No Safe Base: An Attachment Theory Perspective on the Mediational Effects of Reappraisal and Resilience on the Well-being of Homeless Women in the Skid Row District of Los Angeles

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Graduate Program in Psychology

A thesis submitted in partial fulfillment of the requirements for the degree in Master of Science

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No Safe Base: An Attachment Theory Perspective on the Mediational Effects of Reappraisal and Resilience on the Well-being of Homeless Women in the Skid Row District of Los Angeles

(Thesis format: Monograph)

by

Stephanie Montgomery-Graham

Graduate Program in Clinical Psychology

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science

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Abstract

This study aims to test the relationship between attachment style and well-being by examining the possible mediating roles of emotion regulation (conceptualized as reappraisal and suppression) and resilience (Karreman & Vingerhoets, 2012). One hundred homeless women living in homeless shelters in the Skid Row district of Los Angeles were sampled to test Karreman and Vingerhoets’ model of attachment and well-being (2012). Dismissive attachment style comprised the largest group among the four measured attachment styles (n=39). Both dismissive and secure attachment positively correlated with well-being in this sample. Fearful attachment was the only attachment style negatively related to well-being. Preoccupied attachment was not related to well-being. Emotion regulation failed to function as a mediator in this study. Higher resilience mediated the relationship between secure and dismissive attachment styles and well-being, while lower resilience decreased well-being and mediated the relationship between well-being and fearful attachment. Results as well as research and clinical implications of attachment style and well-being in a homeless population are discussed.

Keywords

Attachment theory, homeless women, emotion regulation, resilience, Skid Row
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Most importantly, I am grateful to all of the female participants whose home is the Skid Row district of Los Angeles. I must acknowledge these women who graciously took the time to share their lives with my research assistants and me. Speaking with these women in the context of my data collection was a highlight of my psychology career to date. Experiences involving participants like those whom I met during this project are the reason I left legal practice to pursue a new career in clinical psychology.
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1 Introduction

Attachment theory offers an empirically tested framework to understand how an individual’s attachment style, which is formed in infancy, affects psychological well-being throughout that individual’s life. Adult attachment style could be linked to well-being through stress appraisal mechanisms such as emotion regulation and resilience, since both are related to an individual’s beliefs about his or her ability to cope (Mikulincer & Shaver, 2007). While much of the attachment literature has hailed secure attachment as the optimal attachment style for psychological health and well-being, other attachment styles may be most adaptive in harsh environments (Schmitt, 2008). This study accesses a difficult-to-reach population of homeless women living in what has been referred to as the “Skid Row” district of Los Angeles,1,2 to test the unique association between each attachment style and well-being, which may be connected through a unique pattern of resilience and emotion regulation (Karreman & Vingerhoets, 2012).

1.1 Attachment Theory

According to attachment theory, children develop an attachment bond with their primary caregivers during infancy (Bowlby, 1969). Attachment bonds are based on an infant’s need for safety and protection. The goal of the attachment behavioural system is to maintain proximity to and availability of the attachment figure (an infant’s primary caregiver). Ainsworth, Blehar, Waters and Wall (1978) distinguished three attachment styles based on children’s behavioural patterns of adjustment following separation and reunion with their primary caregivers. Each attachment style reflects a different attachment strategy by the infant to adaptively maximize care in its environment (Simpson & Belsky, 2008). Secure attachment results from reliable and consistent

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1 The United States Court of Appeals, ninth Circuit, defined the boundaries of the Skid Row district of Los Angeles as follows: “fifty city blocks immediately east of downtown Los Angeles, Skid Row is bordered by Third Street to the north, Seventh Street to the south, Alameda Street to the east, and Main Street to the west”. Jones v. City of Los Angeles, 444 F.3d 1118, 1123 (9th Cir. 2006).
2 See Appendix A for pictures of Skid Row in Los Angeles.
caregiving. Securely attached infants know they will be cared for and are able to concentrate on other important life tasks besides trying to obtain caregiving and attention. By contrast, children with an anxious-ambivalent attachment receive inconsistent caregiving, which may include erratic responses to children’s needs and care-taking signals or under-involved parenting. Anxious-ambivalent children develop demanding strategies like hyper-vigilance and rumination about potential relationship loss to increase the likelihood of proximity to their caregivers and to attempt to increase caregiving. Dismissing-avoidant attachment develops from cold and rejecting parenting styles. Children develop this attachment style to overcome the deficiencies of distressed, hostile or neglectful parenting in order to calm the internal emotional storm that arises when an infant’s needs are consistently unmet.

Whether the child’s needs are met or unmet, the child internalizes its interactions with its primary caregiver over time, ultimately leading to the development of internal working models (Bowlby, 1969). Internal working models are cognitive maps or representations individuals use to make sense of the world, themselves, and other people. Working models are cognitive schemata through which an individual forms expectations as to how relationships with other people are governed. Attachment figures feature prominently in the way individuals understand the world and in how we view ourselves (i.e. as loveable or unlovable human beings). In short, the differential internal working models are important because they lead to individual differences in attachment. Bowlby (1979) believed that internal working models of self and other, and the attachment styles that children form, may become more resistant to change as time passes. Recent empirical studies challenge the perspective that attachment styles remain static throughout life as some major traumatic life events (e.g. rape, war, terrorism), have been postulated to alter an individual’s attachment style. Whether attachment styles alter throughout life (or not), the internal working models that underlie attachment styles and guide children’s behaviour typically continue to guide relationships with other people outside of the caregiving context as well. Thus it is meaningful to take a lifespan approach to attachment style and study the attachment styles of adults as well as children.
1.2 Adult attachment in four categories

Bartholomew and Horowitz (1991) drew on Bowlby’s concept of internal working models that underlie attachment behavior and proposed a four category model of attachment styles in adulthood using two dimensions: model of self (negative or positive) and model of other (negative or positive). (See Table 1). Combinations of the two dimensions result in four attachment styles. The person with a secure style has a positive view of self and a positive view of others, yielding confidence in his or her interactions with other people. The individual with a dismissive style has a positive view of self combined with a negative view of other people, and thus dismissively attached individuals tend not to rely on other people and instead strive for independence. Preoccupied individuals have a positive view of others and a negative view of self; this results in an anxious seeking of other people’s approval. Fearful individuals have a negative view of self and a negative view of others, and thus tend to doubt themselves as well as doubt others. They avoid personal contact with others out of fear of being hurt or deceived.

<table>
<thead>
<tr>
<th>Positive View of Others</th>
<th>Positive View of Self</th>
<th>Negative View of Self</th>
</tr>
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<tbody>
<tr>
<td>Positive View of Others</td>
<td>Secure</td>
<td>Preoccupied</td>
</tr>
<tr>
<td>Negative View of Others</td>
<td>Dismissive</td>
<td>Fearful</td>
</tr>
</tbody>
</table>

*Table 1: Attachment: Model of Self and Other*

<table>
<thead>
<tr>
<th>Low Anxiety</th>
<th>High Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Avoidance</td>
<td>Secure</td>
</tr>
<tr>
<td>High Avoidance</td>
<td>Dismissive</td>
</tr>
</tbody>
</table>

*Table 2: Attachment: Model of Anxiety and Avoidance*
In contrast to literature rooted in clinical psychology, in which the categorical model just described is the preferred method of approaching adult attachment, social psychology literature has tended to favour a two dimensional approach using avoidance and anxiety (see for instance Fraley, Waller & Brennan, 2000). Comparing the models of self and models of other to the two dimensional avoidance and anxiety dimensions, the model of self has been most closely associated with attachment anxiety and the model of others has been most closely associated with attachment avoidance (see Table 2; Bartholomew, Kwong & Hart, 2001). Dimensional and categorical measures have robust correlations in some research (Sibley, Fischer & Liu, 2005) and more moderate overlap in other research (Shi, Wampler & Wampler, 2014). The current study replicates a model proposed by Karreman and Vingerhoets (2012), which used a categorical framework to conceptualize attachment style, according to the dimensions of self and other that underlie internal working models.

1.3 Proposed model of attachment and well-being

Attachment style has been linked to well-being, with securely attached individuals demonstrating higher emotional well-being (Kafetsios & Sideridis, 2006) and insecurely attached individuals demonstrating low levels of emotional well-being and high levels of depression and anxiety (Carnelley, Pietromonaco & Jaffe, 1994). Karreman & Vingerhoets (2012) proposed that attachment styles could be linked to well-being through stress appraisal patterns since attachment styles are related to beliefs about one’s ability to cope with stress and resist stress (Mikulincer & Shaver, 2007). Emotion regulation involves the appraisal of events as threatening or not and strategies for coping with these stressors, while resilience involves a stress-resistant attitude and encompasses whether a person regards oneself as able to cope with life stressors (Karreman & Vingerhoets, 2012). Karreman and Vingerhoets’ model (2012) uses emotion regulation and resilience as mediators of the relationship between attachment style and well-being. Emotion regulation and resilience are reviewed below.
1.3.1 **Emotion Regulation**

Gross and John (2003) define emotion regulation as a series of processes a person uses to influence his or her emotions including when emotions are felt and how emotions are experienced and expressed. Two different emotion regulation strategies can be distinguished based on the time at which a person reacts to his or her emotional response (Gross, 1998). **Reappraisal** is an antecedent-focused coping strategy that intervenes before the emotion response tendencies have been fully generated. As a result, reappraisal can alter the emotion trajectory. For example, if a woman is in a hurry to get to a meeting at work and she runs into heavy traffic that will likely make her 15 minutes late for her meeting, she may start to feel stressed. She may start to think about how awful she will appear to her boss when she arrives late and may start to feel her face flush as a stress reaction takes hold. If she quickly reappraises the situation she may tell herself: this lateness is less than ideal and I wish I were not in traffic. However, in six years I have never been late for a meeting and my boss knows this fact and will overlook it. Reappraisal is a form of cognitive change that involves reconceptualizing a potentially emotion-eliciting situation in a way that lessens its emotional impact (Gross & John, 2003).

By contrast, **suppression** is a response-focused emotion regulation strategy that comes late in the emotion-generative process and modifies the behavioural aspect of emotion responses. In the same example as above involving lateness for a meeting because of heavy traffic, a man who suppresses his emotions may have to get farther along the emotion continuum to realize his emotional response to traffic. He may ignore the negative emotions aroused by the situation and distract himself and deny these feelings. There is no cognitive reappraisal because the feeling is not acknowledged. Suppression is an emotion regulation strategy that modifies the behavioural aspect of an individual’s emotion response tendencies (Gross & John, 2003). We would expect this man to outwardly behave as though nothing were wrong because he has suppressed any negative feelings associated with the event.
Different strategies of emotion regulation may be expected to flow from different attachment styles (Mikulincer & Shaver, 2007). When people with secure attachment encounter situations that could elicit negative emotions, they can engage in problem solving, planning and cognitive reappraisal. Attachment security is associated with appraising stressful events in less threatening ways and seeing oneself as being able to cope effectively. Anxiously attached individuals (i.e. fearful or preoccupied) have developed internal working models that perceive negative emotions as congruent with attachment goals, which are continuations of unfulfilled attempts to receive caregiving from attachment figures. Hyper-activating strategies are seen in emotion-focused coping which may involve rumination, catastrophizing, amplifying the threatening aspects of problems, and beliefs about low self-efficacy regarding problem solving ability. Dismissive or avoidant emotion regulation strategies inhibit emotional experiencing in order to deactivate the attachment system of support seeking. Whereas securely attached people’s emotional regulation usually results in down-regulated emotions via communication, compromise and relationship repair, dismissively attached people tend to suppress painful emotions; as well potentially helpful others are not sought out for assistance by individuals with dismissive attachment.

1.3.2 Resilience

Resilience is an ability to adapt to negative life events and return to normal functioning (Wagnild & Young, 1993). As we might expect, resilience is associated with secure attachment which itself results from close relationships with available, sensitive and supportive figures (Simeon, Yehuda, Cunill, Knutelska, Putnam & Smith, 2007). Mikulincer and Shaver (2007) proposed that internalization of and identification with attachment figures allow a person to develop effective self-soothing techniques called security-based self-representations. People reared with supportive attachment figures see themselves as being similar to those models. When stressed or demoralized, securely attached individuals can call forth memories of how they felt when their caregivers reassured them and can self-soothe based on these models (Mikulincer & Shaver, 2007). Resilience has been found to be associated with emotion regulation (Tugade &
Frederickson, 2004); both resilience and reappraisal have been positively associated with well-being (Gross & John, 2003).

In this study, we test Karreman and Vingerhoets’ model that attachment style and well-being will be linked via various patterns of emotion regulation and resilience. Before examining what those patterns might look like in a homeless population that is literally without a secure base, we turn to the homelessness and attachment literature.

1.4 Attachment security in homeless populations

The literature examining homelessness through the lens of attachment theory provides a reasonably comprehensive overview of factors from infancy through adolescence and adulthood that may later lead to adult homelessness.

Easterbrooks and Graham (1999) studied the potential relationship between attachment security and homelessness in a population of homeless infants. Infant attachment security was measured by infants’ mothers, using an attachment Q-sort. Most infants had low attachment security although no significant relationship was discovered between homelessness and infant attachment in this study. Researchers interpreted these results not as evidence of favourable adaptation by these infants and mothers, but rather as evidence that low-income children tend to suffer relative to middle income children in attachment security generally. Study authors noted the attachment scores of these homeless American infants tended to be more similar to impoverished Columbian children than to middle class American children. Becker (1994) also examined whether homelessness is related to attachment insecurity in 25 homeless and 25 low-income, housed infant-mother dyads. Similar to the infants in Easterbrooks and

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3 *Q*-sorts are psychological tests that require subjects to sort items relative to one another along a dimension. The Attachment Q-Sort (AQS) (Waters & Deane, 1985) was used in Easterbrooks and Graham’s study (1999). Mothers were asked to rate how characteristic a set of 90 statements was of her child. Mothers sorted the statements into groups of: “like my child”, “not like my child” and “neither like my child nor unlike my child”. Mothers then sorted these three groups into a further nine subgroups ranging from “highly uncharacteristic” to “highly characteristic” of their child. The AQS is scored by correlating the individual scores for each child with a criterion sort.
Graham’s (1999) study, 86% of both housed (yet impoverished) and homeless mother-child dyads were classified as insecure. Together these studies suggest that circumstances of poverty may contribute to higher attachment insecurity. For instance, both low socio-economic status (SES) women and homeless women often report fragmented social support, violent victimization as children and as adults, and high rates of mental health difficulties, which all make sensitive, responsive, emotionally available parenting difficult to maintain (Easterbrooks & Graham, 1999).

Several studies examine attachment and risk factors for youth homelessness (Easterbrooks & Graham, 1999; Rew, Taylor-Seehafer, Thomas & Yockey, 2001; Stefanidis, Pennbridge, MacKenzie & Pottharst, 1992). Dismissive attachment style is one such risk. Avoidance behaviours and dismissive attachment styles are seen as an adaptive and a learned response to a history of rejection and neglect as well as a means to cope with an insensitive and indifferent rearing environment. Homeless people report high levels of childhood maltreatment including emotional, sexual, and physical abuse, all of which can be expected to increase attachment insecurity (Shvarts, 2013). Homeless youth with dismissive attachment lack trust in others, which may generalize to a wider social environment such that homeless youth either cannot maintain relationships with others or such youth simply choose to avoid contact with others (Tavecchio & Thomeer, 1999). Homeless youth report high rates of neglect and physical and sexual abuse as factors leading to their homelessness. Once homeless, youth are particularly vulnerable to developing substance dependence disorders given the high rates of neglect and violence they often wish to escape (Taylor-Seehafer, Jacobvitz, Holleran Steiker, 2008).

While we see a high proportion of dismissive attachment style among homeless youth generally, another insecure attachment style, namely preoccupied attachment, was the prevalent style in at least one study of homeless young women. Sixty percent of the young, homeless, mostly Black, single mothers classified as preoccupied in one study (Becker, 1994). Intergenerational transmission of poverty, single parenthood, unemployment, and dependency on social assistance undermine financial and emotional independence. Learned helplessness theory has been used to explain the ongoing
experiences of helplessness that homeless women face (Goodman, Saxe & Harvey, 1991). People are said to experience learned helplessness when they lose the belief that their actions can influence their environment (Seligman, 1975). Homelessness leaves people vulnerable to daily assaults on their sense of personal control as they must rely on others to meet the basic needs of eating, sleeping, keeping clean and guarding their personal belongings (Goodman et al., 1991). In light of the dependency that is necessary in order to live as a homeless person, it is unsurprising that a high percentage of homeless teen mothers with infants displayed insecure attachment styles (Becker, 1999).

Adult attachment style was examined in relation to length of time homeless, with the finding that gender played different roles in the lives of homeless people (Franskoviak, 1999). Economic disadvantage tended to underlie male pathways to homelessness, while female homelessness tended to result from a breakdown in the relationships in women’s lives with a subsequent lack of social support ensuing. For example, men tended to become homeless when they could not find good-paying jobs or when they became disabled and lost a good-paying job. By contrast, domestic violence and sexual assault typically forced women to leave their relationships, factors which when combined with women’s lower earning power, may make women more vulnerable to financial instability and possible homelessness. While men typically remain homeless for longer periods of time than women, in this study, dismissive women had the longest periods of homelessness of all participants. The author opined that dismissive homeless women’s strategy of avoiding intimacy may have put such women at a greater disadvantage in a predatory environment by prolonging their homelessness. These findings align with homelessness research which suggests that homeless people with a dismissive attachment style may be least likely to exit homelessness because of a tendency to overstate their well-being combined with an unwillingness to seek help from others in a position to move them from homelessness (Stefanidis et al., 1992).

While the homelessness and attachment literature does not suggest any specific attachment style is associated with homelessness, we see a tendency toward more insecure attachment styles in conditions of poverty. Several themes emerge from the
relevant studies including: that dismissive attachment style developed in the family of origin may lead to homelessness; that dismissive attachment may result from conditions of homelessness when living in adverse environments; and that dismissive attachment may prolong homelessness when individuals with this attachment style refuse to ask others for help.

1.5 Measuring Attachment in Homeless Populations

The homelessness and attachment literature uses five different attachment measures, most of which are self-report. The five measures are: the Attachment History Questionnaire (Pottharst & Kessler, 1990), the Attachment Style Questionnaire (Feeney, Noller, & Hanrahan, 1994), the Experiences in Close Relationships-Relationships Structures Questionnaire (Fraley, Heffernan, Vicary & Brumbaugh, 2011), the Attachment Q-Sort (Waters & Deane, 1985) and the semi-structured Adult Attachment Interview (George, Kaplan & Main, 1985). Both categorical and dimensional measures are used in the homelessness literature sometimes making studies difficult to compare consistently. For instance, a category of disorganized attachment (i.e. measuring an inconsistent pattern of approach-avoidance and anxiety behaviours typically seen in traumatized populations) will be measured and reported in some studies while in others disorganized attachment will not be measured at all. As well, the literature uses both three category and four category measures of attachment style. Nonetheless, a consistent pattern emerging in the homelessness and attachment literature is the high proportion of dismissive attachment style, with some studies reporting dismissive attachment styles in 29.7% (Ron, 2004), 35% (Tavecchio & Thomeer, 1999) and up to 40% of their sample (Franskowski, 1999; Vinay, Salvi & Djin, 2011). By contrast, in their nationally representative housed American sample, Mickelson, Kessler & Shaver (1997) found only 25% of participants had an avoidant attachment style.4

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4 Eleven percent had an anxious attachment style while 59% of the sample was securely attached. Note proportions of attachment style do not sum to 100 because a small percentage of the sample could not be classified where subjects’ attachment categories were rated equally.
While none of the studies in the homeless and attachment literature is experimental, researchers speculate as to whether dismissive attachment might cause (or at least contribute to) homelessness or whether homelessness causes (or contributes to) dismissive attachment. Tavecchio and Thomeer (1999) suggest that there is a tendency in homeless people to distance themselves from others. This tendency results from their internal working models of others that could flow from the neglectful and sometimes traumatic families of origin that prompted their homelessness in the first place. By contrast, Vinay and colleagues (2011) suggest that the fact of becoming homeless in and of itself is sufficient to disrupt an individual’s internal working models that may have been more secure prior to becoming homeless. Homelessness leads to a loss of personal control and trust in one’s environment in the form of: threats to personal safety; increased rates of physical and personal assault on the streets and in shelters; self-harm resulting from drug use; and inadequate medical care, all of which may contribute to the development of insecure attachment (Franskoviak, 1999). Thus the literature merely speculates as to the direction of the link between homelessness and dismissive attachment: either an increased risk of insecure attachment results from the conditions of poverty in childhood, which later increase the risk of homelessness as an adult; or, alternatively, if an individual initially had a secure attachment style in childhood, in order to cope she must develop a dismissive attachment style when she becomes homeless.

Evolutionary perspectives on attachment style provide an explanation as to how ecological stressors in one’s living environment influence a dismissive attachment style across gender and geography (Schmitt, 2008). Schmitt examined cultural differences in adult attachment involving 17,804 participants from 56 countries. Dismissive attachment styles were associated with high stress environments including significant world-wide negative associations between dismissive attachment style and: (a) per capita GDP and (b) life expectancy. Significant positive correlations existed between dismissive attachment and (a) infant mortality, (b) low birth weight, and (c) child malnutrition. Low stress environments demonstrated larger gender differences in dismissive attachment while high stress environments demonstrated lower gender
differences in dismissive attachment. This large-scale study impressively demonstrates that attachment theory is a useful framework to understand how dismissive attachment styles are more common, and might be seen as adaptive, in a harsh living environment.

Homelessness and attachment research has tended to investigate homelessness by looking at homeless men exclusively (Ron, 2004), and by collapsing gender with homelessness, leaving the female sample too small to generalize beyond the study in both adult (Franskoviak, 1999; Shvarts, 2014; Vinay, Salvi & Djin, 2011) and youth research (Stefanidis et al., 1992; Tavecchio & Thomeer, 1999; Taylor-Seehafer et al., 2008). When homeless women are investigated using an attachment framework, they have been studied as single mothers of infants (Becker, 1994; Easterbrooks & Graham, 1999). Attachment and homelessness studies have investigated homeless people in Europe including in France (Vinay et al., 2011) and the Netherlands (Tavecchio & Thomeer, 1999), in mid-sized American cities (Easterbrooks & Graham, 1999), and in large urban American cities including Chicago (Ron, 2004), Miami (Becker, 1994), San Francisco (Franskoviak, 1999), and Los Angeles (Stefanidis et al., 1992). None of these studies in large centres has examined homeless women outside of their mothering role. Women constitute 34% of people in the Skid Row district of Los Angeles (U.S. Census Bureau, 2010), and approximately 23.1% of homeless people on Skid Row (The Los Angeles Homeless Services Authority, 2013). Homeless women face vulnerabilities different from homeless men with the most common reason cited for female homelessness being domestic violence (Tischler, Rademeyer & Vostanis, 2007). Victimization of female homeless women tends to occur in the context of survival strategies to obtain income including panhandling, gathering recyclables, selling items on the street, or engaging in sex with strangers (Wenzel, Koegel & Gelberg, 2000).

Homeless people tend to be an understudied population in psychology generally (American Psychological Association Task Force on Psychology’s Contribution to End Homelessness, 2013). Plausibly the perceived dangers of performing research on Skid Row, and an apparent lack of interest in homelessness generally also make this an understudied population. The current study aims to add to the attachment and
homelessness literature on this understudied and difficult-to-access population of homeless women in Los Angeles’ Skid Row district.

1.6 Hypotheses of the Current Study

Karreman and Vingerhoets encouraged replication of their study of attachment and well-being in an actively stressed population. Homelessness is associated with social disaffiliation and, whether homelessness is sudden or gradual, it can be expected to cause psychological trauma (Goodman et al., 1991). Homeless people were selected as an appropriate group facing a chronic stressor in which to replicate Karreman and Vingerhoets’ (2012) research.

Karreman and Vingerhoets’ model suggests that each attachment style will have a unique association with well-being which will be mediated by resilience, reappraisal and suppression. As well, we suspect from the existing literature that a homeless population will likely demonstrate a high proportion of individuals with a dismissive attachment style. As a result, the following hypotheses are proposed:

Correlational Hypotheses

1. While we are uncertain of the proportion of homeless women who will classify as securely attached given what we have seen in the attachment and homeless literature, we predict that for those homeless women who are securely attached, secure attachment will predict higher well-being;

2. We know that impoverished circumstances tend to increase insecure attachment as emotionally responsive parenting becomes difficult in these circumstances (Easterbrooks & Graham, 1999). We also know that insecure attachment is linked to low levels of emotional well-being, thus we predict that a negative relationship will exist between fearful attachment and well-being;
3. Given the high attachment anxiety associated with preoccupied attachment style and the negative view of self, we predict that preoccupied attachment will be associated with lower well-being;

**Mediational Hypotheses**

4. We expect individuals with secure attachment to appraise threatening events in less threatening ways and engage in problem solving and cognitive reappraisal. As well, resilience is associated with secure attachment (Simeon et al., 2007) while resilience and reappraisal have been positively associated with well-being (Gross & John, 2003). Thus we predict that a positive relationship between secure attachment and well-being will exist and will be partially mediated by higher reappraisal and resilience and lower suppression;

5. Based on earlier findings (Karreman & Vingerhoets, 2012) we anticipate that the negative effect of preoccupied attachment on well-being will be mediated by lower reappraisal and resilience. Given the poor coping skills of individuals with a preoccupied attachment style, we hypothesize that low suppression will mediate the relationship between preoccupied attachment and well-being as well.

6. The mediating roles of reappraisal and resilience are somewhat exploratory with respect to fearful attachment because as Karreman and Vingerhoets note (2012), past research is unclear. Given that fearful attachment is associated with negative view of self and other, we speculate that a negative relationship will exist between fearful attachment and well-being which will be mediated by lower reappraisal and resilience; and

7. It is unclear whether the well-being of dismissive individuals is truly high or whether these individuals simply tend to report their well-being as high as part of their coping style (Stefanidis et al., 1992). Either way, we expect that dismissive attachment will be positively associated with well-being. Dismissive emotion regulation strategies tend to inhibit emotional experiencing resulting in suppression of many emotions.
including those that could contribute to resilience. As a result, we predict that the positive relationship between dismissive attachment and well-being which will be partially mediated by high resilience and high suppression.
2 Methods

The research was conducted in two phases: Part One involved collection of the sociological data via qualitative interviews conducted in Los Angeles in August 2013. Sociological semi-structured interviews allowed the Principal Investigator of this study to interact with participants, learn about their lives and conduct research to inform potential hypotheses for Part Two. Part Two of the study involved the collection of psychological data in Los Angeles in May 2014.

2.1 Sampling of Homeless Shelters

We developed a non-probability sample of the service providers who work with homeless women throughout the greater Los Angeles area to identify participants for both Parts One and Two of the study. We used *The People’s Guide*, (Los Angeles Coalition to End Hunger & Homelessness, 2010), which is a known comprehensive listing of relevant service agencies, to create a sampling frame in January 2013. We contacted the same homeless shelters in January 2014 to conduct Part Two of the research (See Appendix B for telephone script). Eleven homeless shelters were re-contacted in March, 2014. Five shelters in the greater Los Angeles area agreed to participate. All of the shelters visited during Part Two had been visited at least once during Part One of the study. Participants for Part Two were drawn from five homeless shelters in the following proportions for the current project: 36%, 24%, 16%, 15%, 9%.

2.2 Procedures

Target homeless shelters were first contacted by email, then by telephone and provided with a brief overview of the study (see Appendices C and D for email and email reminder scripts). We asked shelter directors for permission to enter the common areas within each shelter, make an announcement to their homeless female clients, and have three researchers meet one-on-one with up to three shelter clients at a time to conduct the study in a semi-private place within each shelter. After a shelter agreed to allow us to access their clients, we asked the organization to advise their clients of the date of the
research team’s visit. Upon our arrival at a particular site, a staff member introduced the
research team and explained the purpose of our visit to all female clients within a shelter.
I made announcements to potential participants to explain the purpose of the study and all
team members then made themselves available to any individuals who wished to
participate in the research (see Appendix E for participant shelter recruitment script).
Participants self-selected and approached one of three researchers (a clinical psychology
M.Sc. 1 student, or a male or female undergraduate research assistant). Researchers
conducted interviews in a semi-private area of each shelter.

Measurement scales differed by instrument. For instance, one of the instruments
used a scale that went from 0 (At no time) to 5 (All of the time) while another instrument
used a different scale and a different order: from 1 (Strongly Disagree) to 7 (Strongly
Agree). To keep scales clear and understandable for participants, each instruments’
measurement scale was reproduced on a white cardboard ruler to remind the participants
of the scale they were using for each instrument (Appendices F, G and H). Part One of
the project, which involved the collection of sociological qualitative interview data,
demonstrated that handing a clip board with a series of questions to members of a
marginalized population was potentially alienating to participants not used to completing
paperwork. As a result, researchers read the research instruments to the participants and
researchers recorded participants’ answers. Researchers read the items to participants for
a number of reasons: (1) to conduct research in the manner most likely to demonstrate
our respect toward the participants; (2) to collect the most accurate data possible; (3) to
avoid having to ask participants whether they were literate; (4) out of a desire to speed
the process and keep participants focused; and (5) to minimize disengaged participants
who might otherwise simply check off items haphazardly to receive compensation
without engagement. Attachment research using oral administration of psychological
instruments has been performed in research with homeless women in Los Angeles
(Hudson, Wright, Bhattacharya, Sinha, Nyamathi & Marfisee, 2010) and San Francisco
(Franskoviak, 1999). Researchers administered instruments in varying order to control for
order effects.
Participants were given information about the purpose and the potential limitations of participating in the study (See Appendix I). All participants were given the opportunity to decline to participate in the study or to not answer particular questions asked of them. Participants who chose to participate in the study reviewed and signed consent forms (Appendix J). After completion of the instruments, all participants received information explaining: the purpose of the study, how they could follow up with the researchers to learn about the study results, and how to contact counseling services if necessary. Participants received a gift card for McDonald’s Restaurant or Walgreens Drug Store in the amount of $10 (US) for their participation. The protocol and the instruments received approval from the university’s institutional ethics review board (Appendix K).

2.3 Participants

The initial sample consisted of 105 female participants from five homeless shelters in the greater Los Angeles area.

Participation was limited to women over age 18 who were residents of a homeless shelter. Women who could not communicate in English, who were inebriated at the time of the research, and women who were apparently actively delusional and not able to make sense of the questions we were asking, were excluded from the study. Some such participants received a gift card if the study had been commenced or if the women’s inability to participate (i.e. actively delusional) had become apparent during the course of administering the measures.

Not all participants who completed the instruments met the above inclusion criteria. As such, five participants were excluded from the final sample. Three participants were excluded because their answers were only partially completed, one participant was not oriented to time or place, and a final deaf participant was excluded after being permitted to complete the instruments as none of the measures has been normed for deaf participants. The five excluded participants were compensated in
accordance with ethical research conduct. The data were analyzed with a final sample of 100 female participants.

All participants were females who ranged in age from 20 to 72 years ($M=45.77$) although 63% of the participants were between 40 and 61 years of age. The vast majority of participants were Black (63%). A majority of participants had not been homeless as children (81%, $n=81$). Ninety-eight participants shared their relationship status with researchers. The majority of participants, 70.41%, were either single (56.12%, $n=55$) or divorced (14.29% ($n=14$)) which is in keeping with the most recent census data in the relevant zip code (U.S. Census Bureau, 2010). A smaller group, 21.42%, had partners; this group was either married (12.24%, $n=12$) or dating (9.18% ($n=9$)). A small proportion of the participants was widowed (8.2% ($n=8$)).

A sample of 90 participants provided information about the number of times they had been homeless in their adult lives with 18% indicating they had never been homeless as adults, 17% reporting they had been in and out of homelessness over four times in their adult lives, and the majority (55%) indicating they had been homeless between 1 and three times in their adult lives.

### 2.4 Pilot Study

All measures described in section 2.5 below were pilot tested in London, Ontario in January 2014 at a local London, Ontario homeless facility that provides meals to homeless people ($N=16$). I ran the pilot study with the help of two undergraduate data collectors to ensure consistency in use of measures among researchers and to collect feedback from pilot participants regarding ease of understanding and appropriateness of measures in a homeless population. No adjustments were made to data collection procedures for the May 2014 Los Angeles data collection following the January 2014 London, Ontario pilot study.
2.5 Measures

*Brief Demographic Questionnaire.* A Brief Demographic Questionnaire (Appendix L) assessing participants’ demographic information was generated for the purposes of this study and was administered to all participants for descriptive purposes.

*Relationships Questionnaire.* The Relationships Questionnaire (RQ; Bartholomew & Horowitz, 1991. See Appendix M) is a 4 item measure which asks participants to select one of 4 short, 2-3 sentence descriptions of the attachment style with which they most identify and then rate each attachment style on a 7 point Likert scale from 1 (Disagree Strongly) to 7 (Agree Strongly). In the event a participant ranked two categories highly, the participant was asked to select the description that best described her and this was the final recorded attachment style. Style A of the RQ relates to secure attachment (e.g. “It is easy for me to become emotionally close to others”); style B corresponds to the fearful-avoidant patterns (e.g. “I want emotionally close relationships but I find it hard to trust others completely or to depend on them”) style C describes preoccupied attachment (e.g. “I want to be completely emotionally intimate with others but I often find that others are reluctant to get as close as I would like”) and style D corresponds to a dismissing-avoidant style (e.g. “I am comfortable without close emotional relationships”). The RQ was selected because it was most similar to the Attachment Styles Questionnaire (van Oudenhoven, Hofstra & Bakker, 2003) used in Karreman and Vingerhoets’ original testing of this model. Attachment scales like the RQ that contain both dimensional assessment (in which a participant assesses degree of likeness to self on each of four attachment styles on a Likert scale) in addition to a forced-choice category (in which participants must select one description among the four attachment styles that most describes them) are plainly worded, brief and face valid. Similar scales that use both dimensional and categorical attachment assessment have been used in homeless samples in the past (see for instance Ron, 2004; and Tavecchio & Thomeer, 1999).

*Emotion Regulation Questionnaire.* The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003. See Appendix N) is a 10 item scale with 6 items measuring
reappraisal and 4 items measuring suppression. Internal consistency measures in the present study are similar to initial validation study Cronbach’s alphas for each scale: *reappraisal* by scale authors was $\alpha = .79$ while the present study’s internal consistency for reappraisal was $\alpha = .77$; *suppression* for scale authors was $\alpha = .73$ and the present study was $\alpha = .69$. The ERQ contains a 7 point Likert scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Example questions include “I control my emotions by changing the way I think about the situation I’m in” (reappraisal) and “I control my emotions by not expressing them” (suppression). No reverse-worded items are included in the scale, and all questions are written in a manner that does not suggest positive or negative outcomes are associated with either regulatory style (Melka, Lancaster, Bryant & Rodriguez, 2011). Recent factor analysis confirms the ERQ’s initial factor structure is appropriate for European as well as Black and White Americans (Melka et al., 2011). Consistent with previous research the two subscales were uncorrelated and represented distinct constructs, $r = .17, p = .089$ (Gross & John, 2003). The factor structure, internal consistency, test-retest reliability across three months, and convergent and discriminant validity have been demonstrated to be adequate (Gross & John, 2003).

**Resilience Scale.** Resilience was measured with the Resilience Scale (RS; Wagnild & Young, 1993. See Appendix O). The RS is an individual level measure developed out of qualitative interviews with 24 older women who successfully negotiated a major negative life event (Wagnild & Young, 1993). According to its authors the RS defines resilience as a “personality characteristic that moderates the negative effects of stress and promotes positive adaptation” (Wagnild & Young, 1993, p.165). The scale items are derived from verbatim statements of a female sample as well as generally accepted definitions of resilience, making this choice of scale a particularly good fit with our sample. While no “gold standard” exists among the available resilience scales, the RS has had the widest application in resilience research (Windle, Bennett & Noyes, 2011). Further, we anticipated that our sample would be comprised of younger and older adults and the RS has been demonstrated to be adaptable to both groups.

The RS comprises 25 items (e.g. “I usually manage one way or another”), which
the participant rates on a 7 point Likert scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Scores range from 25 (indicating low resilience) to 175 (indicating the highest possible resilience). The summed score represents an individual’s score for resilience. RS item 11 (“I seldom wonder what is the point of it all”) lowered the RS’ Cronbach’s alpha from excellent ($\alpha=.92$) to good ($\alpha=.82$). We observed anecdotally that many participants did not understand the word seldom. Data collectors did not realize this discrepancy until part way through the study and it was not clear that all participants had an opportunity to clarify their understanding of the word consistently. RS Item 11 was excluded from all analyses to create a 24 item scale with more acceptable internal consistency reliability ($\alpha=.92$).

**Well-being.** The WHO-Five well-being index (WHO-5) is a single factor measure used to assess a participant’s current state of positive psychological well-being (Bech, Olsen, Kjoller & Rasmussen, 2003) (See Appendix P). Participants indicated how they felt during the past two weeks by scoring five positively worded statements on a 6-point Likert-type scale assessing mood, energy level and general interest, ranging from 5 (All of the time) to 0 (At no time) (e.g. “I woke up feeling refreshed”). Scores were summed and multiplied by 4 to get a total score ranging from 0 to 100 with lower scores indicating lower well-being. Several studies have reported internal consistency, with alpha coefficients ranging from .84 (Bech et al., 2003) to .95 (de Wit, Pouwer, Gemke, Delemarre-van deWaal, & Snoek, 2003). Cronbach’s alpha measuring the internal consistency reliability for this sample may be considered good ($\alpha=.84$).

### 2.6 Selection of Statistical Procedures

The initial research plan involved 200 participants using Structural Equation Modeling. Too few participants were available to perform the planned structural equation modeling (N=100) so a mediational model was conducted. Baron and Kenny’s (1986) *casual steps mediation model* is widely used for mediation analyses. The Baron and Kenny model has been criticized for not directly testing the indirect effect of mediation. Baron & Kenny’s model infers an indirect effect via a set of hypothesis tests (Hayes,
2009). I have selected Preacher & Hayes’ (2004) bootstrapping method to test the mediation models because: (1) it does not impose the requirement of normality of the sampling distribution; and (2) it is more appropriate in smaller samples. Andrew Hayes’ PROCESS for SPSS was downloaded and used via SPSS as an extension to SPSS. I used Hayes’ PROCESS, an SPSS add-on to conduct 5000 bootstraps of my sample which is the minimum number of recommended bootstraps (Hayes, 2009).

First we analyzed whether there was a significant effect of each attachment style on well-being, then we observed the multiple mediation model by adding three mediators to each model to test the hypotheses.
3 Results

3.1 Descriptive Statistics

Table 3 presents correlations between all variables. Skewness and kurtosis testing indicated all variables were normally distributed except for reappraisal and resilience, which were negatively skewed and are discussed further below. Attachment styles break down as follows: dismissive \((n=39)\), fearful \((n=28)\) secure \((n=24)\), and preoccupied \((n=9)\). There was no significant relationship between secure attachment and the two emotion regulation strategies of reappraisal or suppression although variables did correlate in expected directions with each variable (e.g. positive correlation between secure and reappraisal and negative correlation between secure and suppression). Fearful and preoccupied attachment styles were positively associated with higher use of suppression. Unexpectedly, none of the attachment styles was significantly related to reappraisal. Secure and dismissive attachment styles were associated with higher resilience, fearful attachment was significantly correlated with lower resilience, and preoccupied attachment had no relationship with resilience. Dismissive attachment was related to higher well-being, fearful attachment to lower well-being and neither secure nor preoccupied attachment styles had a significant relationship to well-being. All correlations between attachment style and well-being were in the expected direction, except for secure attachment which was not significantly associated with well-being in this population.
Table 3: Descriptive Statistics and Correlations Among all Variables

<table>
<thead>
<tr>
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<th>1.</th>
<th>2.</th>
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<th>8.</th>
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</thead>
<tbody>
<tr>
<td>1. Dismissive</td>
<td>--</td>
<td>-.008</td>
<td>-.025</td>
<td>-.104</td>
<td>.064</td>
<td>.123</td>
<td>.367**</td>
<td>.239*</td>
</tr>
<tr>
<td>2. Secure</td>
<td>.008</td>
<td>--</td>
<td>-.179</td>
<td>.136</td>
<td>.144</td>
<td>-.082</td>
<td>.236*</td>
<td>.128</td>
</tr>
<tr>
<td>3. Fearful</td>
<td>-.025</td>
<td>-.179</td>
<td>--</td>
<td>.254*</td>
<td>-.094</td>
<td>.275**</td>
<td>-.335**</td>
<td>-.315**</td>
</tr>
<tr>
<td>4. Preoccupied</td>
<td>-.104</td>
<td>.136</td>
<td>.254*</td>
<td>--</td>
<td>.158</td>
<td>.218*</td>
<td>-.019</td>
<td>-.048</td>
</tr>
<tr>
<td>5. Reappraisal</td>
<td>.064</td>
<td>.144</td>
<td>-.094</td>
<td>.158</td>
<td>.77</td>
<td>.172</td>
<td>.408**</td>
<td>.270**</td>
</tr>
<tr>
<td>6. Suppression</td>
<td>.123</td>
<td>-.082</td>
<td>.275**</td>
<td>.218*</td>
<td>.172</td>
<td>.69</td>
<td>.125</td>
<td>-.075</td>
</tr>
<tr>
<td>7. Resilience</td>
<td>.367**</td>
<td>.236*</td>
<td>-.335**</td>
<td>-.019</td>
<td>.408**</td>
<td>.125</td>
<td>.92</td>
<td>.515**</td>
</tr>
<tr>
<td>8. Well-being</td>
<td>.239*</td>
<td>.128</td>
<td>-.315**</td>
<td>-.048</td>
<td>.270**</td>
<td>-.075</td>
<td>.515**</td>
<td>.84</td>
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</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>4.85</td>
<td>4.16</td>
<td>4.19</td>
<td>4.89</td>
<td>32.33</td>
<td>16.52</td>
<td>143.92</td>
<td>60.16</td>
</tr>
<tr>
<td>SD</td>
<td>2.18</td>
<td>2.32</td>
<td>2.17</td>
<td>2.27</td>
<td>8.42</td>
<td>6.70</td>
<td>21.45</td>
<td>27.03</td>
</tr>
</tbody>
</table>

Note: The diagonal for variables 5 through 8 presents Cronbach’s alpha values.
* p < .05
** p < .01

Subscales on the ERQ, suppression and reappraisal, are not significantly related constructs. Scores on suppression (M=16.52, SD=6.70) but not reappraisal (M=32.33, SD=8.42) were slightly higher than typically reported in the literature (Melka et al., 2011). Since 63.0% of the sample’s ethnicity was Black, two groups were created, Black (n=63) and not Black (n=35; combining Asian, White, Hispanic and Other)\(^5\) to compare whether ethnicity was significantly related to emotion regulation strategy. Emotion

\(^5\) Two participants chose not to share their ethnicity with researchers.
regulation strategy of reappraisal was significantly negatively skewed so 1000 bootstraps 
were performed to decrease bias. Reappraisal was not significantly different in the Black 
\((M=32.92, SD=7.62)\) versus not-Black \((M=31.49, SD=9.81)\) groups, \(t(95)=.80, p=.43\).

Emotion regulation strategy of suppression violated the assumption of homogeneity of 
variance between the two independent groups, Black and not Black. Assuming unequal 
variance in the groups, there was no significant difference between the Black \((M=16.79, 
SD =7.44)\) versus non-Black \((M=16.49, SD = 5.10)\) groups, \(t(91.31)=.24, p=.81\).

Resilience scores ranged from 79 to 168. The average resilience score using the 
revised scale with one item removed for improved internal reliability, was 143.92. 
Resilience is significantly positively associated with well-being, \(r=.52, p<.001\). 
Reappraisal was positively related to resilience, \(r=.41, p<.001\); suppression was not 
significantly related to resilience.

The average score on well-being was 60.16 \((SD=27.03)\), with the full range of 
scores from 0 to 100 represented in the sample. The cut-off for mild depression 
symptomatology is a score of less than 48 (Ito, Morikawa, Okamura, Shimokado & 
Awata, 2014), and 36% of the sample fit this category. Reappraisal and well-being were 
positively associated. Suppression and well-being were negatively correlated as expected 
but not significantly.

Analyses were conducted among a smaller group of participants \((n=90)\) who 
answered questions about their past and present homelessness including “I was homeless 
as a child (Yes or No)” and “Number of times homeless as an adult”. The question “I 
was homeless as a child” was coded (Yes=1, No=2). Correlational analyses revealed a 
strong relationship between homelessness as a child and the number of times an

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6 Note that some data was not captured because of inconsistencies in early data collection procedures. At 
the outset of the research, some researchers collected the answer to the question “how many times were you 
homeless as a child” revealing a number on a continuous scale, while other researchers collected answers to 
the question: “Were you homeless as a child” revealing a binary yes/no response. A similar error occurred 
with the question about adult homelessness. This problem was caught and researchers consistently asked 
about child homelessness (continuum number recorded which was later transformed into a binary) and 
adult homelessness (also recorded on a continuous scale).
individual is in and out of homelessness as an adult, \( r = -0.25, p = 0.020 \). A one way ANOVA was conducted to see if a relationship existed between number of times of adult homelessness and adult attachment style. Participants with a preoccupied attachment style who also answered the question about the number of times they have been homeless as adults formed a small group \( (n=6) \) that would skew the results of the ANOVA so these 6 participants were removed and a one way ANOVA was run on the remaining 84 participants. No significant results existed between number of times an individual has been homeless as an adult and the three remaining attachment styles (dismissive, fearful and secure).

### 3.2 Correlational Analyses

Recall that in this study attachment style was measured using the RQ. While this measure is categorical in that each participant is required to select an attachment style that best describes her, the measure also records on a seven-point Likert-type scale the extent to which each participant believes the other three attachment descriptions explain her as well. Thus for each participant we have both a categorical attachment style based on: (a) the style each participant said best explained her and she ranked the highest out of 7; and (b) a continuous attachment rating of herself for each attachment style. In sum, an individual participant could have the following data collected: an overall secure categorical attachment style on which she ranked herself 5 out of a possible 7 as a descriptor of herself, and at the same time her ranking of the other attachment categories could be as follows: dismissive 4, fearful 2, and preoccupied 2.

**Hypothesis 1** We predicted that secure attachment would predict higher well-being. In fact, secure attachment was not significantly related to well-being, \( r = 0.13, p = 0.208 \). Dismissive attachment had the highest well-being score of all attachment styles. When we regressed well-being on the various attachment styles, we found only dismissive attachment significantly positively predicted well-being, \( \beta = 2.97, t(98) = 7.03, p < 0.001 \). Table 4 presents the well-being means of each attachment style.
<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Well-being Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissive</td>
<td>$M=67.69$</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>$M=63.11$</td>
</tr>
<tr>
<td>Secure</td>
<td>$M=62.50$</td>
</tr>
<tr>
<td>Fearful</td>
<td>$M=46.71$</td>
</tr>
</tbody>
</table>

*Table 4:* Well-being Means grouped by Attachment Style (ascending order)

**(Hypothesis 2)** We predicted a negative relationship between fearful attachment and well-being and this was indeed borne out, $r=-.32, p=.002$.

**(Hypothesis 3)** We hypothesized that preoccupied attachment would be associated with lower well-being scores. While correlated in the anticipated direction, no relationship existed between preoccupied attachment and well-being, $r=-.05, p=.637$.

### 3.3 Mediational Analyses

**(Hypothesis 4)** A positive relationship between secure attachment and well-being will exist and will be partially mediated by higher reappraisal and resilience and lower suppression. While secure attachment and well-being were correlated in the expected positive direction, they were not significantly correlated $r=.13, p=.208$. Our hypothesis that secure attachment would predict higher well-being in a homeless population was not supported with secure attachment accounting for only 1.6% of the variance in well-being, $R^2=.016, \beta=1.49, t(98)= 1.48, p=.208$. The total effect was not significant.

Although secure attachment and reappraisal are correlated in the anticipated direction, they were not significantly correlated $r=.14, p=.157$. Similarly secure attachment and suppression were correlated in the anticipated direction but not significantly, $r=-.08, p=.421$. In this sample there is no evidence that either of these emotion regulation variables mediates the relationship between secure attachment and well-being.

It is possible for a mediator to be causally between X and Y, (here between secure attachment and well-being) even if the two variables are not significantly associated
(Hayes, 2009). We need not insist that the total effect be detectably different from zero. Given that the emotion regulation variables reappraisal and suppression were not adding to the planned model, a simple mediation using only one mediator, resilience, was re-run in PROCESS. We see that the indirect effect of secure attachment on well-being is not zero by a 95% bias-corrected bootstrap confidence interval based on 5000 bootstrap samples (.275 to 2.78, with a point estimate of 1.40), as are the paths from secure attachment to resilience ($a=2.18$, $p=.019$) and resilience to well-being controlling for secure attachment ($b=.64$, $p<.001$). These results are consistent with the claim that secure attachment increases resilience, which in turn increases a securely attached individual’s well-being. See Figure 1.

**Figure 1:** Secure Attachment and well-being

![Diagram showing the relationship between secure attachment, resilience, and well-being]

Indirect effect, $ab=1.40$, 95% CI [0.27, 2.78]

*Figure 1.* Unstandardized regression coefficients of the relationship between secure attachment and well-being as mediated by resilience. The unstandardized regression coefficient between secure attachment and well-being, controlling for resilience, is in parentheses.
(H5) A negative relationship between preoccupied attachment and well-being will exist which will be completely mediated by lower reappraisal, suppression and resilience. As mentioned in hypothesis 2, while preoccupied attachment and well-being were mildly negatively correlated in the expected direction, no significant relationship existed between preoccupied attachment and well-being, $r = -0.05, p = 0.637$. In testing the various pathways between preoccupied attachment and well-being to see its unique contribution of emotion regulation and resilience, the model failed. Only suppression had a significant relationship to preoccupied attachment, $r = 0.22, p = 0.031$. As a result, when the model was tested in PROCESS the total effects, the indirect effects and the direct effects revealed no significant findings.

(Hypothesis 6) A negative relationship will exist between fearful attachment and well-being which will be mediated by lower reappraisal and resilience. As hypothesized fearful attachment significantly predicted lower well-being accounting for 10.0% of the variance in well-being, $R^2 = 0.10$, $\beta = -3.76$, $t(98) = -3.27$, $p < 0.001$. Neither of the two emotion regulation variables of suppression or reappraisal functioned as mediators between fearful attachment and well-being.

A new model with only one mediator variable, resilience, was re-run in PROCESS. The relationship between fearful attachment and well-being was fully mediated by resilience. As Figure 2 illustrates, the unstandardized regression coefficient between fearful attachment and resilience was statistically significant as was the unstandardized indirect effect (-3.17)(.57) = -1.81. We tested the significance of the indirect effect using bootstrapping procedures. Unstandardized indirect effects were computed for each of the 5000 bootstrapping procedures with 95% confidence intervals. The bootstrapped unstandardized indirect effect was -1.81 and the 95% confidence interval ranged from [-3.23, -0.80]. Thus the indirect effect was statistically significant for resilience. Fearful attachment reduces resilience, which in turn lowers well-being. See Figure 2.
**Figure 2:** Fearful Attachment and well-being

Indirect effect, $ab = -1.81$, 95% CI [-3.23, -0.80]

Figure 2. Unstandardized regression coefficients of the relationship between fearful attachment and well-being as mediated by resilience. The unstandardized regression coefficient between fearful attachment and well-being, controlling for resilience, is in parentheses.

(H7) **A positive relationship will exist between dismissive attachment and well-being partially mediated by high resilience and high suppression.** As hypothesized dismissive attachment significantly predicted well-being accounting for 5.70% of the variance in well-being, $R^2 = .057$, $\beta = 2.97$, $t(98) = 2.42$, $p = .018$. Neither of the two emotion regulation variables of suppression or reappraisal functioned as mediators between dismissive attachment and well-being.

The model was re-run in PROCESS with only resilience as a possible mediator between dismissive attachment and well-being. The relationship between dismissive attachment and well-being was fully mediated by resilience. The total effect was
detectably different from zero. As Figure 3 illustrates, the unstandardized regression coefficient between dismissive attachment and resilience was statistically significant as was the unstandardized indirect effect \((3.63)(.62) = 2.25\). We tested the significance of the indirect effect using bootstrapping procedures. Unstandardized indirect effects were computed for each of the 5000 bootstrapping procedures with 95% confidence intervals. The bootstrapped unstandardized indirect effect was 2.25 and the 95% confidence interval ranged from \([.94, 4.34]\). Thus the indirect effect was statistically significant for resilience. See Figure 3.

**Figure 3:** Dismissive Attachment and well-being

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3}
\caption{Unstandardized regression coefficients of the relationship between dismissive attachment and well-being as mediated by resilience. The unstandardized regression coefficient between dismissive attachment and well-being, controlling for resilience, is in parentheses.}
\end{figure}
4 Discussion

4.1 Descriptive Statistics

Before delving into a discussion of the results, some demographic characteristics of the sample warrant comment. First, the ethnic composition of the sample was predominantly Black (63%), with the next largest ethnic groups being Hispanic (17%), White (14%), Asian (2%), and an Unknown Ethnicity group (2%) and two participants who declined to answer the question. The U.S. 2010 Census records 32.4% of the Skid Row District (which includes poor housed as well as homeless people) as Black (U.S. Census Bureau, 2010). The hidden homeless count which includes Skid Row plus other districts in Los Angeles County breaks the ethnic composition of homeless people down as follows: 38% Black, 37% White, and 22% Latino (Los Angeles Homeless Services Authority, 2013). Likewise, the overwhelming anecdotal impression of the women’s shelters we visited on Skid Row is that they are composed largely of Black women, and our sample bore that out. Our sample was also in line with the most recent reports on marital status of homeless people in Los Angeles County, which indicates that 86% of homeless adults are single (Los Angeles Homeless Services Authority, 2013). Similarly, 77% of our sample was single.

Second, the average age in my sample is 46 years with the largest group of women being between 50 and 59 years. Age distribution in the sample is consistent with the most recent count of homeless people in L.A. county, 61% of whom are between 25 and 54 and represent the largest age group among homeless people (The Los Angeles Homelessness Services Authority, 2013). The Los Angeles Homelessness Services

7 Hidden homeless means individuals believed not to have been counted as homeless because they were not seen in the streets or in homeless shelters. The total number of enumerated homeless men, women and children is approximated to be 40,149 in Los Angeles county. Another 18,274 people are believed to be hidden homeless thus raising the total approximated homeless count in Los Angeles county in 2013 to 58,423 (Los Angeles Homeless Services Authority, 2013).
Authority attempts to accurately count and then detail the characteristics of the hidden homeless in Los Angeles County given the high number of homeless people. Hidden homeless people are living in abandoned buildings, “couch surfing” in various friends’ and family homes, or sleeping in their cars. Estimates suggest that only one in four homeless people in Los Angeles is housed each night which means that sampling participants from homeless shelters only allows access to a relatively small subsample of L.A.’s homeless people (The Los Angeles Homeless Services Authority, 2013). We did not attempt to recruit women outside of shelters who live on the street and do not access shelter services. Given the environment in the Skid Row district of L.A., such a strategy would have been too dangerous. Low participation from this subgroup of homeless people was expected in any event (Toro & Wall, 1991). Further, participant sampling was consistent with the homelessness and attachment literature in which participants are drawn almost exclusively from homeless shelters. Nonetheless, while the age of my sample appears to be similar to what we understand L.A. homelessness to look like, it is possible the study sample could contain a larger proportion of older adults because advancing age may prohibit unsheltered sleeping in a car, or on a friend’s couch.

4.2 Correlational Hypotheses 1 through 3

Contrary to hypothesis 1, secure attachment did not relate to higher well-being and indeed was not significantly related to well-being. Instead dismissive attachment had the strongest relationship with well-being. When we regressed well-being on the various attachment styles, we found only dismissive attachment significantly positively predicted well-being. This finding is consistent with the attachment and homeless literature in which homeless adolescents low in secure attachment tended to deny their feelings of depression, had a capacity to adopt an inappropriately uninvolved stance toward their homelessness, and demonstrated a capacity to exaggerate their feelings of well-being (Stefanidis et al., 1992). Authors of another study involving dismissively attached homeless men with lower than expected scores on depression and anxiety hypothesized that avoidance of close relationships serves as a buffer against symptoms of depression and anxiety (Ron, 2004).
We hypothesized that preoccupied attachment would have lower well-being scores. While it correlated with well-being in the anticipated direction, no relationship existed between preoccupied attachment and well-being. Small sample size may explain part of this result as only a handful of participants fit this attachment style (n=9). The low number of preoccupied individuals in the current study mirrors findings in other studies involving middle-aged to elderly cohorts. For instance, in a study of attachment style and middle-aged participants’ readiness to provide care to older adults, only 4% were preoccupied (Sorensen, Webster & Roggmann, 2002). Similarly a low proportion of preoccupied attachment style was found among elderly patients with dementia (Magai & Cohen, 1998). When their caretakers rated their pre-dementia attachment styles, only 6% were classified as preoccupied. A nationally representative American survey revealed a negative relationship between anxious attachment and age (Mickelson, et al., 1997). Rather than attributing this result to cohort effect relating to changed parenting styles following World War Two, Mickelson and colleagues favoured an interpretation that anxious attachment simply becomes less common with age, suggesting that people become more self-protectively avoidant or more secure as they age. Even if a larger sample had been available for the present study, it is possible a proportionately low number of participants with preoccupied attachment style would have been found in any event given what we know about attachment insecurity decreasing with ageing.

Hypothesis 3 predicted a negative relationship between fearful attachment and well-being. This prediction was indeed borne out. Fearful attachment involves social insecurity, need for the approval of others, and a general lack of assertiveness: qualities that are antithetical to high well-being. Well-being was measured with the WHO-5 well-being index, which has been normed internationally and is a well-accepted measure of well-being in a number of countries. The WHO-5 has been validated for use as a screening tool for depression in the elderly (Bonsignore, Barkow, Jessen & Heun, 2001) and in diabetic populations (Hajos et et al., 2012). The mean (60.16) and median (64.00) well-being scores were high in this sample and the distribution of scores was slightly negatively skewed but still normal, indicating that many of the women reported high
well-being. The only published study using the WHO-5 in a homeless population involved homeless Japanese men and a small proportion of homeless Japanese women (7.3%) who together had a mean WHO-5 well-being index of 11.81, which summed to a total score of 47.24 (SD=5.35) (Ito, Morikawa, Okamura, Shimokado & Awata, 2014). The cut off for mild depression is usually a score of less than 48 (Schneider et al., 2010). These markedly lower overall well-being scores cannot be easily compared to the current sample for several reasons. First, the Japanese sample was almost entirely male (92.7%) whereas our sample is entirely female. Second, the average age of the Japanese sample was 60.6, which is much older and at a different stage of life than our participants whose mean age was 46. Finally, it seems plausible that differing cultural expectations exist about the perceived shame of homelessness in Japan.

As a result, it is difficult to draw any inferences through a comparison of the Japanese sample and my own. While my sample had a high average reported well-being score ($M=60.16$) and it was negatively skewed with many participants reporting high well-being, 36.0% of my sample had well-being scores classifying them as mildly depressed. Of course, almost two-thirds of participants were not mildly depressed which seems unusual given their circumstances. There are two possible explanations for my sample’s high scores on the WHO-5 well-being index. First, the participants in shelters are comparing themselves to other people they encounter regularly – including non-shelter users. In the context of Skid Row inhabitants, regular shelter users might actually have relatively high well-being. Another possibility relates to the “culling the herd” hypothesis – this is an older sample, suggesting that only those individuals capable of surviving on Skid Row are being sampled. Individuals who are less able to cope are, in effect, “culled” by the hazards of life on Skid Row. Here again, this suggests that our sample is assessing its well-being in context: these are the survivors who feel lucky to be alive to participate in research.

4.3 Mediational Hypotheses 4 through 7

Hypothesis four predicted that secure attachment would predict higher well-being and be mediated by higher reappraisal and resilience and lower suppression. While secure
attachment and well-being were correlated in the right direction, they were not significantly correlated. Similarly, while correlated in the expected direction, neither of the emotion regulation variables (i.e. suppression and reappraisal) was significantly related to secure attachment. Hayes (2009) argues that it is possible for a mediator to be causally between two variables even if the variables are not significantly related, as was the case with secure attachment and well-being. While secure attachment was not positively related to well-being in this sample, the findings were consistent with the claim that secure attachment increases resilience, which in turn increases a securely attached individual’s well-being. While 24% of the study sample were securely attached, this is less than half the proportion of what we’d expect to see in a nationally representative sample. Mickleson and colleagues (1997) conducted a study in which they found that 59% of their non-traumatized sample was securely attached. We might conceptualize such a high proportion of secure attachment as anomalous in this sample given poverty and its ability to disrupt pro-social attachments; e.g. the high proportion of homeless women raised in group homes; amount of past sexual violence leading to homelessness as well as the constant fear of living without a home can all be expected to disrupt attachment bonds. Thus, although this study’s sample displayed secure attachment far less frequently than the general population, it could be argued that the rate of secure attachment we observed was actually surprisingly high. While secure attachment increases resilience, which in turn increases well-being, this is not a strong effect within this sample.

Hypothesis 5 predicted that preoccupied attachment and well-being would be negatively related. While these variables were correlated in the expected direction their association was not significant. The mediation of the relationship between preoccupied attachment and well-being was expected to be mediated by lower reappraisal, suppression and resilience. The model did not work within this sample. Findings should be tested in other homeless research given the low number of preoccupied individuals found (n=9). The low number of preoccupied individuals in this sample may be contrasted with Becker’s study (1994) in which the majority of homeless women were found to have a preoccupied attachment style. Becker’s sample consisted exclusively of homeless
mothers, many of whom were adolescents when they became mothers. Early motherhood may have kept the women in Becker’s study financially and emotionally enmeshed with their families of origin and without the ability to develop a clear adult identity. The low percentage of preoccupied attachment style in my sample is more consistent with the existing literature on attachment style and homelessness in general.

Hypothesis 6 predicted that a fearful attachment style would be significantly negatively related to well-being, which would be mediated by lower reappraisal and resilience. This prediction was partially borne out by the evidence. While neither reappraisal nor suppression functioned as a mediator between fearful attachment and well-being, resilience fully mediated the relationship such that fearful attachment decreases an individual’s resilience which in turn lowers well-being.

Hypothesis 7 was the most successful hypothesis in the sample. As hypothesized, dismissive attachment significantly predicted well-being. While neither reappraisal nor suppression mediated the relationship between dismissive attachment and well-being as expected, resilience fully mediated the relationship between dismissive attachment and well-being. First, the high proportion of dismissive attachment style in this sample is in line with the existing literature (Franskoviak, 1999; Ron, 2004; Schmitt, 2008; Tavecchio & Thomeer, 1999; Vinay et al., 2010). Dismissive attachment style is adaptive in this harsh environment with high pathogens, malnutrition and a shortened life expectancy (Schmitt, 2008). The positive effect of dismissive attachment on well-being was inconsistent with some previous research findings that linked low life satisfaction with dismissive attachment style (Lavy & Littman-Ovadia, 2011). However, findings may be expected to differ from this study given attachment avoidance was measured using a general avoidance dimension (see Table 2) and an undergraduate convenience sample was used in the research. While dismissive attachment style may be expected to have a negative effect on well-being (and possibly lower individual resilience) in a middle class population, avoidance may be seen as a potentially adaptive coping approach in homeless communities where survival necessitates caution against trusting others.
We might contextualize these attachment and well-being findings by looking at both socio-economic status (SES) and age more broadly. Some research suggests that attachment security might be variable with SES and age (Magai, Hunzinker, Mesias & Culver, 2000). Some evidence suggests that a dismissive attachment style is associated with lower SES. For instance, Magai, Cohen, Milburn, Thorpe, McPherson & Peralta (2001) found that 78% of a randomly drawn sample of low-income urban elders were classified as having a dismissive attachment style. While age is not significantly related to dismissive attachment style in this sample, the sample is comprised of a significant number of middle-aged to “older” women. The mean age is 46, the modal age is 53 and the median age is 48. While it is plausible that cohort effects such as parenting style may be present in this sample, explaining the high proportion of dismissive attachment style, it is equally plausible that the series of large life disruptions and higher number of losses experienced in the lives of the participants (death, divorce, mental illness, loss of custody of children, loss of employment, physical and mental illness) suggests participants may have already had a dismissive coping style for several reasons: either because of the impoverished environments they hailed from, or as these participants aged and were living in impoverished conditions, their attachment style changed.

Contextualizing these findings requires consideration of our choice to read the scales to the participants. Handing clipboards to marginalized people and asking them to fill out tests seemed overly bureaucratic and likely to deter participation and engagement. Moreover, our strategy has been used in other similar studies involving homeless participants (see for instance Becker, 1994; Franskoviak, 1999; and Shvarts, 2013). The cost of this approach of course is that social desirability may have taken hold on the well-being and resilience scales. This potential confound will be addressed in the upcoming section.

### 4.4 General Discussion

Stepping back and assessing the overall results of Karreman and Vingerhoets’ models in this population, three broad questions arise. First, since the attachment
measures performed well in this population and emotion regulation is the root of attachment theory, why did emotion regulation variables, reappraisal and suppression, fail to mediate the relationships between the various attachment styles and well-being? Second, given all that we know about this traumatized population, why were the resilience scores so high? Finally, how might we make sense of the well-being scores. Each of these questions is discussed below.

4.4.1  Emotion regulation

Surprisingly, neither emotion regulation subscale functioned as a mediator between attachment styles and well-being. In Karreman and Vingerhoets’ (2012) study, only suppression failed to function as a mediator between attachment style and well-being. In my study, each subscale of reappraisal and suppression correlated in the expected direction with each attachment style but only fearful attachment and preoccupied attachment correlated significantly with the emotion regulation subscale suppression, $r=.28$, $p=.006$ and $r=.22$, $p=.031$ respectively. The other emotion regulation subscale in this study, reappraisal, did not correlate significantly with any of the attachment styles but (as would be expected) did show a strong positive association with resilience, $r=.41$, $p<.001$ and well-being, $r=.27$, $p=.007$. While the internal reliabilities of each scale measured using coefficient alpha were “good” for reappraisal ($\alpha=.77$) and “acceptable” for suppression ($\alpha=.69$), their performance was still surprising.

The best explanation for this outcome is that the emotion regulation measure, the ERQ, was not appropriate for the population. Plausibly, the ERQ was not resonant with the participants. The first validation study of the ERQ using Australian and United Kingdom community samples removed an item from the ERQ and found the factor structure of the 9 item scale (item 3 removed) to be supported (Spaapen, Walters, Brummer, Stopa & Bucks, 2014). When item 3 was removed from our sample it simply lowered the already low internal consistency of the scale. The ERQ may not be an appropriate instrument for a homeless population. The ERQ may have been too nuanced for participants who are unaccustomed to making fine linguistic distinctions between scale items. Often when a participant was asked a question from the ERQ like “When I
want to feel more positive emotion (such as joy or amusement) I change what I’m thinking about” and then three questions later was asked “When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about”, participants asked why we were asking them the same questions twice. The participants’ inability to recognize the difference between different questions obviously undermines the data derived from answers to the ERQ items. As a result emotion regulation was not demonstrated to be a robust variable and could not perform as anticipated with this population.

4.4.2 Resilience

What does the existing literature tell us about the resilience scores? RS scale authors suggest the following guidelines for RS scale interpretation following repeated applications of the scale in various samples: scores of 161-175 are considered very high, scores from 145 to 160 indicate moderately high resilience, 131 to 144 indicate moderate resilience, 121 to 130 indicates moderately low levels of resilience, and scores of 120 and below indicate low resilience (Wagnild, 2014). Resilience scores in the present study may be considered moderate (M=143.92). Recall that one item that used the word *seldom* was removed from the RS, because participants did not understand the word and the word was inconsistently explained to participants, possibly biasing the results. Moreover, removal of item 11 (creating the New RS) improved the internal consistency of the scale. Each participant resilience score is lower by as much as 7 points as a result of this accommodation, which should be kept in mind when comparing the overall mean resilience score of 143.92 to the established norms.

New RS resilience scores were negatively skewed, which is typical with the RS (Wagnild, 2014). In all 12 studies that have used the RS, responses tended to be negatively skewed with most samples ranging from 140 to 148 (considered moderate to moderately high) out of a possible score of 175 (Wagnild, 2009). RS authors attribute this tendency to the effects of a social desirability bias since the most desirable and acceptable responses may be obvious to many respondents. Moreover, since we read to the participants (rather than having them read the scales to themselves, for reasons
outlined in section 2.2) participants may have felt a bond with the researchers, yielding an extra “push” to respond with the answer they believed we wanted. Respondents were told (during group recruitment at the shelter common areas and again individually by researchers) that we were not American nationals, had no affiliation with the shelters and would not record participants’ names or other personal information; nevertheless, participants may still have felt they needed to respond in a socially appropriate way to researchers. Acquiescence bias is also a noted issue with the RS. Because all items in the RS are positively worded, it is particularly susceptible to the effects of acquiescence bias. We did try to avoid response fatigue of participants across measures by using several different measures in differing order, with differing scales that were explained to participants as the scales were switched so that no more than 36 questions were ever asked for one scale type. Nonetheless, while participant fatigue was not observed, it is possible that respondents became bored with a series of 25 positively worded questions and respondents simply put little thought into their answers on the RS.

Response sets were detected in 13 participant scores in which “perfect” RS scores of 168 were obtained when these 13 participants endorsed “7” for every item on the revised 24-item scale. When the 13 participants were discarded, the mean of the smaller group (n=87) fell only slightly from 143.92 (SD=21.45) to 139.87 (SD=20.83) indicating that removal of the response sets did not ultimately change the range into which the mean resilience scores fell. Comparing the overall study sample’s mean resilience score of 143.92 to mean RS scores in other studies using housed young to middle-aged women, studies of housed women revealed moderate resilience scores: a mean score of 142.5 (SD=12.9) for mothers with pre-school children (Monteith & Ford-Gilboe, 2002), and a mean score of 143 (SD=not reported) for postpartum military wives (Schachman, Lee & Lederma, 2004). While the women in both studies were undergoing adjustments to major life events, arguably, one might expect that the RS scores would be quite different from women who live with the chronic stress of homelessness.

The RS has been used in one study with a group of homeless participants revealing the lowest scores in the literature with a mean RS score of 111.9 (SD=17.6). While the
sample is similar to the present study in that homeless participants were the subjects, the sample was comprised of adolescent participants rather than adults ($M_{\text{age}}=18.6, SD=1.65$) whose equanimity, meaningfulness, and existential aloneness, concepts fundamental to the RS, (Wagnild, 2009) may not be as developed as those in an older sample, thereby accounting for the low RS scores. Perhaps the most similar comparator group to this unique sample would be RS scores for women in a battered women’s shelter, whose RS mean scores were 143.1 ($SD=24.0$) (Humphreys, 2003). This mean score is slightly lower than my sample but still in the “moderate” range. Although resilience scores may seem high in this sample ($M=143.92$), they are in line with similar samples in the literature.

We may still wonder why a population currently experiencing a level of trauma few people face in a lifetime would have high resilience? Several explanations are possible. First, resilience is not consistently measured empirically. Had a different resilience measure been used, it is plausible that different elements of resilience would have been captured and our participants may not have been labeled “resilient”. Currently, no empirical consensus exists regarding the measurement of the construct of resilience thus different studies tend to measure different aspects of resilience. Resilience is conceptualized and measured in the literature as a process (resources used to foster adaptation), a state (a cluster of psychological constructs including hope, optimism and self-efficacy), an outcome (the ability to “bounce back”), and most commonly (and as measured in this study), as a trait or a set of characteristics internal to the individual (Pangallo, Zibarras, Lewis, & Flaxman, 2015). Plausibly, had I used a resilience scale that focused on outcome rather than trait resilience, homeless participants may not have had high “resilience”. Second, it is possible that the study was accurate: participants were resilient and resilience scores reflect this. Developmental psychologists note that resilience is common in children growing up in adverse circumstances (Masten, 2001). Many of the participants in this study likely grew up in more poverty (and with more difficult family circumstances) than the average American, which may have ultimately led to their resilience and improved ability to cope in the face of extreme adversity as adults. A related explanation considers the hazards of life on Skid Row. As one might
expect, survival on Skid Row is difficult. Rather than coping with the sort of stressors researchers encounter in a typical day, homeless women on Skid Row are faced with levels of violence, crime, abuse, disease and other stressors quite unimaginable to housed individuals. They frequently engage in “survival sex”\(^8\) in order to ensure their subsistence level needs are met. These women in our study – particularly those who had spent a significant period of time living homeless on Skid Row – have survived in the face of these extraordinary hazards. It is plausible that our sample is, accordingly, largely composed of survivors: those individuals who have the resilience to weather the storm of environmental hazards on Skid Row and to survive with the wherewithal to avail themselves of social services (viz. a homeless shelter) and participate in a research study.

Finally, resilience might be more common than we believe. Bonano (2004) notes that the majority of individuals exposed to life-threatening events like the Los Angeles riots, Gulf War veterans, Manhattan residents following 9/11 and the North Sea Oil rig, do not go on to develop PTSD symptomatology (which suggests that they are resilient). While the studies cited all involve single event, time-limited stressors, it is plausible that the vast majority of individuals remain resilient in the face of chronic stressors too. Future research on resilience in the face of chronic stressors like homelessness is warranted.

### 4.4.3 Well-being

Apart from the relationships between well-being and the four attachment styles, individual well-being scores were high. Four possible explanations may account for this. First, high well-being scores may be attributable to self-selection bias. Study participants self-selected into the research, and it is possible that individuals who were feeling depressed did not participate as readily in the research. Moreover, plainly, those homeless women who are unable to cope with their current situations may be deceased through

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\(^8\) The term *survival sex* is used here to mean the exchange of sex for the basic necessities of life including shelter, money or drugs (Walls & Bell, 2011). Survival sex is contrasted with prostitution or commercial sex in that when a homeless individual engages in survival sex, the sex is not typically exchanged for cash and sex work is not the homeless individual’s profession.
suicide. It is also possible that both legal and illicit drugs may have contributed to participant moods, which might affect their self-report scores on well-being indices over the last two weeks. We did not collect data on drug use in Part Two of the study, but we know from Part One that at least half of the women were taking anti-depressant medication, which could have lifted their moods. As well, while obviously intoxicated participants could not participate in the research, we did not drug test nor specifically ask women if they were high. We discarded data from those women who reported being high or excluded them if they were not making sense, or showed obvious signs of impairment. We may have missed some intoxicated women who could have been on street drugs that lifted their moods without researchers detecting it, thereby affecting well-being scores.

It is possible that there was an effect from mood congruent emotional responding by participants. Researchers were trained to create a safe alliance with participants and were reminded of this throughout the data collection process. Many participants welcomed discussions with the researchers. Participants in our study are marginalized women who are largely invisible to others and do not often have the opportunity to reflect on their lives and share their thoughts with a willing listener. As a result, it is possible that the time spent with participants lifted the spirits of the homeless women such that they were not truly reflecting on the last two weeks of their life when they responded to the WHO-5 questionnaire. They were instead speaking about how they felt in the moment.

Finally, it is possible that this sample of homeless women genuinely experience high well-being. The essence of well-being is commitment, satisfaction or happiness that results from optimal functioning (McDowell, 2010). Importantly, well-being need not imply perfect functioning; it is subjective and relative rather than being an absolute concept. People judge their own well-being relative to their own aspirations, and their own subjective and objective reactions to their lives. If cycles of poverty in this sample behave as we might expect, women in this sample may have been reared in economic disadvantage and did not expect their own lives to look different from that model. Alternatively, participants may have escaped living situations that were so unsafe that
living in a shelter results in higher well-being and safety than their former living arrangements. A final possible explanation for the high well-being scores being accurate is that the homeless women in this sample may have psychologically adjusted to their circumstances, and changed their expectations of what life looks like for them and have come to accept a changed circumstance.

4.5 Limitations

As is typical in the attachment literature and in psychological research more broadly, self-report questionnaires were used in this study. It is unknown whether results would be replicated in observational studies. Though subjective well-being is measured most appropriately by self-report, it is unknown whether informant data (i.e. other shelter participants, significant others, children) on any of the variables considered in this study would produce the same results. Traumatization histories of this sample of homeless women were unknown, but tend to be high in homeless populations (for instance, see Easterbrooks & Graham, 1999; or Rew et al., 2001). Thus it may have been beneficial to find an attachment scale that captured disorganized attachment. Longitudinal studies would help to determine whether adult attachment style predicts well-being, as well as to distinguish between age and cohort effects which may have confounded results.

Research was conducted in Los Angeles. Therefore, caution must be exercised in generalizing the findings to other homeless populations. Results may not be generalizable to a variety of different populations with differing characteristics, including: sex (all of our sample was female and women encounter unique vulnerabilities to rape and assault that homeless men do not face); race (the majority of our sample included Black participants who are culturally different than Black Canadian homeless people given the history of American colonialism). Sample results may be more comparable to Canadian Aboriginal homeless people who have suffered the effects of racism and colonization via Residential Schools. As well, only individuals who were not actively psychotic could participate in the study. Results of study participants presenting as delusional were removed thus it may be that such individuals represent a larger proportion of homeless people than our sample suggests. Religiosity may be an important differentiating factor
that impacts both attachment style and well-being in our American sample as well. Many of the shelters we sampled from were affiliated with religious organizations, which may attract more religious women and/or may attract more women who feel they must profess religiosity to ensure shelter. As well participants in homeless shelters may have wished to show well-being and gratitude out of a belief that doing so would lead to favourable treatment by shelter staff or would ensure continued access to shelter services. Furthermore, the cross-sectional design of this study limits inferences about cause-and-effect relationship between well-being and attachment.

4.6 Clinical Implications

We conducted this basic research to inform clinical practice with homeless women. That the majority of homeless women in this sample have a dismissive attachment style is consistent with past research findings in similar homeless communities. Attachment style is an important clinical tool that may guide clinical psychologists’ conceptualizations of assessment and treatment of homeless women. Bowlby (1988) understood the relationship between therapist and patient as a secure base akin to the parent child bond from which the patient may grow. At a minimum, understanding how attachment styles might have evolved as adaptive for homeless women provides insight into treatment planning and approaches to care. While a discussion of the ways in which therapist attachment style may interact with patient care is beyond the scope of this thesis, the interaction of therapist-patient attachment styles may affect the therapeutic alliance and more importantly the outcome of therapy (Bucci, Seymour-Hyde & Harris, 2015). It is hoped that therapists will reflect not only on the attachment style of the homeless populations they serve but also how their own attachment styles may surface in their care of homeless women.

A study examining the attachment styles of bachelor’s- and master’s-level case managers and their clients with various psychopathology demonstrated that the security of the case manager appears to play an important role in the case manager’s ability to respond therapeutically to the needs of his or her clients (Dozier, Cue & Barnett, 1994). Securely attached case managers were able to respond to the underlying dependency
needs of dismissive clients whereas insecurely attached case managers were more inclined to address the surface needs of clients. Insecurely attached case managers were more likely to perceive greater dependency needs and to intervene more intensively with preoccupied clients than with dismissive clients. At a minimum, these findings point to the need for psycho-education of front line workers regarding the behaviours they might expect from homeless women, the feelings homeless women’s behaviours may stir in case managers, and how these transference-type feelings may be addressed to meet the apparent and underlying needs of this vulnerable group.

Clinical psychologists are competent to address the complex and interrelated psychopathology, trauma histories, and substance dependencies common in this population. Approximately 20% of American psychologists surveyed did assessments with homeless people or therapy with homeless people (24.2%) within the last year (American Psychological Association, Presidential Task Force on Psychology’s Contribution to End Homelessness. 2010). It is hoped that this research may add to the existing information used by American clinical psychologists interested in clinical work with this population.

4.7 Future Directions

The four variables studied in this research, namely attachment, emotion regulation, resilience and well-being each need to be used in research with homeless populations to create a robust empirical and clinical literature on this important, vulnerable, hard-to-reach, population. Each of these variables could be studied with homeless populations. To conclude, future research directions are suggested.

Self-report attachment measures rely on participants’ own ratings of their conscious feelings in close relationships. By contrast, the Adult Attachment Interview (AAI; George, Kaplan & Main, 1985) is a semi-structured participant interview that taps adult representations of attachment (i.e. internal working models) by assessing specific recollections from childhood. Rather than tapping into romantic attachment, the AAI taps a person’s state of mind regarding attachment in one’s family of origin. While most
of the attachment literature in homeless, clinical, and student populations favours the simplicity of self-report measures, use of the AAI to measure attachment status would add nuance to the attachment and homeless literature.

A related but important variable that surfaces repeatedly in the homelessness and attachment literature that warrants future investigation is social connectedness. As length of time without a home increases, homeless women can become increasingly marginalized, less trusting of others who may be able to help them, and therefore less able to exit homelessness. Framing research with attachment concepts as well as measuring social support of homeless women might be useful in planning how to “reach” homeless women and enable them to move beyond a victimized framework and empower them to take the risk of trusting in a service provider.

Anecdotally, a large proportion of homeless women in Part One of the study reported having lost an attachment figure during childhood. Similarly, recent work with homeless people in Los Angeles reported 69% of the sample lost a parental figure before age 18 to death, divorce, jail, or institutionalization (Shvarts, 2014). Shear and Shair, (2005) examine the concept of competence motivation (i.e. the loss of long-term goal orientation) that may arise in the context of bereavement. A viscous circle of negative emotion may result in which loss of competence motivation further increases attachment activation, thereby inhibiting engagement with the world and further increasing existing stressors. Loss of competence motivation may be useful as a model to inquire into the roles of bereavement and chronic homelessness.

Emotion regulation is a core concept to attachment theory and future research is encouraged with homeless people. If Karreman and Vingerhoets’ model were to be tested again on a homeless sample, two measures might be preferable to capture emotion regulation in this population as the items are short, concise and face valid. The Cognitive Emotion Regulation Scale (Garnefski, Kraaij, & Spinhoven, 2001), in particular the 20 questions measuring the constructs perspective taking, positive refocusing, positive reappraisal, acceptance and planning could be combined into a 25 item measure assessing reappraisal. To measure suppression in a homeless population in the future, two
subscales of the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) are suggested. The non-acceptance of emotional responses subscale has questions like: “When I’m upset I feel like I am weak”; and the lack of emotional awareness subscale has reverse coded questions like: “I pay attention to how I feel” and “When I’m upset I take time to figure out what I’m really feeling”. Combining the non-acceptance of emotions and lack of emotional awareness subscales could function together as a measure of suppression that may perform better in a vulnerable sample. The DERS, in particular, has performed well in a group of adult psychiatric inpatients with serious mental illnesses (Fowler, Charak, Elhai, Allen, Frueh & Oldham, 2014) and is sensitive to emotion dysregulation issues, which may be higher in marginalized populations.

Whether resilience is conceptualized as a trait, a state, a process, or an outcome, it tends to be conceptualized one dimensionally without taking into account situational factors or even within-person variation (i.e. an individual may be resilient in one circumstance but not in another). In a recent review of resilience scales, Pagnalino and colleagues (2015) urged researchers to use scales that measure resilience through an interactionist model. Such a model accounts for the way in which individual characteristics interact with situational factors. Given the constant vulnerabilities homeless women face in precarious housing situations, research taking into account environmental variables that may add to an individual’s resilience is urged.

Finally, the WHO-5 well-being index has been used with geriatric populations, with individuals with Type 1 and Type 2 Diabetes, and with individuals with Parkinson’s Disease. Given its brevity, simplicity, and validity as a screening tool for depression in a range of disorders, further research using this scale with homeless populations is encouraged.
References


*Jones v. City of Los Angeles, 444 F.3d 1118, 1123* (9th Cir. 2006).


Appendices

Appendix A: Pictures of Skid Row, Los Angeles
Appendix B: Telephone Script for Homeless Shelter Recruitment

Telephone Script for Recruitment

Hello, may I please speak with [insert the name of the shelter Executive Director/Senior employee here].

*If the potential ED/Senior employee is not available ask if there is a better time to call. Do not leave a message as it may be a confidential matter you are calling about that may not be apparent to you*

*If they are available, continue with the conversation*

Hi, [insert the name of the ED/Senior employee here] this is [Stephanie Montgomery-Graham or Joseph Varenese] calling from [the office of Dr. Peter Hoaken at Western University in London, Ontario, Canada].

I am calling today to ask if you are interested in a research study that we are conducting. The study is being overseen by Dr. Peter Hoaken and is being conducted by his graduate student, Stephanie Montgomery-Graham. This research project seeks to understand the ways in which homeless people overcome trauma and cope with significant obstacles in their lives. If you think any of your clients might agree to participate in this survey, we will ask them to fill out a survey either on their cell phones or on a laptop computer that we will provide your clients with. The survey will take approximately 25-30 minutes to complete. We are interested in understanding your clients’ thoughts about their current relationships with other people as well as the ways in which your clients cope with stress. Would you be interested in hearing more about this study?

*If no, thank them for their time and say good-bye*

*If yes, continue to explain the study details to them based on the letter of information*

I am now going to read you the letter of information over the phone [Clearly read the letter of information the participant over the phone]
Do you have any questions?

[Answer any questions they may have]

Do you agree to participate in this study?

*If yes, continue with the study

*If no, thank them for their time and say good-bye
Appendix C: Email Script for Homeless Shelter Recruitment

[WESTERN UNIVERSITY LETTERHEAD]

Re: A Study: Resilience and well-being in the lives of homeless women

Dear [insert contact name here],

I am contacting you on behalf of Dr. Peter Hoaken (Psychology) of Western University in London, Ontario, Canada, as a member of the research team. His graduate student, Stephanie Montgomery-Graham is conducting research on homelessness and resilience for her graduate thesis. Her study is part of a research project, funded by Western University’s New Research and Scholarly Initiative Award, to develop insight into the means by which homeless men and women, who have faced various forms of adversity in their lives, develop resilience. In essence, this research project seeks to better understand how early childhood experiences with one’s caregivers influence well-being in adult life, with particular attention being paid to how adults regulate their feelings, as well as cope with and overcome setbacks. We have two goals with respect to the research we will be conducting: first, the results of this study will become a written graduate psychology thesis; second, our goal is to use the knowledge gained from homeless peoples’ experiences in order to inform programs, policies and best practices aimed at assisting individuals in empowering themselves to move beyond past and present obstacles and transition out of homelessness.

We will be conducting this research in two phases. First, we will conduct a pilot study consisting of approximately 15 interviews with men and women in London, Ontario. This pilot study will help us to test our questions and ensure that we are asking the right things. The second phase of the study will be conducted in Los Angeles with approximately 200 participants.

What we are seeking from your organization is a willingness to participate in the study. Participation entails allowing us to visit your facility – on a mutually agreeable day and time – and ask your clients to complete a survey in a space you have available within your facility. We have 3-5 researchers available to meet one-on-one with 3-5 of your clients, at a time. Ideally, we would ask that our researchers and your clients be put in a large quiet space so they can work together (in pairs of 3-5 researchers and clients). Your clients will be asked to fill out a survey. We would ask to meet with your clients for no longer than 30 minutes and confidentiality will be respected. All participants will be provided anonymity (i.e. we will not be collecting, recording or publishing identifying information of any participant or participant organization). All interviewees will be compensated in the form of a $10 gift card from either Walgreen’s or McDonald’s.

Ideally, we would like to conduct pilot interviews in London in early February 2014. We are hoping to schedule interviews in Los Angeles from mid to late May 2014.
I have attached a copy of the letter of information that provides more details about the study. If you have any questions about this research, please do not hesitate to contact me. My email is XXXX. You can also feel free to contact Professor Hoaken XXXX. We can also be reached by phone at XXXX.

Yours very truly,

Stephanie Montgomery-Graham
Appendix D: Reminder Email for Homeless Shelter Recruitment Script

Subject Line: Invitation to participate in research

An email was sent to you [indicate how long ago it was sent] ago and we wanted to send you a quick reminder about our study.

Our research project seeks to identify the means by which homeless people overcome trauma and cope with significant obstacles in their lives. If your clients agree to participate in this survey, we will ask them to fill out a survey that we will provide your clients with. The survey will take approximately 25-30 minutes to complete. We are interested in understanding your clients’ thoughts about their current relationships with other people, their feelings of well-being, as well as the ways in which they cope with stress.

If you would like more information about this study, please see the attached Letter of Information. Please feel free to contact the researcher at your convenience at the contact information given below should you wish your clients to participate in this research.

Yours very truly,

Stephanie Montgomery-Graham, LL.M.
Appendix E: Shelter Participant Recruitment Script

Introduction Script for Recruitment (for homeless participants)

Hi everyone, my name is Stephanie and we’re here today from Canada because we’re conducting a study on women who use homeless services overcome obstacles in their lives. We want to know more about your personal strengths, family and friends’ support, and how you cope with stress so that we can figure out what works and what doesn’t and how to build on what does.

Just so you know, if you choose to participate, we’re asking you to fill out our survey. We do not need your name, and we don’t share any of your survey responses with anyone else, including [insert name of agency here]. Whether you choose to participate, or even to ask us some questions about what we’re doing, is entirely up to you, no pressure from us or from [insert name of agency here]. This survey has nothing to do with your services here other than [insert name of agency here] was kind enough to let us in.

We’re just going to hang out here for a while and if you have any questions, you can come up to anyone of us – you get your pick! – and we’ll be happy to answer them for you.

Let me turn it over to everyone else to introduce themselves.

Hi, I’m [Stephanie/Hilary/Joe]
Appendix F: Attachment Relationships Questionnaire, Part One

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.
Appendix G: Relationships Questionnaire Likert Scale
Appendix H: WHO-5 Well-being Scale
Appendix I: Letter of Information

ATTACHMENT, RESILIENCE AND WELL-BEING IN THE LIVES OF HOMELESS PEOPLE

INVITATION TO PARTICIPATE

You are being invited to participate in a program of research being conducted by Clinical Psychology Graduate Student, Stephanie Montgomery-Graham, and supervised by Clinical Psychologist and Professor of Psychology, Dr. Peter Hoaken, both of whom are from the Psychology Department at Western University in London, Ontario, Canada (tel: XXXX; email: XXXX and XXXX).

PURPOSE OF THE LETTER

The purpose of this letter is to provide you with the information required for you to make an informed decision regarding participation in this research.

PURPOSE OF THE RESEARCH

This research project seeks to identify the means by which homeless people overcome trauma and cope with significant obstacles in their lives. If you agree to participate in this survey, we will ask you to fill out a survey either on your cell phone or on a laptop computer that we will provide you with. The survey will take approximately 25-30 minutes to complete. We are interested in understanding your thoughts about your current relationships with other people as well as the ways in which you cope with stress. Through these surveys we will address the following important research questions:

1. How do homeless peoples’ past relationships influence their well-being?
2. To what extent do resilience and emotional regulation influence the relationship between past relationships and well-being in a vulnerable population?
3. How does social connectedness interact with a person’s well-being, within their significant attachment relationships and how they regulate their emotions?

PURPOSE OF THE STUDY

Our overall purpose of the study is to identify existing strengths that can be built upon, as well as gaps in existing services, in order to develop programs, policies and ‘best practices’ to help homeless people address issues they face.
We will be conducting interviews with 200 homeless people in the greater Los Angeles area, who are using the services of a homeless service agency. Participation in this study is voluntary. Any one may refuse to participate, refuse to answer any questions or withdraw from the study at any time.

INCLUSION CRITERIA

In order to participate in this study we are looking for participants who are 18 years of age or older and are accessing services for homeless people. We are seeking participants who are “lucid”. By this we mean who are sober, not currently on drugs or under the influence of alcohol or actively delusional as a result of a mental illness.

EXCLUSION CRITERIA

Individuals who:

- are under 18 years of age
- cannot communicate with us in English
- are currently on illicit drugs or inebriated following drinking alcohol
- have active delusions making it hard for them to understand reality

are not eligible to participate in this study.

STUDY PROCEDURES

The research will begin with a discussion of what the purpose of the research is, the consent process, and any questions and/or concerns that you have. Then, once you are satisfied that you wish to participate, and have provided your electronic consent, either Dr. Peter Hoaken, Stephanie Montgomery-Graham, Joseph Varanese, or Hillary Pelladeau will ask you to complete a survey. The survey will take place in the facility at which you have been contacted. After you complete the survey, we will spend some time, as long as you wish to, discussing the survey, the research project, and any other questions or concerns that have arisen for you. We will also provide you with information about how to find out more about the study and tell you who we will be sending our follow up information to at the shelter you’re staying at in case you would like to read the results of the study.

All of the information you provide in the survey will be treated with strict confidence. Your data will be identified only by matching code numbers to your survey answers. We will not ask to collect your name or date of birth, or any other identifying information.

Service provider identities will be known by the researchers (as we are the ones contacting them and arranging interviews). However, their identities will be treated confidentially by us, and no identifying information will be revealed in any published work.
POSSIBLE RISKS AND HARMS

There is a risk of discomfort and disturbance from a process that includes some self-examination. If you experience any sense of unease during the survey process, you may stop taking the test and you may withdraw your consent at any time without penalty and/or accept the offer of confidential counseling through a local service agency to deal with any unsettling feelings that may have arisen.

POSSIBLE BENEFITS

The benefits of this research are both personal and societal. Some individuals appreciate the opportunity to share their insights that might help others in the future.

The expected benefit for society is the creation of knowledge that will help policy-makers and community organizations provide improved services to homeless citizens, who might need assistance with moving past traumas and present obstacles.

COMPENSATION

We will provide you with a $10 gift voucher for either Walgreen’s or McDonald’s (your choice) to thank you for your time.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your ability to reside at [shelter name].

CONFIDENTIALITY

All data collected from you will remain confidential and accessible only to the investigators of this study. If the results are published, your name will not be used. If you choose to withdraw from this study, your data will be removed and destroyed from our database.

While we will do our best to protect your information there is no guarantee that we will be able to do so. Having said that, however, we are not collecting any personal information from you (i.e. your date of birth or your email address). It is unlikely but possible that representatives of The University of Western Ontario Health Sciences Research Ethics Board may require access to your study-related records to monitor the conduct of the research.
CONTACTS FOR FURTHER INFORMATION

If you have any questions about your rights as a research participant or the conduct of this study, you may contact:

Locally: [insert name of Executive Director of relevant Shelter (or knowledgeable contact person) with whom Stephanie Montgomery-Graham will have left information about the study and all of her contact information]

Canada:       The Office of Research Ethics
Tele:          XXXX
email:         XXXX in Canada.

PUBLICATION

If the results of the study are published (including in a written thesis), your name will not be used. If you would like to receive a copy of any potential study results, please contact one of the two listed sources above.
Appendix J: Consent Form

Date: __________________________

Signature: __________________________

I agree to participate in this study. I have seen the Letter of Information, and had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

I understand that I do not waive any legal rights when I sign this document.

I understand that my name and personal information is not being collected.
Appendix K:

Ethics Approval December 2013 for Los Angeles May 2014

Documents Reviewed & Approved for Information:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Comments</th>
<th>Version Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>Reference Sources cited in BOMED analysis</td>
<td></td>
</tr>
<tr>
<td>Recruitment Items</td>
<td>Shelter Participant Recruitment Script</td>
<td></td>
</tr>
<tr>
<td>Recruitment Items</td>
<td>Reminder to Hamilton House - Travel Information</td>
<td></td>
</tr>
<tr>
<td>Recruitment Items</td>
<td>Recruitment Telephone Script for Homeless Shelters</td>
<td></td>
</tr>
<tr>
<td>Recruitment Items</td>
<td>Hamilton Status - Contact Email</td>
<td></td>
</tr>
<tr>
<td>Agreement Notice</td>
<td>REB Approval Notice 10354.R1</td>
<td>February 2013</td>
</tr>
<tr>
<td>Instrument</td>
<td>The Relationship in Close Relationships - Revised Questionnaire</td>
<td></td>
</tr>
<tr>
<td>Instrument</td>
<td>W.H.O. Well Being Index</td>
<td></td>
</tr>
<tr>
<td>Instrument</td>
<td>Emotional Regulation Questionnaire</td>
<td></td>
</tr>
<tr>
<td>Instrument</td>
<td>Relationships Questionnaire</td>
<td></td>
</tr>
<tr>
<td>Western University Protocol</td>
<td></td>
<td>2013/11/09</td>
</tr>
<tr>
<td>Other</td>
<td>Further description of team member bios</td>
<td>2013/11/02</td>
</tr>
<tr>
<td>Revised Letter of Information &amp; Consent</td>
<td>Revised language comparing original LOR and revised LOR. Revised in accordance with REB comments.</td>
<td>2013/11/02</td>
</tr>
<tr>
<td>Other</td>
<td>Blacklist of revised Consent Form adding language requested by the REB.</td>
<td>2013/11/02</td>
</tr>
<tr>
<td>Instruments</td>
<td>Resilience Scale</td>
<td></td>
</tr>
</tbody>
</table>

This is to notify you that The University of Western Ontario Research Ethics Board for the Medical Research involving Human Subjects (REB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans and the applicable laws and regulations of Ontario has granted approval to the above named research study on the approval date noted above.

This approval shall remain valid until the expiry date noted above assuming timely and acceptable responses to the REB/REBs periodic requests for surveillance and monitoring information.

Members of the REB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussions related to, nor vote on, such studies when they are presented to the REB.

The Chair of the REB is Dr. Ray Hinton. The REB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB-20030203.

This is an official document. Please keep the original in your files.
Appendix L: Brief Demographic Questionnaire

Demographic Questionnaire

Researcher initials: _________

Participant number: ________

Shelter ID Number: _________

1. Ethnicity

<table>
<thead>
<tr>
<th>Black</th>
<th>White</th>
<th>Hispanic</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
</table>

2. What year were you born? __________

3. How many times have you been homeless as an adult? __________

4. I was homeless as a child? Yes/No

5. Current relationship status:

<table>
<thead>
<tr>
<th>Single</th>
<th>Married</th>
<th>Divorced</th>
<th>Widowed</th>
<th>Dating</th>
</tr>
</thead>
</table>
Appendix M: Relationships Questionnaire

I’m going to read you a statement and I want you to tell me if it sounds like you or not and then point to the number on the scale that most makes sense to you.

_____ A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don’t worry about being alone or having others not accept me.

_____ B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

_____ C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them.

_____ D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Now please rate each of the relationship styles above to indicate how well or poorly each description corresponds to your general relationship style.
Appendix N: Emotion Regulation Questionnaire

Emotion Regulation Questionnaire (ERQ)

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1------------------2------------------3------------------4------------------5------------------6------------------7

Strongly Disagree Neutral Strongly Agree

1. ____ When I want to feel more positive emotion (such as joy or amusement), I change what I’m thinking about.

2. ____ I keep my emotions to myself.

3. ____ When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about.

4. ____ When I am feeling positive emotions, I am careful not to express them.

5. ____ When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.

6. ____ I control my emotions by not expressing them.

7. ____ When I want to feel more positive emotion, I change the way I’m thinking about the situation.

8. ____ I control my emotions by changing the way I think about the situation I’m in.

9. ____ When I am feeling negative emotions, I make sure not to express them.

10. ____ When I want to feel less negative emotion, I change the way I’m thinking about the situation.
Appendix O: Revised Resilience Scale

With this scale, I will read you a statement and I’d ask you to point to the scale to show me whether you agree or disagree and how much.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I make plans, I follow through with them.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. I usually manage one way or another.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. I am able to depend on myself more than anyone else.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4. Keeping interested in things is important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5. I can be on my own if I have to.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6. I feel proud that I have accomplished things in life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7. I usually take things in stride.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8. I am friends with myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9. I feel that I can handle many things at a time.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10. I am determined.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>11. I seldom wonder what the point of it all is.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

The Western Non-Medical Research Ethics Board required us to remove the mandatory language at the beginning of the Resilience Scale, which mandated that participants answer all questions. Note too: while we collected data on all scale items, for the sake of improved internal consistency we removed item 11 (as discussed in the Methods section) as the word “seldom” was unknown to many participants.
<p>| | | | | | | | |</p>
<table>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I take things one day at a time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. I can get through difficult times because I've experienced difficulty before.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14. I have self-discipline.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15. I keep interested in things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16. I can usually find something to laugh about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17. My belief in myself gets me through hard times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>18. In an emergency, I'm someone people can generally rely on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>19. I can usually look at a situation in a number of ways.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>20. Sometimes I make myself do things whether I want to or not.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>21. My life has meaning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22. I do not dwell on things that I can't do anything about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>23. When I'm in a difficult situation, I can usually find my way out of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>24. I have enough energy to do what I have to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>25. It's okay if there are people who don't like me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix P: WHO-5 Well-being Scale

This is the last scale and it is different again. It starts at 0 (which means; “at no time or never do I feel that way”) to 5 (which means “I feel that way all of the time”).

I am going to read you a statement and I’d like you to show me which of the numbers on the scale best explains how you have been feeling over the last 2 weeks:

<table>
<thead>
<tr>
<th></th>
<th>Over the last two weeks</th>
<th>All of the time</th>
<th>Most of the time</th>
<th>More than half of the time</th>
<th>Less than half of the time</th>
<th>Some of the time</th>
<th>At no time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have felt cheerful and in good spirits</td>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
<td>□ 0</td>
</tr>
<tr>
<td>2</td>
<td>I have felt calm and relaxed</td>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
<td>□ 0</td>
</tr>
<tr>
<td>3</td>
<td>I have felt active and vigorous</td>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
<td>□ 0</td>
</tr>
<tr>
<td>4</td>
<td>I woke up feeling fresh and rested</td>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
<td>□ 0</td>
</tr>
<tr>
<td>5</td>
<td>My daily life has been filled with things that interest me</td>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
<td>□ 0</td>
</tr>
</tbody>
</table>
Curriculum Vitae

Name: Stephanie Montgomery-Graham

Post-secondary Education and Degrees:
Masters of Science, Clinical Psychology
Western University
2013-2015, London, Ontario, Canada

Bachelor of Arts, Psychology
King’s College University
2011-2013, London, Ontario, Canada

Master of Laws, Human Rights and Employment Law
Western University
2004-2005, London, Ontario, Canada

Bachelor of Laws
Osgoode Hall Law School
1997-2000, Toronto, Ontario, Canada

Awards:
Canada Graduate Scholarship, Social Sciences and Humanities Research Council, (CGSM-SSHRC)
2014-2015 ($17,500)

Western Graduate Research Scholarship, 2014-2015, Western University ($4650)

Ontario Graduate Scholarship, 2014-2015 ($15,000) (declined)

Ontario Graduate Scholarship (OGS), Western University, 2013-2014 ($15,000)

Western Graduate Research Scholarship, Western University, 2013-2014 ($1800)

Dean’s Honour List, King’s University College, 2012-2013

Canadian Psychological Association Foundation Student Grant for undergraduate Honours Thesis research, December 2012 ($1000)

Dr. Jaroslav Havelka Memorial Scholarship for academic achievement and community involvement, King’s University College, November 2012, ($400)
King’s University College Continuing Scholarship, 2012-2013, ($1500)

Deans Honour List, King’s University College, 2011-2012

Special University Entrance Scholarship - Law, Western University, 2004 ($5000)

Fogler, Rubinoff Prize (Law), Osgoode Hall Law School, 1998 ($500)

Clifton H. Lane Prize (Law), Osgoode Hall Law School, 1998 ($500)

Highest graduating average in Political Science Master of Arts, Western University, 1997

Western Graduate Entrance Scholarship, Western University, 1996 ($1500)

**Publications:**


**Peer Reviewed Presentations**


October 2014. “A Thematic Analysis of Lay Sources of Pornography How the Discourse is at Odds with Current Research”, 46th Canadian Sex Research Forum Conference, Kingston, Ontario

Invited Lectures:

- March 2015. “Qualitative Field Research on the ‘Skid Row’ District in Los Angeles”. Presentation to an Honours Qualitative Methods of Sociology undergraduate class
- February 2015. “Sexual and Emotional Abuse in Indian Residential Schools”. Presentation to 205 undergraduate psychology students in Dr. William Fisher’s Human Sexuality class
- February 2014. “Sexual and Emotional Abuse in Indian Residential Schools”. Presentation to 550 undergraduate psychology students in Dr. William Fisher’s Human Sexuality class

Employment:

- Cohen Highley LLP (Full service London law firm)
  Lawyer (litigation, dispute resolution, class actions)
  2008-2011, London, Ontario
- Heenan Blaikie LLP (Full service Toronto law firm)
  Lawyer (litigation, dispute resolution, employment law)
  2005-2007, Toronto, Ontario, Canada
- Torys LLP (International Corporate law and litigation firm)
  1999-2005 Summer Student, Law Student, Lawyer (corporate practice, employment law)