained in abusive relationship or unmotivated to work as huge success stories. Therefore, there is some discrepancy in how research studies measure success and how YJS staff measure success. Interventions that only assess reoffending rates post intervention ignore the fact that the youth may be successfully participating in society or achieving their potential. It is therefore important to consider different ways of measuring success. Such measures may include self-report resilience, as

used in the current study (Connor & Davidson, 2003) or the Justice Star (an interactive tool designed to support and measure change; Triangle Consulting Social Enterprise, 2021).

Thesis Strengths and Limitations

Strengths

There are several strengths to this thesis. From a theoretical perspective, the thesis has incorporated established resilience theory from literature pertaining to youths who have offended to inform the development of an individualised resilience intervention. Furthermore, the thesis included the input of the participants via qualitative interviews of literature pertaining to the voice of the youth. We also used a quantitative approach in the intervention study. Therefore, a strength of the thesis is that it contained numerous research methodologies, thereby providing the candidate with a broad research training experience.

As far as the candidate is aware, this is the first study to identify whether increased resilience via targeted intervention related to both reduced offending and other positive outcomes. In general, the empirical evidence suggests that resilience and strengths-based interventions had a positive effect on the youths. This theme is consistent throughout the thesis and we believe this is a noteworthy strength. We also used both staff and self-report assessments of resilience, which give a stronger indication of changes as they are both subjective and objective. In relation to research training, the completion of a systematic review in Chapter 2 inspired the candidate to prepare and submit this work to a well-established Journal. This process was a valuable learning experience and has prepared the candidate for future journal submissions.

Limitations

Our small sample size in the experimental group ($n = 6$) and in the control group ($n = 4$) is clearly a limitation of Chapter 4. This means that at this point we can only draw very

tentative conclusions as to our findings. Collecting the remaining participants data with a further ($n = 7$) and ($n = 2$) respectively, will enable us to draw further conclusions. But Covid-19 restrictions vastly reduced our originally hoped for sample of 50 youths.

In relation to future publication of our findings, once we have collected the remaining participants data, there may be a risk of bias due to the heavy involvement of the PhD candidate as the programme developer. But these will be mitigated throughout. Effect sizes in evaluations of criminal justice programs conducted by developers of the programs tend to be larger than those conducted by independent researchers (Petrosino & Soydan, 2005). Researchers have referred to this phenomenon as the difference between demonstration programs and clinically driven programs (e.g., Nathan et al., 2000). This means that interventions are more likely to be successful when the developer is heavily involved in the piloting and the evaluation. Interventions rolled out to a wider range of participants without the input of a heavily invested researcher may be less successful.

A further limitation was that we did not interview the youths and their caregivers. While time consuming, this may have provided us with an opportunity to corroborate findings across different sources, and we may also have gained valuable insight had we done this. In this instance, resources did not allow for this eventuality.

Directions for Future Research

Several theoretical and empirical questions have arisen which are worthy of future consideration. As these questions pertain to different aspects of resilience, at research and service level, we will group these accordingly below.

Research Level Questions

- Can future research agree on a method or a limited number of options for measuring re-offending? Most studies within criminal literature use quantitative methods such as

offending outcomes as a measure of programme success, and very few use any other measures. However, researchers were varied on how to assess re-offending. Studies assessed re-offending via prediction (risk) of re-offending and actual re-offending; any new offence post-intervention; severity of later offending; the length of time taken to re-offend; and re-offending severity (Bahr et al., 2015; Caldwell et al., 2006; Cann et al., 2005; Farrington et al., 2002; Hoogsteder et al., 2017; Strom et al., 2017). These differing methods of evaluation make assessing programme effectiveness harder, as well as comparison between different interventions less useful. Another important point to consider is that most studies used police arrest, court reports, and probation reports to identify re-offending (Lipsey, 1988). However, these outcomes only measured acts identified by law enforcement or juvenile justice. In addition, re-offences in studies may be under-reported due to the length of time between the offence committed and the criminal charge (St. James-Roberts et al., 2005). Few studies include self-reported delinquency to measure treatment effects. While self-reported delinquency may not be fully accurate (depending on the youth), it may increase the strength of evidence for programme effectiveness. We therefore recommend that studies should report intervention success by several outcomes (e.g., time and severity using both official and self-report).

- To reduce risk bias from intervention developers, who might be best placed to further evaluate the intervention and assess whether the intervention is successful?
- How to assess whether the intervention is portable from our demonstration project to real world settings?
- It would be useful to have an agreed research design and evaluation method for use with this population. In clinical or applied research that tests the efficacy of new treatments or interventions, researchers generally agree that a randomised control trial

(RCT) is the gold standard of study design (Kabisch et al., 2011). This is largely due to the ability on an RCT to limit potential bias in comparing treatment and control groups. However, researchers in the field of criminology seldom use this design for several reasons. For example, in justice programme effectiveness, it is vital to ensure treatments match individual risks and needs (Bonta, 2007). As such, randomisation is harder. For example, one study in Chapter 2 began with randomisation, but half-way through the court decided not to continue with this process (Bahr et al., 2015). Additionally, many intervention studies (including ours) with this population group are voluntary, therefore the youth (and their parent/carer if under 16) must agree to it.

- Considering staff difficulties in delivering resilience work when the youth was in crises, an area of future research is to use naturally disconfirming experiences as an adversity for the youth to overcome ‘in the moment’, enabling stressful situations to build resilience.
- Is there scope to develop a resilience measure specifically for youths who have offended? Resilience factors that appear to be protective factors against re-offending include comprehension, attachment, positive relationships, future focus, positive identity, self-concept, reduced defiance, self-efficacy, perceived autonomy, and emotional regulation. No one resilience assessment tool includes all of these, such a measure may be useful to identify where to intervene and to assess changes occurring.

Service Level Questions

- To what extent would it be useful to conduct interviews with youths who have participated in the intervention to ask about their experience? Would they be able to tell us if anything they felt was missing, anything they did not like, or anything they would like to see more of?

- Is it feasible for YJS to incorporate bi-annual resilience training boosters for staff?

We appreciate that quarterly may not be viable, but from the candidates experience of the pilot study, annual boosters may be insufficient.

- Is it possible to phone those youths who have officially not re-offended and ask for a confidential self-report regarding whether they offended but avoided arrest?
- Do YJS have the resources to offer follow-up resilience booster sessions for those youths that might be interested in this opportunity? If so, what might booster training look like? Staff could offer resilience boosters to those youths who self-report that they had re-offended. This may be a cost-effective method in the long-term.

Summary

Key factors relating to increasing positive outcomes in youths who have offended include providing opportunities for a more positive self-identity and self-concept, and staff's role modelling of positive behaviours. Such approaches are likely to support the youth's acceptance of support, and promote better attachment to society, and greater likelihood of conventional goal setting.

Findings in relation to the psychological resilience intervention piloted in the current study are positive. With further improvements, independent future studies should test the intervention with a larger sample size. Such a study should assess recidivism and resilience in the following two years and if possible, include multiple settings such as community and detention centres. While the recommendations based on the results of the current thesis will inevitably require significant investment, strengthening young people's psychological resilience may help to replace a potential negative long-term trajectory with a more positive life direction.

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Appendix A: Qualitative Interview Schedule

Qualitative Interview schedule

1. Background

Tell me about the YP you work with - background do they have? (environmental external). Please refrain from sharing information that may easily identify an individual.

Prompt: Hobbies / constructive use of time?

2. Psychological profile

a) What are they like as a person? Tell me about personal factors such as their personality / behaviour

Prompt: Awareness, motivation, attitudes, beliefs.

b) What psychological resources do they have to deal with difficulties?

(if lack) Why do you think they lack certain psychological resources?

c) How do they view themselves as a person?

d) How do they express their emotions? *We do not wish to know about specific crimes, as this may make an individual identifiable*

e) How well can they reflect on their behaviours, and the behaviour of others?

f) How do they feel about the amount of control they have over their lives?

g) When they started working with you, to what extent did they stick to their agreement with you?

3. Relationships with others

a) Tell me a bit about what relationships they have with other people – how do these psychological factors influence how they interact with others?

b) How do they understand, or react to other people's emotions?

c) Do their reactions depend at all on the type of person they are/personal issues/specific offences?

d) Are peer groups an issue for many?

e) What role models do they have - who do they identify with?

f) Do you have any ideas as to what makes individuals identify with certain role models? *Please do not give names or any identifiable info if it is an individual who is known for criminal behaviour*

4. Interventions

- a) Can you give me some examples of the interventions or approaches you have used or currently use?
- b) How do you decide what activities to do? *Prompt: why do you decide to choose certain interventions?*
- c) Do you use particular interventions or approaches at particular 'stages'?
- d) What is the focus of the interventions - What attitudes / behaviours do they target?
- e) What sort of activities do the young people do during their time with you?
- f) Do some interventions work better with some types of young person, and can you give me any examples?
- g) How do you decide on group work, if there is any? *Please don't share any info that would lead to the identification of an individual.*
- h) If interventions require participants to have reading/writing skills, how well do they engage?
- i) Is engagement important, i.e., do you find that those who engage more benefit more? *Prompt: What is more important, the level of engagement or what is actually done with the young person?*
- j) What can you tell me about any interventions that you have heard that sound promising? Can you think of any reasons for this?
- k) Can you think of any that have been less effective than others? Can you think of any reasons for this?

5. Delivery of interventions

- a) How do you instigate changes / motivate and engage the young person?
- b) To what extent is the purpose of the activity/ies made clear to the participants?
- c) Does venue or location influence intervention effectiveness?
- d) What choices does the young person have regarding their work with you?
- e) To what extent do you think participants feel that they can influence the situation during these activities, as opposed to simply being told what to do?
- f) Do the child / young person and their families feel that enough support is provided?
- g) What other sources of support do the young people have, and how do they respond to this support?
- h) Are 'rewards' used for compliance, if so, do any work well and with who?

- i) As a role model, you are in a unique position to work with them to change how they see themselves. How do you challenge their current vision of themselves?
- j) How often are participants challenged during the activities and how do they respond?
- k) To what extent did you portray a positive vision of the young person during the intervention?
- l) To what extent did you role model the behaviours you were looking for?
- m) If the young people like to take anti-social risks, does the intervention, or approach you take promote the taking of more pro-social risks and if so how?
- n) How did the interventions allow young people to experience emotions, how was this experience provided?
- o) How do you encourage the young people to see the importance and value of stopping offending?
- p) What type of visions or end points do you and the young person work to? (goals)
- q) If you encourage them to reflect, how do you do this with them?
- r) What are their responses like?
- s) How does an intervention end? Who makes that decision?
- t) How long do you stay in contact with the young person after the closure of the intervention?

6. Response of the child / young person

- a) In general, how well do they engage – if some better why do you think this is?
- b) From what we discussed about their psychological resources, does that influence how they respond?
- c) What about environmental / external influences?
- d) Do they verbalise why they change, or why they don't?
- e) Are there any who say they can't change if so, what reasons do they give?
- f) What, if any, barriers to engagement have you observed?

7. Changes noticed

- a) For those that stop or reduce offending, what changes psychologically that you notice?
- b) What about those that don't – what stays the same?
- c) What else changes - environment, relationships, how they see themselves?

- d) Are there any young people who have difficulties completing programmes and why might this be?
- e) How do you work with those that do not accept responsibility?
- f) If changes were positive, how did you help the young person build on these changes?
- g) What were their reasons for wanting to change?

Appendix B - Psychological Resilience Intervention Workshop Content

Workshop 1 Content – Sense of Coherence (SOC)	Resources / Website links
<p>Definition of SOC model of resilience: Comprehension, manageability and meaning.</p> <p>Effects of high and low SOC on youths.</p> <p>Factors that may hinder development of SOC.</p> <p>Explanation and examples of ‘General Resistance Resources’ (Antonovsky, 1979).</p>	<p>SOC Workshop manual.</p> <p>Cardiff Emotion Recognition Training (CERT). https://emotionrecognition.cardiff.ac.uk/ (Hunnikin et al., 2021; Wells et al., 2020).</p> <p>Videos explaining the brain: https://www.youtube.com/watch?v=ZLF_SEy6sdc (Dovetail Qld.,2019).</p> <p>https://www.youtube.com/watch?v=py8deTlxNco (FloorPlay Coaching, 2018).</p> <p>Feelings and emotions flashcards.</p> <p>Identity Wheel.</p> <p>Empowering questions.</p>
Workshop 2 Content – Strengths-based approaches	Resources provided
<p>Definition of resilience used by the programme developers: “<i>Resilience provides a buffer to protect us from psychological & physical health consequences during difficult times</i>”. (Rutter, 1985; Yi et al., 2008).</p> <p>Explanation of how strengths-based working links to resilience.</p> <p>Traditional CBT: CBT Wheel (Beck, 2011)</p> <p>CBT anecdotes “Noise in the night” (cf. Beck, 2005) “Unnoticed by a friend in the street” (Blenkiron, 2005).</p>	<p>Strength-based approaches Workshop manual.</p> <p>4-step process: SB-CBT© (Padesky & Mooney, 2012).</p> <p>Six strengths areas (Davis, 1999).</p> <p>Visualising technique.</p> <p>Laminated colour- coded strengths area wheel.</p> <p>Colour-coded strength flashcards.</p> <p>Resilience Strategies C5 worksheet.</p> <p>Practice Resilience C5 worksheet.</p> <p>Website link to VIA Character strengths survey: www.viacharacter.org © Copyright 2004-2021, VIA Institute on Character. All Rights Reserved. Used with Permission.</p>

<p>Socratic questioning (cf. Neenan, 2009).</p> <p>SB-CBT© “Case study” for application into practice.</p>	<p>VIA character strengths video: Rebuilding a life through character strengths (YouTube).</p> <p>https://www.youtube.com/watch?v=sZJG3atoc6Q</p> <p>(Via Strengths, 2011)</p> <p>Cognitive distortions and reframing:</p> <p>https://iqdoodle.com/cognitive-distortions/</p> <p>(Sicinski, 2021)</p>
<p>Workshop 3 – New Process of Resilience</p>	<p>Resources provided</p>
<p>Resilience quiz.</p> <p>Resilience analogy (Johnstone, 2010).</p> <p>Broad definition of resilience:</p> <p><i>“Good psychological functioning & good behavioural outcomes despite adverse circumstances expected to jeopardise normative growth & adaptation”</i> (Bonnano, 2004; Masten, 2001; Rutter, 2006).</p> <p>Introduction of a new process of resilience – anticipate, minimise, manage and mend (Alliger et al., 2015, Petit et al., in prep).</p> <p>Relation of SOC ‘comprehension’ to anticipate and minimise.</p> <p>Relation of SB-CBT© Step 3 to anticipate and minimise.</p> <p>Avoidant / approach-focused coping.</p> <p>Self-talk.</p>	<p>Process of resilience manual.</p> <p>13-item Resilience Process scale© (Petit et al., in prep).</p> <p>Positive self-talk flashcards.</p> <p>Leftbrain Buddha: Mindfulness for Teens</p> <p>https://leftbrainbuddha.com/mindfulness-for-teens/</p> <p>(Beach, 2021).</p> <p>CBT traffic light system for emotional regulation</p> <p>http://www.thinkclinicalpsychologists.com.au/2018/07/10/how-traffic-lights-can-help-you-manage-your-emotions/</p> <p>(Reiner, 2018).</p>