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UNIVERSITY OF SOUTHAMPTON  
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**THE MODERATING INFLUENCE OF RESILIENCE ON  
CHILDHOOD TRAUMA**

**Towards an understanding in homeless persons**

by

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Thesis submitted for the Degree of Doctorate in Clinical Psychology

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Kate Willoughby

## **THESIS ABSTRACT**

Resilience is offered as a theoretical framework from which the competent functioning of a small proportion of survivors of childhood trauma can be understood. Despite the likely deleterious impact of abuse and neglect some individuals continue to thrive and achieve positive outcomes. The literature investigating protective factors implicated in resilience to childhood trauma is reviewed. Studies indicate that certain individual and environmental protective factors provide encouraging experiences and promote positive adaptation. Although current literature needs to move to a more process orientated approach for investigating resilience, existing findings offer valuable insights for the direction of prevention and intervention programmes for at-risk populations. This focus on strengths rather than deficits paves the way for innovative approaches especially with disenfranchised groups who might otherwise be less receptive, for instance individuals marginalised from society such as homeless individuals.

On this basis, the empirical study investigated the relationship between childhood trauma and maladaptive coping and the relative influence of resilience, in homeless individuals. A significant relationship between childhood physical abuse and maladaptive coping existed, which was moderated by high levels of resilience. It is postulated that resilience in the homeless population may have a greater protective effect against maladaptive coping as severity of childhood physical abuse decreases. Studies replicating these findings in this and other disenfranchised groups are essential in order to fully understand the role of resilience and potential benefit of promoting and enhancing resilience and coping in reducing tenancy breakdown and therefore chronic and repeated homelessness.

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**A Critical Review of The Construct of Resilience in The Context of Childhood  
Trauma**

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## **ABSTRACT**

Current definitions of resilience emphasise the construct as a dynamic process involving successful adaption and competent functioning. However research often focuses on identifying resilient trait characteristics. As such certain individual protective factors (e.g., above-average intelligence, internal locus of control, and avoidance of maladaptive coping), as well as factors relating to positive family and community functioning have emerged (e.g., having a strong attachment to a supportive adult, supportive and cohesive neighbours, involvement in structured afterschool activities, and support from caring adults in the community). These offer valuable insights for prevention and intervention programmes aimed at enhancing resilience in a variety of at-risk populations.

One particular at-risk population involves survivors of childhood trauma<sup>1</sup> who are vulnerable to a range of negative consequences for developmental status and psychological functioning across the life span. However a proportion of survivors appear to function adaptively within one or more domains. Following a comprehensive literature search 16 studies investigating protective factors implicated in resilience to childhood trauma are reviewed. In addition to highlighting salient protective factors associated with resilience to childhood trauma, consideration is given to rates of resilience, and to limitations and methodological issues. The clinical implications of the literature and considerations for future research are also offered.

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<sup>1</sup> Throughout this paper childhood trauma, child abuse, and child maltreatment are used interchangeably to refer to the same concept.

## **INTRODUCTION**

Individuals who have experienced childhood trauma – including but not limited to sexual, physical and emotional abuse, and neglect – are at-risk of disrupted developmental trajectories and long-term pathological functioning including mental health and substance misuse difficulties. Despite such risk factors a proportion continue to thrive and achieve adaptive outcomes. Such resilience may be a result of certain protective factors that provide encouraging experiences and promote positive adaptation.

Resilience – a dynamic process encompassing an individual's capacity for adapting successfully and functioning competently despite experiencing significant adversity – is an area that is generating increasing interest (Cicchetti, 2003). The mechanisms involved in such adaptive functioning may be particularly relevant for designing effective prevention and intervention strategies for at-risk populations (Cicchetti & Toth, 1992). This paper critically reviews the construct of resilience and explores what is known about determinates of resilience in individuals who have experienced childhood trauma and therefore how resilience may be promoted in this and similar at-risk populations.

In defining the construct of resilience, the first section discusses conceptual issues, explores its validity according to standardised measures, and provides an overview of current research on resilience and protective factors, focusing mainly on comprehensive reviews (e.g., Luthar & Zelazo, 2003; Luthar & Zigler, 1991). Resilience is offered as a theoretical framework from which the competent functioning of a proportion of survivors of childhood trauma can be understood.

The second section provides an overview of current knowledge on the negative sequelae of childhood trauma. This area has received considerable research

attention over several decades, much of which has documented the adverse consequences of maltreatment on developmental status and psychological adjustment. This section focuses on using comprehensive reviews (e.g., Briere & Runtz, 1991; Browne & Finkelhor, 1986; Cicchetti & Toth, 1995). Consideration is also given to protective factors which contribute to positive outcomes following childhood trauma and populations within which childhood trauma is particularly prevalent.

The third and main section examines how these two fields have been drawn together, by providing a detailed review of literature focusing on factors contributing to resilience in individuals exposed to childhood trauma. This section utilised a formal literature search strategy using electronic bibliographic databases and specific search terms in order to identify relevant literature. Although past research on the adverse consequences of childhood trauma has largely ignored the diversity in adaptation among this population, literature is emerging that indicates some children and adults demonstrate relatively positive adjustment and even competent functioning despite such negative experiences.

Finally, ways in which the literature on resilient functioning in individuals maltreated as children can be improved are discussed. Clinical implications are also presented by considering how knowledge about resilience in the presence of adversity can inform prevention interventions and promotion of resilience. Consideration is also given to the gaps in current knowledge and suggestions for further research are proposed.



## **1. THE CONSTRUCT OF RESILIENCE**

### **1.1 What is Resilience?**

Resilience has been conceptualised as a dynamic process encompassing an individual's capacity for adapting successfully and functioning competently despite experiencing significant adversity (Cicchetti & Garmezy, 1993; Luthar, Cicchetti, & Becker, 2000; Masten & Powell, 2003). Two notions are implicit within this definition: 1) there must be significant threat or adversity (i.e., risk), and 2) positive adaptation is achieved despite adversity (i.e., competence) (Masten & Coatsworth, 1998).

### **1.2 Conceptual Issues**

Defining the construct of resilience has been an important initial step in the field, during the course, several important issues have arisen. Firstly, the idea that resilience is a stable characteristic (i.e., a trait-like condition) has been discarded in favour of emphasising it as a dynamic process (Luthar et al., 2000). Resilience as a trait-like condition was considered unhelpful because it potentially fosters blame for those affected by risk, and fails to account for the multitude of factors which impact upon adaptation (Luthar & Zelazo, 2003). Therefore positive adaptation despite exposure to adversity is now considered a developmental progression that changes with new experiences and vulnerabilities. Researchers are focusing on developing an understanding of the dynamic process of resilience and what protective factors might contribute to positive adaptation (Luthar et al., 2000; Masten & Powell, 2003).

Secondly, the idea that resilience is a global feature has been discarded in favour of considering it as being relative within certain domains (e.g., academic, behavioural, or psychological functioning, and social competence). Individuals may

therefore be resilient in one domain but not another (Luthar et al., 2000). Indeed, it would be unrealistic to expect resilience to generalise across all areas of life. Such uneven functioning across a variety of domains does not invalidate the construct but indicates the need for specificity in the spheres within which research findings apply (Luthar, 1993).

Finally, researchers consider that defining risk and protective factors universally is less helpful as it fails to take into account the impact of intellectual functioning (in terms of cognitive and emotional capacities) or developmental difficulties (Luthar et al., 2000; Radke-Yarrow & Sherman, 1990). Whereas defining protective processes according to developmental and situational mechanisms is considered a more individualised approach (Rutter, 1987).

### **1.3 Validity of the Construct**

Valid and reliable instruments can offer a structured and consistent approach to defining and measuring resilience. A recent review of instruments measuring the construct highlighted three self-report questionnaires that may be particularly useful (Ahern, Kiehl, Sole, & Byers, 2006).

The Connor-Davidson Resilience Scale (CD-RISC: Connor & Davidson, 2003) assesses characteristics of resilience such as the ability to cope with stress and adversity. Items appear to reflect characteristics of resilience including: personal competence/tenacity; trust in one's instincts/tolerance of negative affect; positive acceptance of change/secure relationships; control; and spirituality, rather than the process of resilience.

The Resilience Scale for Adults (RSA: Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003) measures intra- and inter-personal protective resources that facilitate adaptation and tolerance to stress and adverse negative life events. Again

items appear to reflect resilient traits rather than a dynamic process, although they represent competent functioning across a much broader range of life facets including: perceptions of self and future; structured style; social competence; family cohesion; and social resources.

The Resilience Scale (RS: Wagnild & Young, 1993) measures resilience as a positive personality characteristic that enhance an individual's adaptation. Items reflect resilience traits such as determination 'When I make plans I follow through with them', adaptability 'I can get through difficult times because I've experienced difficulty before', and self-reliance 'I am able to depend on myself more than anyone else', rather than a dynamic process.

These measures have good psychometric properties, including construct, discriminant, and concurrent validity, and are appropriate for use with a range of clinical populations (Ahern et al., 2006). The RS appears to be the strongest because it is appropriate for use with different ages, genders, and ethnic groups, and has had numerous applications (see: Ahern et al., 2006). However they focus more on resilient characteristics despite the emphasis on a dynamic developmental process. Nevertheless they offer a quantifiable means of exploring protective factors for a variety of at-risk populations and enable the potential of greater consistency and interaction of findings. Indeed, many of the facets these measures assess have begun to emerge as important protective factors for individuals who have experienced adversity (Masten & Coatsworth, 1998).

#### **1.4 Overview of Research on Resilience and Protective Factors**

Although not labelled resilience, early studies of stress resistance that found evidence of adaptive behaviour laid the foundations for contemporary investigations in the area (e.g., Garmezy, 1970; Garmezy & Streitman, 1974; Masten, Best, &

Garnezy, 1990; Zigler & Glick, 1986). Research can be traced back to investigations about exposure to extreme stress and poverty, and to the functioning of people exposed to childhood trauma (Cicchetti, Rogosch, Lynch, & Holt, 1993; Garnezy & Streitman, 1974; Rutter, 1979). Such evidence indicated that a proportion of children thrive despite their at-risk status, which has subsequently driven empirical efforts aimed at understanding the variety of individual responses to adversity (Luthar et al., 2000).

Scientific interest has burgeoned over the past 20 years becoming increasingly more sophisticated since its inception (Cicchetti, 2003). However there is a paucity of research taking a biological and genetic perspective, with the majority coming from a psychosocial perspective, and single rather than multiple levels of analysis. Furthermore, most of the available research has focused on defining broad protective factors, despite the need to move beyond this to underlying protective processes (Luthar et al., 2000).

Luthar and Zelazo (2003) provide a succinct review of the evidence from a variety of studies on resilience highlighting salient protective factors from a diverse set of at-risk groups. Early research on resilience led to the delineation of a triad of 'protective factors' (Garnezy, 1993, p. 132), implicated in the development of resilience: 1) child attributes, 2) aspects of their families, and 3) characteristics of their wider social environment.

In terms of child attributes, protective factors that have consistently emerged include: above-average intelligence; internal locus of control; good coping skills; and an easy going temperament (Garnezy, 1993; Luthar & Zelazo, 2003). Other factors that may promote resilience through limiting the extent of risk might include, for example, avoiding maladaptive coping strategies such as using drugs and alcohol as a

way of coping with negative experiences, or escaping negative family environments through early marriage or pregnancy (Rutter, 1999).

Positive experiences may also have a role in promoting resilience, particularly if they directly counter or compensate for some risk factor (Rutter, 1999). A child's cognitive and emotional response to a situation may also impact upon resilience as a result of individual differences in perceptions of negative experiences. As such, cognitive processing may also have a role in determining whether individuals are able to successfully adapt in spite of significant adversity (Rutter, 1999).

Such individual attributes however may be less powerful than environmental factors (i.e., the family and community) in promoting and sustaining resilience (Cauce, Stewart, Domenech Rodriguez, Cochran, & Ginzler, 2003). In terms of family characteristics, the most consistent protective factors emerging from empirical investigations include: a responsive, supportive, and functional early family environment; good quality parenting; and a strong attachment to a supportive adult (Luthar & Zelazo, 2003).

With regard to characteristics of the wider social environment, evidence demonstrates the protective effects of having supportive and cohesive neighbours and a sense of community belonging, as well as factors directly impacting on children, such as interventions fostering school readiness, involvement in structured afterschool activities, and engagement with prosocial peer groups (Garnezy, 1993; Luthar & Zelazo, 2003). In addition, Wolkow and Ferguson (2001) highlight support from caring adults in the community (e.g., teacher, neighbour or family member) as a key protective factor.

The powerful influence that environmental factors appear to exert over individual attributes, may in part be due to the way the environment shapes a child's character (Luthar & Zelazo, 2003). For instance, Rutter (1998) highlights the 'catch-up effect' by demonstrating that orphaned babies who are adopted benefit enormously from enriched environments and lose their profound early deficits and often reach near-average developmental functioning. Such findings offer a 'powerful testimony to the deleterious effects of early deprivation on cognitive functioning, as well as the beneficial effects of salutary environmental conditions' (Luthar & Zelazo, 2003, p. 531). Family and community factors may be superior, however child attributes are in no way perceived insignificant.

Rather than considering the triad of protective factors in isolation, the cumulative effect of multiple factors has been considered important. Rutter (1999) suggests that not only will multiple adverse experiences increase the risk of negative outcome but multiple protective factors may also increase the likelihood of positive adaptation and therefore promote resilience. Furthermore, experiencing success in one area may lead to positive chain reactions in other areas, making it easier to approach new challenges and experience further success (Rutter, 1999).

## **1.5 Summary**

As a theoretical framework resilience is useful in understanding positive outcomes in at-risk populations. There is a need to carefully consider the definition of resilience, especially because the construct is considered to be a fluid and dynamic process. The main focus of research in the area has been on factors which appear to contribute to positive adaptation for at-risk populations (e.g., above-average intelligence; internal locus of control; good cognitive, emotional, and behavioural coping skills; good school functioning; positive social relationships or friendships;

supportive adult relationships; and positive family and community environments). Individuals who have experienced childhood trauma have been identified as one particular at-risk population.

## **2. CHILDHOOD TRAUMA AND ITS NEGATIVE SEQUELAE**

### **2.1 Overview of Childhood Trauma**

Childhood trauma encompasses an array of negative experiences that, according to their severity and interaction with other factors, can have a significant impact upon developmental status and psychosocial well-being (Briere, 1992).

Despite substantial disparity in defining childhood trauma (Kennerley, 2000), there is general agreement that four types of abuse and neglect exist: 1) *childhood sexual abuse* (CSA); 2) *childhood physical abuse*; 3) *childhood emotional abuse*; and 4) *childhood neglect* (Briere, 1992; Kairys, Johnson, & Committee on Child Abuse and Neglect, 2002).

Awareness of the extent of childhood trauma has increased dramatically over recent decades, although sexual abuse has received far greater attention (Briere, 1992; Everett & Gallop, 2001). Current knowledge suggests an enormous proportion of the population may have experienced some form of child maltreatment. In the UK there are around 32,000 children on the national child protection register for being at-risk of abuse (NSPCC, 2007).

Prevalence rates for sexual abuse are between 3-25% for males and 8-42% for females, with intrusive sexual contact between 1-16% for males and 6-20% for females (Creighton, 2004; Putnam, 2003; Wekerle & Wolfe, 2003). Substantial proportions of children endure physical abuse with prevalence rates between 10-25% (Wekerle & Wolfe, 2003). Although emotional abuse is considered the most

common form because it is inherent within all types of maltreatment, there is little research investigating its prevalence (Briere, 1992). Approximately one fifth of all reported cases are thought to have suffered emotional abuse, and around a half have been neglected (Creighton, 2004; Doyle, 1997).

One of the main caveats with respect to the true prevalence of child abuse is that disaggregating the direct effects of one form from another is almost impossible. Reports indicate that only 5% of cases involve a single form of abuse (Ney, Fung, & Wickett, 1994). Deciphering what constitutes abuse may be inherently problematic, perhaps of paramount importance is validating an individual's experience and subsequent difficulties.

## **2.2 Negative Sequelae of Childhood Trauma**

Childhood is a critical developmental period and exposure to abusive experiences can result in a range of adverse consequences. The deleterious impact on immediate developmental status and normal development over the long-term is well established (Briere & Runtz, 1990). Childhood trauma has consistently been associated with increased rates of mental illness and substance misuse (Browne & Finkelhor, 1986; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Springer, Sheridan, Kuo, & Carnes, 2003). However, there is no single psychiatric diagnostic entity which encompasses the full range of difficulties that abused and neglected children experience. Post traumatic stress disorder (PTSD) is commonly referenced (Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992) however it rarely captures the extent of the impact.

Complex trauma offers a useful framework for understanding the negative sequelae; it not only describes the type of trauma exposure but also the impact of this upon immediate and long-term outcomes. Complex trauma refers to prolonged and



multiple traumatic events that occur within the caregiving system, primarily abuse and neglect (Cook, Blaustein, Spinazzola, & van der Kolk, 2003). Within this framework outcome refers to the range of clinical symptomatology that can appear following maltreatment, often organised into domains of impairment including: attachment; affect regulation; behavioural regulation; cognition; dissociation; and self-concept.

### *2.2.1 Immediate Impact on Developmental Status*

Maltreatment in early life can impact upon a number of major developmental tasks. The primary developmental task during infancy is the formation of attachment relationships with caregivers; attachment theory (Ainsworth, 1985; Bowlby, 1973, 1980, 1982, 1988) suggests this develops from consistent and responsive nurturance. Such a secure base is associated with subsequent competence in social and emotional functioning (Parke & Ladd, 1992). Abuse can impair a child's sense of security and belief in a safe world and such children are unable to develop an optimal parent-child bond leading them to be fearful and distrusting of parental contact yet feel abandoned without it. As such, victims of child abuse tend to have insecure attachment patterns (Morton & Browne, 1998) and a confused, conflictual pattern of relatedness to parents (Shields, Ryan, & Cicchetti, 2001).

Another early developmental task is learning emotion regulation skills, usually shaped by warm and sensitive care giving and appropriate modelling (Contreras & Kerns, 2000). It is likely abused children will have difficulties regulating their emotions, in light of poor quality attachments. Distortions in affective processes during infancy (Gaensbauer, 1982), and difficulties in understanding and communicating their emotions (Cicchetti & Beeghly, 1987; Shipman, Zeman, Penza, & Champion, 2000) are evident in maltreated children.

The harsh, unsupportive, unresponsive parenting experienced by maltreated children also obstructs the development of autonomy, intrinsic motivation, and internalisation, which are developmental tasks that follow attachment and self-regulatory processes (Harter, 2003). Disturbances in autonomy and self-development such as internalising symptoms (e.g., somatic complaints, depressive symptoms and suicidal ideation; Kolko, 1992; McGee, Wolfe, & Wilson, 1997), lower self-esteem (Gross & Keller, 1992), increased hopelessness; and external locus of control (Cerezo & Frias, 1994) are all evident in maltreated children.

The transition to school is another salient task within which parental involvement and self-regulation abilities are important for success (Shonk & Cicchetti, 2001). It is likely that maltreated children struggle with this transition. In fact, such children are less ready to learn (Hoffman-Plotkin & Twentyman, 1984), have poor work habits (Erickson, Egeland, & Pianta, 1989) are more likely to require special education services support (Shonk & Cicchetti, 2001), and are at greater risk of premature termination of education (Leiter & Johnsen, 1997).

Another critical task is the establishment of positive peer relationships. Abused children are disadvantaged because the quality of the parent-child relationship plays a central role in their ability to develop good peer relations (Cicchetti, Lynch, Shonk, & Manly, 1992) which are also predictive of subsequent adjustment (Parker, Rubin, Price, & DeRosier, 1995). It is therefore not surprising that abused children are less socially skilled (Darwish, Esquivel, Houtz, & Alfonso, 2001), less liked by peers (Haskett & Kistner, 1991), have disturbances in social information processing (Dodge, Pettit, Bates, & Valente, 1995), and exhibit higher rates of aggression and other externalising problems (Jaffee, Caspi, Moffitt, & Taylor, 2004), putting them at risk for social maladjustment and peer rejection.

### 2.2.2 *Long-term Psychological Adjustment*

The long-term negative sequelae of childhood trauma span across a number of domains (i.e., emotional, behavioural, cognitive, and self-concept). The immediate impact on core self-regulatory systems leading to emotion dysregulation (i.e. understanding, expressing and modulating negative affect) might relate to subsequent long-term emotional difficulties. There is a strong relationship between childhood trauma and subsequent depression (Browne & Finkelhor, 1986; Polusny & Follette, 1995; Putnam, 2003). Less evidence indicates a link between physical abuse and later depression, and considerably less for emotional abuse, however, it is likely that subsequent abuse-related negative thoughts and beliefs may lead to the development of depression (Jehu, 1988). Child abuse is by nature threatening and disruptive, therefore it is not surprising that victims experience fearfulness or anxiety long after the maltreatment has ceased. In addition to the frequent presence of PTSD (Rowan & Foy, 1993), a range of anxiety disorders have been documented in adults who have experienced child abuse (Kendler et al., 2000; Polusny & Follette, 1995; Saunders et al., 1992; Zlotnick et al., 2008).

As with altered emotionality, the difficulties with behavioural control experienced by individuals abused and neglected as children can be linked to early development. Maltreated children may engage in rigid controlling behaviour which serves to counteract feelings of helplessness and powerlessness, they may also engage in impulsive behaviours as a consequence of impaired executive functioning (Beers & De Bellis, 2002; Mezzacappa, Kindlon, & Earls, 2001). Behavioural patterns may also represent defensive adaptation to overwhelming stress, behavioural re-enactment for instance may serve to gain control over or communicate their experience (Cook et al., 2003). Such behavioural patterns provide a context for

behavioural control difficulties evident in adulthood. Childhood trauma has been associated with antisocial personality disorder (Luntz & Widom, 1994) and high-risk health behaviours in adults, such as eating disorders (Rorty & Yager, 1996; Waller, 1994), substance misuse (Gilbert et al., 2009; Kendler et al., 2000), risky sexual behaviours (Gilbert et al., 2009), suicidality and other self-injurious behaviours (Briere & Gil, 1998; Romans, Martin, Anderson, Herbison, & Mullen, 1995), criminal activity (Gilbert et al., 2009), and re-victimisation (Coid et al., 2001).

Cognitive models propose that assumptions about the self, others, and the world/future are based on childhood learning (Beck, 1979). For children who experience maltreatment, assumptions and self-perceptions become distorted, leading them to over-estimate potential danger or adversity and under-estimate self-efficacy and self-worth (Briere, 1992). Such cognitive dynamics distort a child's perception to the degree that they continue to experience the world as hostile and traumatic (Finkelhor & Browne, 1985). Childhood trauma has been associated with cognitive factors such as guilt, low self-esteem, and self-blame, (Jehu, 1988) and dysfunctional attributes in adulthood (Gold, 1986). Dissociation<sup>2</sup> is also a key feature in individuals who have experienced child abuse and neglect (Cook et al., 2003). This tends to include disengaging, detachment or numbing, out of body experiences, and repression of abuse-related memories (Briere, 1992) and in extreme forms dissociative identity disorder (DSM-IV: APA, 1994). There is some evidence of an association between CSA and dissociation (Briere & Runtz, 1991; Chu & Dill, 1990).

In addition to impaired self-development, disturbed relatedness, and insecure attachment patterns, a continued sense of self as ineffective and unlovable can lead to

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<sup>2</sup> Defined as “defensive disruption in the normally occurring connections among feelings, thoughts, behaviour, and memories, consciously or unconsciously invoked in order to reduce psychological distress” (Briere, 1992, p. 36).

a high degree of self-blame in adulthood (Cook et al., 2003). This may be further complicated by dissociative coping which can lead to serious disruptions in identity development and integration. In adulthood it appears that there are continued difficulties with self-concept and social functioning (Cole & Putnam, 1992). Adult survivors of CSA report difficulties forming and sustaining intimate relationships (Courtois, 1996; Finkelhor, Hotaling, Lewis, & Smith, 1989), difficulties with sexual intimacy (Courtois, 1979), and often accept aggression as normal within intimate relationships (Russell, 1986). Furthermore, children and adults who have experienced maltreatment may also be aggressive towards others which may lead to aggressive criminal behaviour (Briere, 1992).

Understanding such negative sequelae is important not only for assessment but to inform and guide clinical interventions aimed at enhancing adaptation and coping. How individuals cope with childhood trauma and the multitude of negative consequences may also, however, depend upon certain protective factors.

### **2.3 Coping and Protective Factors**

While childhood trauma has a plethora of potentially devastating consequences, there is also the possibility that individuals nevertheless function effectively and competently in a variety of areas (Kendall-Tackett, Williams, & Finkelhor, 1993). Several protective factors which contribute to such resilience have received increasing empirical interest. The following section reviews existing literature on what factors contribute to resilience to childhood trauma. Therefore this section offers a brief overview of some of the abuse-specific protective factors and types of coping strategies relevant to individuals who have experienced maltreatment.

In terms of abuse-specific protective factors, parental support, secure parent-child attachments, and authoritative parenting within the context of a flexible organised communicative family are importance particularly in cases of extra-familial sexual abuse (Carr, 1999). With regards to intra-familial abuse, one particular protective factor is the insistence by the non-abusing parent that the abusing parent leave home and engage in treatment and have no unsupervised contact with the child (Bentovim, Elton, Hildebrand, Tranter, & Vizard, 1988).

The social network surrounding an abused child can also offer some protective element; children offered high levels of social support tend to show better adjustment (Putnam, 2003). Furthermore, treatment systems can offer a protective mechanism particularly through reducing the risk of further abuse and enhancing the possibility of positive changes within a child's psychosocial environment therefore reduce long-term maladjustment (Carr, 1999).

Possessing coping strategies has also been highlighted as important for the long-term mental health outcomes of maltreated children. It has been proposed that coping strategies represent defence mechanisms for individuals who have experienced abuse and neglect, and such protective responses either function to heighten, limit, or block perceptions of reality as a way of coping with their experience (Vaillant, Bond, & Vaillant, 1986).

Certain coping strategies have been associated with promoting positive outcomes while others have been linked to greater functioning deficits and more severe psychopathology (Cook et al., 2003). Strategies such as denial, dissociation, emotional suppression, minimisation, aggression, and avoidance have consistently been linked to greater psychological symptoms for both children and adult survivors of child abuse (Long & Jackson, 1993; Sigmon, Greene, Rohan, & Nichols, 1997;

Spaccarelli, 1994). The use of social support however has been associated with beneficial outcomes, such as reducing levels of distress in adulthood (e.g., Spaccarelli, 1994; Steel, Sanna, Hammond, Whipple, & Cross, 2004).

## **2.4 Summary**

Evidently, childhood trauma can have devastating consequences during crucial developmental years and into adulthood. However such negative effects are not universal, raising the question as to what contributes to positive outcomes for some individuals. Understanding what factors contribute to such resilience may offer valuable insights for the advancement of treatment and prevention programmes, especially in light of the lack of consensus regarding the most effective treatment approaches for maltreated children and adults (Finkelhor & Berliner, 1995; Spaccarelli & Kim, 1995).

Populations of individuals who have experienced childhood trauma are primarily found within the care system due to the fact that maltreatment raises considerable risk for child protection. However, such individuals are also often found within a variety of groups marginalised from society, such as those detained under the mental health act, or those who are homeless. In fact there has been some investigation of the interaction between childhood trauma and resilience in these populations (e.g., Drapeau, Saint-Jacques, Lépine, Bégin, & Bernard, 2007; Edmond, Auslander, Elze, & Bowland, 2006; Rew, Taylor-Seehafer, Thomas, & Yockey, 2001). As such it is important to investigate aspects related to childhood maltreatment across a diverse range of populations and settings.

### **3. DETERMINANTS OF RESILIENCE TO CHILDHOOD TRAUMA**

#### **3.1 Aims and Scope of Literature Review**

Resilience may facilitate our understanding of why certain survivors of childhood trauma function adaptively and achieve positive outcomes. Such individuals who adapt and cope in spite of their experience are an “untapped source of information and understanding about the processes of conceptual change and resilience” (Wilkes, 2002, p. 261). This section aims to ascertain what factors contribute to resilience in maltreated individuals by reviewing relevant literature.

#### **3.2 Literature Search Strategy**

To locate the literature the following electronic bibliographic databases were searched: AMED, British Nursing Index, CINAHL, EMBASE, MEDLINE, PsycINFO, and The Cochrane Library, using the terms: (Child\*<sup>3</sup>) and (Abus\*, Trauma\*, Maltreat\*, Neglect\*, Victim\*, Advers\*) and (Resilien\*). Searches were limited to English language peer reviewed papers over the past 25 years. In addition, review articles were consulted and the reference sections from pertinent papers were scrutinised for additional relevant articles. This search strategy was repeated until it was felt that all relevant published literature had been obtained.

The inclusion criteria were liberal because it was expected that there would be limited literature in this area. All published literature focusing specifically on individuals exposed to childhood maltreatment (i.e., sexual, physical, emotional abuse and neglect) and factors determining resilience including review articles, empirical studies, and theoretical papers were considered regardless of aims or hypotheses tested.

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<sup>3</sup> \* used to denote all words starting with the prefix (e.g., child\* includes child, children, and childhood)



### **3.3 Identified Literature**

A crude total of over 900 studies were identified from initial searches, 120 abstracts were scanned for basic relevance, as a result 39 articles were identified. After the full texts of these were screened 16 were included in the review. The remaining articles were excluded either because they not specifically focused on factors determining resilience in individuals maltreated as children (e.g., Bouvier, 2003; Daniel, 2006; Daud, af Klinteberg, & Rydelius, 2008; Fantuzzo et al., 1996; Kaufman, Cook, Arny, Jones, & Pittinsky, 1994; Lam & Grossman, 1997; Lansford et al., 2006; Lowenthal, 1998; Masten et al., 1999; McGloin & Widom, 2001; Wilkes, 2002; Wright, Fopma-Loy, & Fischer, 2005), or there was insufficient information to establish their relevance (e.g., Banyard, Williams, Siegel, & West, 2002; Breno & Galupo, 2007; Gorman, 2005; Henry, 1999; Knowlton, 2001). Although considered within the initial search, six articles (Cicchetti & Rogosch, 2009; Haskett, Nears, Ward, & McPherson, 2006; Heller, Larrieu, D'Imperio, & Boris, 1999; Masten et al., 1990; Mrazek & Mrazek, 1987; Wilcox, Richards, & O'Keeffe, 2004) were not included because they were review or theoretical papers but were used to inform the discussion.

The majority of the 16 studies employed a quantitative design, four used qualitative interviews and most were based on or included a sample of individuals maltreated or sexually abuse as children from the USA, while none were from the UK. Also of note, all the studies were published over the past 15 years suggesting this is a burgeoning area of interest.

Initially, the literature presenting rates of resilience is summarised. Following this the studies investigating aspects that contribute to resilience among individuals exposed to childhood trauma are reviewed. Despite the emphasis on defining

resilience as a dynamic process, much of the literature continues to explore characteristics of resilience. Furthermore, although there are a number of formal inventories designed to identify aspects of resilience, much of the literature attempts to measure resilience according to one or more domains of functioning (e.g., academic, behavioural or psychological functioning and social competence).

### **3.4 Rates of Resilience to Childhood Trauma**

Despite difficulties in operationally defining resilience, a number of the studies assessed the prevalence of resilience. Table 1 details how resilience was defined for the 16 studies reviewed.

Investigating resilience at one time point, Cicchetti et al., (1993) reported that 18% of maltreated children were considered resilient relative to the full sample (i.e., in the top third) and most were competent on at least one of seven indices.

Spaccarelli and Kim (1995) found 45% of young girls who had been sexually abused were resilient according to social competence and absence of psychopathology.

While, Liem, James, O'Toole, and Boudewyn (1997) reported 28% of undergraduate students sexually abused as children were resilient based on absence of depression/anxiety and presence of positive self-esteem.

Investigating resilience over a three year period, using the same method as previous work, Cicchetti and Rogosch (1997) found only 12% of maltreated children were consistently resilient and far less were functioning competently in any single year of the study. Another longitudinal study (Herrenkohl, Herrenkohl, & Egolf, 1994) reported, of a subset of solely resilient maltreated children 61% remained resilient in adolescence according to educational success (i.e., graduating from high school or still at school at the time of assessment). However only 13% of the original sample were initially classed as resilient based on achieving scores in the top 40% of

the full sample on three composites of adaptive functioning (see: Herrenkohl, Herrenkohl, Egolf, & Wu, 1991).

Examining resilience according to multiple domains, Flores, Cicchetti, and Rogosch (2005) found only 9.2% of maltreated children were resilient (i.e., high functioning, met criteria for success on six indicators). Furthermore, using a similar criteria DuMont, Widom, and Czaja (2007) reported 48% of maltreated children were resilient during adolescence (i.e., success on four or five domains) and 30% during young adulthood (success on six of eight domains). Additionally, over half those resilient in adolescence remained so into young adulthood, whereas 11% of the non-resilient adolescents were resilient in young adulthood. Furthermore, Collishaw et al., (2007) reported 45% of adults abused as children were resilient according to absence of mental health problems. Both these studies highlight that for some individuals resilience persists for a considerable length of time whilst others may only be resilient at certain times.

Rates of resilience vary depending upon the criteria used, however a small proportion of individuals remain competent in one or more areas of functioning for at least a period of time. What factors contribute to such resilience in the face of known risk factors for subsequent mental health and substance misuse problems are likely to be helpful in informing clinical intervention and prevention efforts (Spaccarelli & Kim, 1995). This is particularly important in light of the lack of consensus as to the most effective treatment approaches for individuals maltreated as children (Cicchetti & Toth, 1995).

### **3.5 Protective Factors Associated with Resilience to Childhood Trauma**

Protective factors, according to a developmental framework, are defined as aspects that moderate the effect of individual or environmental risk factors enabling

positive adaptation (Masten et al., 1990). Research into such factors in at-risk children has emerged in recent decades indicating a variety of attributes and experiences which contribute to competent adaptation.

The following section reviews literature focusing on factors determining resilience to childhood trauma, organised according to the triad of protective factors: 1) child attributes; 2) aspects of their families; and 3) characteristics of their wider social environment (Garmezy, 1993). It is important to note that such a distinction is somewhat artificial because a child's attributes are influenced by their family and wider social environment and such child attributes in turn shape family and social contexts through reciprocal and transactional influences (Cicchetti & Toth, 1997).

Table 1.

## Empirical Studies Examining Resilience to Childhood Trauma

<b>Study</b>	<b>Population Studied</b>	<b>Age and Group</b>	<b>Resilience Classification</b>	<b>Resilient Factors</b>
Cicchetti et al. (1993)	Maltreated (vs non-maltreated)	Children aged 8-13 years	Resilience measured by composites on seven domains of adaptive functioning – prosocial behaviour, disruptive-aggressive behaviour, withdrawal, depression, internalising and externalising symptomatology, and school risk (e.g., attendance, disciplinary actions) based on reports of parents, camp counsellors and peers.	Ego-resiliency, ego-over control, and positive self-esteem
Valentine and Feinauer (1993)	Sexually abused	Women abused as child, mean	Resilience measures by self-perception regarding level of functioning in life	Ability to find emotional support outside the family, self-regard, spirituality, external attribution of blame and

		age 39.4 years		cognitive style, and inner-directed locus of control
Herrenkohl et al., (1994)	Maltreated	Adolescents aged 15-21 years	Resilience measured as high-functioning, according to behavioural ratings (by teachers) of academic, social, emotional and physical functioning	Average intellectual ability, absence of physical abuse, presence of at least one stable caretaker throughout childhood
Spaccarelli and Kim (1995)	Sexually abused	Girls aged 10-17 years	Resilience measures as maintenance of social competence and absence of clinical levels of symptomatology	Parental support and level of abuse-related stress
Himelein and McElrath (1996)	Sexually abused (non-abused)	Women abused as children, mean age 18 years	Resilience measured by healthy adjustment according to measures of psychological health and well-being (including absence of distress)	Study 1: a cognitive style of positive illusion which may be highly adaptive in spite of abuse Study 2: four cognitive coping strategies - disclosing and discussing, minimisation, positive reframing, and refusing to dwell on the experience

Cicchetti and Rogosch (1997)	Maltreated (vs non-maltreated)	Children aged 6-11 at baseline (longitudinal study)	Resilience measured by composites on seven domains of adaptive functioning (see: Cicchetti et al., 1993)	Ego-resilience, ego-over control (i.e., self-confidence) and positive self-esteem
Liem et al., (1997)	Sexually Abused (vs non-abused)	Undergraduate students age 16-65 years	Resilience measured by a combination of absence of depression/anxiety and presence of positive self-esteem	Internal locus of control, being less self-destructive and having fewer stressful childhood family events
Hyman and Williams (2001)	Sexually abuse	Women abused as children aged 18-31 years	Resilience measured by a composite score from 13 variables which represented five domains of resilient functioning: psychological well-being, good health, successful interpersonal relationships, absence of arrests as an adult, and economic well-being	Growing up in a stable family, graduating from high school, and absence of incest, physical force as part of sexual abuse, arrested as a juvenile, and revictimisation
Henry	Maltreated	Adolescents	Not detailed	Loyalty to parents, normalizing of the

(2002)		aged 13-20 years		abusive environment, invisibility from the abuser, self value, and a future view
Flores et al., (2005)	Maltreated (vs non- maltreated)	Children mean age 8.68 years	Resilient functioning measured by composites on nine aspects of adaptive functioning including prosocial and cooperative behaviour, aggression and fighting, withdrawal, disruptive behaviour, shyness, and internalising and externalising problems	Ego-resiliency, ego-control, and interpersonal relationship features
Bogar and Hulse- Killacky (2006)	Sexually abused	Women abused as children, currently aged 30+ years	Resilience measured by self-perception regarding ability to maintain stable relationships, pursue and maintain career, volunteer or leisure interests, feeling content, and believing life had meaning	Determinants of resilience: interpersonally skilled, competent, high self-regard, spiritual, and helpful life circumstances Process of resilience: involved, coping strategies, refocusing and moving on, active healing, and achieving closure



Cicchetti and Rogosch (2007)	Maltreated (vs non-maltreated)	Children age 6-12 years	Resilience measured by composites of resilient functioning on multiple domains (consistent with Cicchetti & Rogosch, 1997; Cicchetti et al., 1993)	Adrenal steroid hormones (i.e., high morning levels of cortisol and an atypical rise in DHEA from morning to afternoon contribute to higher resilient functioning, in addition to ego-resilience and ego-control
Collishaw et al., (2007)	Physical and Sexual abuse (vs non-abused)	Children aged 14-15 years and 42-46 years	Resilience defined as no mental health problems in adult life	Parental care, adolescence peer relationship and adult friendship quality, and stability of adult love relationships
Curtis and Cicchetti (2007)	Maltreated (vs non-maltreated)	Children aged 6-12 years	Resilience measured by composites on multiple adaptive functioning domains (consistent with Cicchetti & Rogosch, 1997; Cicchetti et al., 1993)	EEG asymmetry in central cortical regions (biological indicator of emotional regulation)
DuMont et al., (2007)	Maltreated (vs non-	Cases of abuse and neglect	Resilience defined according to eight domains of functioning (education,	Growing up in advantaged neighbourhood combined with a high cognitive ability

	maltreated)	between 1967-1971 (follow-up mean age 29.1 years)	psychiatric disorder, substance abuse, official arrest, self-reported violent behaviour, employment, homelessness, and social activity)	and household stability predicted resilience
Jaffee, Caspi, Moffitt, Polo-Tomas, and Taylor (2007)	Maltreated (vs non-maltreated)	Children 5-7 years old	Resilience defined according to teachers reports of antisocial behaviour problems falling within the normal range	Above average intelligence and parents with fewer symptoms of antisocial personality in boys only

*Note:* The term *maltreated* refers to all forms of childhood abuse (i.e. physical, sexual, emotional abuse and neglect)

### *3.5.1 Individual Attributes*

The most widely investigated features of resilience among individuals maltreated as children are personal characteristics. Several protective factors have been identified:

#### *Intellectual Ability*

Longitudinal research examining resilience offers some support that above-average cognitive ability is a protective factor for individuals exposed to childhood trauma (Herrenkohl et al., 1994). However this study failed to directly assess cognitive ability and instead used behaviour ratings of academic, social, emotional, and physical functioning by teachers to place the children into high, middle, or low functioning groups. Furthermore, in the late-adolescent follow-up phase, continued resilience was defined as remaining at or graduating from school. Defining resilience in this way fails to take into account that it may differ across multiple domains (Cicchetti & Toth, 1995).

More recently prospective investigations have used standardised assessments of intellectual ability (i.e., Wide Range Achievement Test: Jastak & Wilkinson, 1984; & the Wechsler Preschool and Primary Scale of Intelligence-Revised: Wechsler, 1990). Such formal assessments indicate that above-average intellectual ability in combination with other factors, such as growing up in an advantaged neighbourhood and having a stable living situation (DuMont et al., 2007) or being male and having parents with few symptoms of antisocial personality (Jaffee et al., 2007), may increase the likelihood of resilience.

#### *Sense of Self-worth*

Factors relating to self-worth have been associated with resilience in individuals who have experienced maltreatment. Using a broad definition of

resilience obtained from multiple sources, Cicchetti et al. (1993) found positive self-esteem predicted competence in maltreated children. Qualitative studies also highlight a sense of self-worth as being relevant for resilience in maltreated individuals. Bogar and Hulse-Killacky (2006) highlighted that women sexually abused as children report that being competent and having a high self-regard determined whether they were resilient. Valentine and Feinauer (1993) also indicated that in women sexually abused as children resilience was determined by a high self-regard (e.g., thinking well of themselves). However, these results were based on a self-identified measure of resilience (i.e. women felt they were “functioning well”). Exploring adolescents and child care professionals perceptions regarding protective factors for maltreatment, Henry (2002) found that attaining a sense of being valued was important.

#### *Ego-resilience and Ego-control*

Both ego-resilience and ego-control<sup>4</sup> have been identified as protective factors for resilience to childhood trauma. Ego-resilience involves the ability to adjust emotional and behavioural responses in line with environment demands, whereas ego-control involves the ability to monitor and adjust emotions. Both are aspects of self-regulation; ego-overcontrollers adapt and insulate themselves from environmental distractions, while ego-undercontrollers cannot contain their emotions and are therefore vulnerable to environmental stressors.

Four studies all using consistent and multi-domain definitions of resilience indicate that ego-resilience and ego-over control may have some influence on resilience in maltreated children (Cicchetti & Rogosch, 1997; Cicchetti et al., 1993), although do not always differentiate maltreated and non-maltreated groups (Cicchetti

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<sup>4</sup> The use of the term ego in this sense refers to the self

& Rogosch, 2007; Flores et al., 2005). Being reflective, persistent, attentive, dependable, planful, and relaxed are characteristics of individuals who have high ego-resilience and ego-control, whereas being emotionally expressive, self-assertive, curious, energetic and straightforward are characteristics of individuals who have high ego-resilience and ego-undercontrol. Cicchetti et al., (1993) suggest that those maltreated children who maintain an over-controlling style may be more accustomed to factors that prevent continued abuse while under-controllers may provoke attention and reactions therefore exposing themselves to further abuse. As such a strong self-regulatory capacity may influence individual differences in outcomes following childhood trauma (Haskett et al., 2006) and may therefore be important in determining resilience.

### *Emotion Regulation*

Emotion dysregulation has been implicated in negative outcomes for individuals who have experienced childhood trauma (Gaensbauer, 1982). It is not surprising therefore that emotion regulation has also been highlighted as a potential protective factor (Curtis & Cicchetti, 2007). Evidence indicates that positive emotions and effective emotional regulation have emerged as critical components for resilience in general (Buckner, Mezzacappa, & Beardslee, 2003; Cicchetti & Rogosch, 1997) and the left hemisphere of the cerebral cortex is associated with positive emotions/approach behaviour and the right with negative emotions/withdrawal behaviour (Davidson & Tomarken, 1989). Within this context measurement of hemispheric asymmetries in cortical electroencephalogram (EEG) activity may offer a direct biologically based indicator of emotion and may therefore be relevant in the investigation of resilient functioning (Curtis & Cicchetti, 2007).

Curtis and Cicchetti (2007) investigated the association between level of adaptive functioning (i.e., resilience) and emotion regulation assessed by behavioural observation and hemispheric EEG. Findings indicated that both the observational measure of emotion regulation and EEG asymmetry predicted resilient functioning for maltreated children. The authors therefore infer that maltreated children who are better able to regulate their emotions may be more likely to be resilient in the face of adversity. However further research is necessary because this is a relatively new line of investigation.

### *Internal Locus of Control*

The potential influence of an internal locus of control (i.e., the belief that events result primarily from one's own behaviour and actions) has been examined in relation to resilience to maltreatment. Valentine and Feinauer (1993) reported that women sexually abused as children who classed themselves as resilient had a sense of control and power over their lives (i.e. inner-directed locus of control). However, as previously highlighted, this study employed a weak measure of resilience based on participants' perceptions of their level of functioning. In addition, Liem et al. (1997) found that resilient undergraduate students exposed to CSA tended to have an internal locus of control and were less self-destructive. This study however employed a narrow definition of resilience (e.g., absence of depression and/or anxiety, presence of positive self-esteem). Nevertheless there is some indicate that an internal locus of control may be relevant for individuals who are resilient to childhood trauma.

A further retrospective study combining qualitative and quantitative research methods explored resilience in college women 25% who had experienced CSA (Himelein & McElrath, 1996). Using a definition of resilience based on healthy

adjustment on standardised measures of psychological well-being and distress, those classified as resilient exhibited exaggerated perceptions of personal control and unrealistic optimism (e.g., cognitive style of positive illusion). However, there was no difference between abused and non-abused groups and further analysis included both groups therefore making it impossible to tease out the potential protective factors for the women exposed to CSA. Additionally, follow-up interviews with resilient survivors of CSA highlighted well-adjusted women engaged in cognitive coping strategies such as; disclosing and discussing the abuse, minimisation, positive reframing and refusing to dwell on the experience. As such it appears that both an internal locus of control and cognitive reappraisal might be protective factors.

Although evidence emphasises the importance of exploring factors that reflect coping strategies, there has been very little focus on this area. Qualitative, interviews with women exposed to CSA, indicate that developing resilience involved using coping strategies such as refocusing and moving on, active healing, and achieving closure (Bogar & Hulse-Killacky, 2006). Other studies allude to the importance of more positive approaches to coping, such as being less self-destructive and not engaging in criminal activity (Hyman & Williams, 2001; Liem et al., 1997). However, there has been no prospective investigation of coping strategies aiming to ascertain if certain types of strategy might be protective for individuals who have experienced childhood trauma.

#### *External Attribution of Blame*

Contrary to an internal locus of control there is some evidence that resilient adult female survivors of CSA demonstrate external attributions of blame (Valentine & Feinauer, 1993). This attribution style appears to be specific to the experience of sexual abuse and may be related to being able to put the abuse in perspective and

recognise that the blame lay with the perpetrator. Heller et al., (1999) suggest that perhaps such an external locus of control could relate specifically to the abuse rather than all bad events. Further research is needed to explore the specificity of external attributions of blame, not only in individuals who have experienced CSA but in those who have experienced physical abuse or neglect.

#### *Spirituality and Abuse-specific Aspects*

Other possible protective factors include spirituality and abuse-specific aspects. Qualitative studies exploring protective factors in resilient survivors of CSA highlight spirituality as providing a sense of purpose or meaning to life and that one was worthy, which appears to relate to a sense of self-worth (Bogar & Hulse-Killacky, 2006; Valentine & Feinauer, 1993). Whilst aspects specific to the abuse such as the absence of physical abuse, the level of abuse-related stress, and the absence of incest and physical force in sexual abuse have been cited as possible abuse-specific protective factors (Herrenkohl et al., 1994; Hyman & Williams, 2001; Spaccarelli & Kim, 1995). However, further investigation is necessary to confirm their relevance.

#### *3.5.2 Family Environment*

Although there is far less empirical attention, certain factors within the family appear to promote resilience. For instance, adolescents exposed to sporadic rather than chronic maltreatment were resilient based on remaining in school if they had at least one stable supportive parent (Herrenkohl et al., 1994). In sexually abused girls parental support has been suggested to predict resilience (Spaccarelli & Kim, 1995). However, in this study resilience was based upon social competence as measured by the non-perpetrating parent, therefore this might represent a biased view of competence. More recent evidence also supports the importance of parental care as a



protective factor for later positive mental health in individuals sexually or physically abused as children (Collishaw et al., 2007). This study lacked statistical power to conduct multivariate analyses and the definition of resilience was limited to a single domain.

Furthermore, growing up in a stable family environment appears to predict resilience in individuals sexually abused or maltreated (DuMont et al., 2007; Hyman & Williams, 2001). Whilst other family factors include, experiencing fewer stressful family events during childhood, or having parents with fewer antisocial personality symptoms<sup>5</sup> (Jaffee et al., 2007; Liem et al., 1997). Both these studies however employed relatively limited definitions of resilience.

### 3.5.3 *Social Environment*

Social environment factors have also received less research attention; however there appears to be some consistency within the literature. Being able to find emotional support outside the family is reported to determine resilience in women sexually abused as children (Valentine & Feinauer, 1993). In addition, having adult friendships, stable adult love relationships, and adolescent peer relationships may all be protective factors in individuals maltreated as children (Bogar & Hulse-Killacky, 2006; Collishaw et al., 2007; Flores et al., 2005). However much of this research was qualitative and therefore further empirical investigation is required to confirm the importance of such factors.

Growing up in an advantaged neighbourhood also relates to resilience to childhood trauma, although only in combination with high cognitive ability (DuMont et al., 2007). Whilst involvement with a religious community which serves to promote self-esteem, provide friendship and offer a place of safety for women

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<sup>5</sup> In boys only

sexually abused as children, may also act as a protective factor (Valentine & Feinauer, 1993).

### **3.6 Summary**

Research investigating the determinants of resilience in individuals who have experienced childhood trauma highlights a range of protective factors. Of the studies reviewed those that explored resilience according to several domains (e.g., Cicchetti & Rogosch, 1997; Cicchetti & Rogosch, 2007; Cicchetti et al., 1993; Curtis & Cicchetti, 2007; DuMont et al., 2007; Flores et al., 2005; Hyman & Williams, 2001) and therefore used a comprehensive method of classifying resilient functioning appear to assert a greater influence on the findings of the review as a whole.

Overall salient individual factors include: above-average cognitive ability; aspects of self-confidence; emotional regulation; ego-resilience and high ego-control; internal locus of control; and external attribution of blame. Important factors within the family include stable consistent parental support and experiencing fewer stressors from within the family. Salient factors within the social environment include having good interpersonal skills, good emotional and social support outside the family, whilst also living in an advantaged neighbourhood.

However, the literature has a number of methodological limitations, and despite the emphasis on defining resilience as a dynamic process existing literature focuses more on identifying resilient traits. The final section discusses some of these limitations, considers how to achieve greater synthesis between these two areas, and highlights implications for clinical practice.

## **4. CRITICAL REVIEW AND DISCUSSION**

### **4.1 The Construct of Resilience**

Despite pioneers in the field (e.g., Emmy Werner, Ann Masten, and Norman Garmezy) emphasising the importance of defining resilience as a dynamic process, throughout the literature it is evident that investigations tend to define resilience according to a diverse range of traits (Jacelon, 1997). This has led some scholars to question whether the same entity is under investigation or whether researchers are dealing with fundamentally different phenomena (Kaplan, 1999). However, such diversity does not necessarily diminish the understanding of the construct. In fact it has been purported to be essential for its expansion (Luthar et al., 2000).

### **4.2 Variables Associated with Resilience**

A huge body of literature demonstrates the deleterious impact of childhood trauma on an individual's development and functioning. Despite such considerable risk and vulnerability evidence is emerging that a proportion of individuals continue to thrive and achieve adaptive outcomes. A number of individual factors are associated with resilience in individuals maltreated as children including; above-average cognitive ability; positive self-concept; strong self-regulatory capacities; internal locus of control; and external attribution of blame. Such protective factors are not dissimilar to those identified in early research in the resilience field (Garmezy, 1974; Rutter, 1979).

Far fewer investigations focus on environmental factors, of the studies reviewed there is some consistency although further research replicating findings is necessary to ensure they remain relevant. Protective factors within the family consist of growing up in a stable family environment with supportive parents and

experiencing fewer stressful family events during childhood. Whilst growing up in an advantaged neighbourhood, being able to find emotional support outside the family, having good interpersonal skills, and having a religious-based support network are protective factors within the wider social environment. These family and social factors are also not dissimilar from those identified in early research on resilience (Rutter, 1979). However, in economically disadvantaged children there is a greater range of environmental protective factors determining resilience than identified in this review which is likely to relate to the paucity of studies in this area.

There is reason to believe that rather than acting in isolation, numerous protective factors interact and lead to resilient outcomes. For example, a ‘cumulative stressors’ model found children with individual strengths (e.g., high cognitive ability or well-adjusted temperament) were more likely to be resilient to maltreatment in situations of relatively low family and neighbourhood stress (e.g., maternal depression, parental substance misuse, social deprivation, neighbourhood crime and low social cohesion; Jaffee et al., 2007). Luthar and Zelazo (2003) emphasised the powerful influence that environmental factors appear to exert over individual attributes, and suggest that this may in part be due to the way the environment shapes a child’s character. Furthermore, Curtis and Cicchetti (2003) emphasise that resilience is a dynamic interactive process between multiple levels across time with no single factor holding primary importance at any given point.

The studies reviewed suffer from numerous limitations which should be accounted for in future research. One of the main limitations is focusing on correlates of resilience rather than the process (Haskett et al., 2006). It is likely that this is because cross-sectional studies assessing resilience on one or more domains are easier than prospective or longitudinal studies that are more able to explore what

factors are involved in the process of becoming resilient. Furthermore, our understanding of how to investigate the process of resilience is at present limited. More qualitative studies that offer the ability to generate hypotheses which can be empirically tested would be beneficial.

Another limitation is, depending on the approach employed to define resilience (e.g., comparison within the sample, self-report, or the higher end of whatever variable is being measured), the population studied (e.g., combination of different types of abuse, comparison between maltreated and non-maltreated, or specific types of abuse), and the decisions about the criterion level for resilience (e.g., composite scores according to a range of domains, or scores on a single domain), rates of resilience and associated protective factors vary widely within and across studies therefore making comparison difficult and limiting the ability to draw meaningful conclusions (Heller et al., 1999). For instance, assessing resilience according to a single domain results in higher rates of adaptive functioning (28-61%: Collishaw et al., 2007; Herrenkohl et al., 1994; Liem et al., 1997; Spaccarelli & Kim, 1995), whereas using multiple domains results in much lower rates (13-18%: Cicchetti et al., 1993; Herrenkohl et al., 1994). Furthermore, assessing the stability of resilience over time results in even lower rates (9-12%: Cicchetti & Rogosch, 1997; Flores et al., 2005). Rates may also vary according to age, gender, and type of childhood trauma. Future research needs to allow the potential to be more specific about rates of resilience to childhood maltreatment.

Furthermore, findings from studies with larger samples and stronger methodologies (e.g., Cicchetti & Rogosch, 1997; Cicchetti et al., 1993) imply that there may be different pathways to resilient adaptation depending on how resilience is viewed. For example, relationship factors may be more critical for resilient

outcomes in non-maltreated high-risk children whereas personality characteristics and self-system processes may be more important for maltreated children (Cicchetti & Rogosch, 1997). Further research would benefit from applying more consistent ways of assessing resilience in order to improve cross study comparisons.

The use of standardised measures to assess resilience could improve the comparability of findings but at the same time could perpetuate the problem of focusing on correlates of resilience. Further research that focuses on identifying a set of scoring criteria to indicate resilience is needed. What is vitally important is that researchers are explicit in distinguishing their conceptual approach, so that the varying conclusions about risk and protective factors can be fully understood. Furthermore, there is a need for scientific research to move beyond focusing on single factors to considering developmental processes that promote resilience (Rutter, 1990). These processes can then become the focus of the next generation of research on resilience.

### **4.3 Considerations for Future Research**

Research investigating resilience to childhood trauma has progressed from early publications based on clinical observation (Mrazek & Mrazek, 1987), however a number of methodological challenges continue.

It is important for future research to consider possible variations in abuse typology, particularly as different outcomes may be associated with different types of abuse (Cicchetti & Toth, 1995; Stevenson, 1999). Existing literature comprises diverse experiences, such heterogeneity could obscure our understanding of resilience among abused children. Although, different types of abuse rarely occur in isolation therefore the heterogeneity of existing samples could offer adequate understanding of (Haskett et al., 2006). Nevertheless future research would benefit

from drawing comparisons within maltreated populations as well as with other samples (Heller et al., 1999).

Resilience is neither a fixed trait nor a universal construct (Luthar & Zigler, 1991). Collishaw and colleagues (2007) highlight that for some individuals resilience persists but for the majority it may only be present during specific periods. As such resilience appears to be both ‘fluid over time and limited in scope’ (Herrenkohl et al., 1994, p. 308). There is a paucity of longitudinal studies, these may be better able to explore the process of resilience and what factors lead to sustained resilience (Cicchetti & Rogosch, 1997; DuMont et al., 2007). It is likely that protective factors may be sensitive to developmental stage, and different factors may predict resilience at different stages of life (Haskett et al., 2006). Any change in circumstance alters risk and/or protective mechanisms therefore the process of resilience must change in order to enable individuals to continue to develop on a positive trajectory (Rutter, 1994).

Another consideration for future research is disentangling resilience from other related factors, such as coping. Throughout the literature there are references to coping as being involved in resilience (Bogar & Hulse-Killacky, 2006; Himelein & McElrath, 1996). Resilience is often considered a moderator for the negative effects of stress (Ahern et al., 2006), therefore the behaviours or actions employed following a stressful event may be considered the outcome. In this sense resilience has been found to moderate the relationship between childhood emotional neglect and current psychiatric symptoms (Campbell-Sills, Cohan, & Stein, 2006). Lazarus and Folkman (1984) consider stress to involve three processes: primary appraisal – the process of perceiving a threat; secondary appraisal – the process of bringing to mind a potential response; and coping – executing a response. Resilience might therefore be viewed

as a precursor to coping, especially if defined as a dynamic process of successful adaptation and competent functioning despite stressful events (Luthar et al., 2000; Masten & Powell, 2003). Evidently, this distinction requires further investigation, although this is dependent on reaching more of a consensus about what factors determine resilience.

#### **4.4 Clinical Implications**

Scientific interest in this area originated from the idea that identifying protective factors could lead to the development of prevention programmes and intervention strategies and therefore improve positive outcomes for at-risk children (Luthar & Zelazo, 2003). Although research in this area is far from being able to guide clinicians and scientists in the development of programmes to promote resilience, existing literature offer some insights for clinical practice.

Firstly, early intervention appears extremely important given the impact of childhood trauma on developmental status, and the likelihood that it will impede the development of protective attributes. Interventions specifically focused on improving attachment relationships for children exposed to maltreatment (e.g., Becker-Weidman & Hughes, 2008; Hughes, 2004) may have a lot to offer. However it is often not appropriate or timely to begin with psychotherapeutic interventions at the individual level and there is often more emphasis on directing interventions for children through their parents.

As such, parenting programmes may be particularly important given that the research reviewed highlights that stable and consistent parenting within the context of a positive family environment is important for adaptive functioning. These interventions aim to enhance parents' ability to provide a warm, sensitive, stable, and consistent caring environment, which is beneficial for the development of healthy



attachment relationships, self-regulation, and autonomy. Considering the negative impact childhood trauma can have on these aspects such interventions would directly target potential protective factors. Parent skills training programmes such as the ‘Incredible Years Parenting Programme’ are considered extremely valuable (Gardner, Burton, & Klimes, 2006; Patterson et al., 2002).

In terms of interventions targeting individual attributes, Cognitive Behaviour Therapy (Beck, 1976, 1979) or Dialectical Behaviour Therapy (Linehan, 1993) both of which involve techniques aimed at enhancing confidence, self-esteem, emotional regulation, and problem solving skills would help promote resilience in maltreated children. In addition, treatment approaches that involve cognitive restructuring may be useful for abuse-related perceptions and beliefs, such as Schema-Focused Therapy (Young, 1999). Social skills training might also help individuals who have been exposed to childhood trauma establish and maintain interpersonal relationships (Haskett et al., 2006). The literature reviewed offers little guidance as to interventions that might be aimed at wider social environmental factors. However, in light of the reciprocal and transactional influence of child attributes on their family and wider social context (Cicchetti & Toth, 1997) it is likely that interventions directed at any one level will have some positive influence on other levels (Haskett et al., 2006).

In brief, despite the focus on correlates of resilience as opposed to its developmental process, existing literature offers an excellent foundation for continued theoretical and scientific understanding of the processes associated with resilience to childhood trauma. In this respect further research will provide the building blocks for prevention and intervention efforts for individuals who have suffered such maltreatment.

## **5. CONCLUSION**

Despite the risk of negative consequences, a proportion of individuals who experience childhood trauma adapt and achieve positive outcomes. Factors determining resilience include a combination of individual and environmental features. Although current literature needs to move to a more process orientated approach for investigating resilience, existing findings offer valuable insights into the direction of prevention and intervention programmes for at-risk populations. Clarity on the construct of resilience is still in its infancy. However such an emphasis on positive factors offers an interesting change of perspective for social science research which inherently focuses on deficits and pathology rather than strengths.

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**The Influence of Resilience on Childhood Trauma and Coping Style  
and their relationship in Homeless Persons**

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## **ABSTRACT**

Developing an understanding of resilience could offer valuable guidance for prevention and intervention programmes aimed at reducing chronic and repeated homelessness. This study investigated the influence of resilience on the relationship between childhood trauma and maladaptive coping. A sample (n=59) of mainly white males, mean age 35 years, currently homeless, completed self-report questionnaires. Statistical analysis involved correlation and multiple regression techniques, the latter of which explored the moderated effect of resilience. Key findings indicate a significant association between childhood physical abuse and maladaptive coping, which was moderated by resilience. Specifically homeless individuals with high levels of resilience engage in more maladaptive coping at higher levels of childhood physical abuse, whilst those with lower levels of childhood physical abuse engage in less maladaptive coping.

Such findings may indicate that resilience has a greater protective effect against maladaptive coping as severity of childhood physical abuse decrease. As such the potential benefit of psychotherapeutic interventions aimed at promoting and enhancing resilience and adaptive coping are discussed. The importance of early intervention for individuals at-risk of becoming homeless is highlighted. However since this was the first investigation exploring the moderating influence of resilience, further research aiming to replicate this finding is imperative, in addition to prospective longitudinal studies which enable causal conclusions to be drawn about the temporal sequence involved in becoming and remaining homeless.



## 1. INTRODUCTION

### 1.1 Overview

Despite considerable reductions over the past decade (DCLG, 2008b)<sup>6</sup> homelessness is still a significant problem in the United Kingdom (UK) and government strategies continue to target the prevention of homelessness (DCLG, 2009). Homeless people by way of their marginalised status (Power & Attenborough, 2003) represent the most vulnerable and disadvantaged people in society. Yet current knowledge of the pathways to *becoming* and *remaining* homeless remains deficient, as is knowledge of factors that could help prevent repeated loss of tenancy and other negative outcomes which perpetuate chronic and repeated homelessness.

### 1.2 Homelessness

In the broadest sense *homelessness* encompasses anyone without a permanent place to live (Crisis, 2005) including households or families with dependent children. Being *homeless* often refers to people sleeping on the streets and in other outdoor places such as derelict buildings or tents (ODPM, 2003). Government statistics indicate around 67,500 households were officially homeless during 2008 and on any one night in England almost 500 people were sleeping rough (DCLG, 2007).

*Rough sleepers* are among the most visible homeless persons but are only a small minority of individuals considered homeless or threatened with homelessness. A large proportion of homeless persons are not sleeping rough although do not have a permanent place to live. The '*hidden homeless*', largely consist of single individuals with no dependents, who reside in hostels, squats, bed and breakfast, on

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<sup>6</sup> There has been a 32% reduction in statutory homelessness (households accepted as homeless by local authorities) between April-June 2009 compared with the same period in 2008 (DCLG, 2008a), and a 73% reduction in rough sleeping in England between 1998 and 2007 (DCLG, 2007).

friends' sofas, or in other temporary and insecure conditions. Although such people are often considered legally homeless<sup>7</sup>, they are generally not eligible for local authority support (Crisis, 2005)<sup>8</sup> and are not accounted for within statistics.

Estimates suggest at any given time there are at least 380,000 'hidden homeless' in Great Britain (Crisis, 2006). As such it is difficult to ascertain accurate prevalence rates.

Although there is widespread acceptance that homelessness is about more than *rooflessness*, who and what conditions constitute a precise definition continues to be debated (Crisis, 2005). Not only does the transient nature of homelessness contribute to the complexity of defining the group. The homeless population no longer consists of a majority of single white males, women and families, minority ethnic groups, and adolescents increasingly experience homelessness (Warnes, Crane, Whitehead, & Fu, 2003). Despite the constant flow of homeless persons through hostels and on the street, some people remain homeless for extended periods of time (*chronic homelessness*) or cycle in and out of homelessness (*repeated homelessness*).

As such the homeless population consists of a diverse range of people who become and remain homeless for a variety of reasons, mainly due to a complex interaction between macro and micro factors (Morrell-Bellai, Goering, & Boydell, 2000). Macro factors (i.e., political, economic, and social risk factors) that play a role in precipitating homelessness include for example poverty, unemployment, lack of affordable housing, and lack of economic viability (Breakey, 1997; Morrell-Bellai et

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<sup>7</sup> A person is considered legally homeless if they have no right to occupy accommodation or that it is not reasonable to continue to occupy current accommodation (Housing Act, 1996)

<sup>8</sup> There is a difference between the legal definition of homelessness (see above) and statutory homelessness (homeless people or households recognised by the local authority as either unintentionally homeless and in priority need, intentionally homeless and in priority need or homeless and not in priority need) (Crisis, 2005).

al., 2000; Toro et al., 1995). These factors together with a lack of skills, opportunities, and support to cope with daily stressors or compete in the housing or employment market also serve to perpetuate homelessness (Morrell-Bellai et al., 2000; Slade, Scott, Truman, & Leese, 1999).

In the context of such macro factors are individual micro factors (i.e., risk factors) which render certain individuals more vulnerable. These include for example; family and relationship breakdown, mental illness and substance misuse, leaving institutional settings (e.g., local authority care, criminal justice system, or armed forces) and childhood abuse or neglect (Caton et al., 2005; Koegel, Melamid, & Burnam, 1995; Morrell-Bellai et al., 2000).

Numerous pathways lead to homelessness, which involve certain predisposing factors rendering an individual at risk (e.g., childhood trauma). These contribute to subsequent events or conditions (e.g., mental illness or substance misuse) which combined with certain precipitants (e.g., leaving care, parental separation, or loss of accommodation or employment) result in homelessness (Crane et al., 2005; Maguire, 2006; Martijn & Sharpe, 2006; Sullivan, Burnam, & Koegel, 2000). Many of the original risk factors that contribute to becoming homeless also serve to perpetuate homelessness (e.g., increased psychological or substance use disorders, traumatic incidents, and criminal activity; Morrell-Bellai et al., 2000).

It is evident that homeless persons have multiple and complex needs, and may be considered a population at-risk. It is unclear however what factors may help protect homeless persons from suffering further adversity. Although homelessness has received substantial research attention and interest from policy makers (Warnes et al., 2003) over the past decade, much of the focus has been on psychosocial factors with far less attention on the temporal sequence involved in becoming and remaining

homeless or what factors could break the cycle of chronic and repeated homelessness.

### **1.3 Childhood Trauma and Homelessness**

A large proportion of homeless adolescents and adults have experienced traumatic childhoods<sup>9</sup> (Davies-Netzley, Hurlburt, & Hough, 1996; Gwadz, Nish, Leonard, & Strauss, 2007; Ryan, Kilmer, Cauce, Watanabe, & Hoyt, 2000). Almost 70% report trauma during childhood (Christensen et al., 2005), with childhood sexual abuse (CSA) amongst the most prevalent (Goering, Tolomiczenko, Sheldon, Boydell, & Wasylenki, 2002; Martijn & Sharpe, 2006). Such maltreatment appears to be overrepresented within this population and is commonly cited as a risk factor for homelessness (Martijn & Sharpe, 2006).

A possible mechanism for why childhood trauma is involved in becoming and remaining homeless, may be the impact it has on later psychological and social functioning. Evidence highlights the short- and long-term adverse sequelae of child abuse (Browne & Finkelhor, 1986; Kendall-Tackett, Williams, & Finkelhor, 1993; Springer, Sheridan, Kuo, & Carnes, 2003), including disrupted early development, insecure attachment style, poor educational attainment, emotion dysregulation, and disturbances in interpersonal relating and social functioning (Cicchetti & Toth, 1995; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Stevenson, 1999).

Furthermore, exposure to childhood trauma has consistently been associated with a variety of subsequent mental health and substance misuse difficulties (Browne & Finkelhor, 1986). Including for example, posttraumatic stress disorder (Stovall-McClough & Cloitre, 2006), personality disorders (Spataro, Mullen, Burgess, Wells,

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<sup>9</sup> Childhood Trauma includes but is not limited to childhood sexual, physical, or emotional abuse and/or neglect. Other traumatic childhood experiences reported by homeless persons include for example exposure to violence, parental mental health and substance misuse problems, and spending time in local authority care (Martijn & Sharpe, 2006).

& Moss, 2004), psychosis and schizophrenia (Read, van Os, Morrison, & Ross, 2005), and alcohol/drug dependence (Polusny & Follette, 1995).

Understanding the relationship between childhood trauma and later psychological difficulties might offer some insights into homelessness. There is some evidence that homeless persons who have experienced child abuse have increased rates of mental illness and substance misuse (e.g., Davies-Netzley et al., 1996; Rew, Taylor-Seehafer, & Fitzgerald, 2001a; Stein, Leslie, & Nyamathi, 2002).

A significant proportion experience a range of mental health and substance misuse difficulties which are disproportionately high compared to the general population (Fischer & Breakey, 1991). Government statistics indicate that between 30-50% of rough sleepers suffer mental health problems (Warnes et al., 2003). Furthermore evidence indicates that around 85% have a major mood or anxiety disorder (Christensen et al., 2005), 60-90% exhibit symptoms of antisocial personality disorder (Maguire, Keats, & Sambrook, 2006; North, Smith, & Spitznagel, 1993), 70% misuse substances (Goering et al., 2002) and 10-20% have a dual diagnosis (i.e., severe mental illness and substance use disorder; Drake, Osher, & Wallach, 1991).

It is unclear whether such psychopathology is a cause or consequence of homelessness (Snow & Anderson, 1993). Although for the majority mental illness precedes homelessness (North, Pollio, Smith, & Spitznagel, 1998), rates of drug and alcohol and/or psychological disorders significantly increase after four years of homelessness (Martijn & Sharpe, 2006) and may also be associated with chronic homelessness (North et al., 1998). The relationship is likely to be multi-directional (Johnson, Freels, Parsons, & Vangeest, 1997).

In brief, childhood trauma, mental illness, and substance misuse may increase the risk of becoming homeless, whilst contributing to remaining homeless. Another mechanism involved in remaining homeless might also be engaging in maladaptive coping strategies (e.g., substance misuse, criminal behaviour, violence and aggression, or emotional avoidance) by increasing the risk of tenancy breakdown (Maguire et al., 2006).

#### **1.4 Maladaptive Coping and Homelessness**

Homeless persons frequently engage in a range of unhelpful behaviours such as violence and aggression, criminal behaviour, use of drugs and/or alcohol, and self harm/suicidal behaviours, possibly as ways of coping with their chaotic and unstable lifestyle and past experiences (Bassuk, Buckner, Perloff, & Bassuk, 1998; Fischer & Breakey, 1991; Morrell-Bellai et al., 2000; North, Smith, & Spitznagel, 1994).

Coping is the process of attempting to reduce stress and is based on an individual's appraisal of an event (Carver, Scheier, & Weintraub, 1989; Lazarus & Folkman, 1984). There are a multitude of ways to manage or solve problems, the popular method of assessing coping as problem-focused (e.g., attempts at solving the problem) or emotion-focused (e.g., attempts at reducing emotional distress associated with problem) have been criticised for failing to appreciate the diversity of potential coping responses (Carver et al., 1989).

Carver and colleagues (1989) therefore developed a theoretically derived measure of coping (i.e., COPE) which divides coping functions into a range of conceptually distinct scales. These include for example, removing a stressor by seeking instrumental or emotional support, denying or disengaging from the

experience (i.e., experiential avoidance), or using alcohol and/or drugs excessively<sup>10</sup>, and can be broadly grouped into either adaptive or maladaptive coping strategies.

There is limited evidence of an overall coping style in homeless persons, disengagement which involves problem avoidance, wishful thinking, avoidance of negative emotions and thoughts, and social withdrawal may be common (Votta & Manion, 2003). The unhelpful behaviours that homeless people frequently engage in may be indicative of a more maladaptive coping style. Certainly avoidant coping, social withdrawal, anger, and the use of drugs and/or alcohol as coping strategies have been highlighted in the homeless population (Kidd, 2003; Kidd & Carroll, 2007; Taylor-Seehafer, Jacobvitz, & Steiker, 2008).

Such maladaptive coping may arise as a result of early traumatic experiences. There is some evidence that in general individuals who experience CSA engage in more maladaptive strategies such as avoidant or disengagement coping (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Leitenberg, Greenwald, & Cado, 1992; Shapiro & Levendosky, 1999) which is also related to poorer psychological adjustment (Leitenberg et al., 1992). Limited evidence demonstrates this link in the homeless population (Chen, Tyler, Whitbeck, & Hoyt, 2004; Famularo, Kinscherff, Fenton, & Bolduc, 1990; Johnson, Rew, & Sternglanz, 2006; Ryan et al., 2000).

If maladaptive coping contributes to remaining homeless by increasing the likelihood of repeated tenancy breakdown or other negative outcomes (i.e., further experiences of trauma, development of physical and/or psychological health problems, and substance misuse) then promoting and enhancing more adaptive functioning (i.e. resilience) might help break the cycle of repeated tenancy breakdown and chronic and repeated homelessness. Levels of resilience are thought

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<sup>10</sup> See Measures section within the Methodology for further details.

to impact on coping ability and the ability to adapt in changing situations (Ireton & Cassata, 1976).

## **1.5 Resilience and Homelessness**

Research has begun to explore resilience in the homeless population. A recent review highlights the importance of the concept in the lives and existence of this at-risk population (Jones, 2006). Resilience refers to the process of successful adaptation and competent functioning in spite of significant adversity (Luthar, Cicchetti, & Becker, 2000; Masten & Powell, 2003).

Research investigating protective factors which contribute to resilience highlights the importance of strong cognitive abilities, positive self-esteem, self-reliance, emotion regulation, avoidance of maladaptive coping, good interpersonal skills, and supportive relationships within and outside the family, in disadvantaged populations including childhood trauma (Haskett, Nears, Ward, & McPherson, 2006; Heller, Larrieu, D'Imperio, & Boris, 1999; Luthar & Zelazo, 2003). Resilience may therefore be particularly relevant for the homeless population given their tendency to engage in maladaptive coping behaviours (e.g., drugs and alcohol) which is likely to reduce their level of resilience and contribute to repeated homelessness. Moreover, Connor (2006) suggests that resilience is a crucial factor in determining how a person reacts and copes in the face of adversity.

The majority of evidence relating to resilience in the homeless population is based on qualitative investigations with young people currently homeless or having experienced recent homelessness. Similarities can be drawn between the protective factors previously identified as important for resilience and factors identified in homeless youths. For example, independence, responsibility, determination, self-improvement, maturity, acceptance of support, and decreased reactivity to others,



were salient themes related to resilience (Lindsey, Kurtz, Jarvis, Williams, & Nackerud, 2000; Rew & Horner, 2003; Williams, Lindsey, Kurtz, & Jarvis, 2001).

The only empirical investigation, found relatively high rates of resilience in homeless youths using a standardised measure (Resilience Scale: Wagnild & Young, 1993), and despite being socially disconnected, those who were resilient were less lonely and hopeless, and engaged in fewer life-threatening behaviours (Rew, Taylor-Seehafer, Thomas, & Yockey, 2001b). Such evidence implies that relatively high levels of resilience may reduce homeless people's propensity to engage in maladaptive coping behaviours. Further research is necessary to elucidate the exact nature of resilience in homeless people.

Resilience is often considered a personality characteristic that moderates the negative effects of stress and promotes adaptation (Ahern, Kiehl, Sole, & Byers, 2006; Wagnild & Young, 1993). Evidence implies that resilience could moderate the relationship between childhood trauma and particular negative outcomes such as psychiatric illness or unhelpful coping behaviours. For instance, retrospective reports of high levels of childhood emotional abuse were found to be related to high levels of current psychiatric symptoms in individuals lacking resilience (Campbell-Sills, Cohan, & Stein, 2006). Therefore promoting and enhancing resilience in individuals with a history of childhood trauma could improve not only their coping mechanisms but also their current life circumstances.

Indeed, not all individuals exposed to childhood trauma experience long-term negative consequences, a growing body of evidence suggests a small proportion, commonly around one fifth, remain resilient (e.g., Cicchetti & Rogosch, 1997; Herrenkohl, Herrenkohl, & Egolf, 1994). It is possible therefore that a proportion of homeless individuals are resilient despite their frequent histories of childhood

trauma, and that promoting and enhancing resilience in those lacking such adaptive functioning could reduce maladaptive coping strategies and therefore contribute to breaking the cycle of repeated tenancy breakdown, thus chronic and repeated homelessness (Slade et al., 1999).

## **1.6 Formulation of Current Study**

Childhood trauma and maladaptive coping may be implicated in the pathways to becoming and remaining homeless. To improve our understanding of such pathways and to offer guidance for prevention and intervention programmes the current study proposed that, the way homeless people cope (e.g., avoidant coping, social withdrawal, anger, and the use of drugs and/or alcohol) may be influenced not only by early traumatic experiences but by level of resilience. Previous research has not considered the possible influence of resilience in reducing maladaptive coping in the homeless. Therefore, this study aimed to explore the relationship between childhood trauma and coping, and the relative influence of resilience, by testing the following hypotheses<sup>11</sup>:

*Hypothesis 1:* Childhood trauma will be associated with higher levels of maladaptive coping and lower levels of resilience. While lower levels of resilience will be associated with a higher degree of maladaptive coping.

*Hypothesis 2:* Level of resilience will moderate the relationship between childhood trauma and maladaptive coping.

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<sup>11</sup> A moderator rather than mediator model was proposed because it was not predicted that resilience would account for the impact of childhood trauma on maladaptive coping but that different levels of resilience may influence maladaptive coping at different levels of childhood trauma.

## **2. METHODOLOGY**

### **2.1 Design**

This study employed a cross-sectional multiple regression/correlation design.

### **2.2 Sample**

#### *2.2.1 Sampling Strategy*

Participants were homeless individuals aged 18-65 recruited via third sector organisations in Southampton, including: an assessment centre hostel; two longer term hostels; and two day centres. An outreach team working alongside the day centres assisted in accessing rough sleepers.

*Inclusion criteria:* any individual male or female, currently homeless for more than one month, or with a history of repeated homelessness (i.e., homeless more than once) if currently homeless for less than one month, was eligible to take part in the study.

*Exclusion criteria:* any individual not currently homeless or without a history of repeated homelessness, or unable to understand written or spoken English<sup>12</sup>. Individuals were not excluded on the basis of drug or alcohol use however they were unable to access services if under the influence.

A broad definition of homelessness encompassing anyone without a permanent place to live was used. This included individuals residing in homeless hostels and shelters, in squats or overcrowded housing or any other type of temporary accommodation. Rough sleepers included anyone residing outdoors such as sleeping on the street, or in uninhabitable places.

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<sup>12</sup> Funding for an interpreter was not available and it was not clear if the questionnaires would be reliable if translated into another language.

Recruitment took place over nine sessions and approximately 156 individuals were approached, of these 81 took part, resulting in a 52% recruitment rate.

### 2.2.2 *Anticipated Sample Size*

A priori power analysis<sup>13</sup> (using a Linear multiple regression f-test) indicated a sample size of 68 would enable the detection of a medium effect size ( $r = .30/ f^2 = .15$ ), where power was .8 and  $\alpha$  was .05 (Cohen, 1992; Faul, Erdfelder, Buchner, & Lang, in press). This was also considered realistic based on previous research utilising similar methods (Mathews, 2006; Munawar, 2008).

## 2.3 **Participant Characteristics**

### 2.3.1 *Demographic Characteristics*

Eighty-one homeless adults took part, this included almost equal numbers of individuals recruited from hostels ( $N = 44$ : 54%) or day centres ( $N = 37$ : 46%). However the sample was overrepresented by the hidden homeless ( $N = 54$ : 66.7%) in comparison to rough sleepers ( $N = 20$ : 24.7%)<sup>14</sup>.

Twenty-two participants (27.2%) were excluded from statistical analysis either because they did not meet the inclusion criteria ( $N = 8$ : 36.4%), had failed to sufficiently complete all questionnaires ( $N = 3$ : 13.6%)<sup>15</sup>, or their responses appeared untrustworthy ( $N = 11$ : 50%)<sup>16</sup>. On the whole excluded participants did not differ considerably in age, gender, ethnicity, and accommodation status, from those

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<sup>13</sup> Using G\*Power 3.1, a power analysis computer programme (Faul, Erdfelder, Lang, & Buchner, 2007)

<sup>14</sup> A further three (3.7%) were not currently homeless and four (4.9%) did not state their current circumstance.

<sup>15</sup> Where either a whole questionnaire had not been completed or 10% or more items on any one questionnaire had not been completed

<sup>16</sup> Where there were whole questionnaires with the same response irrespective of reversed items, or frequent repetitions of marking more than one response on each item.

included in the statistical analysis<sup>17</sup>. The majority were white British ( $N=19$ : 86.4%) males ( $N=18$ : 81.8%) with an average age of 34.1 years ( $SD=10.6$ ), residing in hostels ( $N=10$ : 45.5%), on the street ( $N=5$ : 22.7%) or in other outdoor places ( $N=3$ : 13.6%)<sup>18</sup>.

Table 1 presents the demographic characteristics for the final sample ( $N=59$ ). Overall the majority were white British ( $N=52$ : 88.1%) males ( $N=55$ : 93.2%) with an average age of 35.8 years ( $SD=11.7$ ) who were residing in a homeless hostel ( $N=34$ : 57.6%). Most had been homeless for up to six months ( $N=28$ : 47.5%) of which the majority had been previously homeless up to five times ( $N=32$ : 54.2%). The average age of participants at first episode of homelessness was 28.1 years ( $SD=12.7$ ) and 74.5% ( $N=44$ ) gave up to four reasons for becoming homeless. The main reasons were using alcohol and/or drugs, having mental health problems, experiencing relationship difficulties, and having financial difficulties or problems with parents or step-parents.

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<sup>17</sup> It was not possible to compare the excluded participants with those included in the final sample as the numbers were too low to perform any statistical analysis.

<sup>18</sup> Two were residing derelict buildings, one on a friend's sofa, and one did not state their current circumstance.

Table 1

Demographic Characteristics (*N*=59)

	<b>N</b>	<b>Frequency (%)</b>
<b>Age</b>		
18-25	16	27.1%
26-35	13	22.1%
36-49	20	33.9%
50+	6	10.1%
<b>Gender</b>		
Male	55	93.2%
Female	4	6.8%
<b>Ethnicity</b>		
White British	52	88.1%
White Irish	1	1.7%
White other	1	1.7%
White & Black Caribbean	2	3.4%
White & Black African	1	1.7%
Mixed other	1	1.7%
Black Caribbean	1	1.7%
<b>Accommodation Status</b>		
Staying in a shelter / hostel	34	57.6%
Sleeping on a friend's sofa	7	11.9%
Sleeping in derelict buildings	2	3.4%
Staying in a squat	1	1.7%
Sleeping on the streets	6	10.2%

Sleeping in other outdoor areas	2	3.4%
Staying in rented accommodation	3	5.1%
Other	3	5.1%
Not stated	1	1.7%

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### Homeless Status

Homeless / other temporary accommodation	43	72.9%
Roofless / Street	10	16.9%
Not currently homeless	3	5.1%
Not stated	3	5.1%

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### Repeated Homeless Status

First episode currently > 1 month	14	23.7%
Repeated episodes & current > 1 month	37	62.7%
Repeated episodes & current < 1 month	3	5.1%
Repeated episodes & not currently homeless	3	5.1%
Repeated episodes & current not stated	2	3.4%

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### Age at first episode of homelessness

< 18	16	27.1%
18-25	15	25.4%
26-35	12	20.3%
36-49	11	18.6%
50+	5	8.5%

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### Number of episodes of homelessness

One	15	25.4%
2-5	32	54.2%
6-10	6	10.2%

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11-19	2	3.4%
20+	4	6.8%
<b>Length of current episode of homelessness</b>		
< 1 month	4	6.8%
1-6 months	28	47.5%
7-12 months	5	8.5%
1-5 years	12	20.3%
5+ years	5	8.5%
Not stated	2	3.4%
Not applicable	3	5.1%
<b>Number of perceived reasons for homelessness <sup>[1]</sup></b>		
One	11	18.6%
2 - 4	44	74.5%
5 -8	4	6.8%
<b>Perceived reasons for homelessness</b>		
Using alcohol and / or drugs	35	59.3%
Mental Health Problems	23	39%
Relationship / Marriage breakdown	21	35.6%
Physical / Sexual Health	4	6.8%
Problems with parents / step-parents	15	25.4%
Losing a loved one through death	8	13.6%
Growing up in care	5	8.5%
Being excluded from school	3	5.1%
Spending time in prison	11	18.6%
Serving in the armed forces	3	5.1%



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Financial difficulties <sup>[2]</sup>	29	49.2%
Other	6	10.2%

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*Note.* <sup>[1]</sup> Participants responded by ticking any reason that applied. <sup>[2]</sup> Includes losing job, being in debt, not being able to pay the rent / mortgage, being made redundant or being dismissed, and having benefit problems.

### 3.3.2 *Substance use*

Table 2 details self-reported substance use over the past month for the final sample ( $N = 59$ ). Overall 96.6% ( $N = 57$ ) had used substances (excluding cigarette/tobacco), 71.2% ( $N = 42$ ) of which had used any one type of drug. The main types of drugs included, depressants ( $N = 48$ : 81.4%), stimulants ( $N = 23$ : 39%), or opiates ( $N = 16$ : 27.1%). The majority had smoked cigarettes/tobacco ( $N = 49$ : 83.1%) and most had also consumed alcohol (with or without also using drugs) ( $N = 41$ : 69.5%).

Table 2

Substance use over the past month ( $N=59$ )

	<b>N</b>	<b>Frequency (%)</b>
<b>Substance use</b>		
Cigarettes / Tobacco	49	83.1%
Drugs	16	27.1%
Alcohol	15	25.4%
Drugs and Alcohol	26	44.1%
None	2	3.4%
<b>Type of substances used <sup>[1]</sup></b>		
Depressants (e.g., Cannabis, Alcohol, barbiturates)	48	81.4%
Stimulants (e.g., Cocaine / Crack, Amphetamine, Ecstasy)	23	39%
Opiates (e.g., Heroin, Morphine, Methadone)	16	27.1%
Tranquillisers (e.g., Benzodiazepines/Valium)	8	13.6%
Hallucinogens (e.g., LSD, MagicMush)	8	13.6%
Solvents (e.g., Gases, Glues, Aerosols)	2	3.4%
Other drugs (e.g., Poppers, Anabolic steroids)	6	10.2%

*Note.* [1] Data represent endorsement of any one substance within the category

## 2.4 Measures

### 2.4.1 Demographic Information

A demographics form (Appendix C) elicited information about – age, gender, ethnicity, accommodation status, perceived cause(s) of homelessness, length and frequency of homelessness, and substance use over the past month.

### 2.4.2 Assessment of Childhood Trauma

**Child Abuse and Trauma Scale** (CAT: Sanders & Becker-Lausen, 1995) is a 38 item self-report questionnaire assessing the multidimensional nature of childhood abuse by establishing frequency and extent of negative childhood and adolescent experiences. It has four subscales (Sanders & Becker-Lausen, 1995), negative home atmosphere/neglect (Neglect: 14 items) child physical abuse/punishment (CPA: 6 items) and child sexual abuse (CSA: 6 items), emotional abuse (CEA: 7 items), created by Kent and Waller (1998), incorporates six items not previously included in the other subscales and one from neglect. Subscales are best treated dimensionally (Sanders & Becker-Lausen, 1995), however CSA can be treated categorically to indicate presence (defined as any positive response to any item) or absence of abuse (van Hanswijck de Jonge, Waller, Fiennes, Rashid, & Lacey, 2003). Responses are rated on a 4-point scale from 0 (*never*) to 4 (*always*). Subscale scores are the mean of relevant items and total score is derived from the mean of all items. Higher scores reflect increased severity of traumatic experiences. Items are worded in a purposefully mild fashion, for example “Were there traumatic or upsetting sexual experiences when you were a child or teenager that you couldn’t speak to adults about?” in order to minimise subsequent distress.

The CAT has adequate psychometric properties with strong internal consistency ( $\alpha = .63$  to  $.90$ ) and test-retest reliability ( $r = .71$  to  $.91$ ) and concurrent validity ( $r = .24$  to  $.41$ : Kent & Waller, 1998; Sanders & Becker-Lausen, 1995). It has been used in numerous studies exploring childhood trauma and psychological difficulties (e.g., Pekala et al., 1999; Sanders & Giolas, 1991; van Hanswijck de Jonge et al., 2003). The CAT was selected as the most appropriate and reliable measure to identify a history of childhood trauma.

#### 2.4.3 *Assessment of Resilience*

**Resilience Scale** (RS: Wagnild & Young, 1993) is a 25 item self-report questionnaire assessing two factors of resilience: personal competence (PC: 17 items); and acceptance of self and life (ASL: 8 items). Personal competence represents self-reliance, independence determination, invincibility, mastery, resourcefulness, and perseverance. Whilst acceptance of self and life represents adaptability, balance, flexibility and a balanced perspective of life. Responses are rated on 7-point scale from 1 (*disagree*) to 7 (*agree*). Subscale scores are the sum of items and total resilience is the sum of all items (range 25-175) with higher scores indicating more resilience.

The measure has good internal consistency ( $\alpha = .76$  to  $.91$ ), and good test re-test reliability ( $r = .67$  to  $.84$ ) and concurrent validity ( $r = .26$  to  $.37$ : Humphreys, 2003; Hunter & Chandler, 1999; Wagnild & Young, 1993). The RS has been used in a few studies investigating resilience and psychological factors/distress (e.g., Humphreys, 2003; Moorhouse & Caltabiano, 2007; Pinquart, 2009), in particular with homeless adolescents (Rew et al., 2001b). The RS was selected as the most appropriate measure to identify resilience.

#### 2.4.4 Assessment of Coping Style

**Brief COPE Inventory** (Carver et al., 1989) is a 28 item self-report questionnaire assessing a broad range of coping responses, including functional and dysfunctional strategies. It is an abbreviated version of the COPE (Carver et al., 1989), developed for use with populations where a high response burden was likely as such it was felt more appropriate for a homeless population.

The brief COPE includes 14 scales each captured by two items: active coping, planning, positive reframing, acceptance, humour, religion, using emotional support, using instrumental support, self-distraction, denial, venting, substance use, behavioural disengagement, and self-blame. The first eight scales can be regarded as adaptive and the last six as maladaptive (Carver et al., 1989). Responses are rated on a 4-point scale from 1 (*don't usually do this*) to 4 (*do this a lot*). Each scale provides a total scale score which is the sum of items and higher scores represent more endorsement of that coping style.

The measure does not provide an overall coping index or, adaptive or maladaptive composites. The author however suggests that aggregated scores can be determined by exploring the factor structure among scale scores (Carver, 1997). Meyer (2001) aggregated the 14 scales into two summary scales – adaptive and maladaptive coping, reporting excellent internal consistency for adaptive coping ( $\alpha = .81$ ) but lower for maladaptive coping ( $\alpha = .48$ ). Excluding substance use and self-distraction which did not positively contribute to internal consistency for maladaptive coping the coefficient alpha increased ( $\alpha = .57$ ) to above the minimally acceptable level ( $\alpha = .50$ : Nunnally, 1978). Therefore their maladaptive coping composite included, behaviour disengagement, denial, venting and self-blame.

Overall the brief COPE has good internal reliability on all scales ( $\alpha = .64$  to  $.90$ ) except for venting, denial, and acceptance, although these exceed minimum acceptability (Carver, 1997). It has been used in numerous studies investigating coping in people with psychological disturbances (e.g., Meyer, 2001; Schnider, Elhai, & Gray, 2007), and the full version (COPE: Carver et al., 1989) has been used with homeless adolescents (Votta & Manion, 2004).

## **2.5 Procedure**

The study was approved by the University of Southampton, School of Psychology Ethics Committee (Appendix D) and permission was obtained from The University of Southampton Research and Development Committee (Appendix E). All homeless agencies gave permission for service users to be approached.

Recruitment and assessment was conducted jointly with another researcher<sup>19</sup>, the two projects were presented as one study involving five questionnaires<sup>20</sup> and a demographics form. Given the nature of the setting and sample the procedure was flexible.

### *2.5.1 Approach*

The homeless organisations displayed posters (Appendix F) and distributed flyers (Appendix G) advertising the study. Staff were also informed to enable them to provide further information.

### *2.5.2 Recruitment*

Individuals were recruited on the day of the assessment. A verbal explanation of the study (Appendix H) outlined pertinent information, emphasising that

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<sup>19</sup> Also a Trainee Clinical Psychologist

<sup>20</sup> Three questionnaires for this study and a further two for the second study.

participation was voluntary and highlighted the sensitive nature of some questions. Participants were given an information sheet (Appendix I) and informed consent was assumed on the basis of completion and return of anonymous questionnaires.

Screening forms<sup>21</sup> (Appendix J) identified individuals who might have difficulty completing the questionnaires and offered a choice of assessment options (independently, with support, or in an interview format). Consent forms (Appendix K) were used in cases where participants opted for an interview format.

### 2.5.3 *Assessment*

All participants were assessed in a group format with a maximum of 10 individuals, unless an interview format was requested ( $N=16$ : 19.8% opted for an interview format out of the total sample  $N=81$ ) which was conducted in private to ensure confidentiality. Drop-in assessment sessions lasted approximately 2 hours. Researchers were available throughout to offer support, and participants were asked not to confer. Risk issues and breakaway procedures were discussed prior to sessions and in most cases researchers were provided with personal alarms or walkie-talkies so that staff could be alerted to any difficulty.

Questionnaires were coded<sup>22</sup> to ensure confidentiality and anonymity, and participants returned completed forms in a sealed envelope. The entire set of questionnaires<sup>23</sup> and demographics form took approximately 50 minutes to complete. All participants received a £6 supermarket voucher as a thank-you.

### 2.5.4 *Debrief*

A written debrief (Appendix L) accompanied a verbal explanation reiterating the possibility of distress and signposting appropriate support agencies (i.e., support

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<sup>21</sup> Used in previous research with homeless populations (Mathews, 2006; Munawar, 2008)

<sup>22</sup> Each participant was allocated a unique identity number and data was coded accordingly

<sup>23</sup> Five questionnaires in total, including two additional questionnaires for the second study



workers, GP services, or Samaritans). All participants rated distress levels following completion of questionnaires on a scale from 0 (*not at all upset*) to 10 (*very upset*) ( $M = 2.9, SD = 2.8$ )<sup>24</sup>. This information was used to highlight individuals who may have a negative reaction and such individuals were followed-up by staff.

## **2.6 Ethical Considerations**

The standard debriefing process was considered insufficient for the day centres. It was therefore supplemented with a mood repair task (Appendix M), this was necessary because no support worker systems were in place and access to primary care services was difficult for day centre service users. The mood repair task involved rating a set of jokes on a humour scale 1 (*not at all funny*) to 4 (*very funny*) as a form of distraction.

In addition a qualified Clinical Psychologist experienced in working with homeless individuals was available for consultation should anyone become significantly distressed. Had all debriefing methods failed, a one-to-one session with this professional would have been offered. However neither of these components were utilised since no participant reported significant distress following participation.

## **2.7 Statistical Analysis Strategy**

All descriptive and inferential statistics were performed using Statistical Package for the Social Sciences (SPSS), version 17.0. Preliminary statistics explored variable distributions in order to establish if parametric tests were appropriate and descriptive statistics were established. The first hypothesis was addressed using correlation analysis exploring the relationships between variables. The second hypothesis was tested using hierarchical multiple regression techniques as the

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<sup>24</sup> For the whole sample (N=81)

appropriate method of testing a moderation model (Aiken & West, 1991; Baron & Kenny, 1986; Cohen, Cohen, West, & Aiken, 2003).

### **3. RESULTS**

#### **3.1 Preliminary Analysis**

Preliminary statistical analysis explored if data for the final sample ( $N=59$ ) conformed to the assumptions of normality. Mean scores were used throughout for subscales and total scores and all cases were included in the statistical analysis. Kolomogorov-Smirnov tests and measures of skewness and kurtosis demonstrated all variables were sufficiently normally distributed to enable the use of parametric tests. With the exception of CSA ( $D(58) = .254, p > .001$ ) and total CAT total ( $D(58) = .135, p > .05$ ), inspection of boxplots identified two possible outliers for CSA, however these were not removed since they simply represented severe cases. Excluding CSA from total CAT resulted in this being sufficiently normally distributed to enable the use of parametric tests, CSA was then treated as a categorical variable. Finally, in order to reduce the amount of data for the brief COPE, the 14 scales were aggregated into two composite scores for adaptive and maladaptive coping on the basis of previous research (see section 2.4.4).

#### **3.2 Descriptive Statistics**

Table 3 displays the means and Cronbach's Alphas for all variables, subscales and total scores demonstrated acceptable reliability (Nunnally, 1978).

##### *3.2.1 Childhood Trauma*

According to the CAT, childhood physical abuse had the highest mean severity score, although emotional abuse and neglect were not too dissimilar. Total

CAT score ( $M = 1.67$ ,  $SD = .78$ ) is almost double that reported for various non-clinical samples ( $M = .39$  to  $.91$ ,  $SD = .06$  to  $.66$ ; Kent & Waller, 1998; Patti, 1999; Sanders & Becker-Lausen, 1995) and higher than a sample of bulimic women ( $M = 1.19$ ,  $SD = .82$ ; Hartt & Waller, 2002) but less than a sample of adults with multiple personality disorder (DSM-III-R: APA, 1987;  $M = 2.7$ ,  $SD = .84$ ; Sanders & Becker-Lausen, 1995). Furthermore, exploring the presence or absence of sexual abuse<sup>25</sup> indicated that 59.3% ( $N = 35$ ) of the participants reported sexual maltreatment as a child.

### 3.2.2 Resilience

With regards to the components of the RS both personal competence and acceptance of self and life, were endorsed to a similar degree. Total RS score ( $M = 4.87$ ,  $SD = .96$ ) is similar to a sample of homeless adolescents ( $M = 4.48$ ,  $SD =$  unknown; Rew et al., 2001b), although lower than a sample of adolescents from an inner-city school ( $M = 5.3$ ,  $SD =$  unknown; Hunter & Chandler, 1999). On further exploration, the summed total RS score for this sample ( $M = 121.2$ ,  $SD = 24.0$ ) was slightly lower than for battered women ( $M = 143.1$ ,  $SD = 24.0$ ; Humphreys, 2003), Alzheimer care givers ( $M = 138.4$ ,  $SD = 18.6$ ), female graduate students ( $M = 139.1$ ,  $SD = 14.5$ ), first-time mothers (post-partum) ( $M = 141.7$ ,  $SD = 14.9$ ) and social housing residents ( $M = 141.1$ ,  $SD = 15.3$ ; Wagnild & Young, 1993), although not considerably, given the possible range of scores<sup>26</sup>.

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<sup>25</sup> Treating CSA as a categorical variable where scores greater than zero represented the presence of sexual abuse

<sup>26</sup> Base on group means from summed total scores with a range of 25 to 175 (Wagnild & Young, 1993)

### 3.2.3 Coping Style

The brief COPE indicates the most common coping styles were active coping, planning, acceptance, substance use, and self-blame. Composite scores indicate that participants engaged in overall adaptive or maladaptive coping styles to a similar degree. The composite scores for adaptive ( $M = 2.48$ ,  $SD = .54$ ) and maladaptive ( $M = 2.42$ ,  $SD = .62$ ) coping in this sample are not dissimilar to a sample of psychiatric inpatients (adaptive:  $M = 2.37$ ,  $SD = .70$  and maladaptive:  $M = 2.02$ ,  $SD = .65$ ) with, schizophrenia, major depressive disorder, or schizoaffective disorder (DSM-IV: APA, 1994; Meyer, 2001)<sup>27</sup>.

On further exploration the individual maladaptive coping scales the summed scores for self-distraction ( $M = 4.72$ ,  $SD = 1.67$ ) and venting ( $M = 4.46$ ,  $SD = 1.97$ ) for this sample were similar to those for people living with HIV/AIDS, although behavioural disengagement ( $M = 3.98$ ,  $SD = 1.91$ ), denial, ( $M = 4.34$ ,  $SD = 2.17$ ), and substance use ( $M = 5.68$ ,  $SD = 2.21$ ) were considerably higher (Vosvick et al., 2002).

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<sup>27</sup> Note: Meyer (2001) only included four subscales (behavioural disengagement, denial, venting, and self-blame) for their maladaptive composite score due to a lack of internal consistency when including the additional two scales (substance use and self-distraction).

Table 3

Descriptive Statistics for Childhood Trauma, Resilience and Coping Style ( $N=59$ )

	$\alpha^{[1]}$	M (SD)	Range
<b>CAT</b>			
Neglect	.89	1.84 (0.90)	0-4
CPA	.60	2.10 (0.72)	0-4
CSA	.87	.65 (0.97)	0-4
CEA	.92	1.98 (1.01)	0-4
Total CAT	.95	1.67 (0.78)	0-4
<b>RS</b>			
PC	.87	4.91 (1.02)	1-7
ASL	.59	4.79 (0.97)	1-7
Total RS	.89	4.87 (0.96)	1-7
<b>bCOPE</b>			
Active Coping	-	3.01 (0.81)	1-4
Planning	-	2.88 (0.79)	1-4
Positive Reframing	-	2.42 (0.97)	1-4
Acceptance	-	2.97 (0.75)	1-4
Humour	-	2.19 (1.03)	1-4
Religion	-	1.74 (1.06)	1-4
Emotional Support	-	2.04 (0.97)	1-4
Instrumental Support	-	2.59 (0.88)	1-4
<b>Overall Adaptive Coping<sup>[2]</sup></b>	.82	2.48 (0.54)	1-4
Self-distraction	-	2.35 (0.84)	1-4
Denial	-	2.20 (1.10)	1-4

Venting	-	2.23 (0.98)	1-4
Substance Use	-	2.83 (1.12)	1-4
Behavioural Disengagement	-	2.04 (0.98)	1-4
Self-Blame	-	2.86 (0.98)	1-4
<b>Overall Maladaptive Coping<sup>[3]</sup></b>	<i>.77</i>	2.42 (0.62)	1-4

*Note.* CAT – Child Abuse and Trauma Scale, CPA – Child Physical Abuse, CSA – Child Sexual Abuse, CEA – Child Emotional Abuse, RS – Resilience Scale, PC- Personal Competence, ASL – Acceptance of Self and Life, bCOPE – Brief Cope.

<sup>[1]</sup> Cronbach’s alpha values of between .70 and .80 indicate good reliability, although minimally acceptable alpha reliabilities should meet or exceed .50 (Nunnally, 1978). It was not possible to report alpha’s for all 14 bCOPE scales because there were too few items within each scale to perform the reliability analysis.

### 3.3 Correlations between Childhood Trauma, Resilience, and Maladaptive Coping

Table 4 illustrates the Pearson correlation coefficients for all variables, specific relationships are highlighted below:

#### 3.3.1 *Childhood Trauma and Maladaptive Coping*

The results demonstrated that experiencing greater levels of childhood trauma was associated with engaging in a higher degree of maladaptive coping. As predicted, there were significant positive correlations between, CPA and maladaptive coping ( $r = .362, p = .005$ ), and total CAT and maladaptive coping ( $r = .294, p = .024$ ). Furthermore, there was a non-significant trend for neglect ( $r = .236, p = .071$ ) and CSA ( $r = .217, p = .099$ ) with maladaptive coping. In addition, the relationship between overall childhood trauma and maladaptive coping remained when CSA was removed from total CAT ( $r = .284, p = .029$ ).

On further exploration those participants who had experienced CSA<sup>28</sup> engaged in a higher degree of maladaptive coping ( $M = 2.5, SD = .60$ ) compared to those who had not ( $M = 2.2, SD = .61$ ). This was tentatively supported by an independent t-test which found a non-significant trend ( $t(48.8) = -.297, p = .071$ : 2-tailed).

#### 3.3.2 *Childhood Trauma and Resilience*

No significant correlations were observed between childhood trauma and resilience and there was still no relationship between childhood trauma and PC ( $r = -.057, p = .66$ ), ASL ( $r = .020, p = .882$ ), and total RS ( $r = -.036, p = .787$ ) when CSA was removed from total CAT.

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<sup>28</sup> Treating CSA as a categorical variable

### 3.3.3 *Maladaptive Coping and Resilience*

There was no correlation between maladaptive coping and resilience, although higher levels of adaptive coping strategies were associated with higher levels of resilience.



Table 4

Correlations: Childhood Trauma, Resilience and Coping Style ( $N=59$ )

	1	2	3	4	5	6	7	8	9	10
<b>CAT</b>										
1. Neglect	–									
2. CPA	.587**	–								
3. CSA <sup>[1]</sup>	.412**	.329*	–							
4. CEA	.819**	.611**	.529**	–						
5. Total CAT	.921**	.721*	.663**	.902**	–					
<b>RS</b>										
6. PC	-.054	-.134	-.037	.011	-.057	–				
7. ASL	-.012	.034	-.062	.078	.006	.765**	–			
8. Total RS	-.043	-.087	-.048	.033	-.040	.978**	.882**	–		
<b>bCOPE</b>										
9. Maladaptive	.236	.362**	.217	.174	.294*	.132	.577	.202	–	
10. Adaptive	-.014	.167	.088	.106	.092	.518**	.580**	.565**	.146	–

*Note.* CAT – Child Abuse and Trauma Scale, CPA – child physical abuse, CSA – child sexual abuse, CEA – child emotional abuse, RS – Resilience Scale, PC- Personal competence, ASL – acceptance of self and life, bCOPE – Brief Cope. [1] CSA was also treated as a categorical variable and independent t-tests used to explore the relationship with resilience and coping. \*  $p < .05$  (2-tailed), \*\*  $p < .01$  level (2-tailed)

Correlations however tell us nothing about the predictive power of variables, regression analysis on the other hand fits a predictive model to the data therefore exploring the predictive value of one or more variables upon on an outcome (Field, 2005).

### **3.4 The Moderating Effect of Resilience**

A series of hierarchical multiple regressions were performed in order to examine the moderating effect of resilience on the relationship between maladaptive coping and CPA. This analysis was guided by conceptual and statistical work on interaction effects for testing moderation (Aiken & West, 1991; Baron & Kenny, 1986; Cohen et al., 2003). Within the regression models the predictor variable was entered at step 1 (i.e., CPA), the moderator at step 2 (i.e., Total RS), and the interaction term at step 3 (i.e., CPA multiplied by total RS)<sup>29</sup>, the outcome variable remained constant throughout each step (i.e., maladaptive coping). The predictor and moderator variables were mean centred (i.e., put in deviation score by subtracting each variable's mean from the individual observation) prior to computing the interaction term (Cohen et al., 2003). A significant interaction term (i.e., standardised regression coefficient  $\beta$ , as well as  $R^2$  change) indicates a moderator effect (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004; Holmbeck, 1997).

In order to interpret a significant interaction, simple regression lines for high and low values of the moderator variable are plotted and t-tests established if these were significantly different from zero (Frazier et al., 2004; Holmbeck, 1997). The results of the regression analysis are presented in table 5.

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<sup>29</sup> Additional sets of regression models were explored with CPA as the predictor and either PC or ASL as the moderator.

Table 5

Regression to Test the Moderated Effect of Resilience (N=59)

	<b>B</b>	<b>SE B</b>	<b>T</b>	<b>95% CI</b>	<b>β</b>
<b>Step 1. Predictor</b>					
Constant	2.419	0.076	31.978	2.267, 2.570	
CPA	0.312	0.106	2.936	0.099, 0.525	.362**
<b>Step 2. Moderator</b>					
Constant	2.419	0.075	32.044	2.268, 2.570	
CPA	0.302	0.107	2.833	0.088, 0.515	.350*
Total RS	-0.089	0.080	-1.115	-0.249, 0.071	-.138
<b>Step 3. Predictor x Moderator</b>					
Constant	2.343	0.073	33.387	2.288, 2.580	
CPA	0.252	0.105	2.404	0.042, 0.462	.292*
Total RS	-0.096	0.077	-1.250	-0.251, 0.058	-.149
CPA*Total RS	0.251	0.107	2.348	0.037, 0.466	.284*

Note. B = unstandardised beta weights,  $\beta$  = standardised beta weights.  $R^2 = .131$ ,  $F$  change (1, 57) = 8.617 for Step 1; Change in  $R^2 = .019$ ,  $F$  change (1, 56) = 1.244 for step 2; Change in  $R^2 = .077$ ,  $F$  change (1, 55) = 5.511,  $p < .05$  for step 3.

\* $p < .05$  \*\* $p < .001$

Overall, the model fitted the data well and did not violate assumptions of regression analysis (Berry, 1993), therefore suggesting the findings could be generalised to wider homeless populations. The interaction between CPA and total RS significantly predicted maladaptive coping: *change in  $R^2 = .077$ ,  $F$  change (1, 55) = 5.511,  $p < .05$* , which explained 22.8% of the variance in maladaptive coping<sup>30</sup>.

The plot of the regression lines from the significant interaction between resilience and CPA on maladaptive coping is presented in figure 1. This demonstrates that resilience has a moderating effect on maladaptive coping at different levels of CPA. Post-hoc tests of the regression slopes, following procedures outline by Aiken and West (1991) (Appendix N), found that homeless individuals with high levels of resilience significantly differed from those with low levels of resilience,  $t(3, 55) = 2.348, p < .05$ . Specifically, there was a weak significant positive slope among homeless individuals with high levels of resilience,  $t(2, 56) = 1.44, p < .10$ , but among those with low levels the slope did not differ from zero,  $t(2, 56) = .03, p > .10$ . This suggests that individuals with high levels of resilience engage in more maladaptive coping at higher levels of CPA, and those with lower levels of CPA engage in less maladaptive coping, whilst there is no association between maladaptive coping and CPA for individuals with low levels of resilience.

Testing the same model, substituting total CAT excluding CSA (because this was also significantly associated with maladaptive coping) as the predictor variable, the interaction between resilience and childhood trauma was non-significant (Appendix O). This suggests that there is something unique about the relationships between CPA and maladaptive coping that is influenced by resilience.

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<sup>30</sup> A similar pattern of results was found in the addition sets of analyses substituting PC or ASL as the moderator.

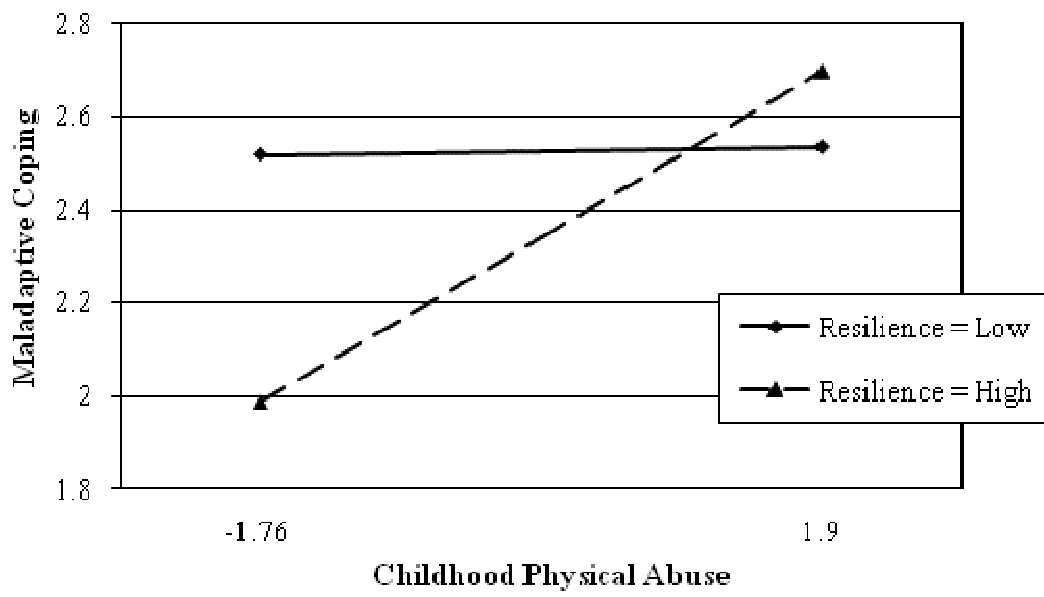


Figure 1

Interaction of resilience ( $\pm 1 SD$ ) by childhood physical abuse ( $\pm 1SD$ ) on maladaptive coping in homeless individuals

## **4. DISCUSSION**

This study aimed to build upon evidence that childhood trauma and maladaptive coping play a significant role in the pathways to becoming and remaining homeless, and attempted to explore the potential influence of resilience on reducing maladaptive coping. It sought to highlight factors underpinning the possible benefit of prevention and intervention approaches aimed at promoting and enhancing resilience as a way of breaking the cycle of repeated tenancy breakdown and concomitant chronic and repeated homelessness.

### **4.1 Interpretation of Key Findings**

Homeless persons within this study had a substantial history of childhood trauma, mainly physical and sexual abuse, which is consistent with previous research (Christensen et al., 2005; Day, 2009; Martijn & Sharpe, 2006). Despite such traumatic experiences, individuals frequently engage in a combination of adaptive (e.g., active coping, planning, and acceptance) and maladaptive (e.g., substance use and self-blame) coping strategies, the latter of which is considerably higher than for people living with HIV/AIDS for example (Vosvick et al., 2002). Furthermore, individuals also had relatively high levels of resilience, comparable to those previously identified in homeless youths (Rew et al., 2001b) and not dissimilar to sheltered battered women with high levels of abuse and post-traumatic stress disorder (Humphreys, 2003). Indeed levels of resilience in healthy populations (e.g., graduate students) are similar to those evidenced in homeless individuals thus far.

This study offers further support for the relationship between childhood trauma (in particular physical abuse) and maladaptive coping strategies in adulthood. Resilience was not related to childhood trauma but higher levels were associated

with engaging in adaptive coping strategies. Although not in the direction predicted this is consistent with the idea that resilience may be beneficial for the way homeless people cope with their disadvantaged status. Notably the absence of an association between resilience and childhood trauma, and resilience and maladaptive coping supports Baron and Kenny's (1986) suggestion that when using regression to test a moderator effect, it is easier to interpret a significant interaction if the moderator variable does not correlate with the predictor or outcome variables.

The key finding indicates that resilience moderates the relationship between childhood physical abuse and maladaptive coping. Specifically for homeless individuals with high levels of resilience, the level of childhood physical abuse experienced predicts the amount of maladaptive coping in adulthood. For individuals with lower levels of resilience the relationship between maladaptive coping and childhood physical abuse was less significant. It appears that overall the majority of homeless individuals engage in high levels of maladaptive coping, with perhaps the exception of those who are both highly resilient and have not experienced severe childhood physical abuse. The findings although unexpected, might suggest that resilience has a greater protective effect against maladaptive coping for individuals reporting lower levels of severity of childhood physical abuse, however further research which attempts to replicate these findings would be helpful.

One possible explanation for such findings might be guided by the theory of learned helplessness (Seligman, 1975). In the sense that homeless individuals may have lost their belief that their actions can influence their circumstance, as a result of the daily assaults on their sense of personal control (Goodman, Saxe, & Harvey, 1991). They may therefore feel quite helpless and engage in unhelpful methods of coping (e.g., using drugs and/or alcohol, engaging in violence or criminal behaviour,

or self-harming behaviours) in order to maintain a sense of personal control, which may contribute to frequent loss of tenancy and therefore chronic and repeated homelessness. Those homeless individuals with higher levels of resilience and less severe childhood physical abuse could be the group more likely to maintain their tenancies and reduce the chances of chronic and repeated homelessness.

This might fit with the suggestion that resilience in homeless people may be a survival mechanism, where individuals become overly self-reliant as a way of adapting to street life and coping with being disconnected, lonely, and hopeless (Rew et al., 2001b). Clearly further research is necessary not only to replicate the findings of this study but also to uncover the exact nature of the relationship between resilience and coping, and explore this in other populations. Either way the findings have important implications for interventions addressing not only resilience but coping strategies and the negative sequelae of childhood abuse.

## **4.2 Clinical Implications**

Overall this study highlights the importance of increasing the availability and accessibility of psychological interventions for homeless individuals (Morrell-Bellai et al., 2000). Much of the existing research has focused on social and economic factors (Stein et al., 2002). This study not only highlights the importance of considering psychological factors but adds to current knowledge of pathways to becoming and remaining homeless. In particular, it offers support for models which propose that a complex interaction between certain macro and micro level predisposing, perpetuating and precipitating factors render individuals vulnerable to homelessness or result in the onset of homelessness (Martijn & Sharpe, 2006; Morrell-Bellai et al., 2000; Sullivan et al., 2000).



The severity of childhood trauma and the presence of CSA in over half the sample, emphasises the importance of psychotherapeutic interventions targeting abuse related perceptions and beliefs, in addition to the likely psychopathology associated with such maltreatment. Psychotherapeutic approaches to consider include, Schema-Focused Therapy (Young, 1999), or Dialectical Behaviour Therapy (DBT: Linehan, 1993) because they address emotion dysregulation and teach adaptive skills which may help reduce maladaptive coping. Prior to considering interventions addressing early traumatic experiences, it would be important to consider strategies aimed at developing current coping mechanisms so individuals are able to manage the associated distress of confronting abuse-related psychopathology. There is also a need for effective programmes which address mental health issues in the homeless, which are beginning to appear in the USA (Susser et al., 1997; Wasylenki, Goering, Lemire, Lindsey, & Lancee, 1993), with far fewer reports of such in the UK (Maguire, 2006; Maguire et al., 2006).

*[Three paragraphs removed here and the following three added]*

Given the high level of maladaptive coping in this sample and the tendency of homeless individuals to engage in unhelpful methods such as denial, behavioural disengagement, and substance misuse; interventions which focus on reducing maladaptive coping strategies and enhancing emotion regulation would be valuable. For instance Cognitive Behaviour Therapy (CBT: Beck, 1976), which aims to enhance problem solving skills and increase adaptive cognitive and behavioural coping strategies, and specific DBT techniques (Linehan, 1993) aimed at managing difficult cognitions and emotions. The focus of such approaches however may need to differ for the different profiles of homeless individuals.

For instance, those homeless individuals with high levels of resilience who have experienced more childhood physical abuse and engage in more maladaptive coping, might benefit from a combination of CBT and DBT interventions aimed at reducing maladaptive coping, reinforcing protective factors (i.e., resilience), and addressing underlying issues related to childhood physical abuse. Whilst, for those individuals with low levels of resilience who engage in high levels of maladaptive coping regardless of the severity of childhood physical abuse, the emphasis may be on CBT interventions aimed at enhancing protective factors whilst also reducing maladaptive coping. Reducing such unhelpful methods of coping could lead to homeless individuals being able to maintain temporary accommodation and work towards integrating back into society (by finding employment, and improving social and economic circumstances).

The group that appear to warrant a different focus are those with already high levels of resilience who have experienced less childhood physical abuse and engage in less maladaptive coping. Interventions with these individuals could focus less on behavioural aspects such as coping strategies and more on psychosocial factors such as employment. It is possible that because this group engage in less maladaptive coping that they are already better able to maintain their tenancies and may therefore be less likely to remain in the cycle of repeated homelessness, therefore focusing on psychosocial factors may better support them in integrating back into society.

Furthermore, specific approaches targeting substance misuse may also be beneficial, especially in light of the rate of drug and alcohol use reported within this study. Motivational Interviewing (Miller & Rollnick, 2002) which aims to elicit behaviour change through exploring and resolving ambivalence could be beneficial

for substance use problems in particular within this population but may also help modify other unhelpful behaviours.

The role of relatively high resilience in influencing the relationship between childhood trauma and maladaptive coping in the homeless population requires further investigation. However this study suggests there may be some benefit in exploring prevention and intervention programmes promoting and enhancing resilience in this population. Capitalising on already high levels of resilience or improving resilience could serve to increase homeless individuals' adaptive coping mechanisms and combined with interventions aimed at improving coping could have a positive influence on the cycle of repeated tenancy breakdowns and therefore chronic and repeated homelessness.

*[Paragraph removed here]*

The findings also highlight the importance of early intervention, given that homeless people often have a history of childhood trauma which can lead to attachment and interpersonal difficulties (Morton & Browne, 1998). Treatment approaches such as Dyadic Developmental Psychotherapy (Becker-Weidman & Hughes, 2008) - an evidence-based treatment for children with complex trauma and disorders of attachment aimed at developing emotions regulation, self-awareness, and secure relationships - might be one prevention method for reducing the likelihood of homelessness.

#### **4.3 Strengths and Limitations**

This study has a number of strengths. It adds to the evidence for high rates of childhood trauma in homeless individuals, and contributes to evidence of a relationship between this and maladaptive coping. Furthermore, it is one of few studies exploring childhood trauma in homeless adults in the UK and was the first

study to specifically explore overall coping style and the relative influence of resilience. Considering the clinical implications and strengths of the research, a number of limitations also warrant discussion.

Cross-sectional measurement limits the ability to draw firm conclusions about the temporal sequence of the relationship between variables. This paper proposed that resilience influences maladaptive coping, however it is equally plausible that coping could influence levels of resilience. Similarly there may be other factors that influence the type of coping employed by homeless people (e.g., emotional dysregulation, experiential avoidance). In addition, the cross-sectional nature of the study precludes the ability to understand whether maladaptive coping strategies preceded the onset of homelessness, although almost 60% of the sample reported the use of alcohol and/or drugs as one of the reasons for becoming homeless which offers some insight into the sequence of events.

The sample was relatively homogeneous (i.e., white British males) however it was not representative of the broader range of people now experiencing homelessness (i.e., women, minority ethnic groups, and adolescents; Warnes et al., 2003). Furthermore, although the sample included individuals considered the 'hidden homeless' there may have been a selection bias only recruiting people who accessed services.

The lack of a consistent definition of homelessness leads to difficulties comparing findings across studies. This study used a broad definition leading to a sample of individuals predominately considered chronically or repeatedly homeless, therefore individuals homeless for short periods of time were not represented. Another limitation was that individuals who took part could have been under the influence of drugs and/or alcohol therefore increasing the likelihood of inaccuracies

within their data. Receiving a supermarket voucher as a thank-you for taking part may have also resulted in a degree of inaccuracy if this was the motivating factor for taking part.

Exploring childhood experiences using a retrospective self-report measure of childhood trauma may have resulted in a degree of under reporting (Fergusson, Horwood, & Woodward, 2000). This relies on the accuracy of peoples accounts of past experiences and memory of events which can be incomplete, repressed, or contaminated, and peoples' willingness to report such highly emotive experiences. In addition, this raises an important ethical concern regarding the assessment of such sensitive early experiences. The potential for increased emotional discomfort and distress was balanced against the importance of understanding levels of childhood trauma in order to justify the need for psychological interventions addressing this and subsequent related psychopathology in homeless populations. In order to manage the potential distress a comprehensive debriefing procedure was implemented and overall distress levels following completion were low (average distress = 2.9/10).

Recent evidence suggests a degree of cognitive impairment and low levels of literacy in homeless people (Spence, Stevens, & Parks, 2004). Although individuals were offered differing levels of support (i.e., independently, with support, or in an interview format) very few opted for an interview format ( $N=7$ : 31.8%). Therefore it is likely that a proportion of participants had difficulty completing the questionnaires and would have benefited from additional support.

The final limitation relates to a wider issue concerning the definition of resilience and the way it is measured. This study relied on the use of a standardised self-report measure defining resilience as a positive personality trait that enhances an individual's adaptation encompassing personal competence and acceptance of self

and life (Wagnild & Young, 1993), whereas there is an emphasis on considering resilience as a dynamic process (Luthar et al., 2000; Masten & Powell, 2003). As yet there is no consistent method of assessing such a fluid construct. The use of the resilience scale enabled direct comparisons with the existing evidence in homeless youths (e.g., Rew et al., 2001b).

Related to definition issues is the possible conceptual overlap between resilience and coping. Item analysis of the measures used with this study suggest that separate constructs were assessed, resilience was represented by aspects such as self-reliance, independence, determination, resourcefulness, perseverance, adaptability, and flexibility, whereas coping was represented by aspects such as getting advice or emotional support, refusing to accept things, giving up, using alcohol or drugs to get through things, and being critical. As such resilience was thought to represent an internal mechanism about the ability to successfully endure adversity and, coping an external mechanism involving behavioural or mental actions aimed at managing certain stressors. Nevertheless further research attempting to decipher the precise definition of resilience and how this differs from other constructs is warranted.

#### **4.4 Directions for Future Research**

Despite these limitations this study adds valuable evidence to the paucity of research investigating psychological factors in the homeless population. Future directions for research would benefit from systematic investigation of the mechanisms through which childhood trauma impacts on subsequent functioning and how this relates to becoming or remaining homeless (attachment style or interpersonal functioning are pertinent factors yet to be explored). Such knowledge is vital in offering guidance for developing prevention and intervention programmes.

Further exploration of coping would offer valuable guidance for suitable ways to intervene or prevent homelessness. This might involve the exploration of specific maladaptive strategies and mechanisms which drive them (i.e. emotion dysregulation, experiential avoidance, learned helplessness), in addition to the nature of adaptive methods which could be used to enhance opportunities of success.

Research that confirms the exact influence of resilience on coping in the homeless is also warranted, in addition, to developing a better understanding of the influence of childhood trauma on resilience in this population. The exact nature of the relationship between resilience and specific coping strategies rather than overall maladaptive approaches requires further exploration. Whilst the moderating influence of resilience on childhood trauma and coping style in adulthood requires replication, especially to uncover whether this relationship only exists in the case of physical abuse. If this is the case it would be important to investigate if there is something specific about the nature of physical abuse that influences resilience.

In line with resilience research, investigations within the homeless population might also benefit from exploring salient protective factors for successful adaptation, taking into account the limitations within this field. Overall future research with the homeless population would benefit from improved methodology, such as larger samples enabling more sophisticated analysis, prospective or longitudinal designs offering more opportunity to understand the temporal sequence of certain factors, and more innovative methods of recruitment in order to include a wider variety of homeless people (e.g., females, ethnic minority groups, rough sleepers). Especially important is accessing the street homeless; who are underrepresented within investigations because they are difficult to access however may have the most significant difficulties and require even more support. Finally, research also needs to

move towards evaluating the efficacy of psychotherapeutic interventions for the homeless, although considerable advances are required before this will be possible.

## **5. CONCLUDING REMARKS**

This study is a useful addition to the limited empirical literature on the homeless population in the UK. It supports existing evidence that significant proportions experience physical and or sexual abuse during childhood, yet despite such experiences it highlights that homeless people remain fairly resilient and when facing adversity on a daily basis may develop a range of protective mechanisms enabling them to adapt and survive though remain disenfranchised.

Numerous evidence-based psychotherapeutic interventions may be beneficial for this marginalised population, albeit applied innovatively in order to increase accessibility and engagement. Whilst there is a continued need for policies focusing on the prevention of homelessness, psychological factors must be given more emphasis in order to reduce the burden of homelessness upon individuals and society. Evidently further psychological research is desperately warranted in order to generate funding for the development and evaluation of psychological interventions with the homeless population (Maguire et al., 2006).



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## **APPENDICES**

**A. Instructions to Authors: Clinical Psychology Review**



## Guide for Authors



### Preparation

#### **Use of wordprocessing software**

It is important that the file be saved in the native format of the wordprocessor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the wordprocessor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. Do not embed "graphically designed" equations or tables, but prepare these using the wordprocessor's facility. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). Do not import the figures into the text file but, instead, indicate their approximate locations directly in the electronic text and on the manuscript. See also the section on Electronic illustrations.

To avoid unnecessary errors you are strongly advised to use the "spell-check" and "grammar-check" functions of your wordprocessor.

#### **Article structure**

##### ***Subdivision - numbered sections***

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to "the text". Any subsection may be given a brief heading. Each heading should appear on its own separate line.

##### ***Introduction***

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

##### ***Material and methods***

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

##### ***Results***

Results should be clear and concise.

##### ***Discussion***

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

##### ***Conclusions***

The main conclusions of the study may be presented in a short Conclusions section,

which may stand alone or form a subsection of a Discussion or Results and Discussion section.

### ***Appendices***

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on.

### **Essential title page information**

*Title.* Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. **Note: The title page should be the first page of the manuscript document indicating the author's names and affiliations and the corresponding author's complete contact information.**

*Author names and affiliations.* Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author within the cover letter.

*Corresponding author.* Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.**

*Present/permanent address.* If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

### ***Abstract***

A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

### **Keywords**

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of"). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

### **Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

### **Acknowledgements**

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

### **Footnotes**

Footnotes should be used sparingly. Number them consecutively throughout the article, using superscript Arabic numbers. Many wordprocessors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

#### *Table footnotes*

Indicate each footnote in a table with a superscript lowercase letter.

### ***Electronic artwork***

#### *General points*

- Make sure you use uniform lettering and sizing of your original artwork.
- Save text in illustrations as "graphics" or enclose the font.
- Only use the following fonts in your illustrations: Arial, Courier, Times, Symbol.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Produce images near to the desired size of the printed version.
- Submit each figure as a separate file.

**B. Instructions to Authors: Journal of Consulting and Clinical Psychology**

## Instructions to Authors

### Length and Style of Manuscripts

Full-length manuscripts should not exceed 35 pages total (including cover page, abstract, text, references, tables, and figures), with margins of at least 1 inch on all sides and a standard font (e.g., Times New Roman) of 12 points (no smaller). The entire paper (text, references, tables, etc.) must be double spaced.

Instructions on preparing tables, figures, references, metrics, and abstracts appear in the [\*Publication Manual of the American Psychological Association\* \(6th edition\)](#).

For papers that exceed 35 pages, authors must justify the extended length in their cover letter (e.g., reporting of multiple studies), and in no case should the paper exceed 45 pages total. Papers that do not conform to these guidelines may be returned without review.

The References section should immediately follow a page break.

Authors can publish auxiliary material as online supplemental material. These materials do not count toward the length of the manuscript. Audio or video clips, oversized tables, lengthy appendixes, detailed intervention protocols, and supplementary data sets may be linked to the published article in the PsycARTICLES database.

Supplemental material must be submitted for peer review at the end of the manuscript and clearly labeled as "Supplemental Material(s) for Online Only." Please see [Supplementing Your Article With Online Material](#) for more details.

### Brief Reports

In addition to full-length manuscripts, the *JCCP* will consider Brief Reports of research studies in clinical psychology. The Brief Report format may be appropriate for empirically sound studies that are limited in scope, contain novel or provocative findings that need further replication, or represent replications and extensions of prior published work.

Brief Reports are intended to permit the publication of soundly designed studies of specialized interest that cannot be accepted as regular articles because of lack of space.

Brief Reports must be prepared according to the following specifications: Use 12-point Times New Roman type and 1-inch (2.54-cm) margins, and do not exceed 265 lines of text including references. These limits do not include the title page, abstract, author note, footnotes, tables, or figures.

An author who submits a Brief Report must agree not to submit the full report to another journal of general circulation. The Brief Report should give a clear,

condensed summary of the procedure of the study and as full an account of the results as space permits.

This journal no longer requires an extended report. However, if one is available, it should be submitted to the Editorial Office, and the Brief Report must be accompanied by the following footnote:

Correspondence concerning this article (and requests for an extended report of this study) should be addressed to [give the author's full name and address].

Letters to the Editor

*JCCP* considers primarily empirical work and occasionally reviews. Letters to the Editor are no longer published.

Title of Manuscript

The title of a manuscript should be accurate, fully explanatory, and preferably no longer than 12 words. The title should reflect the content and population studied (e.g., "treatment of generalized anxiety disorders in adults").

If the paper reports a randomized clinical trial (RCT), this should be indicated in the title, and the [CONSORT criteria must be used for reporting purposes](#).

Abstract and Keywords

Manuscripts must include an abstract with a maximum of 250 words. All abstracts must be typed on a separate page (p. 2 of the manuscript). Abstracts must contain a brief statement about each of the following:

- the purpose/objective;
- the research methods, including the number and type of participants;
- a summary of the key findings;
- a statement that reflects the overall conclusions/implications

After the abstract, please supply up to five keywords or short phrases.

Participants: Description and Informed Consent

The Method section of each empirical report must contain a detailed description of the study participants, including (but not limited to) the following: age, gender, ethnicity, SES, clinical diagnoses and comorbidities (as appropriate), and any other relevant demographics.

In the Discussion section of the manuscript, authors should discuss the diversity of their study samples and the generalizability of their findings.

The Method section also must include a statement describing how informed consent was obtained from the participants (or their parents/guardians) and indicate that the study was conducted in compliance with an appropriate Internal Review Board.

## Measures

The Method section of empirical reports must contain a sufficiently detailed description of the measures used so that the reader understands the item content, scoring procedures, and total scores or subscales. Evidence of reliability and validity with similar populations should be provided.

## Statistical Reporting of Clinical Significance

*JCCP* requires the statistical reporting of measures that convey clinical significance. Authors should report means and standard deviations for all continuous study variables and the effect sizes for the primary study findings. (If effect sizes are not available for a particular test, authors should convey this in their cover letter at the time of submission.) *JCCP* also requires authors to report confidence intervals for any effect sizes involving principal outcomes.

In addition, when reporting the results of interventions, authors should include indicators of clinically significant change. Authors may use one of several approaches that have been recommended for capturing clinical significance, including (but not limited to) the reliable change index (i.e., whether the amount of change displayed by a treated individual is large enough to be meaningful; see Jacobson et al., *Journal of Consulting and Clinical Psychology*, 1999), the extent to which dysfunctional individuals show movement into the functional distribution (see Jacobson & Truax, *Journal of Consulting and Clinical Psychology*, 1991), or other normative comparisons (see Kendall et al., *Journal of Consulting and Clinical Psychology*, 1999). The special section of *JCCP* on "Clinical Significance" (*Journal of Consulting and Clinical Psychology*, 1999, pp. 283-339) contains detailed discussions of clinical significance and its measurement and should be a useful resource.

## Discussion of Clinical Implications

Articles must include a discussion of the clinical implications of the study findings or analytic review. The Discussion section should contain a clear statement of the extent of clinical application of the current assessment, prevention, or treatment methods. The extent of application to clinical practice may range from suggestions that the data are too preliminary to support widespread dissemination to descriptions of existing manuals available from the authors or archived materials that would allow full implementation at present.

## **General Instructions**

### APA Journals Manuscript Submission Instructions For All Authors

The following instructions pertain to all journals published by APA and the Educational Publishing Foundation (EPF).

Please also visit the web page for the journal to which you plan to submit your article for submission addresses, journal-specific instructions and exceptions.

## Manuscript Preparation

Prepare manuscripts according to the [Publication Manual of the American Psychological Association \(6th edition\)](#). Manuscripts may be copyedited for bias-free language (see Chapter 3 of the *Publication Manual*).

Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts appear in the *Manual*.

If your manuscript was mask reviewed, please ensure that the final version for production includes a byline and full author note for typesetting.

Review APA's [Checklist for Manuscript Submission](#) before submitting your article.

## Submitting Supplemental Materials

APA can now place supplementary materials online, available via the published article in the PsycARTICLES database. Please see [Supplementing Your Article With Online Material](#) for more details.

## Abstract and Keywords

All manuscripts must include an abstract containing a maximum of 250 words typed on a separate page. After the abstract, please supply up to five keywords or brief phrases.

## References

List references in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References section.

Examples of basic reference formats:

### **Journal Article:**

Herbst-Damm, K. L., & Kulik, J. A. (2005). Volunteer support, marital status, and the survival times of terminally ill patients. *Health Psychology, 24*, 225–229. doi:10.1037/0278-6133.24.2.225

### **Authored Book:**

Mitchell, T. R., & Larson, J. R., Jr. (1987). *People in organizations: An introduction to organizational behavior* (3rd ed.). New York: McGraw-Hill.

### **Chapter in an Edited Book:**

Bjork, R. A. (1989). Retrieval inhibition as an adaptive mechanism in human memory. In H. L. Roediger III & F. I. M. Craik (Eds.), *Varieties of memory & consciousness* (pp. 309–330). Hillsdale, NJ: Erlbaum.



## **C. Demographics Form**



5. Which of the following do you think led to (or had an effect on) you becoming homeless? (please tick all that apply)

Mental health issues e.g., depression or schizophrenia	<input type="checkbox"/>	Using alcohol and drugs	<input type="checkbox"/>	Physical or sexual health issues	<input type="checkbox"/>
Relationship or marriage breakdown	<input type="checkbox"/>	Problems with parents/step parents	<input type="checkbox"/>	Losing a loved one through death	<input type="checkbox"/>
Growing up in care	<input type="checkbox"/>	Spending time in prison	<input type="checkbox"/>	Serving in the armed forces	<input type="checkbox"/>
Being excluded from school	<input type="checkbox"/>	Loosing my job	<input type="checkbox"/>	Being made redundant or being dismissed from work	<input type="checkbox"/>
Being in debt	<input type="checkbox"/>	Not being able to pay the rent / mortgage	<input type="checkbox"/>	Having benefit problems	<input type="checkbox"/>
High house prices or rent	<input type="checkbox"/>	Any other _____			

6. When was the first time you became homeless? Approximate date \_\_\_\_\_

7. How old were you when you first became homeless? Approximate age  
\_\_\_\_\_

8. How many different times have you been homeless? Approximately \_\_\_\_\_  
times

9. How long have you been homeless this time? Approximately \_\_\_\_\_ years  
\_\_\_\_\_ months

10. Have you used any of the following substances over the past 1 month? (please tick all  
that apply)

Ecstasy / MDMA  Barbiturates  Solvents

Opiates (e.g., Heroin, Morphine)		Benzodiazepines (e.g., Valium)		Alcohol	
Cocaine / Crack		Magic Mushrooms		Tobacco (e.g., cigarettes)	
LSD		Ketamine		Prescribed Methadone	
Cannabis		Anabolic Steroids		Other Substance	
Amphetamine		Poppers			

**D. School of Psychology Ethics Committee Approval Letter**

Ms Kate Willoughby  
School of Psychology  
Clinical Psychology  
University of Southampton  
Bassett Crescent East  
Southampton  
SO16 7PX

14 July 2008

Dear Ms Willoughby

**Professional Indemnity and Clinical Trials Insurance**

RGO REF - 5915

School Ethics Ref - 470

**Project Title Homelessness: The Relationship Between An Abusive Childhood, Attachment, Resilience, And Coping Style**

Participant Type:	No Of Participants:	Participant Age Group:	Notes:
Healthy volunteers	85	Adults	

Thank you for forwarding the completed questionnaire and attached papers.

Having taken note of the information provided, I can confirm that this project will be covered under the terms and conditions of the above policy, subject to written consent being obtained from the participating volunteers. For completely anonymous questionnaires containing nothing that could identify the participant the completion of the questionnaire is deemed to provide written consent. Full written consent is required where questionnaires are completed in an interview format.

I would also advise that it is a condition of the University's insurance that any incidents that could eventually result in a claim are reported immediately. Complaints and other adverse events or reactions fall into this category and should be reported to the Insurance Office at the earliest opportunity. Failure to do this could invalidate the insurance.

If there are any changes to the above details, please advise us as failure to do so may invalidate the insurance.

Yours sincerely



Mrs Ruth McFadyen  
Insurance Services Manager

Tel: 023 8059 2417  
email: hrm@soton.ac.uk

cc: File

**E. Research and Development Committee Approval Letter**

Ms Kate Willoughby  
School of Psychology  
Clinical Psychology  
University of Southampton  
Bassett Crescent East  
Southampton  
SO16 7PX

15 July 2008

Dear Ms Willoughby

RGO Ref: 5915

**Project Title Homelessness: The Relationship Between An Abusive Childhood, Attachment, Resilience, And Coping Style**

I am writing to confirm that the University of Southampton is prepared to act as sponsor for this study under the terms of the Department of Health Research Governance Framework for Health and Social Care (2nd edition 2005).

The University of Southampton fulfils the role of Research Sponsor in ensuring management, monitoring and reporting arrangements for research. I understand that you will be acting as the Principal Investigator responsible for the daily management for this study, and that you will be providing regular reports on the progress of the study to the Research Governance Office on this basis.

I would like to take this opportunity to remind you of your responsibilities under the terms of the Research Governance Framework, and the EU Clinical Trials Directive (Medicines for Human Use Act) if conducting a clinical trial. We encourage you to become fully conversant with the terms of the Research Governance Framework by referring to the Department of Health document which can be accessed at:

<http://www.dh.gov.uk/assetRoot/04/12/24/27/041224>

In this regard if your project involves NHS patients or resources please send us a copy of your NHS REC and Trust approval letters when available.

Please do not hesitate to contact me should you require any additional information or support. May I also take this opportunity to wish you every success with your research.

Yours sincerely



Dr Martina Prude  
Head of Research Governance  
Tel: 023 8059 5058  
email: [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk)



**F. Poster**



**Would you like  
to receive a  
£6 ASDA voucher  
for 1 hour of your  
time taking part in  
a research study?**

**If you would like to find out  
more, please take a flyer or  
speak to a member of staff**

**We are Trainee Clinical Psychologists and are  
hoping our research will help understand some  
of the difficulties homeless people face and  
contribute to improving the support services  
available to you**

## **G. Flyer**



## Would you like to receive a **£6 ASDA voucher** as a thank you for taking part in our research study?

### *What is the study about?*

- The study is about the experiences and personal characteristics of homeless people
- We hope it will help us find out more about some of the difficulties that homeless people face
- And could improve the support services available to people who are homeless

### *What will taking part involve?*

- Attend a group assessment session to completing six questionnaires and an information sheet
- This usually takes around 1 hour and 10 minutes to complete, but can vary
- Some of the questions ask about childhood which some people may find upsetting

### *What will happen to the information?*

- All information will be private and confidential
- Your name will not appear on any of the questionnaires
- Information will not be shared with anyone

### *What will I get for taking part?*

- Once you have completed the questionnaires, you will be offered a £6 ASDA voucher to thank you for taking part

### *How can I take Part?*

If you are interested in taking part you can:

- Speak to a member of staff to find out more information
- Complete the screening form, which you can get from a member of staff

### *When and where can I take part?*

- Assessment sessions will be held at \_\_\_\_\_
- Staff will have a list of dates and times – please ask for details

## **H. Verbal Script for Research Participants**

# **A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS OF HOMELESS INDIVIDUALS**

## **Verbal Script for Research Participants**

We are Kate Willoughby and Anneliese Day. We are both Trainee Clinical Psychologists at the University of Southampton. This study is being done as part of our training and has been reviewed by the School of Psychology Research Ethics Committee.

You are being asked to take part in a research study, and are here today because you have expressed an interest in taking part. Before you decide whether you would like to take part, we would like to tell you about why this study is being done and what it will involve.

Please listen carefully and think about whether you would like to take part. If you have any questions, please feel free to ask.

This study will look into some of the experiences and personal characteristics of people who are homeless and the difficulties they face. It is hoped that the study may help improve the support service for homeless people.

It is up to you to choose whether or not you want to take part. If you do decide to take part, you will be given an Information Sheet to keep. If you fill out the questionnaires, this will be taken as you agreeing (i.e. informed consent) to be included as a participant in this study.

Even if you choose to take part, you will still be able to stop at any time without giving a reason and this will not affect the services you receive.

You will be asked to fill in 5 questionnaires. They usually take about 1 hour to fill out.

Once you have completed the questionnaires, you will be asked to put them in the envelope given to you so we can collect them. We will check that all questionnaires have been completed in full and as a way of saying 'Thank You' for filling out the 6 questionnaires, you will be offered a £6 food voucher.

If you would rather fill out the questionnaires with help from somebody or during an interview, please tell us or a member of staff and this can be arranged.

Your participation in this study will be completely anonymous and confidential. This means that personal information will not be released to or viewed by anyone other than researchers involved in this project.

Results of this study will not include your name or any other identifying characteristics, and your name will not be printed on any questionnaires that you complete.

The overall results of this study will be written up in a report. All reports and publications will be completely anonymous and will not mention your name. We are happy to provide you with a summary of these results when they are available if you would like.

Some of the questionnaires you will be asked to fill out may make you feel upset or distressed. If you become upset or distressed while filling out the questionnaires, you will be free to stop participating and support will be available if you would like it.

Does anyone have any questions?

If you have questions about your rights as a participant in this research, you can contact the Chair of the Ethics Committee whose contact details are on the information sheet.

**I. Information Sheet**



**A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS  
OF HOMELESS INDIVIDUALS**

Researchers: Kate Willoughby, Anneliese Day & Dr. Nick Maguire

**INFORMATION SHEET**

You are being asked to take part in a research study. Before you decide, it is important for you to understand why this study is being done and what it will involve. Please take some time to read this information carefully and think about whether you would like to take part. If you have any questions or would like to find out more information about this study please talk to us or a staff member. Thank you for reading this information.

**WHAT IS THE PURPOSE OF THIS STUDY?**

This study will look into some of the experiences and personal characteristics of people who are homeless and the difficulties they face. It is hoped that the study may help in creating more suitable and better services for homeless people.

**DO I HAVE TO TAKE PART?**

It is up to you to choose whether or not you want to take part. If you do decide to take part, you will be given this Information Sheet to keep. If you fill out the questionnaires, this will be taken as you giving informed consent to be included as a participant in this study. Even if you choose to take part, you will still be able to stop and withdraw at any time without giving a reason and this will not affect the services you receive.

**WHAT WILL I HAVE TO DO IF I TAKE PART?**

You will be asked to fill in 6 questionnaires. They usually take about 1 hour and 10 minutes to fill out. Once you have completed the questionnaires, you will be asked to put them in the envelope given to you so we can collect them. If you would rather fill out the questionnaires with help from somebody or during an interview, please tell us or a member of staff and this can be arranged.

**WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?**

All the information collected from the questionnaires will be kept strictly confidential, it will not be shared with anyone other than the researchers named on this information sheet. You will be allocated a unique identification number which will be put on all the questionnaires and will therefore make them anonymous. All the information we collect about you as part of this study will be kept in a secure

place only accessible by the named researchers. The overall results of this study will be written up in a report, you will remain anonymous in this report. You will be able to get a summary of the results when they are available by contacting us.

### **WHAT ARE THE POSSIBLE DISADVANTAGES OF TAKING PART?**

Some of the questionnaires you will be asked to fill out may make you feel upset or distressed. If you become upset or distressed while filling out the questionnaires, you will be free to stop participating and support will be available if you would like it.

### **WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?**

The information from this study will help us understand some of the difficulties homeless people face and so hopefully let us know what further support services might be needed to help people in similar situations to yourself. Also, as a way of saying 'Thank You' for filling out the 6 questionnaires, you will be offered a £6 food voucher.

### **WHO ARE WE AND HOW DO YOU CONTACT US?**

Our names are Kate Willoughby and Anneliese Day, we are Trainee Clinical Psychologists at the University of Southampton. Dr Nick Maguire is our supervisor and is a Clinical Psychologist working at the University of Southampton. This study is being done as part of our training and has been reviewed by the School of Psychology Research Ethics Committee, University of Southampton.

If you have any questions or would like further information, please contact us at:

School of Psychology  
Doctoral Programme in Clinical Psychology  
University of Southampton  
34 Bassett Crescent East  
Southampton  
SO16 7PB  
Tel: 023 8059 5320

*Thank you for taking part in this study*

**J. Screening Form**

**A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS  
OF HOMELESS INDIVIDUALS**

Researchers: Kate Willoughby, Anneliese Day & Dr. Nick Maguire

**SCREENING FORM**

1. Do you / can you read one of the daily newspapers (e.g. The Mirror, The Daily Mail)?

**YES**

**NO**

2. Do you / can you fill in your own benefit forms without any help / support?

**YES**

**NO**

3. For this study, how would you prefer to fill in the questionnaires?

You will be able to change your mind on the day, if you wish.

**Please tick  
one box**

**I would like to fill in questionnaires by myself**

**I would like to fill in questionnaires with some help**

**I would like to fill in questionnaires in an interview**

Participant name: \_\_\_\_\_ Participant ID no: \_\_\_\_\_

**K. Consent Form**

**A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS  
OF HOMELESS INDIVIDUALS**

Researchers: Kate Willoughby, Anneliese Day & Dr. Nick Maguire

**CONSENT FORM**

(Please tick  
each box)

1. I confirm that I have read and understood the Information Sheet that was given to me for the above study and I have had the opportunity to ask questions.
  
2. I understand that I have a choice to take part in the study and that I can stop at any time (without giving a reason) without my care being affected.
  
3. I have agreed to take part in the study.

Name of participant \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Name of researchers Kate Willoughby and Anneliese Day Date \_\_\_\_\_

Signature \_\_\_\_\_

**L. Debrief**

## **A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS OF HOMELESS INDIVIDUALS**

Researchers: Kate Willoughby, Anneliese Day & Dr. Nick Maguire

Thank you for taking part in this study. This study was looking into some of the experiences and personal characteristics of people who are homeless and the difficulties they face. It is hoped that the study may help in creating more suitable and better services for homeless people. You can get a summary of the results when they are available by contacting us.

From time to time, everyone feels upset, angry, scared, or worried, especially when things are not going very well in their life. Sometimes, these kinds of feelings can last for quite a long time and it can affect the way people feel about themselves, the way they think about things and the way they cope and do things in their everyday life.

This may not apply to you, but if you feel this way after taking part in this study, you might find it helpful to get some advice and support.

### **WHERE TO FIND ADVICE & SUPPORT**

If you feel you need some help and support, or if you just want to talk to someone in confidence, please contact any of these people who will be able to help you:

- Your **support worker** at the service
- Dr Dubras or Dr Martin (Homeless Healthcare GP's) on: 023 8033 6991 or call your personal GP
- **Samaritans** on: 08457 90 90 90

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, Department of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578



**M. Mood Repair Task**

**A STUDY OF THE EXPERIENCES AND PERSONAL CHARACTERISTICS  
OF HOMELESS INDIVIDUALS**

**INSTRUCTIONS**

This is an optional task which can be completed at any time after taking part in the research study. Please read each of the jokes below and rate how funny you found each one on the scale provided.

1.



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1 ----- 2 ----- 3 ----- 4

Not at all  
Funny

Very  
Funny

2.



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1 ----- 2 ----- 3 ----- 4

Not at all  
Funny  
P.T.O.

Very  
Funny

3.

**Not In My Backyard! by Dale Taylor**

Feb. 3, 1998

<http://nimby.net>



1 ----- 2 ----- 3 ----- 4

Not at all  
Funny

Very  
Funny

4.



1 ----- 2 ----- 3 ----- 4

Not at all  
Funny

Very  
Funny

## **N. Probing Significant Interactions in Regression Equations**

## Probing Significant Interactions in Regression Equations

(Aiken & West, 1991)

### *Plotting the Interaction*

The following regression equation was used to express the regression of the outcome variable on the predictor variable at levels of the moderator variable as simple slopes:

$$Y = (b_1 + b_3)X + (b_2Z + b_0)$$

where Y = outcome, X = predictor, Z = moderator,  $b_1$  = regression coefficient of X,  $b_2$  = regression coefficient of Z,  $b_3$  = regression coefficient XZ, and  $b_0$  = regression constant.

### *Post Hoc Probing*

In order to test if the slope of the simple regression line significantly differs from zero the following process was followed:

1. Calculate the standard error using the following equation:

$$S_b = s_{11} + 2Zs_{13} + Z^2 s_{33}$$

2. Obtain the coefficient of the simple slope by extracting the relevant data from the covariance matrix, which for this study was as follows:

	$b_1$	$b_2$	$b_3$
$b_1$	.011	.001	-.002
$b_2$	.001	.006	.000
$b_3$	-.002	.000	.011

3. Compute the t-Test for the simple slopes by divide the coefficient of the simple slope by its standard error with  $(n - k - 1)$  degrees of freedom.

## **O. Additional Regression Model**

Table 6

Additional Regression to Test the Moderated Effect of Resilience (N=59)

	<b>B</b>	<b>SE B</b>	<b>t</b>	<b>95% CI</b>	<b>β</b>
<b>Step 1. Predictor</b>					
Constant	2.420	0.078	31.094	2.265, 2.576	
Total CAT <sup>[1]</sup>	0.215	0.096	2.233	0.022, 0.408	.284*
<b>Step 2. Moderator</b>					
Constant	2.420	0.077	31.247	2.265, 2.575	
Total CAT <sup>[1]</sup>	0.211	0.096	2.198	0.019, 0.403	.278*
Total RS	-0.103	0.082	-1.254	-0.266, 0.061	-.159
<b>Step 3. Predictor x Moderator</b>					
Constant	2.421	0.078	31.077	2.265, 2.578	
Total CAT <sup>[1]</sup>	0.200	0.098	2.043	0.004, 0.397	.264*
Total RS	-0.100	0.082	-1.210	-0.265, 0.065	-.154
Total CAT <sup>[1]</sup> *Total RS	0.064	0.103	0.620	-0.143, 0.271	.080

Note. <sup>[1]</sup>Total CAT excluding CSA, B = unstandardised beta weights, β = standardised beta weights.

$R^2 = .080$ ,  $F$  change (1, 57) = 4.988 for Step 1; Change in  $R^2 = .025$ ,  $F$  change (1, 56) = 1.572 for step 2; Change in  $R^2 = .006$ ,  $F$  change (1, 55) = .385,  $p < .05$  for step 3.

\* $p < .05$  \*\* $p < .001$