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AN EXAMINATION OF HOMELESSNESS FROM A STRESS PERSPECTIVE

SUSAN JANE FARRELL

**A thesis submitted to the School of Graduate Studies of the University of Ottawa
as partial fulfillment of the requirements for the degree of Doctor of Philosophy**

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Abstract

Previously, models of homelessness have not described how persons dealt with the stressful experience of being homeless. This study examined the adequacy of a transient stress model, developed by the integration of Moos and Schaefer's (1993) Integrated Framework of Stress and Coping and Dohrenwend's (1978) Social Stress Model, to understand the experiences of persons who are homeless. The model illustrates what factors contribute to a person's well-being in the context of experiencing the crisis of being homeless. Specifically, personal factors (personality characteristics, sex, past experiences of homelessness, personal empowerment and approach-style and avoidance-style coping responses) and environmental factors (perceived social support and social network size) were examined in terms of their association with the occurrence of stressful life events and the appraisal of, and response to, the stress associated with being homeless. Stress appraisal and stress response were then used to predict levels of psychopathology and subjective well-being. Interviews were conducted with a sample of 200 persons who used emergency shelters and with a convenience sample of 30 persons who used community services but slept elsewhere. The final model demonstrated that personal and environmental factors played a role in the occurrence of stressful life events and stress response, but that only personal empowerment and stress response were directly associated with levels of well-being and psychopathology. The addition of qualitative responses provided more information about individuals' processes of coping with being homeless, as explained in their own words. Moreover, it allowed for the examination of differences between groups, defined by sex and age in their reporting of stressful life events, coping responses, social support, personal empowerment and stress

appraisal. Unlike previous models of homelessness, this model demonstrated the importance of personal and environmental factors in the occurrence of stressful life events and the subsequent stress reaction and reports of well-being and psychopathology.

Dedication

This thesis is dedicated to C. M., a man who was homeless when I met him in October 1997 while I was completing a needs assessment of services for persons who were homeless in Ottawa-Carleton. In discussing my interest in understanding the lives of persons who are homeless and my search for a dissertation topic, Mr. M. wisely said to me, “why don’t you just ask people what it’s like and how they cope with it?” From him came this project and, in return, my eternal thanks. Mr. M. did not live long enough to see the completion of this work, but it is my hope that his spirit and struggle to survive on the street are reflected in these pages.

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Homelessness is a critical social issue in Canada about which relatively little is known. "Homelessness is a major national problem, but the exact extent of the problem is difficult to determine...because the homeless are not a homogenous category of people" (Breakey & Fischer, 1990, p. 31). Inherent in understanding the extent of the problem is understanding the many aspects of the issue. First, the definition and scope of the problem must be clarified. Second, the experiences of those who are homeless must be understood, and third, the impact of such experiences on persons who are homeless must be appreciated. This study is designed to address the experiences of persons who are homeless by testing a transient stress model in an attempt to predict what factors serve to predict a person's well-being in the context of experiencing the crisis of being homeless.

1.1 Historical Perspective on the Definition of Homelessness

Researchers have made the distinction between the "old" and "new" homeless populations by suggesting that the persons who were homeless at different times in history have been very different from one another. Research on persons who were homeless in the 1920's focused on "hobohemia" where concentrations of single men who lived in rooming houses with transitory employment were considered homeless because they lived outside of normal family life. In fact, "without a place and a family to live with, a man was homeless" (Shlay & Rossi, 1992, p. 13). In the 1930's the homeless population was often considered undistinguishable from others suffering from the effects of the Great Depression, and then the start of World War II reduced the number of people considered to be "homeless", as many were enlisted for military service or related duties (Hopper & Hamburg, 1984). In the 1950's to the 1970's, as the urban centres of central cities

were being developed, the emergence of “skid row” appeared in many cities. At that time, homelessness was still associated with living outside family units, and “skid row” was conceptualized as being populated by alcoholic old men (Bahr & Caplow, 1974; Baum & Burnes, 1993). The “skid row” areas of large urban centres, were concentrated in particular neighborhoods in which “homeless” persons typically had some shelter, and only a few were literally sleeping in the streets (Rossi, 1990). However, this degree of relative housing, albeit in poor conditions, did not provide an introduction to the end of homelessness, but instead, was the beginning of what is now termed the “new homelessness” that began in the 1980's.

Homeless persons described post-1980 are perhaps not all that new, but are termed “new” because the 1980's marked the first time that social science researchers began to appreciate the diversity of the homeless population, and the magnitude of the problem (Rossi, 1990). With the continued urban renewal and expansion of downtown areas, “skid rows” were shrinking in size, and could no longer provide shelter for the majority of persons who were homeless. The lack of available temporary housing for persons considered homeless meant that the “new” homeless population could be seen sleeping in public shelters, or without any shelter at all. Perhaps the most striking difference between the “old” and “new” homeless populations was the appearance of women in the “new” homeless population. As Rossi (1990) notes, “the skid rows of the 1950's and 1960's were male enclaves; very few women appeared...and thus, homelessness had come to be defined (or perhaps stereotyped) as largely a male problem” (p. 956). From the late 1970's through to the 1990's, the occurrence of a “new” homeless population, which included both males and females who had either inadequate shelter, or a complete lack of shelter, necessitated a new

conceptualization of who comprised the homeless population, and a new definition of homelessness. The first international definition of homelessness was put forth by the United Nations for the International Year of Shelter for the Homeless in 1987, differentiating between absolute homelessness (victims of disaster) and relative homelessness (people whose homes do not meet UN standards) (United Nations, 1987, as cited in Rossi, 1989). These broad definitions were difficult to operationalize, and thereby limited the feasibility of investigations of the numbers of persons who were homeless in the United States (Wright, 1989). In examining the incidence and prevalence rates of homelessness, estimates are plagued by both imprecise definitions and incomplete counting strategies.

1.2 Incidence and Prevalence Rates of Homelessness

“Estimating how many people are homeless is exceedingly difficult, for reasons both methodological and conceptual” (Breakey & Fischer, 1990, p. 32). Conceptual difficulties have been alluded to by the historical changes to definitions of who comprises the homeless population. To use definitions of the homeless population from the 1950’s and 1960’s would be to exclude women, children and elderly persons who are now experiencing homelessness as a result of inadequate housing, low social subsidies, or other precipitating factors. To include persons who are housed, but in inadequate conditions, is to combine two seemingly different groups, the homeless and the housed poor, and to erroneously assume that all experiences of living in poor housing or no housing are comparable (Toro et al., 1995). Therefore, each estimate of the number of persons who are homeless for a given area must consider the inclusion criteria of those counted.

“Counting the homeless has proven to be an arduous task” (Perssini, McDonald & Hulchanski, 1996, p.1). As Bentley (1995) noted, beyond the definition of the population, counting strategies are compromised by issues such as: statistical rarity (recent prevalence rates indicate that homelessness affects 0.1 to 1.5% of the population, so sampling is either expensive or has to be done in areas of concentration); identification (homelessness is not immediately observable, and some persons may not wish to disclose that information); transience and turbulence (experiences of homelessness can vary by duration); geographical concentration (not distributed uniformly in the community) and possible communication difficulties (including co-operation, and mental health status and/or substance use). In considering these limitations to enumeration, general approaches to counting persons who are homeless have often included: survey or expert opinion, relying on published reports, shelter or street counts (both on-going and single night counts), descriptive information from shelter records, number of arrests or observations by police, personal observation, and market and socio-economic indicators (Applebaum, 1989; Bentley, 1995; Burt, 1992). Difficulties with these approaches include reliance on the opinion of others, be they police officers, members of advocacy groups or service providers, or relying on the adequacy of shelter records, counting only “visible homelessness” or assuming that economic indicators are predictive of the etiology of homelessness. Sampling methods often rely on probability street sampling, snowball sampling, or tracking studies, all of which are compromised by the above-mentioned issues of the diversity, transience, and the identification of persons to be counted.

1.3 Estimates of Homeless in the United States

Despite these methodological limitations, counts to estimate the prevalence rate of homelessness have been attempted. Direct estimates have been attempted in certain cities by taking censuses of people in shelters combined with those on the streets. For example, a block sampling strategy in Chicago in 1987 produced an estimate of 2,722 homeless persons which varied from earlier higher estimates gathered from indirect methods (Rossi, Fisher & Willis, 1987). In Virginia, Bromley and his colleagues (1989) used block sampling in both urban and rural areas to estimate a prevalence rate for homelessness in the state of 0.1%. Robinson (1985) estimated 6,454 homeless persons in the District of Columbia by using block sampling and an additional number assumed to count as a "correction" for the proportion of homeless persons who were estimated to have evaded counting. All of these estimates are cross-sectional and only provide an estimate at a particular point in time. Cowan (1988; as cited in Breakey & Fischer, 1990) used a capture-recapture method in which several cross-sectional samples were drawn and an estimate of the true size was drawn averaging multiple estimates. For example, in Baltimore, 1300-1500 persons were estimated to be homeless, although on any given night the shelter count was 535 persons. An important limitation of this method includes the assumptions regarding the homogeneity and stability of the population being estimated.

National estimates, although plagued with even more methodological problems (such as sampling locations and size of catchment areas), have been attempted. The United States Department of Housing and Urban Development in 1984 estimated that there were 250,000-350,000 homeless persons in the United States (Bentley, 1995). Therefore, whereas some

national-level estimates have been attempted, they have a large range, were conducted over a decade ago, and do not reflect the magnitude of the problem in Canada.

1.4 Estimates of Homelessness in Canada

American estimates, as well as certain counting strategies used in the United States, cannot be easily transferred to the Canadian context for estimating the size of the homeless population. Counting strategies that involve social service use (e.g. domiciliary hostels, soup kitchens, welfare offices) reveal different estimates for each country, not only because of the difference in each nation's population, but also because of the differences in the "social safety net" provided by each country. The "social safety net" is reported to be a small and fragmented system for persons in the United States, particularly those persons who are homeless (McChesney, 1992). Daly (1996) reports that in the United States, national workfare initiatives and decreasing state responsibility for social programs provides less per capita provision of social services than in Canada, where the "safety net" is created by federal, provincial and local levels of government, with involvement from the voluntary sector. Therefore, estimates based on shelter beds or other service use would be differentially representative between the United States and Canada.

In Canada, "there appears to be no research initiative on measuring the extent of either literal or acute homelessness approaching the scale of investigation in the United States" (Bentley, 1995, p. 46). In fact, few national estimates are available. Heilman & Dear (1988; as cited in Bentley, 1995) estimated that on any given winter night in 1987, 20,000 to 40,000 persons were homeless in Canada (a rate of 0.1 to 0.2% of the total population). In 1987 McLaughlin reported the availability of 13,797 shelter beds in Canada, suggesting that many persons who are homeless

are not receiving services or shelter. O'Reilly-Fleming (1993) suggests that those estimates are "conservative", and suggests that the homeless population is growing in both size and diversity. The diversity from the previous American conceptualizations of the homeless population has been challenged for many years in Canada. In the early 1980's, the Metro Toronto Planning Department found that 36% of the counted group (which was 3,400 persons) did not fit the "skid row" stereotype, either because they were women and/or under 25 years of age (as cited in Bentley, 1995). Despite the limitations in the definition and estimates of persons who are homeless, findings consistently report that the problem is increasing in magnitude (Jones, Levine & Rosenberg, 1991). For example, Dail (1993) reported that the projected rate of increase for the number of homeless persons in the United States was 24% per year. Findings also reveal that the stereotype of who is homeless is being challenged by the emergence of many diverse populations experiencing homelessness. Understanding the experiences of being homeless among this diverse population remains a challenge for researchers.

2.0 Models for Understanding the Experiences of Persons who are Homeless

There is a large body of literature available on the reactions to, the possible causes of, and the results of homelessness. What is limited in this available literature is the presentation of models for understanding the experiences of persons who are homeless. Therefore, in order to select relevant research for discussion, only literature related to models (either empirical or theoretical) of homelessness will be reviewed. Parameters of the literature search included articles listed in PsychInfo and SocioFile, and models reviewed in available books. Additional research findings will be discussed in related to the transient stress mode proposed for the study.

In an attempt to understand the experiences of persons who are homeless, a variety of models have been proposed. Broadly defined, these include models based on demographic characteristics of the homeless population, classification models, antecedent or pathway models and psychological models.

2.1 Models based on Demographic Characteristics

Models based on demographic characteristics often involve comparisons between groups of persons who are homeless. For example, Roorda (1995) suggests that older homeless persons have more physical health problems and have an increased probability of victimization from others compared to younger persons who are homeless. Differences are also proposed on the basis of ethnic origin. First and his colleagues (1988) in a study of the homeless population in Ohio, found that there was an over-representation (compared to the total population of Ohio) of homeless persons who were black, and that this sub-group were also younger, had less social support, had higher rates of psychiatric symptomatology, and had higher rates of unemployment than white homeless persons.

The most frequent comparison made between experiences of persons who are homeless is between males and females. In the initiation of a case management program for persons who were homeless in Toronto, no initial differences were found between the experiences of men and women who were homeless (Goering et al., 1992), however many other studies report differences, be they in pathways to homelessness or in the prevalence of other life experiences. A higher proportion of women were found to have been exposed to battery (91%), rape (56%), mental distress and having a smaller social support network than men (Fisher, Hovell, Hoftetter,

& Hough, 1995). Coston (1989) suggested that of the four “types” of homeless persons in New York (those who are homeless full-time, those with some temporary shelter part-time, those with mental illness and those fleeing situational violence), women were most likely to be “situational shopping-bag ladies” (p.166), suggesting that they were fleeing violent domestic situations. North and Smith (1993) outlined the differences between homeless men and women in St. Louis by reporting that homeless women were younger, were more likely to be a member of an ethnic minority group, were more dependent on social assistance, had spent less time homeless, had lower rates of substance abuse and involvement with the legal system, and were more likely to have children in their custody.

Homeless women with and without children have also been compared in an attempt to understand the experiences of homeless families. LaVesser, Smith & Bradford (1997) reported that in the US, the fastest growing group in the homeless population is families with dependent children. Estimates of the proportion of the homeless population made up by homeless families ranges from 20% (Bassuk, 1987) to 39% (LaVesser et al., 1997). In a contrast of homeless single women, single men and women with children, Burt and Cohen (1989) found that homeless women with children were usually homeless for shorter periods of time (averaging 15 months as compared to 34 months for women without children or 43 months for men), that fewer of them had psychiatric hospitalization histories, fewer had involvement with the legal system and that they spent more of their time sleeping in emergency shelters while homeless.

Bassuk (1987) reported that the “typical” homeless family in Boston was: female-headed, with 2.4 children (most of whom are pre-school age), receiving social assistance in 90% of all

cases, and that the family had experienced a long pattern of residential instability, family violence or an absence of supportive relationships. Children in these families were reported to have severe developmental lags (compared to age-matched peers), and to have a higher incidence of symptoms of anxiety and depression.

Low levels of school performance in children from homeless families was also reported by Timberlake (1994), who also noted delays in their psychosocial adjustment and peer relations believed to be a function of having difficulty coping with the concept of self as homeless. Rabideau and Toro (1997) noted that homeless children had higher rates of behavior problems and depression than an age-matched community sample. Other concerns for homeless children include higher incidence rates of health problems, poor nutrition, developmental delays, academic underachievement, anxiety, depression and behavioral problems than those of age-matched housed peers (Rafferty & Shinn, 1991).

In sum, models based on demographic characteristics of persons who are homeless often provide some investigation into experiences of different sub-groups of the population, but they do not adequately explain the impact of situational or personal factors (such as social support of personal coping styles) on how they cope with these differences. Differences between groups are further highlighted in classification models used to understand the experiences of persons who are homeless.

2.2 Classification Models

Classification models identify a distinguishing characteristic about the population, and develop a taxonomic system based on that feature as a framework with which to compare some of

their other experiences. For example, Kuhn and Culhane (1998) developed a typology of homelessness based on patterns of shelter utilization. Findings revealed that 81% of the group were transitional shelter users (short-term shelter users, average length of stay 57 days), 9.1% were episodic users (two or more distinct periods of shelter use, average length of stay 261 days), and 9.8% were chronic shelter users (long-term users, average length of stay 630 days). Limitations of this typology include the assumption that the duration of the homelessness provides information about other aspects of the experience, as well as the methodological difficulties presented in the requirement of tracking persons who are homeless to accurately classify the duration of their homelessness (Cohen et al., 1993).

Morse, Calsyn and Burger (1991) conducted a comparison of two taxonomic systems, one that classified homeless men based on past psychiatric disability and the other based on current psychiatric disability. They compared the discriminating power between the classification systems on predictor variables such as homelessness history, socioeconomic status, life satisfaction, social supports and events prior to becoming homeless. Findings revealed that current levels of psychiatric impairment were better able to predict homelessness history, socioeconomic status, life satisfaction, social supports and prior events than past levels of psychiatric impairment. However, such a system provides a unidimensional view of the experience of being homeless, as it assumes that psychiatric disability is the key (or organizing) feature of the lives of homeless men.

Morse and Calsyn (1992) also proposed another classification system based on service needs. A cross-validation system was developed for classifying persons based on one of 4 sub-groups: economically disadvantaged, alcoholic, mentally ill or relatively advantaged. A limitation

of using this classification system to describe the experiences of persons who are homeless are that the groups are not mutually exclusive (e.g., a persons may be economically disadvantaged, have substance abuse issues and a mental illness). In addition, these groups provide a narrow, and rather “pathologized” view of experiences of persons who are homeless.

Pathologizing types of models are either ones in which the persons who are homeless are either directly or inadvertently blamed for their plight (Ryan, 1971), or models in which only the negative attributes of a person are reported in an attempt to make persons in a given population appear to be “different” than other citizens in their community (Lee, Lewis & Jones, 1992). Other models that often provide a limited or “pathologizing” description of the experiences of persons who are homeless are pathway or etiological models.

2.3 Pathway Models

Little consensus exists in the development of etiological models to explain homelessness (Holden, 1986). Based on recent literature, pathway models can be categorized in groups that describe either proximal conditions (e.g. recent housing history), or ones that include distal conditions (e.g. childhood antecedents). Poverty and instability of housing history are often considered as pathways to homelessness (Timmer, Eitzen, & Talley, 1994). Shinn and Gillespie (1994) trace the roles of increasing poverty and the shortage of affordable housing in the origins of homelessness. They make a distinction, however, between the influences of poverty and lack of suitable housing for single adults or families who are homeless. Families need larger housing units, are provided social assistance from a different system than single adults (in the United States), and they posit that family members are less likely to have mental illness or substance abuse issues, as

social services would have likely removed children from such a family unit.

However, Weitzman, Knickerman and Shinn (1990) suggest that despite differences between homeless families and single adults (with respect to past histories of poverty and inadequate or unstable housing), that, "homeless families are not a monolithic and homogeneous population" (p. 125). They described three pathways to homelessness for families based on housing history, in which 43% (of their New York sample) had been primary tenants in their own quarters in the past year, 13% had previously lived independently, but in the past year had lived in someone else's quarters, and 44% had never had a place of their own. Models based on housing history or poverty may explain immediate circumstances precipitating homelessness, however, they do not adequately capture the experiences of persons (or how they cope with those experiences), once they are homeless.

Pathway models based on childhood antecedents suggest that events occurring in childhood or early adolescence create risk factors for becoming homeless as an adult. Susser, Moore and Link (1993) present a model in which background factors (such as sex, age, parental socio-economic status and ethnicity) influence events both in childhood (such as foster care placement), and in young adult life (such as socio-economic attainment, formation of social bonds, orientation to deviant behavior and health status). It is then posited that background factors, and events in childhood and young adult life create risk factors (such as economic and social resources, health status, personality characteristics, mental illness and substance abuse) for homelessness in adult life. Although the model does include the influence of job and housing market conditions, it assumes that earlier events (that are often unable to be measured reliably),

create risk factors for becoming homeless. In support of this pathway model, Susser and his colleagues (1991) had found that in three samples of persons who were homeless, 15% had a history of foster care, 10% had a history of group home placement, and 20% had a history of running away as a child or adolescent. These figures compared with 2%, 1%, and 5% respectively in a sample of persons who had never been homeless.

Simmons and Whitbeck (1991) found that some adolescent runaways become socialized to the “culture” of homelessness and have trouble adopting “conventional roles” as adults, and subsequently, often become homeless as adults. They are also more likely to be involved in criminal activities than other persons who are homeless. Other factors significantly related to the reasons that adolescents ran away from home and subsequently became homeless as adults included substance abuse, association with a deviant peer group, victimization or witnessed victimization and parental abuse. Many of these factors overlap with factors proposed in psychological models to explain the etiology of homelessness. Therefore, psychological models will be reviewed next.

In summary, the findings from investigation of this childhood antecedent model suggest that past episodes of being homeless influence current experiences of being homeless, however the model relies on either costly and time-consuming longitudinal analysis (of a transient population), or on retrospective information that may span decades. Therefore, the model may be useful for understanding the influence of some childhood events on current experiences of homelessness, but it does not address how persons who are currently homeless describe or cope with their experiences.

2.4 Psychological Models

Psychological models of homelessness either posit homelessness as a result of severe mental illness, or suggest that the experience of being homeless is a “life crisis” that creates a risk factor for psychiatric symptomatology. Lamb (1984) suggested that homelessness among persons with severe and persistent mental illness is a result of the way that deinstitutionalization (the closing of psychiatric facilities and the release of former patients into the community) was conducted. He posits that the lack of planning for structured and affordable housing arrangements, and the lack of appropriate community-based care, created a situation in which many persons with mental illness became “drifters” and cycled through domiciliary hostels and experiences of being homeless.

The previously mentioned classification system of Morse et al. (1992) that had a mentally ill group reflects the prominence of the incidence rate of persons with severe mental illness who are homeless. A variety of prevalence rates of the population of homeless persons who have a severe mental illness have been presented in the literature. These rates range from a lower boundary of 10-15% to an upper boundary of 33% (Wright, 1988).

Appleby and Desai (1987) found a direct relationship between psychiatric hospitalization history and experiences of being homeless. The reasons for this relationship have been reviewed in the literature as being related to the inability to maintain stable housing (Appleby & Desai, 1987), the interference of psychiatric symptoms (e.g. delusions, disordered thinking, depression) with independent community living (Lamb & Lamb, 1990), or the lack of access to specialized community-based mental health services (Sosin & Grossman, 1991). In contrast, Cohen and

Thompson (1992) suggest that homeless persons have similar backgrounds and demographic profiles (influenced by their low socio-economic status) and that high levels of mental distress are common to all persons who are homeless. This theory suggests that homelessness, as an event or experience in a person's life, creates high levels of mental distress, irrespective of their previous experiences or mental health status.

Lehman and his colleagues (1995) demonstrated that both objective and subjective aspects of quality of life (including living situation, family and social relations, employment, daily activities and legal and safety problems, and satisfaction with each of these aspects), were lower for persons who were homeless with severe mental illness than a housed comparison group. Winkleby & White (1992) found that homeless adults in California who reported no impairments (physical health or mental health) when they first became homeless were likely over time to develop substance abuse or psychiatric disorders. The idea that the onset of psychiatric symptomatology is a result of being homeless is also suggested in the theory that posits homelessness as a "traumatic" experience (Goodman, Saxe & Harvey, 1991; Martin, 1991).

Goodman, Saxe and Harvey (1991) use the construct of psychological trauma to propose that homelessness is a risk factor for the development of emotional disorder, social disaffiliation and learned helplessness. They suggest that not only should risk factors for becoming homeless be examined, but that the experiences of being homeless should be considered as risk factors for the development of post-traumatic stress disorder symptomatology. Homelessness is likened to trauma in that "the loss of one's home can be a stressor of sufficient severity to produce symptoms of psychological trauma...the conditions of shelter life may produce trauma symptoms,

or that many homeless people, particularly women, become homeless after experiencing physical and sexual abuse and consequent psychological trauma" (Goodman et al., 1991, p. 1219).

Martin (1991) also discussed the trauma of homelessness as leading to mental and physical health impairment. North and Smith (1992), however, refute that theory in their study of 900 homeless persons in St. Louis, in which the factors leading to PTSD in 75% of the study sample began before the onset of homelessness. They found that childhood factors such as physical and sexual abuse and family fighting were significantly related to the presence of PTSD symptomatology in both adult men and women who were homeless. In addition, the experience of psychiatric illness in adulthood prior to becoming homeless was related to the presence of PTSD symptomatology, however, there was no clear pattern of relationships between psychiatric diagnoses and PTSD symptoms for either men or women. Overall, the authors note that

"the most striking finding from this study is the high proportion of homeless persons who met criteria for PTSD, far greater than in a low income comparison group. Nearly one third of the homeless women and one-fifth of the homeless men interviewed gave a history consistent with a diagnosis of PTSD. More than half of the entire sample had experienced a traumatic event out of the range of ordinary experience" (North & Smith, 1992, p. 1015).

Despite the findings that many of the traumatic experiences occurred prior to the onset of being homeless, North and Smith (1992) note that many persons reported re-victimization once they became homeless, thereby suggesting the incidence of trauma symptomatology both before the onset of homelessness and in subsequent experiences while homeless.

The proposed relationship between homelessness and trauma symptomatology highlights the role of multiple stressors in the experiences of persons who are homeless. Surprisingly, the stressful life events proceeding and accompanying homelessness have been given little attention in the empirical literature on homelessness. Two studies have found that the number of stressful events (such as unemployment, death of a friend, assault and debt) experienced by homeless people was correlated with the degree of psychiatric symptoms that they exhibited (Morse & Calsyn, 1986; LaGory Ritchey & Mullis, 1990). Mulroy and Lane (1992) describe the decreased social support and scarcity of affordable housing that low-income single mothers face, and how these factors contribute to their concentration in "urban neighborhoods that have high rates of stressful events" (p. 60). These stressful events (including social isolation, crime and substance use in the neighborhood and poor living conditions), are posited to be risk factors for becoming homeless. The research to date has demonstrated that "a wide range of acute and chronic life events that can be considered stressors place [individuals] at risk of becoming homeless. Furthermore, once they become homeless, homelessness itself can become a stressor that places them at greater risk of prolonged homelessness" (Milburn & D'Ercole, 1991, p. 1167).

A theoretical stress model has been proposed by Milburn and D'Ercole (1991) to explain the experiences of homeless women. "The stress model is an appropriate heuristic framework for organizing thinking and research about homeless women because the model does not construe individuals as inactive or incapable of responding to aversive pressures" (Milburn & D'Ercole, 1991, p. 1165). Rather, they suggest that women are at risk of becoming distressed by the impact of major life stressors, such as housing instability, poverty, work problems or victimization, and

that this distress might be mediated by the availability of social support or other coping resources. No other factors are considered as being involved in the process, which potentially limits both the explanatory power and the generalizability of the model.

The model proposed by Milburn and D'Ercole (1991) is only theoretical. The authors do not operationalize concepts such as social support and coping resources, nor do they attempt to explain how the mediation process might occur. Instead, they note that "to date, there are no available studies designed to explicitly examine the coping styles and strategies of homeless women...and that the fit between the model and the realities of homelessness for women needs to be tested empirically" (Milburn & D'Ercole, 1991, p. 1166-1167). An empirical examination of a transient stress model to explain the experiences of persons who are homeless is the focus of this study. Two models of stress and coping (Moos & Schaefer, 1993; Dohrenwend, 1978) will first be reviewed, and then combined and expanded upon, to create the transient stress model used in this study.

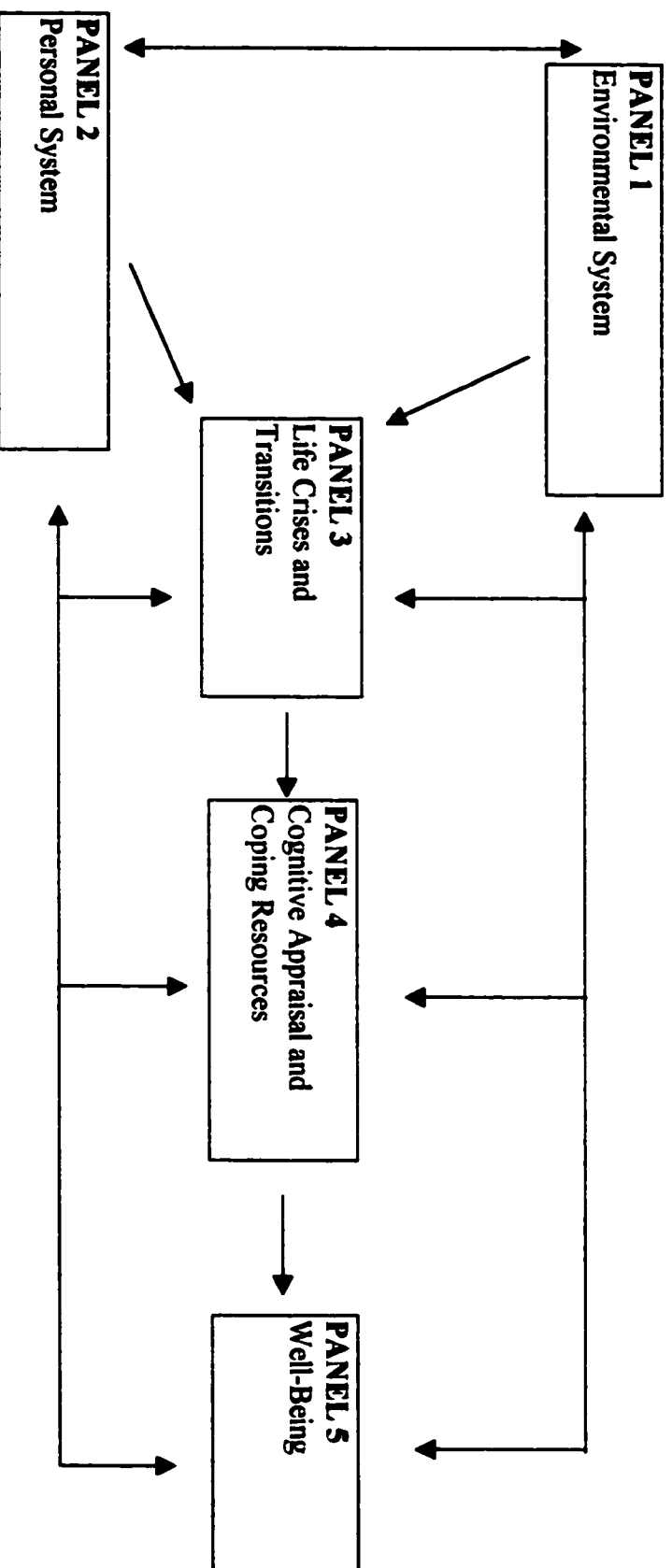
3.0 An Integrated Model of Stress and Coping

3.1 Moos and Schaefer's (1993) Integrated Conceptual Framework

Moos and Schaefer (1993) proposed an integrated conceptual framework for examining the stress and coping process. As shown in Figure 1, the model has five panels, all of which represent different aspects of the process. Each panel of the model is proposed to represent a collection of variables. For example, panel 1 (environmental system) is composed of ongoing life stressors, social resources and relationships with others. Panel 2 (personal system) includes an individual's demographic and personal factors, described by the authors to be self-confidence, ego

Figure 1

Conceptual Model of the Stress and Coping Process
(Moos & Schaefer, 1993)



development, personal commitments and aspirations, and prior crisis and coping experiences.

"The model posits that life crises or transitions (panel 3) and the environmental and personal factors that foreshadow them (panels 1 and 2) shape cognitive appraisal and coping responses (panel 4) and their influence on health and well-being (panel 5)" (Moos & Schaefer, 1993, p. 237).

The inclusion of appraisal and coping responses in the model acknowledges the active involvement of individuals in assessing, and reacting to, events related to life crises. The relationship proposed between the panels is bi-directional, suggesting that the stress and coping processes are transactional and that reciprocal feedback can occur at each stage. What remains unclear in the description of the model is how these transactional processes are operationalized or measured.

In summary, the model proposed by Moos and Schaefer (1993) provides a useful conceptual framework in which to appreciate the influence of environmental and personal factors on the experience of life crises, attempts to cope with them, and the resultant effect on health and well-being. What is left unanswered is the nature of the bi-directional pathways, and the operationalization of the component parts of each panel. The panels are broadly described, suggesting that different aspects of each may be differently involved with the stress and coping processes, however, this is not elaborated upon in the presentation of the model. Perhaps different aspects of the environmental and personal systems may be more directly involved in the stress appraisal process and coping responses of the individual having experienced the life crisis. Also, there is no consideration of individual differences in the stress and coping process, and the specification of any particular individual personality traits that may influence both stress reaction

and coping responses. Therefore, what seems to be lacking in the presentation of Moos and Schaefer's (1993) conceptual framework is a clear conceptualization of the relationship between the panels. More specifically, how elements of the personal or environmental system that might directly influence cognitive appraisal or coping resources.

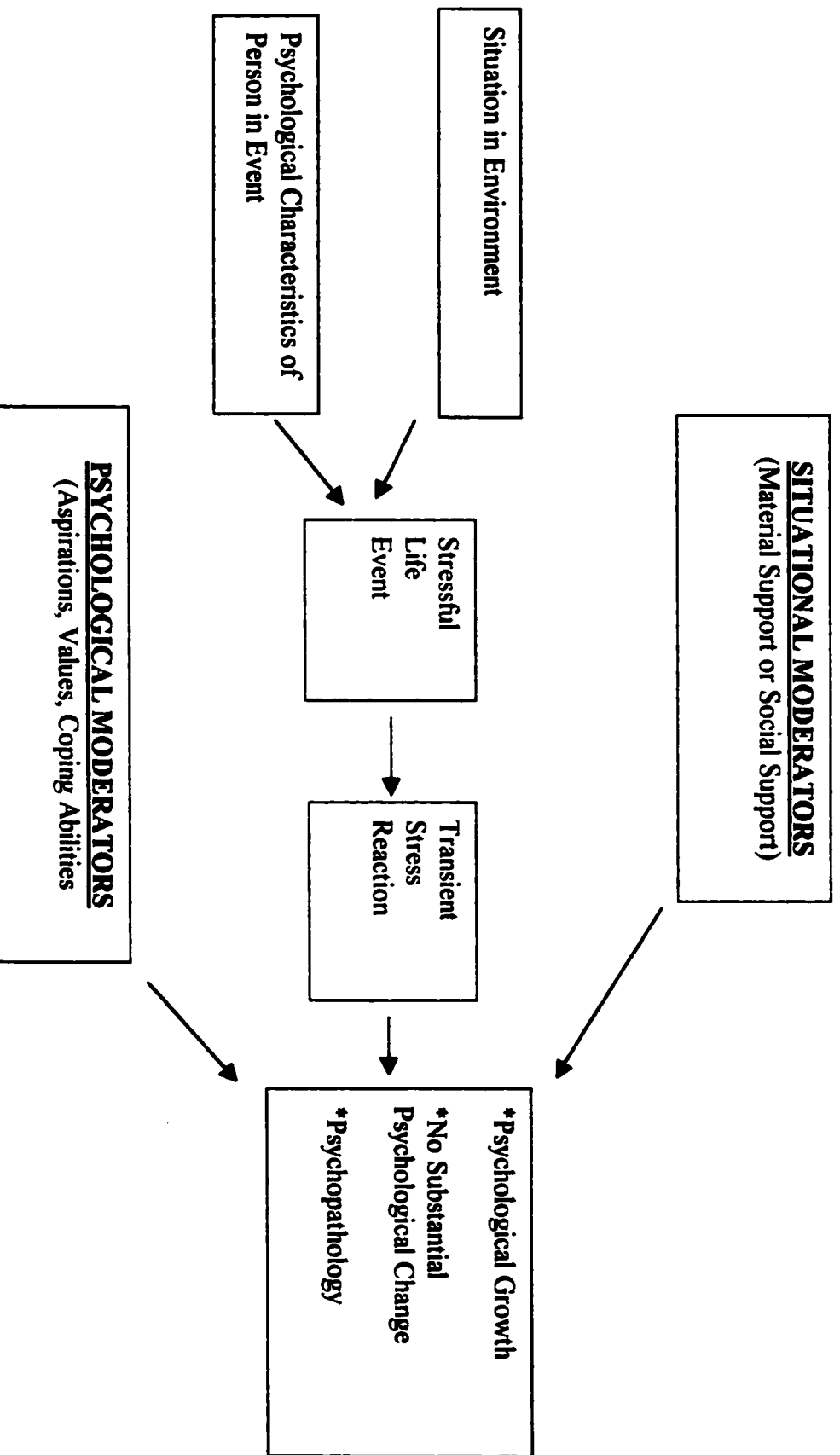
3.2 Dohrenwend's (1978) Social Stress Model

Dohrenwend (1978) proposed a social stress model in which proximate causes of psychopathology are believed to originate in the experience of stressful life events triggering transient stress reactions to that event (see Figure 2). Rather than considering distal causes of psychopathology as some of the pathway models have done, the social stress model posits that the effects of a stressful life event, and the reaction an individual has to that event, can produce one of three results: psychological growth, no substantial permanent psychological change, or psychopathology. The model posits that psychological moderators (such as coping abilities, aspirations and values) and situational moderators (such as material and social supports or handicaps) are directly related to the experience of one of the three results (i.e., psychological growth, psychopathology or no change) of the individual's reaction to a stressful life event. (Dohrenwend, 1978).

The benefits of this social stress model include the consideration of the role of psychosocial stress in the development of psychopathology, and that certain stressful life events, and an individual's reactions to them, play a central role in the etiology of psychological growth or psychopathology. The community psychology focus of the model includes the importance of not only individual factors that moderate stress reactions, but also the role of situational or

Figure 2

Conceptual Model of Psychological Stress Inducing Psychopathology
(Dohrenwend, 1978)



environmental moderators such as social support. What is left unexplained by the model is how such factors should be operationalized in order to provide empirical validation for the proposed relationships. Also, the description of “coping processes” is left vague, and therefore unable to address the question of which types of coping resources or processes are used in moderating a transient stress reaction.

3.3 Comparison of Moos & Schaefer and Dohrenwend’s Models

Dohrenwend’s (1978) social stress model shares many similarities with Moos and Schaefer’s (1993) integrated framework for understanding stress and coping processes. Both models suggest the importance of recent stressful life events (or “life crises”), rather than past events, as the central factor in the determination of either psychopathology (as posited by Dohrenwend), or well-being (as posited by Moos & Schaefer). In addition, both models consider the reaction to the stressful event, as a transient stress reaction, to involve the use of an individual’s coping resources, although each model conceptualized coping resources slightly differently. Moos and Schaefer (1993) suggest that coping resources are multi-faceted, involving both cognitive and behavioural approach and avoidance strategies, and that the extent to which an individual utilizes each strategy is dependent on his/her own coping style. In contrast, Dohrenwend does not address, nor conceptualize, coping resources.

Another important element in both models is the inclusion of situational (environmental) factors and personal factors in the stress process, although the models conceptualize the influence of these factors quite differently. Moos and Schaefer (1993) place environmental and personal factors as the first two panels in the stress process, suggesting that they influence the experience

of the life crisis, or stressful life event. In contrast, in Dohrenwend's (1978) social stress model, although the situation in the environment and the personal characteristics of the individual are listed in advance of the stressful life event, the situational and personal moderators are placed after the transient stress reaction, suggesting that the moderators are only involved in the potential development of psychological growth or psychopathology. In addition, although both models consider the influence of personality factors, they do not specify, nor operationalize, the traits that they consider to be influential in the stress process.

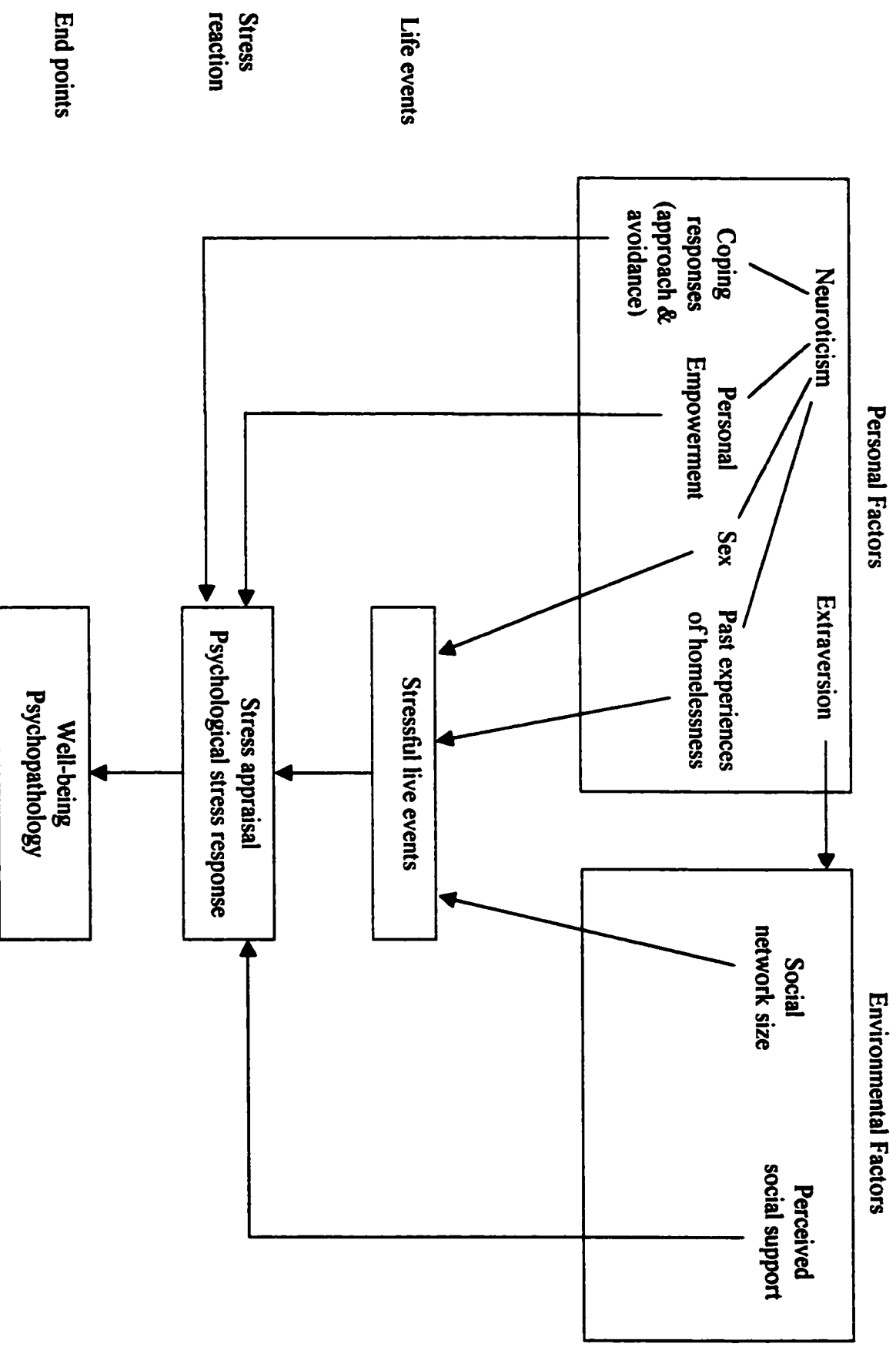
What seems more likely is a compromise between the two models, in which certain aspects of situational and personal moderators are involved at the time (or in advance of) the experience of the stressful life event, and that other aspects of such moderators are involved in the stress reaction. In order to explore the placement of moderators in a transient stress model, and to examine the proposition that both situational and personal factors are involved in the process, a revised model is needed. A revised model could examine the influence of different aspects of environmental and personal factors on both the occurrence of stressful life events and an individual's reaction to them. Revisions to Moos and Schaefer's (1993) and Dohrenwend's (1978) models could also provide an operationalization of the factors considered in both models in order to test the assumptions made by the model with a particular population that experiences stressful life events. Therefore, a revised transient stress model for persons who are homeless based on an integration of the Moos and Schaefer (1993) and Dohrenwend (1978) models, will be proposed for use in this study.

3.4 Revised Transient Stress Model for Persons who are Homeless

A revised transient stress model is presented in Figure 3. A general overview of the model will first be provided, and then each aspect of the model (and its operationalization) will be described in more detail. The justification for each of the expected relationships (shown as arrows in the model) will follow the description of the factors.

The model is revised not only to consider limitations of earlier models, but also to adapt the operationalization of factors to be consistent with experiences of persons who are homeless as presented in relevant empirical and theoretical literature. Consistent with both Moos and Schaefer's (1993) integrated framework and Dohrenwend's (1978) social stress model, the life crisis (being homeless) and associated stressful life events are central aspects of the model followed by the stress reaction of the individual. Another similarity between the revised model and its precursors is the inclusion of both situational/environmental factors and personal factors. Differences between the model and its earlier influences include the position of these mediators and exogenous variables in the model, the depiction of the stress reaction (as both appraisal and psychological response), and the final panel of the model that includes both psychopathology and well-being.

In the transient stress model proposed for the present study, environmental and personal mediators and exogenous variables are posited to impact both the experience of stressful life events related to being homeless and the reaction (appraisal and psychological stress response) to the experience of being homeless. The environmental mediator chosen for inclusion in the revised model is social support, including both the size of the social support network and an individual's

Figure 3**Proposed Transient Stress Model**

perception of available social support. Personal mediators include personality characteristics (namely neuroticism and extraversion, coping responses, personal empowerment, and the number of past experiences being homeless).

The aspect of the model depicting a transient stress reaction, includes both the appraisal of the stressful situation and psychological symptomatology related to reacting to the stressful event(s). The inclusion of two distinct aspects of a stress response (appraisal and psychological symptomatology) incorporates the variable of "cognitive appraisal" from the Moos and Schaefer's (1993) model and "transient stress reaction" from the Dohrenwend (1978) model.

The final panel of the model combines the final panel of both models, in that both well-being and psychopathology are included. Lawton, Moos, Kleban, Glicksman & Rovine (1991) suggest that psychopathology and psychological well-being are not two ends of the same continuum, and rather, they should be considered separate from one another. They propose the use of two outcome variables at the end of the stress process: one for positive valence and one for negative valence. Therefore, both psychopathology and well-being or life satisfaction were included.

The revised model is intended to utilize the strengths of both the integrated framework and the social stress conceptualizations of the stress process while proposing alterations believed to adapt the model to explain a stress process for persons who are homeless. Revisions to the model are designed to expand and adapt the range of stressful events believed to be relevant for the population under study, while expanding the examination of the moderation of stress responses by environmental and personal factors. Finally, it is proposed that the operationalization

of formerly theoretical models will provide additional insight into the processes used by individuals to deal with the experience of being homeless.

4.0 Review of Literature Relevant to the Study's Theoretical Model

Each element of the model will now be described in more detail. The elements will be explained in the following order: personal factors, environmental factors, life events, stress response, well-being and psychopathology. Elements of personal and environmental factors will be explained together, however, it must be noted that different elements of these two factors are anticipated to exert influence at different times in the stress process. The reason all elements of a factor are being presented together is to illustrate their common conceptualization as either factors external to an individual (environmental factors) or factors internal to an individual (personal factors).

4.1 Personal Factors

The five personal factors proposed for use in the model are personality characteristics (neuroticism and extraversion), sex, past experiences of homelessness, personal empowerment, and coping responses. Neuroticism is posited to be related to other personal factors such as sex, past experiences of homelessness, coping responses, and personal empowerment, whereas extraversion is posited to be related to the environmental factors of perceived social support and social network size.

4.1.1 Personality Characteristics

Personality factors, often called traits, are aspects of an individual that are assumed to remain stable over time (Matthews & Deary, 1998). In fact, two assumptions of the trait-

approach to explaining personality are that traits are stable over time, and that individual differences in behavior have some consistency across different situations (Matthews & Deary, 1998). The inclusion of two personality traits, neuroticism and extraversion, has been proposed for the transient stress model used in this study in order to assess the influence of individual differences in personality on the stress and coping process in response to being homeless. First, the trait approach to personality will be reviewed briefly, followed by an introduction to a common conceptualization of personality traits, the Five Factor Model (FFM). Next, research relating the FFM (particularly the factors of Neuroticism and Extraversion) to the stress and coping process will be reviewed. Finally, the limited role of personality factors in past homelessness research will be discussed.

4.12 Trait Approach to Personality

Initial identification of personality traits has been traced back to the work of Aristotle who attempted to develop a classificatory scheme of fundamental dimensions of human behavior (Matthews & Deary, 1998). Since that time, different methods of classification, such as the lexical approach and the questionnaire or factor analytic method, have been developed to examine the dimensions of human personality. Yet, as Digman (1996) notes, despite differences in the method of investigation, similar theoretical considerations about both the causality and locus of traits have arisen for each investigation.

“A traditional assumption of trait theorists has been the causal primacy of traits” (Matthews & Deary, 1998, p. 7). It has often been supposed that the direction of causality is from trait to behaviour, however, there are two important qualifications of the causality hypothesis.

First, the explanation of behavior requires different levels of analyses, which include genetics, physiology, learning and social factors (Hettema & Deary, 1993). Second, the causal effects of traits on behavior may be indirect. Traits may interact with situational factors to produce transient internal conditions or states that may have a more direct influence on behavior than the trait itself (Matthews & Deary, 1998; Spellberger, 1966). The causality of traits is not a universally accepted principle. The most well known critique is the situationalist critique, which posits that traits may be determined by situation-behaviour contingencies, and that traits themselves do not exist in the form of cross-behavioral dispositions (Mischel, 1968; Wright & Mischel, 1987). The situationalist critique suggests “traits, however consistent as self-descriptions, are poor at predicting behaviors... and that “real” personality dispositions must lie in the behavioural consistencies from one situation to the next” (Matthews & Deary, 1998).

The second consideration of traits is their locus, and their resultant causal effects on behavior. The traditional assumption had been that all traits had an inner locus, and were assumed to be a fundamental core quality of the person, which may even be genetically influenced (Eysenck, 1967; Matthew & Deary, 1998). However Cattell and Kline (1977) distinguished between surface traits (clusters of overt responses which tend to be associated), and source traits (which are deeper properties of the individual and assumed to have causal effects on behavior). Neuroticism and extraversion, two conceptualizations of traits used in the present study are assumed to be source traits, and will be discussed in the following section.

In summary, Matthews and Deary (1998) conclude, “there is no generally accepted scientific theory of traits” (p. 8). However, they concede that despite the use of a common theory

to understand traits, it is important to examine the personality traits of an individual to determine their influence on an individual's reaction to, and behavior in, certain situations. The most widely accepted conceptualization of personality traits, known as the five factor model (FFM), will now be reviewed with attention to the features of the model, findings of its relation to the stress and coping process, and applicability to a model examining how persons respond to the experience of being homeless.

4.13 The Five Factor Model (FFM) of Personality

“The five-factor model of personality is a hierarchical organization of personality traits in terms of five basic dimensions: extraversion, agreeableness, conscientiousness, neuroticism and openness to experience” (McCrae & John, 1992). The FFM is considered hierarchical because it is organized as five broader factors, each with more narrow traits (Paunonen, 1998). Although a history of the development of the FFM is beyond the scope of the present study, it is interesting to note that different authors attribute its antecedents to different research. Digman (1996) suggests that the first mention of five core factors of personality came from Thurstone in 1934 who observed that when 60 adjectives pertaining to human personality were factor analyzed, five core factors emerged. Next, Cattell (1943) reviewed 18,000 personality descriptive terms to develop clusters of related terms, and when he used factor analytic techniques, five orthogonal factors emerged: (1) surgency (or extraversion), (2) agreeableness, (3) conscientiousness (or dependability), (4) emotional stability (or its opposite, neuroticism) and (5) culture (or intellect) (Goldberg, 1990).

McCrae and John (1992) suggest that the development of the FFM began with Eysenck's

(1947) identification of two broad dimensions of personality: extraversion and neuroticism. Eysenck eventually added a third dimension (psychoticism) and stated that intellect (a fourth dimension) was orthogonal to the other dimensions (Digman, 1996). McCrae and John (1992) suggest that Eysenck's identification of extraversion (conceptualized at the time as "sociability") and neuroticism (conceptualized as psychiatric disorder or nervousness) as major components of psychological tests began the specification of the five factors. This initial conceptualization was followed by Costa and McCrae's (1980, 1985) inclusion of three additional factors: openness to experience, agreeableness and conscientiousness.

Findings of the FFM indicate that the personality trait structure it proposes is universal (McCrae & Costa, 1997). Using translations of the NEO Personality Inventory into German, Portuguese, Hebrew, Chinese, Japanese and Korean they found that a five factor structure, similar to the one found in English samples, was found in each cultural group. They therefore concluded that personality traits, as defined in the FFM, are universal.

Costa and McCrae (1996) assert that there are six postulates of the FFM of personality. The first is basic tendencies, indicating that personality traits represent individual differences (all adults can be characterized by their differential standing on the five traits, which influence their feelings, thoughts and behaviors). Further to this postulate is the origin of personality traits, believed to be endogenous, with substantial heritability, but unaffected by environmental influences (Costa & McCrae, 1996; Plomin & Dainels, 1987). Traits are assumed to develop throughout childhood and become fully developed by age 30 (Costa & McCrae, 1996; Costa & McCrae, 1997). As previously mentioned, traits are assumed to be organized hierarchically from

narrow descriptors to broad factors such as neuroticism and extraversion. Hence, the basic tendencies are considered to be the “personality” of the individual (Costa & McCrae, 1996). This postulate, therefore, necessitates the placement of personality factors at the origin of a transient stress and coping model, as endogenous factors such as neuroticism and extraversion are anticipated to influence personal and environmental factors, but are not anticipated to be influenced by other endogenous or exogenous factors.

The second postulate is characteristic adaptations, entailing the assertion that over time individuals adapt their thoughts, feelings and behaviors (in ways that are consistent with their existing personality traits) as a reaction to their environment. It further asserts that some of these adaptations may or may not be optimal or compatible with cultural values or personal goals. The ability of traits to influence characteristic adaptations in response to changes in the environment provide another reason why personality traits should be considered in a model examining how individuals perceive the stress, and cope with the demands, of being homeless.

The third postulate, objective biography, states that an individual’s actions and experiences are complex functions of all the characteristic adaptations he or she has developed in response to a given situation. This means that over a life course, individuals can organize their actions (or adaptations) in ways that are consistent with their personality traits in response to their life situations. This lends support to the placement of both personality traits and personal and environmental factors in advance of stress appraisal and response, as personality factors are likely to predict personal and environmental factors (such as personal empowerment, coping responses and social support) in ways that will influence the actions of stress appraisal and response.

The fourth postulate is self-concept, which states that “individuals maintain a cognitive-affective view of themselves that is accessible to consciousness” (Costa & McCrae, 1996, p. 74). This allows the measurement of personality traits, both neuroticism and extraversion, in the transient stress and coping model to be done using self-report methodology.

The fifth postulate, external influences, states that adaptations are shaped by an interaction between personality traits and the social and physical environment, and that individuals attend to, and appraise, their environment in ways that are consistent with their personality traits (known as apperception). Therefore, examining the influence of personality traits on apperception and adaptations, which may be similar processes to stress appraisal and response, are important additions to examining the stress and coping process of individuals who are homeless.

The sixth and final postulate is dynamic processes, which asserts that although continuous adaptations are being made by individuals in response to their situations, all adaptations are influenced by their pre-existing personality traits. To this effect, personality traits are considered “master traits” that shape the expression of other actions and responses (Costa & McCrae, 1996). These dynamic processes link basic tendencies (or traits) with characteristic adaptations and self-concept to explain how traits exert an influence over actions and reactions to the environment. Therefore, it is following these postulates that the placement of neuroticism and extraversion as predictors of personal and environmental factors (or adaptation processes such as styles of coping) was determined for the transient stress and coping model.

There is extensive literature available on the five factor model, its features and its comprehensiveness as a model of personality structure. As a result, many instruments have been

developed, and existing instruments have been modified to assess the FFM (Widiger & Trull, 1992). One such instrument is the NEO Personality Inventory (Costa & McCrae, 1985, 1992) which is designed to measure the five factors. In addition, each factor contains facet scales, considered to be more narrow expressions of the overall trait. For example, the facet scale of gregariousness exists within the broad factor of extraversion (Costa & McCrae, 1985, 1992). In fact, the NEO-Personality Inventory is a well-established measure in the investigation of the role of personality traits in both stress and coping processes and the prediction of well-being (Costa & McCrae, 1980; Emmons & Diener, 1986; Magnus, Diener, Fujita & Pavot, 1993; Quirk & McCormick, 1998; Schwabel & Suls, 1999; Watson & Pennebaker, 1989).

4.14 The Role of Personality Traits in the Stress and Coping Process

The examination of the role of personality traits in the stress and coping process involves an understanding of how personality variables interact with processes of stress appraisal and response (and often coping responses) to influence health-related outcomes. Four models have been developed to explain the associations between personality and health outcomes (Wiebe & Smith, 1997). These models include the stress moderation model, the health behavior model, the constitutional predisposition model and the illness behavior model.

The stress-moderation model “assumes that stress causes illness and that dispositional factors make one more or less vulnerable to its pathogenic effects” (Wiebe & Smith, 1997, p. 892). Stress is hypothesized to affect health via physiological pathways, in which the appraisal of the stressful event as threatening activates the sympathetic and neuroendocrine systems to sustain physiological arousal and lead to illness. Similarly, coping responses influence physiological

arousal, and if successful, such responses may decrease resulting illness. Personality has been assumed to influence health at each part of the process: first, by exacerbating or diminishing the appraisal of the stressful event as threatening, and second, by influencing the use of successful or non-successful coping strategies that also impact on arousal. In sum, although this model is helpful to show the influence of personality traits on both appraisal and coping processes, it is limited in that it does not appreciate that coping and personality factors may be interactional, without a clear influence on one by the other. Recent iterations of the model posit a transactional view of personality and assert that people do not only respond to situations, but that their responses and actions also create elements of the situation (Buss, 1987; Cantor, 1990). Another revision of the model is the assertion that personality traits may influence the occurrence of stressful life events themselves (Wiebe & Smith, 1997). In fact, with a sample of young adults, Magnus et al. (1993) found that higher ratings of neuroticism predisposed people to experience more negative objective life events (using the social readjustment rating scale and list of recent events), and higher ratings of extraversion predisposed people to experience more positive objective life events. This finding supports the placement of personality characteristics, (namely neuroticism), in the transient stress model as a predictor of the occurrence of stressful life events.

The second model, the health behavior model, posits that personality affects health via the quality of one's health practices. For example, Costa & McCrae (1987) found that higher ratings of neuroticism were related to the tendency to engage in unhealthy behaviors. The difficulty found with this model is that personality appears to influence both health-enhancing and health-damaging behaviors, but because these behaviors are only weakly correlated with each other, and

fluctuate over time, it is unlikely that they could be strongly correlated with personality.

Therefore, it is unlikely that tendencies to engage in healthy or unhealthy behaviors are mediators of the effects of personality on health (Harris & Guten, 1979; Leventhal, Prochaska & Hirschman, 1985; Wiebe & Smith, 1997).

Constitutional predisposition models suggest a statistical association between personality and health as a result of a third variable, not a direct process. This model posits that individuals may be genetically predisposed to certain physiological processes (related to arousal) that influence both the development of illness and the behavioral, cognitive, and emotional aspects of personality. Wiebe and Smith (1997) report that this model has not been systematically studied across personality variables, but does support the notion of heritability of personality.

The final model, the illness behavior model, posits that personality affects illness behavior, rather than actual illness. Illness behavior is considered to be the actions people take when they consider themselves to be ill (e.g., medical care utilization, self-medicating). Personality is hypothesized to influence the processes of heightened attention and sensation of physiological changes, thus labeling these changes as illness and initiating illness behavior. However, because illness behavior may or may not correlate with the actual presence of illness, the explanation of the influence of personality on physical health in this model may potentially be artifactual (Wiebe & Smith, 1997).

The review of these models suggest that there is no agreed upon way to conceptualize the relationship between personality, stress and coping processes and health outcomes. Instead, selected findings relating personality factors, namely neuroticism and extraversion, and their

relationship to stress and coping and health outcomes will be reviewed.

Neuroticism and stress and coping processes. Neuroticism has been found to be related to both measures of illness, such as symptom checklists, and illness behaviors (Costa, Fleg, McCrae & Lakatta, 1982; Wiebe & Smith, 1997). In fact, Shekelle, Vernon and Ostfeld (1991) found that higher ratings of neuroticism were related to reporting angina-like chest pain symptoms, but were no different than a control group in objective diagnoses of angina. They concluded that neuroticism was associated with symptom reporting, but not the development of actual cardiac disease. Similarly, Watson and Pennebaker (1989) also found that the disposition of negative affectivity (similar to neuroticism in that it measures stable and pervasive differences in negative mood) lead to self-ratings of poor health but was unrelated to biological markers of poor health. Schwebel and Suls (1999) reported that two groups (divided by high vs. low neuroticism scores) did not exhibit differences in heart rate during the application of environmental stressors (cognitive and behavioral tasks). Hence, mixed evidence exists as to the extent that neuroticism predisposes an individual to stress appraisal or response behaviors.

Adler (1994) notes “whether neuroticism should be viewed only as a disposition that exacerbates the effects of environmental stress, or as a risk factor itself, remains unresolved” (p. 242). Ormel and Wohlfarth (1991) used a seven-year longitudinal design in which they examined the effects of neuroticism in the relationship between life situation change (environmental stressors) and psychological distress. They found that high levels of neuroticism strengthened the effect of life changes on psychological distress, meaning that, “temperamental dispositions (such as neuroticism) were more powerful than environmental factors in predicting psychological

distress” (Ormel & Worhlfarth, 1991, 744). This suggests that personality traits may exert more influence over an individual’s resultant well-being or psychopathology from a stressful event (such as being homeless) than any other environmental factors (such as social support). Bolger (1990) proposed that, “coping is personality in action under stress” (p. 525). He found that neuroticism influenced both coping styles (such as wishful thinking and self-blame) and levels of daily anxiety in students who were preparing to take a medical school examination. However, neither neuroticism nor coping responses influenced examination performance.

Extraversion and stress and coping processes. Fewer studies exist to directly examine the relationship between extraversion and stress and coping processes. Instead, the effect of extraversion on subjective well-being (one of the end-points in the proposed transient stress model) has been examined. Emmons and Diener (1986) separated two components of extraversion (sociability and impulsivity) to look at their influence on well-being. They found that only sociability influenced well-being, and concluded that subjective well-being could in fact be influenced by several different factors including personality influences as well as life events (Emmons & Diener, 1986, p. 1214). This finding confirms the use of both personality characteristics (neuroticism and extraversion) and stressful life events in the prediction of an individual’s experience of well-being while being homeless.

4.15 Sex

Differences between men and women are expected in their experience of stressful life events related to being homeless. Although some research consider “the homeless” to be a homogeneous group of individuals, differences have been found between characteristics of

homeless men and homeless women. For example, Breakey et al. (1989) found that homeless men and homeless women in Baltimore had different rates of mental illness, substance use and social disaffiliation from one another. Similarly, Burt and Cohen (1989) also found differences between males and females who were homeless in 20 U.S. cities in their length of experience of homelessness, their employment and income histories, their history of personal issues (including mental health and substance use problems) and their involvement with dependent children. Homeless females (with and without children) in New York State were also found to have higher rates of psychological distress, higher rates of contact with family members, higher rates of victimization and lower rates of criminal activity and substance use than homeless males (Roll, Toro and Ortola, 1999). Bassuk (1987) describes the “feminization” of homelessness, indicating that more persons becoming homeless in Boston are single women with dependent children. She further asserts that the life experiences (including stressful ones) of these homeless women differ from those of homeless men. Therefore, sex will be included in the hypothesized model to assess whether or not it differentially predicts the occurrence of stressful life events related to being homeless.

4.16 Past Experiences of Homelessness

Moos and Schaefer (1993) suggest that another important individual-level variable in their conceptualization of the stress process is previous experience with the stressful life event that is presented. They suggest that an individual’s experiencing of an event affects subsequent experiences of the same, or a similar, event. For example, an individual who has been homeless at a previous time in his/her life, might experience the stressful events associated with becoming

homeless again (e.g., eviction, loss of employment) differently than if never encountered previously.

Grigsby, Baumann, Gregorich and Roberts-Gray (1990) proposed that persons who had been homeless for extended periods of time became “entrenched” in a street culture or a culture of homelessness. They suggested that although becoming homeless initially involved feelings such as social disaffiliation, isolation and dysfunction, some persons who were homeless actually became “affiliated” into the street culture and were better able to deal with the once-stressful experiences in their lives with increased resilience. The theory further proposed that for individuals who had been homeless, then housed and then homeless again (a type of “episodic” homelessness), the presentation of events related to becoming homeless caused less distress in the individual if they had been previously experienced.

4.17 Personal Empowerment

“Empowerment is a developing but inconsistently-defined concept. In general, it connotes a process by which individuals with lesser power gain control over their lives” (Segal, Silverman, & Temkin, 1995, p. 215). Empowerment is generally understood to be the degree of control that vulnerable (or marginalized) individuals are able to exercise over their lives (Rappaport, 1981, 1987). Personal empowerment has been conceptualized as a multi-faceted construct that includes values, self-efficacy, a sense of mastery or control over events in an individual’s life, a sense of optimism about the future, and a willingness to take action in the public domain (Prilleltensky, 1994; Rogers, Chamberlin, Ellison & Crean, 1997; Zimmerman & Rappaport, 1988). Many of these factors, such as dispositional optimism, self-efficacy, and a sense of coherence or control

over the future are proposed by Moos and Schaefer (1993) and Dohrenwend (1978) to be personal factors involved in moderating the stress process. Therefore, in the proposed transient stress model used for this study, empowerment will be used as a construct related to the occurrence of stressful life events.

The concept of empowerment, however, is not without its critics (Riger, 1993; Ryan-Finn & Albee, 1994). "At best individual empowerment may displace the problem...empowering the single individual cannot ameliorate underlying socioeconomic problems" (Ryan-Finn & Albee, 1994, p. 383). The concept of empowerment can examine the perception of control an individual has over his/her environment, however, it cannot be considered a causal factor in the occurrence of stressful life events (Riger, 1993). Riger (1993) further criticizes the concept of empowerment for its "promotion of traditionally masculine concepts of master, power and control, over traditionally feminine concerns of communion and cooperation" (p. 279). She suggests that empowerment may have different connotations for different marginalized groups. What she proposes is that in the investigation of levels of personal empowerment for a given group, factors related to their situation (e.g., self-efficacy, power/powerlessness and optimism or a sense of control over the future) be examined.

4.18 Coping Responses

"It is clear that the concept of coping, like that of stress, is not a unified construct with readily agreed-upon meaning" (Eckenrode, 1991, p. 1). Perhaps more accurately, coping is an umbrella term comprised of a number of responses based on an individual's experience of a stressful event, behavioural and cognitive responses to the event, and available resources in his/her

environment to help the individual deal with presented stressors (Eckenrode, 1991). Coping has not, however, been viewed as an invariant mode of responding irrespective of the stressor being confronted. Instead, findings suggest that coping responses are sensitive to situational characteristics and constraints (Kessler, Price & Wortman, 1985; Lazarus & Folkman, 1980). It is proposed that the person's appraisal of, and their reaction to, the stressful situation are linked to their choice of coping responses used to respond to the stressor (Lazarus & Folkman, 1991).

Coping responses have been conceptualized as a multidimensional set of cognitions and behaviours that lead to differing outcomes depending on the situational characteristics and the choice of response by the individual (Wethington & Kessler, 1991). Coping responses are often theorized to be activated after the appraisal and response to a stressful situation, however the role of these responses as a moderator between stress and later distress can be problematic (Pearlin, 1991). Pearlin (1991) notes, "there has been a tendency to attempt to explain outcome variability in terms of coping differences when this variability might better be explained by other factors" (p. 274). He suggests that coping responses might be better viewed as playing a moderating role in the appraisal and experiencing of stressful events, and that it is the meaning of the events themselves that are more likely to be related to the occurrence of later distress.

Perez and Reicherts (1992) suggest that adequate adaptation from a stressful situation depends on four factors: (1) the ability to realistically perceive the relevant characteristics of the stressor (stress appraisal), (2) the ability to connect the results of the stress perception process to adequate and available coping resources, (3) the presence of appropriate beliefs about the efficacy and application of coping resources, and (4) the ability to receive information about subjective and

objective effectiveness of short-term coping responses and information about their role in the occurrence of long-term effects such as mental health problems or well-being (p. 35). In order to more closely examine the factors proposed to be involved in an individual's adaptation to a stressor, the classification of coping responses and findings related to their effectiveness will be reviewed.

Classification of coping responses. Although no single method for categorizing coping processes has yet emerged, there are two main conceptual approaches to study the process. The first approach emphasizes the focus of coping: "a person's orientation and activity in response to a stressor. An individual can approach the problem and make active efforts to resolve it and/or try to avoid the problem and focus mainly on managing the emotions associated with it" (Moos & Schaefer, 1993, p. 243). A second approach emphasizes the method of coping that people employ, delineating between the use of cognitive or behavioral efforts. In integrating the two approaches, four typologies of coping strategies are created (Moos, 1992). A diagram representing the four typologies is presented in Table 1. Two of the typologies involve cognitive activities, and the other two typologies involve behavioural efforts. In addition, two typologies are defined as "approach" strategies in which new alternatives to solve the problem are involved, and two typologies are termed "avoidance" strategies in which attempts to withdraw or divert attention from the stressor are employed.

The first type of coping response is cognitive approach coping, which includes subscales of logical analysis and positive reappraisal. Logical analysis is defined as "cognitive attempts to understand and mentally prepare for a stressor and its consequences", and positive reappraisal is defined as

Table 1**Typology of Coping Responses**

	Approach	Avoidance
Cognitive	<u>Cognitive Approach</u> -logical analysis -positive reappraisal	<u>Cognitive Avoidance</u> -cognitive avoidance -resigned acceptance
Behavioural	<u>Behavioural Approach</u> -seeking guidance & support -problem solving	<u>Behavioural Avoidance</u> -alternative rewards -emotional discharge

"cognitive attempts to construe and restructure a problem in a positive way while still accepting the reality of the situation" (Rijavec & Donevski, 1994, p. 94). The second type of coping is behavioral approach coping which includes the subscales of seeking guidance and support and problem solving. These approaches are defined as "behavioural attempts to seek information, guidance or support" and "behavioural attempts to deal directly with the problem" (Rijavec & Donevski, 1994, p. 94).

The third and fourth types of coping are the avoidance strategies. For cognitive activities these include cognitive avoidance (avoiding thinking about the stressor realistically) and resigned acceptance (cognitive attempts to react to the stressor by simply accepting it and making no effort to change the situation). Behavioural avoidance coping strategies include alternative rewards (attempts to engage in new activities to create new sources of satisfaction) and emotional discharge (attempts to reduce tension by expressing negative feelings). Each of these coping responses are theorized to be used differently by individuals in distinct situations, and to lead to

varied outcomes. Next, the findings of coping studies using this typology will be reviewed.

Findings on the effectiveness of different coping responses. Few studies address the coping resources of persons who are homeless. If reviewed, studies usually provide anecdotal accounts of coping strategies. Other studies propose that once an individual becomes homeless, his/her coping responses either deteriorate over time, or that coping responses are not necessary because the person has become affiliated to a lifestyle of being homeless and no longer considers the events associated with being homeless to be stressors (Grigsby et al., 1990). Therefore, findings of studies using the approach and avoidance types of coping will be reviewed despite their different research questions and populations under study.

A variety of community samples have been used to investigate this typology of coping responses. In an early study, Billings and Moos (1981) found that adults with few social resources tended to use more avoidance coping strategies than persons with higher levels of social resources. Similarly, in a study of senior citizens and their drinking behaviours, those classified as "problem drinkers" were more likely to use avoidance strategies (both cognitive and behavioural) to manage life stressors (Moos, Brennan, Fondacaro & Moos, 1990). Interestingly, problem drinkers who experienced more negative life events used a higher number of coping responses than those who had not experienced similar events, but they used both avoidance and approach strategies. Consistent with the Billings and Moos (1981) finding, those persons with fewer financial and social resources relied more on avoidance coping responses, and were found to have more drinking problems, report higher levels of depression and physical symptoms, and lower levels of self-confidence. Moos, Finney and Cronkite (1990) studied the coping responses of

persons two and ten years after they had finished a residential alcohol addiction program. Persons who were considered to have “relapsed” at the two-year period were found to use more avoidance coping strategies than the remitted group or case controls. Remitted and control groups showed no differences in their use of cognitive or behavioural approach strategies. Surprisingly, at the ten year assessment, all three groups displayed similar patterns of coping responses, indicating that the once relapsed group were able to learn both cognitive and behavioural approach strategies, even if they were still drinking. Moos, Finney and Cronkite (1990) suggest that the change in coping responses for the relapsed group indicate that coping responses can be learned to meet the demands of dealing with particular life stressors.

Coping responses have also been examined in young adult populations. Rijavec & Donevski (1994) found that among 336 college students who recounted their attempts to resolve a personally stressful situation, those with successful outcomes had used approach coping responses. Specifically, the most frequently used strategies were cognitive approach responses. Vercruysse and Chandler (1992) studied adolescents coping with recent family relocation from the United States to Belgium. They found that, overall, adolescents used both approach and avoidance coping responses, but that females and older teenagers relied more on approach than avoidance strategies. In addition, adolescents with better self-concepts tended to use more approach strategies, as did those with better behavioural adjustment.

In a sample of adults with acute leukemia in remission, approach coping resources were used with more frequency than avoidance responses. Cognitive approach resources were used the most frequently to deal with the stress associated with the experience of having leukemia (Evans,

Thompson, Browne, Barr & Barton, 1993). Hiebert-Murphy (1998) studied mothers whose children had been sexually abused and found that those women who had been abused themselves were more likely to use avoidance coping strategies in dealing with their child's disclosure of abuse. Reliance on avoidance coping strategies was also found to predict levels of emotional distress experienced by the women, even after controlling for both maternal history of sexual abuse and levels of available social support.

In conclusion, with a diverse range of individuals and associated experiences, differences are found in the coping strategies used to deal with life stressors. This suggests the utility in examining coping responses in the model proposed for the study by the two dimensions of cognitive and behavioural activities, and approach and avoidance responses.

4.2 Environmental Factors

The two environmental factors to be examined are social network and perceived social support. First, a conceptual understanding of social support and findings of its relevance to the population being investigated will be provided.

4.21 Social Support

Definitions of social support. "Social bonds have long been considered essential to psychological well-being" (Rook, 1984, p. 1389). These bonds have been conceptualized as the social support offered by others to an individual, however, the concept of social support has often been considered too broad or vaguely defined. Cobb (1976) suggests that "social support is defined as information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations" (p. 300).

Methods of conceptualizing social support have varied widely over the years (Sarason, Sarason & Gurung, 1997). Early studies defined and measured social support by categorizing the individual's marital status and estimating the amount of contact the individual had with others. Measurement instruments that grew from these approaches could be grouped into four general categories: (1) measures that assessed the "embeddedness" of an individual in a social group, (2) measures that assessed the amount of support received during a particular time period, (3) measures that assessed an individual's perception of the availability of social support should it be needed, and (4) the functions or activities used to provide support (e.g., emotional support, informational support, tangible support) (Sarason et al., 1997). Despite these attempts at different classifications, the implications of different assessment methods and the question of who determines supportiveness was reported to still be largely ignored. In an attempt to address these issues, different theories of the role of social support were examined.

Models of social support. Two main models of social support are discussed in terms of their "hypothesis" of the role of social support in an individual's health and well-being. The "direct effect hypothesis" argues that "support enhances health and well-being irrespective of stress level ...as a result of the perception that others will provide aid in the event of stressful occurrences or as a result of integrated membership in a social network" (Cohen & Syme, 1985, p. 6). In contrast, the "buffering hypothesis argues that support exerts beneficial effects in the presence of stress by protecting people from the pathogenic effects of such stress" (Cohen & Syme, 1985, p. 7). The buffering hypothesis further suggests that social support may play a role at two different points in the stress-pathology chain: (1) by intervening between the stressful event and the stress

experience by preventing or diminishing the resultant stress response and (2) support may intervene between the experience of stress and the onset of a pathological outcome. The first depiction of the role of support suggests that perceived social support may redefine the appraisal of the stressful situation and/or bolster the ability to cope with the imposed demand. The second depiction suggests that support may directly influence behaviours or physiological processes involved in a transient stress response that contribute to the onset of psychopathology. Although both models of social support are still considered in the conceptualization of social support, the “buffering hypothesis” has received more attention in empirical studies.

Studies have demonstrated that social support can “buffer” individuals in a crisis from a wide variety of detrimental conditions including: physical illness, mental health, and substance abuse (Cobb, 1976; Eaton, 1978, Nelson, 1990, Sarason et al., 1997). In addition, the provision of social support has been demonstrated to accelerate recovery from physical illness, improve psychological functioning, and decrease perceived burden in life events such as caring for a mentally ill family member (Billings & Moos, 1982, Cohen & Syme, 1985, Potaszniak & Nelson, 1984). The effects of the “buffering role” of social support are not, however, posited to be the same for everyone. Differences have been found both in the role and perception of social support by men and women, and also in the context in which the support is received.

Billings and Moos (1982) found that social support from family members was related to improved psychological functioning in women, whereas social support from co-workers was related to improved functioning in men. Eckenrode and Gore (1981) posit that the buffering role of social support against stressful life events must be considered in the context of the life event.

The context of the event is defined as the “temporal, psychological, and social situations that determine both the meaning of the events and the individual capacities for dealing with them” (p. 46). This suggests that in order to consider the buffering role played by social support, aspects of the individual, the life event and the type of social support must all be considered.

Thoits (1982) suggests that there are two main problems in considering social support as a “buffer” from the effects of stressful life events. First, the aspects of social support (as outlined above) have not been clearly delineated in many studies, thereby confounding the type of social support assessed and its role in buffering stress. Second, the interactive effects of life events and social support have not been fully considered. Not only can social support influence the occurrence of stressful life events, but life events may also alter the support available to individuals. Although the perceived social support may help to buffer the individual against decreased well-being as a function of stressful life events, life events (such as being homeless) may have already impacted upon the availability of such support. This suggests that both the structure (or size) of the social network and the perception of available support are important factors in conceptualizing the amount of available support.

Structural and functional perspectives of social support. The social support process has been studied from two different perspectives: in terms of the structure of the social network (e.g. size, density, composition) and in terms of the functions that the network serves (Cohen & Syme, 1985). The two perspectives of social support address the earlier mentioned issue of the implications of different assessment methods to investigate social support. Structural measures describe the connections between the individual and the members of his/her social network (e.g.

the roles played by members of the network). Although a list of the network is usually self-reported, structural measures are usually considered to measure objective characteristics of social networks (Cohen & Syme, 1985). Functional measures assess whether interpersonal relationships serve particular functions (e.g., provide affection, provide a sense of belonging, reassurance of worth), and generally ask the individual about his/her perceptions of the availability or adequacy of support provided by other persons. The functional measures also address a conceptual limitation of other measures by allowing the individual to determine the perceived supportiveness of the network, and not relying solely on structural characteristics to infer support.

Perhaps not surprisingly, a very small relationship between social network assessment and perception of social support has been found (Dunkel-Schetter & Bennett, 1990, Nadler, 1986). In fact, Schaefer, Coyne and Lazarus (1981) demonstrated that although a relationship existed between social network size and perceived social support, the two variables were empirically distinct. One explanation for the distinctness of the variables is that others' (members of the network) views of the degree of stress to which an individual was exposed and the stressed individual's personal coping abilities and help-seeking behaviour may play more important roles in how support is perceived and delivered than the number of persons available to provide support (Dunkel-Schetter & Bennett, 1990). Another explanation is that social support may have negative consequences (Fisher, Nadler & Witcher-Algana, 1982), or act in a way that the recipient perceives as being negative (Nelson, Hall, Squire & Walsh-Bowers, 1992), or that the expected beneficial effect may not occur because of aspects of the personal relationships between the individual and those supporting him/her (Coyne & DeLongis, 1986). Due to the different

conceptualizations of social support and the different information that both structural and functional perspectives to assessment can yield, House, Umberson & Landis (1988) recommended measuring social support with more than one approach and incorporating both structural and functional perspectives in order to determine how they relate to various health and well-being outcomes. This emphasis on multiple measurements of social support will be considered in the context of social support research conducted with persons who are homeless and by the use of both a structural and a functional measure in the proposed transient stress model for the study.

Findings on social support and persons who are homeless. Some studies on social support and persons who are homeless compare results with persons who have a low socio-economic status, but who are housed. For example, Goodman (1991) compared the nature of social support in the lives of 50 homeless and 50 housed women. She found no differences between the groups on measures of size and composition of social network, nature of support received, or degree of contact with family members. The only difference was the degree to which respondents expressed trust in their social networks, with homeless women being less trusting of others. She posited that "social isolation may be more a consequence than a cause of homelessness". Shinn, Knickman and Weitzman (1991) compared the social relationships of 677 women who were mothers of families requesting emergency shelter and 495 women who were mothers in housed families receiving public assistance in New York City. They found women seeking shelter had experienced more past events reflecting a history of disruption in social relationships (e.g., foster home or institutional placement, run from home, youth homelessness, physical and/or sexual abuse) than the women who were housed. In a surprising finding, women who were seeking shelter were

more likely to have had contact with friends and family members than housed women, although they perceived less support from these sources, and felt less able to draw on those resources to meet their current housing needs. An interpretation of this finding was that women seeking shelter had already stayed with members of their support network and may have “used up” potential sources of future support from such members before turning to public shelter.

Solarz and Bogrart (1990) found that persons who were homeless had relatively small social networks, with an average of 6 members, although almost all persons had at least one member in their support network. Other findings suggest that although persons who are homeless have a network of friends, family, service providers or acquaintances, these networks differ from those described in the general population because they report less overall satisfaction with perceived social support (LaGory, Ritchey and Fitzpatrick, 1991). Shutt, Meschede and Rierdan (1994) highlight the role of perceived social support in their finding that “perceived social support lessens distress and suicidal thoughts directly and also buffers homeless persons from the distress associated with traumatic experiences” (p. 134). Therefore, the size and composition of a support network, and the perception of the support that it provides, appear to be important variables to be assessed in the examination of social support for persons who are homeless. These two elements, social network and perceived social support, will be examined in the transient stress model proposed for the study.

4.22 Social Network

Social network (both size and composition) and perceived social support are the structural and functional support variables that are being used in the proposed model for the study. In the

model, social network is hypothesized to be related to stressful life events, and perceived social support is hypothesized to be associated with both stress appraisal and the psychological stress response.

Social network assessments record the number of persons in an individual's social network that fulfill different roles (e.g. family, friend). Bedford & Blieszner (1997) suggest that examining the roles that persons in an individual's social network play provides important information about the type of social support available to the individual. For example, if the network is filled only by service professionals, different types of support would be available to an individual than if his/her social network was comprised only of other homeless persons who were living companions in an emergency shelter. Therefore, by differentiating members of a social network by the role they play in an individual's life additional information about the type, not the quality, of support can be made, based on the composition of the network.

The size of the network should also be considered (Nelson et al., 1992). Although overall size cannot accurately estimate the perception of available social support, size differences between distinct groups in society have been found. For example, previous research has shown that social network sizes of persons who are homeless are likely to be small, and made up of people of the same sex as the respondent (Passero, Zax & Zozus, 1991; Solarz & Bogart, 1990; Tolsdorf, 1976). Most network measures that have been used in this research examine support coming from family, friends, or co-workers, and do not ask about support from professionals or community support workers. As Milardo and Allan (1997) note, "it is not entirely clear which types of network members are most likely to be influential" (p. 518). Therefore, they suggest the inclusion

of a measure of an individual's perception of available social support in addition to an examination of the characteristics of the social network.

4.23 Perceived Social Support

Perceived social support is the most frequently assessed social support concept (Barrera, 1986). Reviewed studies of perceived social support indicated that it is negatively related to psychological distress associated with stressful life events (Barrera, 1986). Kaniasty and Norris (1997) examined the role of perceived social support during natural disasters that affect entire communities. They found that although the stress of the event for some people led to a deterioration of available support, for others, the perception of social support ameliorated individuals' coping abilities and played a "protective appraisal" role in the onset of psychological distress. They defined the protective appraisal process as, "the belief of being reliably connected to others will hopefully guard others from experiencing more intense distress" (p. 618). They further postulate that this role of perceived social support may apply to collective events or "community stressors" in which the event "greatly impacts a number of people, many of whom are members of each other's support networks and are mutually dependent on one another's coping resources" (Kaniasty & Norris, 1997, p. 619). A relevant "community stressor" may be the experience of being homeless, and thereby supports the investigation of both perceived social support and the number of network members in similar circumstances (i.e., homeless).

The most common conceptualization of the role of perceived social support in the stress process is as a moderator of stress appraisal. Wethington and Kessler (1991) note that one of the "most potent predictors of psychological adjustment after stress is the perception of social support

in the environment" (p. 28). Component models of social support have suggested that different types of support should be considered in an overall measure of its provision (Cutrona & Russell, 1987). Types of support include elements such as emotional, tangible aid or informational support (Schaefer et al., 1981), or more affect-related components such as affirmation and self-esteem support (Cohen & Wills, 1985; Kahn, 1979).

Weiss (1974) offers a typology of six "relational benefits" that appear to capture all of the different dimensions of support that have been identified in these models (Russell, Cutrona, Rose & Yurko, 1984). The provisions of different aspects of relationships include: attachment (a sense of emotional closeness and security); social integration (a sense of belonging to a group of people who share common interests and recreational activities); reassurance of worth (acknowledgment of one's competence and skill); reliable alliance (assurance that one can count on others for tangible assistance); guidance (advice and information), and opportunity for nurturance (a sense of responsibility for the well-being of another person) (as defined in Cutrona, 1986). Another important aspect of perceived social support is the perception of being able to provide support to others (Russell, Cutrona, Rose & Yurko, 1984, Cutrona, 1986). Provision of social support to others is related to the relationship factors of social integration and reassurance of worth.

Therefore, assessment of perceived social support should consider not only these six elements or provisions within an individual's interpersonal relationships, but also the aspect of reciprocity of support.

4.3 Life Events

Stressful life events related to being homeless are proposed in the model to be the antecedents of the stress process. A description of the evolution of the process used to measure life events will be provided, followed by a listing of those events proposed to be relevant to being homeless.

4.31 Stressful Life Events

In considering stressful life events, the first issue to address is what elements of an event constitute its stressfulness. In life events research, two points of view exist in this discussion: those who believe it is the amount of change associated with the event that constitutes its stressfulness (Holmes & Rahe, 1967), and those who believe that the stressfulness is due to the undesirability of the event (Gersten, Langner, Eisenberg, & Orzek, 1974; Vinokur & Selzer, 1975). Each theory contends that stressful life events, either by the amount of change they contain, or by their undesirability, are an important element in explaining illness onset (Rahe, 1979; Vinokur & Selzer, 1975). However, each proposes that the stressfulness of the event can be quantified and measured differently.

Measuring life events based on change. The first attempts to quantify stressful life events in terms of the degree of change they produced in an individual's life, or the degree of adaptation required as a result of the change, came with Holmes and Rahe's (1967) Social Readjustment Rating Scale. The scale lists 43 life events that involve either "positive stress" (e.g. marriage, pregnancy, vacation) or "negative stress" (e.g., death of a spouse, troubles with the boss). Events are given a rating (number of points) indicative of the amount of stress (either positive or

negative) that they are expected to contain. For example, death of a spouse is an event that is given 771 points (Masuda & Holmes, 1967). The points allocated to each event were derived from an "expert panel" and vary for each event. Although this rating scale was a useful initial attempt to quantify and examine stressful life events, many difficulties emerged in its conceptualization and use. Mechanic (1975) notes that because the scale provides a total score (the sum of the events that have happened to a person over a given period of time), it cannot be used to determine the role of varying types of life changes (i.e. positive or negative) in the occurrence of illness onset. In addition, the selection of items and the reliance on expert raters to quantify the amount of change (and therefore stress), associated with each event does not allow for an investigation of cultural variance in stressful life events, and limits the use of the scale to a homogeneous (in terms of culture and socio-economic status) population (Hough, Timbers-Fairbank, & Garcia, 1976).

In an attempt to remedy some of the earlier limitations of the scale, Rahe (1978) proposed that the same scale items be used, but to replace expert ratings on quantifying the amount of change with "subjective life change units" in which the individual assigns a value between 1-100 to indicate the amount of change that he/she experienced as a result of the event. Although this allows for individual variability in the experience of events, the change in methodology still produces a single "presumptive stress score" in which events remote in time have less influence than recent events (Horowitz, Schaefer, Hiroto, Wilner, & Levin, 1977). Not only does the single score not account for a recency and primacy effect in subjective rating of the amount of change that an event produced, but the single score continues to disallow the investigation of the

differences in the role of desirable ("positive stress") or undesirable ("negative stress") events involved in illness onset, or the coping resources required to deal with the events.

Desirable versus undesirable life events. Vinokur and Selzer (1975) investigated the relationship of life events to stress and mental distress by separating desirable and undesirable life events. Findings revealed that although life events were related to self-reports of tension, distress and emotional disturbances, this relationship was only present for undesirable life events, thereby suggesting the predictive differences between the desirability of the life event and its perceived stressfulness.

Ross and Mirowsky (1979) compared 23 different methods of weighting stressful life events in terms how well they predicted psychiatric symptomatology, including the Social Adjustment Rating Scale (Holmes & Rahe, 1967) with both the expert rating point system, and the subjective point system. They also considered methodologies in which the desirable and undesirable life events were sub-divided and examined separately. They found that scales of undesirable events predicted symptomatology better than change scores. Further, in multivariate regressions when undesirability was controlled, the effects of desirable or ambiguous events on changes scores disappear. They also stated that the most efficient undesirability index "consists of simply adding up the undesirable events" (Ross & Mirowsky, 1979, p. 166). Therefore, the best way to examine stressful life events appears to be to sum the number of undesirable life events experienced by an individual. However, this simplified methodology still does not account for the seemingly poor fit of the items to a variety of populations who may experience stressful events outside of the ones listed.

Creation of a list of relevant stressful life events. Persons who are homeless have been considered members of a distinct group or “culture” (Grigsby et al., 1990). As such, they are a group for which the events listed on Holmes and Rahe’s (1967) Social Readjustment Scale may not be very relevant. Instead, what is needed is a list of undesirable life events that pertain to the experiences of persons who are homeless, in an attempt to assess how many of those events have happened to them in the past year. A list of relevant stressful life events was created from the compilation of empirical research on factors associated with homelessness (see Appendix G).

Events were chosen from factors most frequently mentioned in theoretical pathway models, factors involved in classification models, and other factors that were most frequently investigated in empirical studies. Events are constructed from related research and classified under seven subheadings: employment (McChesney, 1992; Morse et al., 1992; Wenzel, 1992), housing (Dail, 1993; Leavitt, 1992; Ropers, 1988; Rossi, 1989; Shinn & Gillespie, 1994; Timberlake, 1994), mental health issues (Appleby & Desai, 1987; Lamb & Lamb, 1990; Martin, 1991; Morse et al., 1992; North & Smith, 1992; Sosin & Grossman, 1991; Wright, 1988), substance abuse (Addiction Research Foundation, 1998; Morse et al., 1992; Linn, Gelberg & Leake, 1990; McCarty, Argeriou, Huebner, & Lubran, 1991; Struening & Padgett, 1990), victimization (Bassuk, 1987; Fisher et al., 1995; Milburn & D’Ercole, 1991), changes to the social network (Goodman, 1991; LaGory, Ritchey & Fitzpatrick, 1991; Shinn, Knickman & Weitzman, 1991; Winkle & Ward-Chene, 1992), and legal history (Fisher, 1992; O’Reilly-Fleming, 1993).

4.4 Stress Reaction

Stress response is being proposed in the model as a response to the stressful life events

related to being homeless. It is at this stage in the model that the environmental factor of perceived social support and the personal factors of coping responses and personal empowerment are proposed to exert influence over the response to the stressor. The measurement of stress response is composed of both stress appraisal and a psychological reaction to the stressor. In this section, current conceptualizations of stress will be described, followed by depiction of both elements of the stress response.

4.41 Conceptualization of Stress

The term “stress” refers to an increasingly wide variety of conditions, responses and experiences (Fisher, 1986). In attempting to define the concept of stress, three main types of definitions have emerged: those based on the features of the stimulus variables, those based on the features of the response variables, and those based on the interaction of the stimulus and the response (Fisher, 1986; Monat & Lazarus, 1991). Definitions based on stimulus features assumes stress to be a condition of the environment, and that the level or intensity of the condition determines its resultant stressfulness for individuals (Fisher, 1986; Monat & Lazarus, 1991). The limitations of that definition of stress are the assumption that what is considered stressful for one person will be stressful for another, and that there is no simple way to estimate the tolerance level for the intensity of individual stressors.

Definitions based on response features define stress as the response (often a physiological response) of an individual to the presence of a stressor. This concurs with one of the earliest definitions of stress by Selye (1956) that classified stress as an undifferentiated state of heightened arousal and hormone activity. The limitation of this definition is that it assumes that stress is

defined only by an individual's reaction to a stressor, and does not consider features of the stimulus to be important. This narrow view of stress as considered only by an individual's response provides an idiosyncratic conceptualization that does not explain why some people find the same situation stressful even if their overt behaviour to react to the stressor is markedly different from one another. Instead, what is needed is an interactional definition that considers both stimulus and response features.

Interactional definitions of stress assume that the mental state assesses the presence of stress and then the individual responds to the presence of the stressor (Fisher, 1986). Symington and his colleagues (1955) first demonstrated this interaction between conscious awareness of a stressor and a response to it by demonstrating that autonomic arousal system increased in patients who were dying and conscious, but not in those who were dying but unconscious (as cited in Fisher, 1986). This demonstrated that the presence or absence for the capacity for thought was a determinant of the individual's response, thereby linking awareness or appraisal of the stressor to responses to the stressor. Further, it described what are now considered to be two key processes in stress: stress appraisal and stress response (Baum, Davidson, Singer & Street, 1987; Perrez & Reicherts, 1992; Lazarus & Folkman, 1980, 1984, 1990).

4.42 Stress Appraisal

Appraisal helps to explain individual variation in response to stressors (Baum et al., 1987). The information collected by the individual is believed to shape his/her response to the stressor. In addition, the interpretation of stressors has also been shown to influence the presence of emotion (Lazarus, 1982, 1984; Lazarus & Smith, 1998) and to determine adequate coping responses to

deal with the stressor (Moos, 1992).

The importance of appraisal as a component in the stress process is not universal (Baum et al., 1987). Some believe it is a necessary part of stress, others believe it is important but not necessary, and others believe that it is not a necessary part of responding to stress. (Baum et al., 1987; Thoits, 1983). It is likely that the role of appraisal in the stress process is dependent on how it is defined and assessed. Moos and Schaefer (1993) suggest that appraisal is not always consistently defined, nor adequately measured. They suggest that appraisal is often measured using one item to assess what is understood to be a multi-dimensional construct. In order to propose the most appropriate measurement of stress appraisal, theories about its composition will be presented.

Appraisal has been conceptualized as a primary and secondary processes, or as a collection of component considerations about the nature of the stressor. Lazarus and Folkman (1984) suggest that the appraisal process involves a primary appraisal process (which involves the individual's judgments about what is at stake in the stressful situation) and a secondary appraisal process (which involves their beliefs about viable options for coping). Peacock and Wong (1990) expand the idea of primary and secondary processes to include component parts in each process. They posit that three aspects of primary appraisal include: threat, challenge and centrality of the stressor to an individual's view of him/herself. The three aspects of secondary appraisal all deal with the appraisal of how the effects of the stressor can be controlled. They classify the way that the stressor is controlled into three distinct categories: controllable by self, controllable by others and uncontrollable. In examining the relation of stress appraisal to stress response, Peacock and

Wong (1990) found that university students who appraised a university examination situation as more threatening, central and uncontrollable reported more psychological symptoms and depressed mood.

Using a conceptualization of the dimensions of the stressor to guide the appraisal process, Perrez and Reicherts (1992) suggest that appraisal is based on six subjective dimensions of a situation: (1) valence (the subjective meaning of a situation/event that contributes to its stressfulness), (2) controllability (the subjective appraisal of personal ability to control the stressful situation), (3) changeability (the appraisal that the event will change by itself, without the person or action), (4) ambiguity (the uncertainty of the situation), (5) reoccurrence (an event happening again, or the likelihood that it will in the future), (6) familiarity (the extent of personal experience with such a situation) (p. 26). Litt (1988) also suggests that perceived self-efficacy to deal with the demands presented by the stressor and perceived control over the stressful situation are important aspects of the stress appraisal process.

In sum, consideration of stress appraisal appears to be an important part of examining an individual's response to stressful situations. Stress appraisal has been demonstrated to be linked to stress response (Baum et al., 1987; Fillion, Tessier, Tawadros, & Mouton, 1989; Lemyre & Tessier, 1987; Monat & Lazarus, 1991) and to psychopathology (Finlay-Jones & Brown, 1981; Peacock & Wong, 1990; Schutt et al., 1994). Appraisal based on component parts of the stressor and dimensions of both primary and secondary appraisal will be used in investigating the proposed model for the study.

4.43 Stress Response

Folkman and Lazarus (1985) suggest that "a stressful encounter should be viewed as a dynamic, unfolding process, not as a static unitary event" (p. 150). The process begins with the appraisal of a stressor, and shortly thereafter, the response to the stressor.

Responses to a stressful event have often been classified as physiological or psychological (Fisher, 1986; Baum & Singer, 1987; Perrez & Reicherts, 1992, Selye, 1991). In a simplified sense, physiological responses involve an alarm stage in which hormones from the adrenal cortex (immunoglobulin A, ACTH, etc.) are released into the bloodstream, and an adaptation stage in which hormone levels return to homeostatic levels for the individual (Selye, 1991). Physiological responses also assume that the individual either returns to a state of internal homeostasis, or that decreased immunocompetence and disease onset result (Kiecolt-Glaser et al., 1984). The assumption is that if hormone levels are not reduced in an adaptation phase of stress response, then decreased immune function and disease onset occur as the result of a prolonged state of arousal, or a prolonged alarm phase.

Research on the effects of physiological responses to stress have included measuring hormone levels of persons experiencing stressful events, distinguishing between hormone levels and other physiological responses (e.g., galvanic skin responses) during stressful and non-stressful events, and assessing resulting deficiencies in an individual's immune functioning (Kiecolt-Glaser et al., 1984, 1987; McClelland, Alexander & Marks, 1982). McClelland and his colleagues (1982) demonstrated that male prisoners who reported high stress levels reported significantly increased levels of immunoglobulin-A in their saliva compared to other prisoners who reported lower levels of

stress. In addition, those with higher levels of stress hormones in their system later reported a higher number of respiratory infections.

In assessing immune deficiency as a result of physiological stress responses, Kiecolt-Glasser and her colleagues (1984) found that blood samples drawn from medical students one month before final examinations and the day of the exam had significantly different levels of natural killer cell activity, with the sample from the day of the exam having lower levels. They also found the sample drawn on the day of the exam had significantly higher levels of stress hormones than the samples drawn one month previous. This suggested that the presence of stress created both a presence of stress hormones and a decrease in immunocompetence, which may in turn lead to illness onset.

Kiecolt-Glasser and her colleagues (1987) also examined blood samples of married women and separated/divorced women and found that women separated one year or less had the lowest levels of immune functioning, and that shorter separation periods, more attachment to the ex-husband, and higher levels of reported stress were associated with poorer immune function and higher levels of depression. For the married sample, poorer marital quality was associated with lower immune function and higher levels of depression than those reporting marital satisfaction. The findings suggest that physiological responses such as the release of stress hormones and the resultant decrease in immunocompetence are not only related to the experience of a stressful event, but also to psychological responses to stress, such as feelings of depression.

In sum, physiological measures of reactions to stress offer a number of advantages: they allow for an objective measure of stress response, they can be related to later immunocompetence,

and they can be compared during periods in which a stressor is present or absent. The limitations that such measures contain include the difficulty of collecting samples in field research, the intrusiveness of blood sample collection to participants, and the lack of opportunity that the measures provide for individuals to discuss their experiences of responding to stress. The release of stress hormones and the resulting decrease in immune function are not the only responses to stress demonstrated by individuals, thereby necessitating an investigation of psychological responses to stress.

4.44 Psychological Stress Response

Psychological responses examine an individual's response to stress in three domains: affective, cognitive and behavioural responses to a stressor (Fillion et al., 1989; Lemyre & Tessier, 1987, 1988). Although few measures of psychological responses to stress exist, studies have shown the relationship between measures of psychological responses to stress to both physiological measures and to the onset of disease or psychopathology (Aneshensel, 1992; Fillion et al., 1989; Finlay-Jones & Brown, 1981; Jenkins, 1979, Schutt et al., 1994; Smari & Valtysottir, 1997; Vinokur & Caplan, 1986).

One of the earliest studies to examine the link between psychological responses to stressful events and disease onset demonstrated a relationship between the experience of stressful events, cognitive and affective reactions to the events and the onset of tuberculosis (Rahe, Meyer, Smith, Kjaer & Holmes, 1964). Jenkins (1979) postulated that psychological reactions to stress could be related to both biological and psychological pathological end-states. In other words, responses to stress could be related either to the onset of physical disease symptomatology or to

psychopathology. Smari & Valtysottir (1997) examined psychological stress responses and coping styles in relation to self-reported control of diabetes. They found that differences in initial responses to stress lead to differences in the amount of control reported over diabetes and the use of either task-oriented or emotion-oriented coping styles.

In relating psychological stress responses to physiological responses, Fillion and her colleagues (1989) used a measure of psychological responses to stress and found that affective, cognitive and behavioural indicators of a stress response were significantly related to dental students' levels of immunoglobulines, and also that they could distinguish between exam and non-exam periods.

Psychological responses to stress have also been related to psychopathology (Finlay-Jones & Brown, 1981; LaGory, Ritchey & Mullis, 1990; Schutt et al., 1994; Vinokur & Caplan, 1986). Reactions to stressful events have been shown as correlates of depression, anxiety and suicidal ideation and gestures. More of these findings will be reviewed in the section on end-points of the model, in which psychopathology (a proposed end-point in the model) is reviewed.

In sum, advantages of psychological measures of stress response include their examination of different dimensions of the stress response (e.g., affective, cognitive, and behavioural), are related to both physiological responses to stress and coping responses, and have demonstrated relationships with both disease onset and psychopathology. Although the measures are limited by self-report biases, they have shown low relationships to measures of social desirability (LaGory et al., 1990). Therefore in order, to examine stress response in the model proposed for the study, a measure of psychological responses to stress will be used.

4.5 End Points of the Model

As previously reviewed, stress models propose either well-being (considered as successful adaptation to the stressor) or psychopathology (unsuccessful adaptation) as end points of a stress model. Given the suggestion that psychopathology and psychological well-being are not two ends of the same continuum (Lawton et al., 1991), both psychological well-being and psychopathology will be examined.

4.51 Well-being

Well-being is a broad theoretical construct that has been given many different conceptualizations. Veenhoven (1991a) classifies the concepts of well-being as being objective or subjective, and on either a specific aspect of well-being or on an overall level. For example, she classifies a specific aspect of objective well-being to be wisdom, whereas a specific aspect of subjective well-being would be job satisfaction. On an overall level, she classifies objective measures to include need for gratification, self-actualization, etc., and subjective measures to include life satisfaction and contentment. Headey and Wearing (1991) suggest that subjective measures, rather than objective ones, are more important in the measurement of well-being, because it is a judgment made by an individual, and not an assessment of his or her environment, that best determines the level of subjective well-being.

Top-down vs. bottom-up theories of well-being. An important debate among researchers has been termed the “top-down” versus “bottom-up” controversy (Diener, 1984; Headey, Veenhoven & Wearing, 1991). Bottom-up theories of subjective well-being suggest that variables such as social support, life events and levels of expectation and aspiration are causes of subjective

well-being. In contrast, top-down theories suggest that those same factors could be consequences, not causes, of subjective well-being. To investigate these theories, Headey et al. (1991) used a 1981-1987 Australian panel study to devise a statistical model to assess causal direction between six specific areas of satisfaction (marriage, work, leisure, standard of living, friendship and health) and subjective well-being. Results suggested that neither theory could account for the causal relationship between subjective well-being and all satisfaction domains sampled, but that the marriage domain showed two-way causation; the work, leisure and standard of living domains showed top-down causation, and that friendship and health satisfaction showed spurious (e.g., artificially inflated) correlations to subjective well-being.

The limitations of these findings included the use of crude measures of satisfaction with each domain by simply rating the overall domain on a scale ranging from delighted to terrible, and not using the most common life satisfaction index (the Satisfaction with Life Scale, Diener et al., 1985), but using a dated scale with limited psychometric properties instead. Also, there were only small changes reported in domain satisfaction scores over the six years of the study. Finally, only the net effect of the factors on well-being were assessed because scales of extroversion and neuroticism (that were only assessed during the first panel of the study) were first factored into the relationship. Not only are these personality factors broad, but the method used in the study suggests that satisfaction in these life domains is independent of an individual's personality.

In sum, Headey et al. (1991) caution that the model's apparent support for a top-down theory of subjective well-being should not be seen to confirm Diener's (1984) assumption that well-being is a stable trait rather than a fluctuating state. The authors note that although the

“estimated stability of the well-being was 0.55-0.60 for two, four and six year intervals, about 25% of the sample shifted overall levels of well-being by over one standard deviation in these time periods” (Headey et al., 1985, p. 95). Findings from this study suggest that both the stability and the personality correlates of subjective well-being need to be examined.

Stability of subjective well-being. Horley and Lavery (1991) suggest that the stability of subjective well-being has not been well understood because most research has been cross-sectional in design. The opposite consideration of the stability of a well-being measure is its measurement sensitivity. As Horley and Lavery (1991) note, “effective subjective well-being measures must be stable when circumstances are stable and dynamic when circumstances change” (p. 113). For example, Atkinson (1982) reported that during a two-year period, test-retest coefficients for both global and domain-specific measures of satisfaction were more stable in a group reporting little change in their life conditions over the two years as opposed to a group reporting change. The finding that changes in life circumstances produced changes in satisfaction (or well-being) measures supports a bottom-up theory of well-being for persons who have experienced significant life changes. It further suggests that life satisfaction ratings should be used as a measure of subjective well-being for individuals who have experienced significant life changes in the past few years.

Personality correlates of subjective well-being. Past research has shown that demographic variables fail to account for much variance in individuals’ perceptions of their subjective well-being (Andrews & Withey, 1976; Diener, 1984; Emmons & Diener, 1985). Although this may appear surprising, it suggests that well-being may be comprised of dimensions that are

differentially influenced by exogenous factors. Some theories have posited that subjective well-being is composed of three dimensions: life satisfaction, positive affect and negative affect (Diener, 1984; Diener & Emmons, 1985; Emmons & Diener, 1985; Veenhoven 1991b). In examining personality correlates related to these three dimensions of well-being, and using dimensions of the 16PF personality inventory (Cattell, Eber, Tatsuoka, 1970), Emmons & Diener (1985) found that life satisfaction was significantly related to: self-sufficiency, tough poise (i.e., determination), intelligence, surgency, social boldness, and extraversion, which are factors of both interpersonal competencies and internal states. They also found that positive and negative affect were related to different personality correlates from one another, and from life satisfaction. Despite these differences in related personality correlates, Horley and Lavery (1991) suggest that “affective” subjective well-being measures are generally less adequate than “cognitive” measures, such as life satisfaction.

Swartz and Strack (1991) propose that an individual's personality (particularly his/her values and aspirations) exerts considerable influence over cognitive measures of subjective well-being such as life satisfaction. They propose that life satisfaction ratings are made by an individual by comparing his/her present state to an ideal or desired state. They believe that the discrepancy between these states (e.g., between an individual's ideal state and his/her actual state) is likely to create judgments of low life satisfaction.

In sum, findings that variability exists in life satisfaction scores related to the presence of changes in life circumstances (Atkinson, 1982) and the influence of an individual's personality (Swartz & Strack, 1991), suggest that a measure of life satisfaction would be best used to assess

subjective well-being in the proposed model of the study. The population being studied (e.g., persons who are homeless) are assumed to have experienced changes in their life circumstances by becoming homeless, however, they are also assumed to report variation in their life satisfaction scores as a result of the influence of their individual personalities, thereby limiting the possibility of a floor effect (e.g. only low scores reported) of life satisfaction scores in the study.

Findings on subjective well-being for persons who are homeless. Selection of presented findings for persons who are homeless required differentiating between findings based on subjective well-being measures and objective measures of quality of life. Few studies met this criteria, although many interesting findings about the role of housing conditions (and stability), social support and well-being were discovered. Although not directly related to either the population under study or the above-mentioned criteria, some important findings relating well-being and housing conditions will first be reviewed to provide a background context for the consideration of well-being and housing status.

Housing conditions have been found to be related to decreases in self-reported life satisfaction. Lehman and his colleagues found that persons residing in more restrictive settings were less satisfied with their lives than persons living in less restrictive settings (Lehman, Possidente & Hawker, 1986; Lehman, Slaughter & Myers, 1991). However, not only the conditions of the housing, but also its perceived stability, has found to be related to subjective well-being.

Earls and Nelson (1988) related psychological well-being (defined by positive and negative affect) to perceptions of housing and social support for persons with severe and persistent mental

illness. They found that negative affect was related to the number of concerns an individual had about his/her housing (including its stability), and was inversely related to satisfaction with available social support. Positive affect was related to frequency of social support. In addition, a positive correlation between network size and positive affect was found only for those individuals with a high level of housing concerns, and an inverse relationship was found between network size and negative affect for those same individuals. This further supported the "buffering hypothesis" of social support in which support "buffered" the influence of housing concerns on the individuals' affect. This study highlights the role of both social support and well-being for persons who have concerns about their housing. Further, the results suggest examination of the role of these factors for persons who not only have concerns, but have subsequently lost, their housing.

Veenhoven (1991b) related happiness (positive affect) to an individual's housing conditions and found that happiness was related to the presence of stable living conditions. She noted that although most people were typically positive about their life, adverse conditions such as poverty, isolation and lack of stable housing decreased their ratings of happiness. While the finding is not surprising, it does further illustrate the influence of housing and other objective life circumstances on ratings of subjective well-being.

Marshall and his colleagues (1996) found a relationship between objective life circumstances and life satisfaction for persons who were homeless in California. Using both objective indices of life quality (total income and current living status and location over the past week), and both domain specific (housing, clothing, health, food, finances, social relationships, and leisure) and overall life satisfaction measures, they found life circumstances were related to

both domain specific and overall measures of satisfaction. In addition, life satisfaction was also found to be higher for males than for females and to be related to the individual's economic circumstances. Although the entire population had comparatively few resources, variation in satisfaction ratings was found to be related to available resources. This suggests that although many respondents in the proposed study may be in similar circumstances, the use of a life satisfaction scale has enough measurement sensitivity to detect small difference even within a population with somewhat homogeneous living circumstances.

Marshall and his colleagues (1996) comment on the utility of a global life satisfaction measure by noting, "if we had used only sphere-specific measures, then we may have failed to identify associations between demographic characteristics and global satisfaction". Although they did not measure the response to stressful life events as proposed in the present study, using only sphere-specific measures would likely fail to capture the effect of levels of stress associated with homelessness to ratings of subjective well-being.

4.52 Psychopathology

As previously mentioned, responses to stressful situations or life events have been found to be related to psychopathology (Finlay-Jones & Brown, 1981; LaGory, Ritchey & Mullis, 1990; Schutt et al., 1994; Vinokur & Caplan, 1986). Using the stressful situation of being involved in a war, Rahe and his colleagues (1978) studied the experience of stressful events and the occurrence of mental health problems of medical personnel in a Vietnamese refugee camp. They found that all personnel had elevated levels of depression and anxiety symptoms (as measured by the Cornell Medical Index-Health Questionnaire) when compared to age-matched norms, and attributed the

elevated scores to be a result of exposure to the stressors in their environment.

Finlay-Jones and Brown (1981) found that in a community sample of women in Australia, those who reported stressful life events that involved loss in the past year also reported higher levels of depression; those who reported life events involving danger reported higher levels of anxiety, and those reporting life events involving both loss and danger reported high levels of both depression and anxiety. Their findings suggest a relationship between dimensions of stressful life events and resulting symptomatology. In addition, the authors recommend examining rates of depression and anxiety in persons who have experienced stressful life events. Another stressful life event for which some studies have been conducted to examine resultant psychopathology is the experience of being homeless.

Findings from persons who are homeless. Schutt, Meschede and Rierdan (1994) found that levels of psychological distress (as measured by the Center for Epidemiological Studies Depression Scale) and frequency and severity of suicidal thoughts were much higher for a group of adults who were homeless than adults in the general population. The one factor that was found to protect (or "buffer) adults in the homeless sample from increasing levels of depression was perceived social support.

Grigsby and his colleagues (1990) proposed that persons who become homeless experience a process of social disaffiliation. If they do not become "re-affiliated" into a distinct sub-group of persons who are homeless, they were found to experience "isolation and dysfunction: (p. 143), as measured by a lower rating on the Global Assessment of Functioning Scale.

In one study that did consider the influence of life events for persons who were homeless on levels of depression, LaGory and his colleagues (1990) found that life circumstances had a significant impact on reported levels of depression. The life circumstances measured included: life events, daily hassles, the type of environment occupied and how long the person had been homeless. Results indicated that the lower the life conditions reported, the higher the level of self-reported depression.

In sum, a relationship between the occurrence of stressful life events and psychopathology symptoms (namely depression and anxiety) has been demonstrated for specific populations, including persons who are homeless. Therefore, a measure of psychopathology, that is sensitive to both depression and anxiety, but also provides a more general overview of mental health concerns than a specific diagnosis, will be used to assess psychopathology in the model proposed for the study.

5.0 Hypothesis for the Study

This study is designed to address the experiences of persons who are homeless by testing a transient stress model in an attempt to predict what factors serve to predict a person's well-being in the context of experiencing the crisis of being homeless. A revised transient stress model is presented in Figure 3. The model combines elements of Moos and Schaefer's (1993) integrated framework of stress and coping and Dohrenwend's (1978) social stress model to examine the stress process and reaction to a life crisis (designated in the revised model as being homeless).

Environmental and personal factors are posited in the revised model to provide an overarching framework to the experience of stressful life events related to being homeless, by

serving as a moderating influence both at the time of the stressful event, and also to influence the reaction to the event. The environmental factor chosen for the revised model is social support, with two aspects of support being measured: the size of the support network and an individual's perception of the social support available to him/her by others. The personal factors chosen include personality characteristics (namely neuroticism and extraversion), sex, past experiences of homelessness, coping responses and personal empowerment. In addition, personality characteristics are posited to have relationships with other personal and environmental factors. As shown in Figure 3, neuroticism is expected to have a predictive relationship with coping responses, personal empowerment, sex, and past experiences of homelessness. In addition, extraversion is expected to have predictive relationships with both environmental factors (social network size and perceived social support).

5.1 Explanation of the Predicted Relationships

An explanation for each of the relationships predicted in the transient stress model is provided in their order of presentation in the model.

Neuroticism and coping responses. It is expected that higher levels of neuroticism will be predictive of lower levels of using approach-style coping responses and higher levels of using avoidance-style coping responses. Moos (1997) reported that individuals who displayed lower overall levels of mental health problems tend to use approach-style coping responses more often. Moreover, it is expected that persons with lower susceptibility to psychological distress (as measured by neuroticism) will engage in more approach-style coping responses.

Neuroticism and personal empowerment. It is expected that increased levels of

neuroticism will be predictive of decreased levels of personal empowerment, as heightened susceptibility to psychological distress is assumed to be related to lower levels of feeling mastery and control over one's life.

Neuroticism and sex. The relationship between neuroticism and sex is expected as a result of Cosa and McCrae's (1992) finding of differences between males' and females' (in a community sample) scores on the neuroticism subscale. In addition, Breaky et al. (1989) found that there were differences between homeless men and women in Baltimore with respect to rates of mental health problems. Differences were also found between rates of trauma-based symptomatology for homeless men and women in emergency shelters in California (North & Smith, 1993). Although neither study employed the NEO-PI, it is postulated that differences found among the population in mental health problems will also be reflective of differences found in susceptibility to psychological distress.

Neuroticism and past experiences of homelessness. It is expected that increased levels of neuroticism will be predictive of an increased number of past experiences of homelessness, as previous research has suggested that distress may be an antecedent to an experience of homelessness (Calsyn & Morse, 1992; Morse & Calsyn, 1986; Schutt, Meschede & Rierdan, 1994).

Extraversion and social network size. It is expected that increased levels of extraversion will be predictive of an increased number of persons in the social network. It is postulated that a heightened capacity for engaging in acts of interpersonal intimacy would be predictive of having more persons an individual considers important to him/her in his/her network.

Extraversion and perceived social support. A similar relationship is expected between extraversion and perceived social support. Given the reciprocal nature assumed to be a key aspect of social support (Cobb, 1976), it is expected that heightened capacity for engaging in acts of interpersonal intimacy towards others (extraversion) will be related to increased levels of perceived social support from others.

Sex and stressful life events. The relationship between sex and stressful life events is expected as a result of the findings by Coleman and Wilson (1991) that males and females who were homeless in Ireland had experienced different stressful life events. In the present study, it is further expected that females will have experienced more stressful life events, as previous findings suggest that homeless females experienced (or reported) higher rates of victimization and mental health problems than homeless males (Bassuk, 1987; North & Smith, 1993). Both victimization and mental health problems are categories of stressful life events investigated in the present study.

Past experiences of homelessness and stressful life events. It is expected that increased numbers of past experiences of homelessness will be predictive of an increased number of stressful life events experienced in the past year. Grigsby et al. (1990) suggested that there is a “culture of chronic homelessness” in which persons who have more (and longer) experiences of homelessness experience more stress, isolation and dysfunction (defined as changes to social relationships and mental health problems) than those persons with fewer previous experiences of homelessness.

Social network size and stressful life events. It is expected that increased social network size will be predictive of a decreased number of stressful life events experienced in the past year. This expectation is based on the proposition that social network members may act as a “buffer” to

the occurrence of such life events (Cohen & Syme, 1985).

Stressful life events and stress reaction. It is expected that an increased number of stressful life events experienced in the past year will be predictive of increased levels of stress reaction (appraisal or, and reaction to, being homeless). The occurrence of stressful life events related to being homeless (as used in the present study) is expected to increase the amount of stress an individual would be required to react to, thereby increasing levels of both stress appraisal and psychological stress response.

Coping responses and stress reaction. It is expected that increased levels of approach-style coping responses will be predictive of decreased levels of both stress appraisal and psychological stress response. Given that the approach-style coping responses used in this study are seeking guidance and logical analysis, it is assumed that the more often individuals cope with being homeless by seeking support from others or analyzing their current situation, the less stressful their appraisal of, or response to, being homeless. Conversely, increased levels of avoidance-style coping responses (such as emotional discharge and resigned acceptance) are expected to be predictive of increased levels of both stress appraisal and psychological stress response.

Personal empowerment and stress reaction. It is expected that increased levels of personal empowerment will be predictive of decreased levels of stress reaction (both appraisal and psychological stress response). Consistent with Moos (1998), it is postulated that the preception of heightened levels of personal mastery and control will be related to lower levels in stress appraisal in relation to being homeless. It is therefore assumed that increased levels of mastery and

control will also be predictive of decreased levels of stress response.

Perceived social support and stress reaction. It is expected that increased levels of perceived social support will be predictive of decreased levels of stress reaction (both appraisal and response). This is postulated because perceived social support is expected to redefine the appraisal of, and subsequently the response to, being homeless as less stressful by assuming that available social support will help the individual cope with the demands of being homeless.

Stress reaction and well-being. It is expected that increased levels of stress reaction (appraisal and psychological stress response) will be predictive of decreased levels of well-being. Consistent with Moos (1997), it is postulated that higher levels of stress appraised in relation to being homeless will be predictive of lower ratings of subjective well-being. It is anticipated that this relationship will also be true for increased levels of stress response being predictive of decreased well-being.

Stress reaction and psychopathology. It is expected that increased levels of stress reaction (appraisal and psychological stress response) will be predictive of higher levels of psychopathology. It is postulated that the higher the levels of stress appraised and responded to in relation to being homeless, the higher the frequency of symptoms related to mental health problems reported.

5.2 Hypothesis for the Study

There is one hypothesis for the study. The hypothesis is that the proposed transient stress model is an adequate model to explain the prediction of a person's well-being in the context of experiencing being homeless.

6.0 Method

The proposed study was part of a larger study intended to provide information to a coalition of emergency shelters, community agencies and regional government working with the homeless population in the Ottawa-Carleton region (i.e., Alliance to End Homelessness in Ottawa-Carleton) and the Health Department of the Regional Municipality of Ottawa-Carleton on the characteristics, health needs and service utilization of persons who are homeless in the region. Data was used by the Regional Government's Health Department to prepare a health report card on the health status of the population. It was also used to develop fact sheets for members of the Alliance to End Homelessness to profile the demographic characteristics, stressful life events, and physical health conditions of different sub-groups of the homeless population.

Sample. In order to obtain a representative sample for sub-groups of homeless persons based on age, sex and shelter use (i.e., adult male, adult female, youth male, youth female, adults in family shelters, and persons not using emergency shelters), a sample of 230 persons was chosen. This sample included 200 persons who were users of the emergency shelters in Ottawa-Carleton and 30 persons who did not use emergency shelters. This division of the sample is supported by Toro and his colleagues (1999) who suggest that homelessness research should focus primarily on shelters and secondarily on food programs for sampling in order to obtain as representative a sample as possible. Although initially the sample was to consist of 50 persons from each sub-group using emergency shelters, slow turnover of residents in some shelters combined with the need to use convenience sampling strategies in some shelters made this target unattainable. Instead, 52 respondents were adult males, 45 respondents were adult females, 45

respondents were male youth, 36 were female youth, and 22 were adult residents of family shelters (Forward and Carling Family Shelter). Another 30 individual not using shelters (but who were homeless) were also sampled for the study.

Although random sampling was attempted in all emergency shelters, it was not possible in some shelters due to the comfort level of staff with the random selection methodology. Random sampling procedures were used for interviews with adult men, male youth, and female youth. For adult women and residents of family shelters, advertisements about the study were placed in each resident's mailbox, and residents self-selected for participation in the study. Therefore in those shelters no information could be collected about persons who refused participation.

The 30 persons who do not use shelters were comprised of a convenience sample from related community services, such as soup kitchens and drop-in centers. Recruitment of participants in this sub-group was done on the basis of those persons who met eligibility criteria (e.g., homeless and not currently using emergency shelters) and volunteering to participate. The community sample for the study was comprised of 9 adult males, 7 adult females, 8 youth females and 6 youth males.

In order to avoid duplication of persons interviewed, a list of names and dates of birth was developed to track participants. The list was checked at the start of each interview.

7.0 Measures

Measures are discussed in their order of presentation in the model. This order closely matches the design of the proposed model (see Figure 3), and separates elements of environmental and personal factors into the component parts being examined. This was not the

order of presentation of items to respondents. For the interview protocol, the presentation of information ranged from least to most sensitive. The other measures were added to the questionnaire to meet the needs of the Alliance to End Homelessness and the Region of Ottawa-Carleton's health department, were not involved in testing the transient stress model, and therefore, are not shown.

7.1 Measures of Personal Factors

The personal factors measured in the transient stress model were: personality characteristics, coping responses, personal empowerment, sex, and past experiences of homelessness.

Personality characteristics. The Neuroticism and Extraversion subscales from the NEO Five-Factor Inventory-Form S (Costa & McCrae, 1992) were used as the measures of Neuroticism and Extraversion (see Appendix A). The NEO-FFI-S was chosen in order to assess Neuroticism and Extraversion in an abbreviated format, meaning the use of as few items as possible (for sensitivity to the overall length of the interview) to still provide a valid estimate of each factor.

The NEO-FFI-S is a shortened version of the NEO Personality Inventory (NEO-PI), consisting of five 12-item scales that measure each of the five factors proposed in the Five Factor Model (Neuroticism, Extraversion, Conscientiousness, Openness to Experience and Agreeableness). Selection of NEO-FFI items was based on the 12 items from the NEO-PI having the highest positive or negative loading on the corresponding factors.

Facets of the Neuroticism subscale include: anxiety (conceptualized as tendency to be

apprehensive, fearful, prone to worry, nervous tense and jittery); angry hostility (tendency to experience anger and related states such as frustration and bitterness); depression (tendency to experience depressive affect); self-consciousness (tendency to experience shame and embarrassment); impulsiveness (inability to control cravings and urges) and vulnerability (vulnerability to stress and tendency to feel unable to cope with it) (Costa & McCrae, 1992, p. 16). Facets of the Extraversion subscale include: warmth (ability to demonstrate interpersonal intimacy); gregariousness (preference for other people's company); assertiveness (components of dominance, forcefulness and social ascendance); activity (components of high energy and need to keep busy); excitement-seeking (tendency to crave excitement and stimulation) and positive emotions (tendency to experience positive emotions such as joy, happiness, love and excitement) (Costa & McCrae, 1992, p. 17).

Each item is a statement about oneself (i.e., I like to have a lot of people around me (Extraversion item) or I often get angry with the way people treat me (Neuroticism item)). Each item is scored on a Likert scale from 0 (strongly disagree) to 4 (strongly agree), with total scores ranging from 0 to 96. For the 24-item scale, four items are negatively worded and 8 are reverse scored.

Internal consistency (alpha coefficients) for the subscales were .80 for Neuroticism, and .79 for Extraversion (Costa & McCrae, 1992, p. 18). The validity of the NEO-FFI scales was assessed by correlations between scale items and adjective self-reports collected 3 years earlier (McCrae & Costa, 1986, also cited in Costa & McCrae, 1992), and by cross-observer correlations with NEO-FFI self-reports correlated with factors from the NEO-PI for spouse and mean peer

ratings respectively (Costa & McCrae, 1992). For the correlations between NEO-FFI items and adjective self-reports, the authors note “despite the passage of time and the use of a different operationalization of the model [use of adjective self-reports instead of NEO-FFI items], the convergent correlations range from .52 to .62 (Costa & McCrae, 1992, p. 18). Similarly, divergent correlations do not exceed .20. For cross-observer correlations, the authors note clear evidence of convergent validity (items correlate with other measures that share an overlap of constructs), and divergent validity (items do not correlate with variables from which they should differ).

Coping responses. Four types of coping (cognitive approach, cognitive avoidance, behavioural approach and behavioural avoidance) are included in the Coping Responses Inventory (Moos, 1997; Moos, 1992). Each of the four types of coping are divided into two subscales to produce the scales of: logical analysis, positive reappraisal (cognitive approach coping); seeking guidance and support, problems solving (behavioral approach coping); cognitive avoidance, resigned acceptance (cognitive avoidance coping) and seeking alternative rewards, emotional discharge (behavioral avoidance coping). Each of these eight subscales is comprised of six items. In an attempt to create a shortened version of the Coping Responses Inventory, Moos (personal communication, November 20 1998) suggested using one subscale from each type of coping, thereby producing a scale with four subscales and 24 items. The subscales chosen for the modified version of the scale included: logical analysis, seeking guidance and support, resigned acceptance and emotional discharge. The items are shown in Appendix B. Items were scored using a Likert-type scale indicating the frequency with which they use each coping response. Response

alternatives ranged from 0 (no, not at all) to 3 (yes, fairly often) with possible total scores ranging from 0 to 72. Although the internal consistency of both the total score and the sub-scales of approach-style (both behavioral and cognitive types) and avoidance- style (both behavioral and cognitive types) was examined, the sub-scales were used in the analyses.

The Coping Responses Inventory has been used with a variety of populations including adult community samples (Moos, 1992, 1995, 1997), adults with acute leukemia in remission (Evans, Thompson, Browne, Barr, & Barton, 1993), mothers of children who have been sexually abused (Hiebert-Murphy, 1998), college students (Rijavec & Donevski, 1994), and elderly adults, some of whom were considered problem drinkers (Moos, Brennan, Fondacaro, Moos, 1990). Psychometric properties of the inventory include moderately high internal consistency, (alpha coefficient = 0.67), moderately stable over a one year period, (test-retest reliability $r = .45$) and having only small correlations with sociodemographic characteristics such as age, education, marital status and ethnic background (Moos, 1997). Construct and discriminant validity of the inventory have also been demonstrated (Moos, 1992, 1997).

In addition, to provide context and guide interpretation of the scale, one qualitative question was added. The question was: are there other ways that you deal with a problem?

Personal empowerment. The idea of empowerment having its own conceptualization for different vulnerable populations was further developed by Rogers et al. (1997) in the development of a scale to measure personal empowerment as defined by consumers of mental health services. Using a consumer advisory board, consumers first defined personally relevant attributes of empowerment to guide the development of the scale. After pilot testing, a 28-item Empowerment

Scale was developed. Factor analysis of the scale yielded five factors: self-esteem/self-efficacy; power/powerlessness; community activism and autonomy; optimism and control over the future; and righteous anger. For the purposes of creating a modified version of the scale, the subscales of self-esteem/self-efficacy, power/powerlessness and optimism/control over the future were used (see Appendix C). These subscales most closely match the theoretical conceptualization of personal empowerment being used in the proposed model, and encompass the personal factors proposed in the Moos and Schaefer (1993) integrated model. Items used a Likert-scale scoring system that ranged from 1 (strongly agree) to 5 (strongly disagree). Seven of the 15 items were negatively written and therefore reverse scored. In the analysis, a total score (ranging from 15-75) was used.

Based on a community sample of 265 consumers, psychometric properties of the full scale include a high degree of internal consistency (Cronbach's $\alpha = .86$), and discriminant validity. Discriminant validity was demonstrated using a known-groups procedure, in which patients in a state hospital had significantly lower scores (on the full scale) than consumers of community-based services, suggesting that scale scores could discriminate between group membership. No significant differences were found between empowerment scores for males and females.

This empowerment scale has the advantages of having been developed by consumers of mental health services. In addition, the scale incorporates all of the personal factors considered in Moos and Schaefer's (1993) and Dohrenwend's (1978) stress and coping models suggesting its suitability for use as a personal factor variable in the revised stress and coping model.

To further guide interpretation of the results and to explore individuals' sense of mastery

and control over their lives, a qualitative question was added. The question was: is there anything you would like to change about the amount of control you have over your life right now?

Sex. The sex of each respondent was noted and coded for the analysis (i.e., 1 = male, 2 = female).

Past experiences of homelessness. Number of past experiences being homeless was examined by asking each respondent about their past experiences of homelessness (see Appendix D). A definition of what is meant by "homelessness"(i.e., the United Nations' definition of 'absolute homelessness' in which an individual has no housing at all, or is staying a temporary form of shelter), and a check on where the individual was living at that time (as asked by the second item), was included to ensure that the episode(s) being reported corresponds to the definition of homelessness being used. The duration of past experiences was not investigated, as the information would be subject to distortions due to memory functioning. It is likely however, that an individual can remember distinct incidences of prior homelessness (Wenzel, 1992), and so the number of previous experiences was used as a person factor related to coping processes in the model.

Additional information collected about past experiences of homelessness included where the person slept at that time (e.g., emergency shelter in Ottawa, shelter outside of Ottawa, on the street, etc). Although this information was not used to test the adequacy of the stress and coping model, it was collected to obtain a more complete picture of respondents' experiences with being homeless.

7.2 Measures of Environmental Factors

The environmental factors measured in the transient stress model were social network size and perceived social support.

Social network. Different aspects of individuals' social networks were examined by the use of the Social Support Network Assessment (SNA) measure (Nelson, Hall, Squire & Walsh-Bowers, 1992). The SNA is a measure that was designed for use with people with severe mental health problems living in the community. The measure is shown in Appendix E. The measure provides information on both the size of the overall network and the size of each network category: family members, friends/living companions, and service professionals. The respondent is asked to provide initials of persons who were in his/her support network over the past six months, and to provide the role and the gender of the network member. Two-week test-retest reliability was: family (0.94), friends/living companions (0.83), professionals (0.79) and total (0.89) (Nelson et al., 1992). A total count of persons in the social network was used in the transient stress model.

Perceived social support. The Social Provisions Scale (see Appendix F) was used to assess an individual's perception of the availability of social support. The scale asks respondents to rate the degree to which their social relationships are currently providing six different benefits: attachment, social integration, reassurance of worth, reliable alliance, guidance and opportunity for nurturance of others (Cutrona, 1984; Cutrona, Russell & Rose, 1986). Each of these benefits is described by four items - two that describe the presence of the relational provision, and two that describe the absence of the provision. For example, two of the statements used to assess attachment are "I have close relationships that provide me with a sense of emotional security and

well-being" and "I lack a feeling of intimacy with another person". Items are scored on a Likert-type scale from 1 (strongly disagree) to 4 (strongly agree). A total social support score is determined by summing the scores across the items. Total scores could therefore range from 24 to 96.

The scale has been used with college students, community samples, nursing practitioners, teachers and an elderly population. Internal consistency estimates (Cronbach's alpha) of the scale range from 0.85 to 0.92 depending on the population under study (Cutrona et al., 1986). Convergent validity was determined by the relationship between the items and measures of loneliness and interpersonal relationships (Cutrona & Russell, 1987). Using a sample of college students, Cutrona and Russell (1987) examined the convergent validity of the measure by assessing its significant correlations ($p < .001$) with other social support measures. They also demonstrated the divergent validity of the measure by its low correlations with measures of social desirability, number of stressful life events, and measures of neuroticism. In a sample of elderly respondents, the Social Provisions Scale showed significant concurrent negative correlations with depression and positive correlations with life satisfaction. Some age and sex differences were found between the college and adult community samples, although these differences only accounted for .4% to 6.9% of the variation in social provision scores.

To further guide interpretation of the results and explore the provision of social support, three qualitative questions were created. Questions include: (1) thinking about the people who are important to you, what do they do for you to give you support? (2) what do you do for them to give them support? and (3) what would you like to change about the amount of support you give

or receive?

7.3 Measure of Stressful Life Events

The measure of stressful life events was the Stressful Life Events scale created for the present study. As mentioned earlier, the best method proposed for assessing the stressful life experiences that an individual has experienced is a simple count of the number of undesirable life events that have occurred in a given time period. Given the lack of an appropriate or relevant list of stressful life experiences for use with persons who are homeless, a list was created from theoretical and empirical literature and is shown in Appendix G. As previously mentioned, events were chosen from factors most frequently mentioned in theoretical and empirical literature, and categorized according to events related to: employment, housing, changes to the individual's social network, mental health issues, substance use/abuse, legal history and victimization.

Each individual was asked to simply indicate those life events that have occurred in his/her life in the past year, and a total score ranging from 0 to 39 was calculated for each individual depending on the number of life events he or she had experienced.

7.4 Measures of Stress-Related Processes

The two stress-related processes used in the transient stress model were stress appraisal and psychological stress response.

Stress appraisal. The nine items used to assess stress appraisal were derived from the first part of the Coping Responses Inventory (Moos, 1997). For each item, the stressor being appraised is the current experience of being homeless. The items ask about: knowing in advance that the individual was going to become homeless, preparation for becoming homeless, appraisal

of homelessness as a threat or a challenge, responsibility (self or others') for the experience of being homeless, if anything good is coming out of being homeless and the anticipated resolution to being homeless (see Appendix H). Items use a Likert-type scale ranging from 1 (definitely yes) to 4 (definitely no), with a total score that can range from 9 to 36. Currently there are no psychometric properties reported for these items, however they are currently being used as a stress appraisal measure with community samples (Moos, personal communication, November 20, 1998).

To further guide the interpretation of the item that inquires if anything good is coming out of being homeless, a qualitative question was asked to the individual if his/her response was "mainly yes" or "definitely yes". The follow-up question was: you stated that something good was coming out of you being homeless. Can you tell me more about that?

Psychological stress response. The Psychological State of Stress Measure-PSSM (Lemyre & Tessier, 1988) was used as a measure of psychological stress response. The measure is designed to measure the impact of psychological stress experiences on health. The measure is methodologically independent of a source of stress, allowing it to be applied to record the stress response of an individual to any stressful situation. The PSSM is a 25-item measure that assess the subjective experience of feeling stressed from affective, cognitive, behavioural and physical descriptors (see Appendix I). Based on an 8-point Likert scale ranging from 1 (not at all) to 8 (extremely), respondents are asked to rate their agreement with the occurrence of the presented list of experiences for the past 4-5 days. An example of an affective descriptor is: "I feel lonely, isolated, misunderstood"; an example of a cognitive item descriptor is: "I go over ideas in my

mind over and over again; I juggle ideas; I have repetitive thoughts; my head is full of thoughts”; an example of a behavioural descriptor is: I have a tendency to skip meals or forget to eat” and an example of a physical descriptor is “my jaws are tight”. Total scores can range from 25 to 200.

The concomitant validity of the PSSM was demonstrated by its relation to physiological stress measures of 44 dental students assessed during two exam periods (Fillion et al., 1989). PSSM scores were significantly elevated during two exam periods (in comparison to two non-exam periods) and were significantly related to levels of immunoglobulines (hormones released during stressful experiences). In addition, internal consistency (alpha coefficient = 0.90), test-retest reliability ($r = 0.69$), and convergent validity (the ability of the test to correlate with variables or measures with which it shares an overlap of constructs) and discriminant validity (the ability of the test to not correlate with variables or measures from which it should differ) were both reported to be high (Lemyre & Tessier, 1988).

7.5 Measures of End Points of Transient Stress Model

The two end points of the transient stress model were well-being and psychopathology.

Well-being. The Satisfaction with Life Scale (SWLS) was developed as a measure of the cognitive or judgmental component of subjective well-being (Diener, Emmons, Larsen & Griffin, 1985). The Satisfaction with Life Scale provides an overall assessment of life satisfaction (Neto, 1993). The scale contains five items which are shown in Appendix J. Items use a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree), with total scores ranging from 5 to 35. Pavot and Diener (1993) note that the scale is “recommended as a complement to scales that focus on psychopathology or emotional well-being, because it assesses an individual’s conscious

evaluative judgment of his or her life by using the person's own criteria" (p. 164). Despite its focus on overall satisfaction and degree of temporal stability observed ($r = .54$ test-retest over a 4 year period), Pavot and Diener (1985) report that the SWLS has shown sufficient sensitivity to be potentially valuable to detect change in life satisfaction during the course of clinical intervention, or over time.

Psychometric properties of the scale include a unidimensional factor structure, with loadings of all items ranging from 0.66 to 0.83. (Lewis, Bunting, Shelvin & Joseph, 1995). In addition, the measure has been demonstrated to have significant correlations to other measures of subjective well-being, and a low, non-significant correlation to a measure of social desirability (Diener et al., 1985). The scale also shows discriminant validity from measures of emotional well-being (Pavot & Diener, 1985).

Level of psychopathology. The level of psychopathology present was assessed using the General Health Questionnaire (GHQ). The GHQ is a self-report instrument designed for identifying minor psychiatric morbidity in the general population (Goldberg, 1978). For the purpose of the current study, the 20-item scale was used (Burvill & Knuiman, 1983). The items are shown in Appendix K. Items ask about current or recent difficulties, functioning levels and/or well-being with respect to a number of areas (e.g., sleep, decision-making). A Likert-type scoring method was adopted rather than the GHQ binary method. Both methods have been found to have equivalent psychometric properties, but the Likert-type scoring method is recommended for parametric statistical analyses because it generates a continuous variable of well-being (Banks et al., 1980; Huppert, Gore & Elliott, 1988). Therefore, a Likert-type scale was used with response

alternatives ranging from 1 (not at all) to 4 (much more than usual) to describe frequency of listed symptoms or states.

The 20-item GHQ has been shown to correlate highly with more comprehensive psychiatric interviews (Goldberg, 1978, Rand et al., 1988) (see Appendix K). Its alpha coefficient for the Likert-type scoring method has been reported as ranging from 0.82-0.90 (Viewig & Hedlund, 1983). Total scores could therefore range from 20 to 80.

8.0 Procedure

Through involvement with the Alliance to End Homelessness of Ottawa-Carleton, which included representation from all of the shelters from which respondents were sampled, arrangements to interview participants on the shelter/service premises were established. All data collection was in the form of face-to-face interviews. Training of interviewers included education on such topics such as: interviewing protocol, manner of dress for interviewers, speech appropriate to the setting and safety issues. Also, the content of the interview was reviewed to establish what verbal prompts could be offered to participants if clarification of items was needed.

The order of presentation of items in the questionnaire ranged from the least sensitive items to the most sensitive items. In addition, items from each measure were presented together, followed by the use of qualitative questions at the end of each measure to facilitate the process of participants sharing their experiences and to obtain supplementary information. For all measures requiring the use of Likert-type scoring, a response card was used.

Members of the Data Collection Working Group of the Alliance to End Homelessness provided feedback on the appropriateness of the measures, language use and length of interviews.

In addition, six pilot interviews were conducted with a convenience sample of persons who were homeless and residing in emergency shelters. Information from pilot interviews was used to simplify instructions, modify language of qualitative questions, and to increase the clarity of directions and interviewing procedures. In addition, the interview protocol was translated into French and pilot tested.

Interviews using random sampling procedures in shelters began with the selection of potential participants from the resident lists. In order to protect the confidentiality of the resident list, only a number (chosen from a random numbers table) was presented to staff. Staff then contacted the resident occupying the bed with the corresponding number and the resident was approached by staff using a recruitment script developed to provide initial details about the study and to ask for their consent to meet with a representative of the research team. The interview began with the presentation of information about the study to each potential participant (see Appendix L). If participants agreed, they were presented with an informed consent form that explained the demands of the study, the voluntary nature of participation, and how confidentiality and anonymity were ensured (see Appendix M). If participants refused, their date of bed number, age and reason for refusal were recorded in order to track non-participants.

Potential participants for the convenience sample volunteered after receiving information about the study. For the sample of non-shelter users, participants were approached by the interviewer after being asked by community agency staff (i.e., drop-in workers, outreach workers) for permission to meet with a representative of the research team. After this initial identification of participants, all steps in the recruitment and presentation of the consent form was identical to the

procedure used with participants in emergency shelters.

Interviews ranged from 40 to 190 minutes in length, with an average length of 76 minutes.

At the end of the interview, participants received a debriefing form describing the study, the dissemination of the results, contact names and numbers for queries about the study, and information about a local counseling service if they experienced distress following their participation in the study (see Appendix N). An honorarium of \$10 was paid to participants.

9.0 Results

9.1 Description of the Final Sample

Participants were 230 persons who were homeless in the Ottawa-Carleton Region. Of this group, two hundred persons were using emergency shelters at the time of the interview, and 30 persons were not using emergency shelters, (i.e., living on the street). In total, 54 persons (41% of the population from adult male, male youth and female youth shelters) were selected for participation from those shelters in which random sampling was used, but were not included in the study population. This included 15 persons whose bed numbers were chosen but refused to participate, 17 persons who discontinued the interview (reasons cited included needing to meet someone, interview too long, too much like a psychiatric interview/too personal, not interested, etc), 10 were not approached due to staff intervention (i.e., staff refused on behalf of participant reporting reasons such as intoxication or inability to tolerate the demands of the interview process) and 12 persons sampled could not be found.

In total, there were 111 females and 119 males that participated in the study. Demographic characteristics of the sample are listed in Table 2. In order to compare differences between males

Table 2**Demographic Characteristics of Final Sample**

		Females (N=111)		Males (N=119)	
		<u>n</u>	<u>%¹</u>	<u>n</u>	<u>%¹</u>
Age					
	14-16	13	12	7	6
	17-18	26	23	29	24
	19-21	14	13	25	21
	22-25	12	11	2	2
	26-30	11	10	8	7
	31-35	10	9	7	6
	36-40	11	10	18	15
	41-45	8	7	9	8
	46-50	5	5	4	3
	51-55	0	0	4	3
	56-66	1	>1	6	5
Education					
	Grade school or less	10	9	18	15
	Some high school	63	57	68	57
	Graduated from high school	21	19	23	19
	Post secondary diploma	12	11	7	6
	University degree	5	4	3	3
Marital Status					
	Single (never married)	79	71	89	75
	Living with romantic Partner	8	7	2	2
	Married	6	5	3	3
	Separated	14	13	10	8
	Divorced	3	3	15	12
	Widowed	1	>1	0	0

¹ % of study population by gender. Some % have been rounded to provide closest whole number approximations

Table 2 (continued)

		<u>Females (N=111)</u>		<u>Males (N=119)</u>	
		<u>n</u>	<u>%¹</u>	<u>n</u>	<u>%¹</u>
Children					
	Participant has one or more children	49	45%	40	34%
Length of Time Homelessness					
	1-7 days	37	34	17	14
	8-14 days	18	17	16	13
	15-21 days	13	12	11	9
	22-30 days	8	7	15	12
	31-45 days	6	5	7	6
	46-60 days	6	5	14	12
	61-90 days	8	7	9	8
	91-180 days	2	2	13	11
	181-365 days	6	5	7	7
	365+ days	7	6	10	8
Number of Times Homeless					
	One (first time)	25	23	15	13
	2-5 times	56	50	74	62
	6-10 times	23	21	21	18
	11-15 times	4	3	7	6
	16-20 times	3	3	0	0
	21-25 times	0	0	1	>1
	26-30 times	0	0	1	>1
Reported Reasons for Currently Being Homeless					
	Eviction	12	11	18	15
	Fire/unsafe premises in former housing	11	10	7	6
	From corrections	0	0	2	2
	From psychiatric treatment	4	4	0	0
	From substance abuse treatment	4	4	3	3
	Housing too expensive	7	6	7	6
	Kicked out by friend	7	6	12	10

Table 2 (continued)

	<u>Females (N=111)</u>		<u>Males (N=119)</u>	
	<u>n</u>	<u>%¹</u>	<u>n</u>	<u>%¹</u>
Kicked out by parent	4	4	3	3
Parental abuse (sexual)	6	5	3	3
Parental abuse (other)	5	4	3	3
Relationship problems	24	22	28	24
Recently moved to Ottawa	10	9	14	12
Reported having a "transient" lifestyle	9	8	18	15
Spousal abuse (all types)	8	7	0	0
Transferred by child welfare system	0	0	1	>1

and females in the study, demographics are presented separately. This separation by sex is consistent with the strategy used to examine qualitative results in the post-hoc section, to further compare the experiences of homelessness for males and females. All other results will be presented for the full sample. The average age of females in the sample was 26 years (range 14-60 years), and the average age of males was 29 years (range 16-66 years). Seventy two percent of males and sixty six percent of females had not graduated from high school, and fifteen percent of males and nine percent of females had not completed public school (up to grade 8). In contrast, 9% of males and 15% of females reported having a post-secondary diploma or university degree. Almost three-quarters of respondents (75% of males and 71% of females) reported being single and never married, 8% of males and 13% of females reported being separated, 12% of males and 3% of females reported being divorced, 1 female reported being widowed, and 5% of males and 12% of females were either married or living with a romantic partner. In addition, 45% of females and 34% of males reported having children.

Both males and females reported previous and long experiences of being homeless. The average number of previous experiences of homelessness for males was 5 (range 1-30) and 4 for females (range 1-20). For males the average number of days homeless (during current experience of homelessness) was 146 days (range 1-2190 days), compared to 99 days for females (1-2190 days), suggesting that on average, females had been homeless fewer times in their lives than males, and for shorter durations.

Reported reasons for participants' current experience of homelessness varied from the disruption of interpersonal relationships to leaving treatment facilities or programs. Reasons for current homelessness differed between males and females, with the exception of the two most

common reasons: personal reasons and eviction. For both, the most common reason cited was “relationship problems” (e.g., break-up of personal relationship, chose to leave or kicked out by partner) which accounted for 24% of the male sample and 22% of the female sample. The next most common reason for being homeless reported by both groups was eviction (15% for males, 11% for females). This was as common a reason for males as reporting having a “transient” lifestyle (also 15%), whereas only 8% of females reported having a transient lifestyle. Transient lifestyle was defined as choosing to not have a fixed address at this time. The next most common reason for homelessness among females was fire or unsafe premises in former housing (10%), whereas this accounted for only 6% of reasons cited by males. Six percent of both males and females reported that housing was too expensive. Twelve percent of males and 9% of females reported recently moving to Ottawa.

Experiences of mental health treatment and abuse varied between the sexes as a reason for homelessness. Four percent of females reported coming to the shelter or living on the street following a discharge from psychiatric hospital, compared to no males reporting discharge from hospital. Four percent of females reported release from an inpatient substance abuse treatment program, compared to three percent of males. Two percent of males and no females reported release from a correctional facility. Seven percent of females reported being homeless as a result of fleeing spousal abuse. No males reported spousal abuse as their reason for currently being homeless. Nine percent of females reported parental abuse, compared to six percent of males. Similarly, four percent of females reported being kicked out by a parent (as compared to three percent for males). However, the differences between males and females on reasons for becoming homeless were not found to be statistically significant.

For each category of demographic information reported, differences between males and females were examined. For categorical variables (i.e., education, marital status, having children and reasons for homelessness) a Chi-square statistic was used, and for continuous variables (i.e., age, number of days homeless and number of past experiences of homelessness), a t-test was used. Only marital status yielded significant differences between males and females ($\chi^2 = 13.44$, $p < .05$) with more males reporting being single, never married and fewer being married or currently living with a romantic partner.

9.2 Comparison of the Final Sample to the Homeless Population in Ottawa-Carleton

Estimation of the representativeness of the complete study sample relative to the homeless population in Ottawa-Carleton during the period of the study was not possible because of the lack of population data available. Each shelter or group of shelters (the three men's shelters share a common data collection system) employ their own procedures for collecting population data, and this tends to include only age, length of stay and occupancy rates of the shelter. Only the men's shelters have the distribution of the ages of their population available. For the other groups, statistical comparisons cannot be made because no distribution of ages is available. For the community sample that does not use shelters ($n=30$), no data is available on the "street population" and therefore no comparisons can be made. A comparison of distributions of the age of the study sample and the male adult shelter population is shown in Table 3. Results from a Chi-square analysis found differences between the sample and population to be not significant at the .05 level.

The average length of stay in the shelter (as recorded by most shelters) cannot be accurately compared to the study sample because the question asked of the study sample was

“how long have you been homeless this time?” The question was asked this way to allow persons who alternated between shelters, spent time on the street, or used friends’ or family members’ homes for shelter to give the total number of days homeless and not the number of days at a particular shelter. For other groups (such as adult female and youth female) there is only one shelter in the Ottawa-Carleton area, but comparisons would not be sensitive to the history reported by some respondents that they had been homeless in other cities or living on the street before entering that shelter.

One comparison that could be made was between the respondents in the study residing in family shelters (n=22) and the population in the family shelters at that time as to the reason for currently being homeless as reported by shelter residents. The frequency of each reason reported is shown in Table 4. It is important to note, however, that the measures used to assess the reasons for the current experience of homelessness were not the same. For the study, the reason for the current experience of homelessness was asked and then coded into categories (see Appendix A). For the family shelter population, the reason was simply asked by shelter staff and the categories were created afterwards based on the reasons presented. The reasons reported by the population and the study sample were compared and are shown in Table 4. Results from a chi-square analysis found significant differences between the population and study sample $\chi^2 = 26.45$, $p < .01$, with the study sample reporting higher rates of eviction, finding housing too expensive and living in unsafe premises. The population reported slightly higher rates of domestic violence as the reported reason for being homeless at that time.

Table 3

Comparison of Study Sample to Population in Adult Male Emergency Shelters between January – June 1999²

<u>Age Category</u>	<u>Population %</u> (N = 675)	<u>Study %</u> (n = 52)	<u>Chi-Square</u>
Under 18	>1	0	10.74
Ages 18-24	13	13	
Ages 25-34	25	15	
Ages 35-44	33	42	
Ages 45-54	19	15	
Ages 55-64	7	8	
Age 65 and older	32	6	

² Emergency shelters for adult men include the Salvation Army, Shepherds of Good Hope and the Union Mission

Table 4

Comparison of Reasons for Homelessness between Study Sample of Persons in Family Shelters to Population in Family Shelters (January –June 1999)

<u>Reason for Homelessness¹</u>	<u>Population %</u> (N = 790)	<u>Study %</u> (n = 22)	<u>Chi-Square</u>
Eviction from landlord	18	23	26.45*
Eviction by family or friends	4	5	
Housing too expensive	4	13	
Fire/unsafe premises	1	18	
Domestic violence	20	14	

*p < .01

¹ Reasons listed as "other: in family shelter statistics were not defined and therefore cannot be compared.

9.3 Data Preparation

In preparation for analyses, the data were examined for coding accuracy, missing values and outliers. Interviewers were asked to rate the quality of the interview and to record any issues that arose. Ten percent of interviews (n=24) were rated as excellent, 44% (n=44) were rated as very good, 42% (n=42) were rated as good, 4% (n=9) were rated as fair. Eighty-nine percent of the interviews (n=204) reported no issues, 4% (n=10) were reported to have English as a second language issues, 4% (n=8) were reported to have cognitive or comprehension difficulties, therefore requiring many prompts (these interviews were removed from the analysis and replaced with new interviews). A random 10% of cases in the computerized data file were compared to their raw questionnaire data. This test revealed only one error, suggesting a high level of coding accuracy.

Missing data on individual variables ranged from 0-1.3% of cases in the sample of 230 respondents. Given the large sample size and the small proportion of missing data, cases were simply removed listwise if they had missing data on any variables in the analysis. For one scale (NEO) one participant refused to complete the scale, and therefore the case was dropped from the analyses. Also, one person did not finish the stress appraisal scale, and the case was also removed from the analyses. The four interviews completed in French were dropped for the quantitative analyses. Eight interviews in which comprehension difficulties of the participant were noted were removed from the analyses, and eight new people were interviewed. Prior to each analysis, distributions of all variables involved were examined for univariate and multivariate outliers. Univariate outliers were defined as scores greater than +3.67 or less than -3.67 ($p < .001$) on the standardized (z) distribution (Tabachnick & Fidell, 1989). Based on this criterion, only three

outliers on past experiences of homelessness (number of days homeless and past experiences of homelessness) were found. Because each variable is a count of actual experience, values on this variable were left unchanged.

9.4 Factor Analysis of Measure Developed for the Study

9.41 Stressful Life Events Scale

Because the Stressful Life Events Scale was created for this study, no psychometric properties exist on the measure. Before calculating such properties, the factor structure of the measure needed to be examined, to determine if the measure was unidimensional or multidimensional.

In order to combine scale items into interpretable factors, a principal components analysis was conducted. A principal components analysis is considered an appropriate technique to summarize data into interpretable factors (Gorsuch, 1983).

A varimax rotation producing an orthogonal solution accompanied the extraction of principal components. Varimax rotation is the type most frequently used in social science research and was chosen for the ease of interpreting items identified as composing extracted factors (Tabachnick & Fidell, 1989). The number of factors in the final solution was based on the Kaiser-Guttman Rule (i.e., factors with eigenvalues greater than 1) and the interpretability of factors (Gorsuch, 1983; Yates, 1987). The number of factors was also confirmed with the use of a scree test. Results of this procedure produced similar results. Only variables with factor loadings of 0.45 or higher were considered for interpretability (Comrey, 1973). Variables that showed salient loadings on two or more factors were dropped from the analysis in order to simplify the interpretation of the factor structure (Tabachnick & Fidell, 1989).

Principal components analysis of the 39 items of the Stressful Life Events Scale identified 14 factors with Eigenvalues greater than 1.0, but only two factors on which variables had loadings of 0.45 or greater. Therefore, a two-factor solution formed the final solution. Table 5 presents the factor loadings and communalities of items in the solution.

Factor One. The first factor was comprised of 9 items, all of which refer to having engaged in criminal or illegal activities. The items are shown in Table 5, and included involvement with the legal system (such as being picked up by the police, arrested, charged, held in jail and served a sentence). The other two items involved substance use, namely, use of alcohol and/or drugs to the point of interference with daily activities. This factor accounted for 14% of the common variance in the factor solution. The internal consistency of the factor (alpha coefficient) was 0.83.

Factor Two. The second factor was comprised of 4 items, which refer to having experienced abuse or mental health problems. The items included experiencing physical abuse, emotional abuse, abuse by a spouse or romantic partner and the experience of mental health problems. This solution accounted for 9% of the common variance. The internal consistency of the factor (alpha coefficient) was 0.68.

9.42 Personal Empowerment Scale

Although the Personal Empowerment Scale was determined to be sensitive to the population being studied, few empirical studies have been conducted using this scale. As a result, when a low internal consistency was detected for the full scale ($\alpha = .40$), the factor structure of the measure was examined. Again, a principal components analysis was conducted. There were three factors extracted that had eigenvalues greater than 1, however only one factor had more

Table 5**Items, Factor Loadings, Variance Explained and Communalities of Factors for Stressful Life****Events Scale**

Factor/Item	FL ¹	h ² ²
<u>Factor 1:</u> Criminality (Variance Explained =14%)		
Held in jail overnight (e.g., lock up)	.71	.75
Arrested	.67	.83
Come out of jail (after serving a sentence)	.59	.76
Used drugs to the point that it interfered with daily activities	.55	.65
Picked up for disturbing the peace	.53	.60
Picked up for drunk and disorderly behavior	.52	.71
Charged but not convicted	.52	.70
Used alcohol to the point that it interfered with daily activities	.50	.72
In jail (served a jail sentence)	.47	.81
<u>Factor 2:</u> Mental Health/Trauma (Variance Explained=9%)		
Been physically abused	.58	.68
Been emotionally abused	.54	.60
Experienced mental health problems	.52	.68
Been abused by a spouse or romantic partner	.47	.66

¹ FL=factor loading² h²=Communality

than two items loading on it. Because of the low number of items on the second and third factor, these factors were considered uninterpretable and dropped from the analysis. Therefore, a one-factor solution with seven items with loadings greater than 0.45 formed the final solution. Table 6 presents the factor loadings and the communalities of items in the solution.

The factor was comprised of items that refer to self-perceptions of mastery and persistence. Items included issues such as accomplishing tasks, achieving stated plans, having confidence in decisions, being able to overcome barriers, and having optimism about the future. Again, the factor score for the scale was computed using the regression method. The internal consistency of the factor (alpha coefficient) was 0.75.

9.43 Derivation of Factor Scores

Factor scores on the final solution of the factor-analyzed variables were computed by the regression method. This method is the most widely used procedure for estimating factor scores (Gorsuch, 1983). A major advantage of this approach is that it produces the highest correlations between factors and factor scores (Tabachnick & Fidell, 1989). The distribution of factor scores based on the regression method is standardized, with a mean of zero and a standard deviation of one. An examination of the covariance matrix for estimated factor scores showed them to be orthogonal to each other. In calculating factor scores, missing values on individual items for a respondent were estimated using the mean of other items making up that factor for the respondent.

Table 6

Items, Factor Loadings, Variance Explained and Communalities of Factors for the Personal Empowerment Scale

Factor/Item	<u>FL</u>	<u>h²</u>
<u>Factor 1: Mastery and Persistence (Variance Explained = 20%)</u>		
I am usually confident about the decisions I make	.72	.59
I feel powerless most of the time (reverse scored in the analysis)	.68	.58
I am often able to overcome barriers	.64	.50
I generally accomplish what I set out to do	.59	.64
When I make plans, I am almost certain to make them work	.59	.48
Usually, I feel alone (reverse scored in the analysis)	.56	.63
I am generally optimistic about the future	.55	.52

9.5 Description of Statistical Analyses

Statistical analyses were conducted in three stages. The first stage involved the examination of the psychometric properties of the measures, the second stage involved testing the adequacy of the proposed stress and coping model, and the third stage examined qualitative responses of study participants.

In the first stage, the means, standard deviations and internal reliability (alpha coefficients) for each measure in the theoretical model were calculated. Due to the fact that measures used were standardized in English, and only four questionnaires were completed in French, analyses were conducted on data provided by English respondents.

The values of variables examined in the study are reported in Table 7. The internal reliability of measures ranged from .45 (Approach-style coping responses from the Coping Responses Inventory) to .94 (Psychological Stress Response). In addition, the correlation matrix for variables in the hypothesized model is presented in Appendix O.

Avoidance and approach coping subscales of the Coping Responses Inventory were also analyzed. The avoidance coping scale was comprised of the emotional distancing (behavioral) and resigned acceptance (cognitive) subscales. Each subscale is comprised of 6 items. The alpha coefficient for the avoidance coping scale was 0.65. The approach coping scale was comprised of the seeking guidance and support (behavioral) and logical analysis (cognitive) subscales. Each subscale is comprised of 6 items. The alpha coefficient for the approach coping scale was 0.45. Subsequent examination of internal consistency if any items were deleted indicated that the alpha level would not improve by removing any of the items. Due to the low internal consistency of the measure of approach-style coping ($\alpha = 0.45$), the variable was dropped from the model

Table 7**Means, Standard Deviations and Alpha Coefficients of Variables in the Theoretical Model**

<u>Variable</u>	<u>M</u>	<u>SD</u>	<u>Alpha Coefficient</u>
Environmental Factors			
Social Network	6.48	3.22	-- ¹
Perceived Social Support	68.30	11.80	.92
Personal Factors			
Personal Empowerment (factors)	0.00	1.00	.75
Avoidance Coping Responses	15.80	6.23	.65
Approach Coping Responses	20.49	6.06	.45
Previous Experiences	4.58	4.22	-- ¹
Being Homeless			
Stressful Life Events			
Factor 1-Criminality	0.00	1.00	.83
Factor 2-Mental Health/Trauma	0.00	1.00	.68
Stress Variables			
Stress Appraisal	21.67	3.79	.58
Psychological Stress Response	69.33	22.38	.94
Personality Variables			
Neuroticism	26.14	8.93	.85
Extraversion	26.69	7.55	.79
Well-being (Satisfaction with Life)	14.25	7.12	.80
Psychopathology (GHQ)	46.16	13.83	.94

¹ Alpha coefficients were not calculated for total size of social network or for number of previous experiences being homeless because the variables were only the summed scores of the numbers reported.

testing, as it was assumed to be an unstable measure of the construct for the sample (Tabachnick & Fidell, 1989).

9.6 Hypothesis Testing and Analysis of the Overall Model

The second stage of the analysis involved the hypothesis testing, or more specifically, testing the adequacy of the overall proposed model to explain the experiences of the study population from a stress and coping perspective. In particular, the goodness of fit indices and suggested modification indices were examined to determine the adequacy of the hypothesized model and identify potential modifications to improve its explanatory ability.

The adequacy of the model was assessed using a structural modeling equation package (AMOS: Analysis of Moments Structures, Arbuckle, 1994), with manifest (measured) variable testing. This procedure was used instead of a series of multiple regression analyses in order to simultaneously analyze the covariance among all observed variables. In addition, this procedure allowed for calculation of the adequacy of the model to explain the relationship between observed variables. The results of the model testing (beta weights of relationships between variables) for the theoretical model were similar using an AMOS analysis as they were to results from standard multiple regressions conducted in SPSS. Therefore, AMOS was chosen as a multivariate approach to simultaneously analyze all pathways of the model and assess the adequacy of the proposed theoretical model. The results of the hypothesis testing will be explained following a description of the fit indices used to test the adequacy of the proposed model.

9.6.1 Indices for Model Testing

Five fit indices were used to testing of the adequacy of the proposed model. The indices are: Chi-square statistic (χ^2), Comparative Fit Index (CFI), Adjusted Goodness of Fit Index

(AGFI), Root Mean Square Error of Approximation (RMSEA), and the Expected Cross Validation Index (ECVI). These indices will be reported for the proposed model and any subsequent versions of the model that are tested. First, each index will be briefly reviewed, including its importance to model testing and critical value.

Chi-square likelihood ratio (χ^2). The Chi-square statistic (χ^2) is suggested by Byrne (1990) as the first fit index of a model to consider, as it is considered a measure of fit between the sample model and the observed data. The Chi-square statistic evaluates whether the estimated covariance matrix differs significantly from the sample covariance matrix (Green-Demers, 1997). Byrne (1990) also suggests that the Chi-square statistic be considered a “badness of fit” index (rather than a goodness of fit index), in that revised versions of models will have a smaller Chi-square statistic as compared to earlier versions of the model (Byrne, 1990).

Comparative fit Index (CFI). The Comparative Fit Index (CFI; Bentler, 1990) is used as a measure of the goodness of fit of the overall model. According to Byrne (1990), “the CFI is the best index of fit” (p. 110). CFI values range from 0 to 1.00, with a value above 0.90 indicating an acceptable fit of the data.

Adjusted goodness of fit index (AGFI). The AGFI is considered the “absolute index of fit” because it compares the hypothesized model with no model at all, meaning that it addresses the issue of parsimony of the model by incorporating a penalty (reduced value) for additional pathways placed in the model that are non-significant (Byrne, 1990; Hu & Bentler, 1995). In addition, the AGFI is lowered by the complexity of a model (number of variables and proposed pathways).

Root mean square error of approximation (RMSEA). The Root Mean Square Error of

Approximation (RMSEA) assesses the estimated discrepancy, per degree of freedom, between the population covariance matrix and the model (Green-Demers, 1997). In model testing, the RMSEA is examined to determine “how well would the model, with unknown, but optimally chosen parameter values, fit the population covariance matrix if available” (Byrne, 1990, p. 112). Byrne (1990) suggests values less than 0.5 indicate a good fit, whereas values between 0.8 and 0.10 represent a mediocre fit.

Expected cross validation index (ECVI). The Expected Cross-Validation Index (ECVI) evaluates the likelihood of cross-validation across samples of similar size drawn from the same population. As Byrne (1990) notes “because ECVI coefficients can take on any value, there is no determined appropriate range of values” (p. 114). This is because the ECVI is utilized to rank order different models according to their potential for cross-validation (Green-Demers, 1997). However, a value under 1.00 is considered to be an adequate estimate of the model and its likelihood to produce similar results with another sample.

9.62 Results of Model Testing

The hypothesis for the present study is that the proposed transient stress model is an adequate model to explain the prediction of a person’s well-being in the context of experiencing being homeless. Results of model testing revealed that for the proposed transient stress model, the CFI was 0.64, indicating a mediocre to poor fit of the data, and the AGFI was 0.62 also suggesting a mediocre to poor fit of the data. Therefore, the hypothesis was not supported. Significant pathways that resulted from testing the proposed model are shown in Figure 4 and the fit statistics are shown in Table 8.

The model was further revised with the addition of modification indices. The use of

Figure 4

Results of Proposed Model Testing

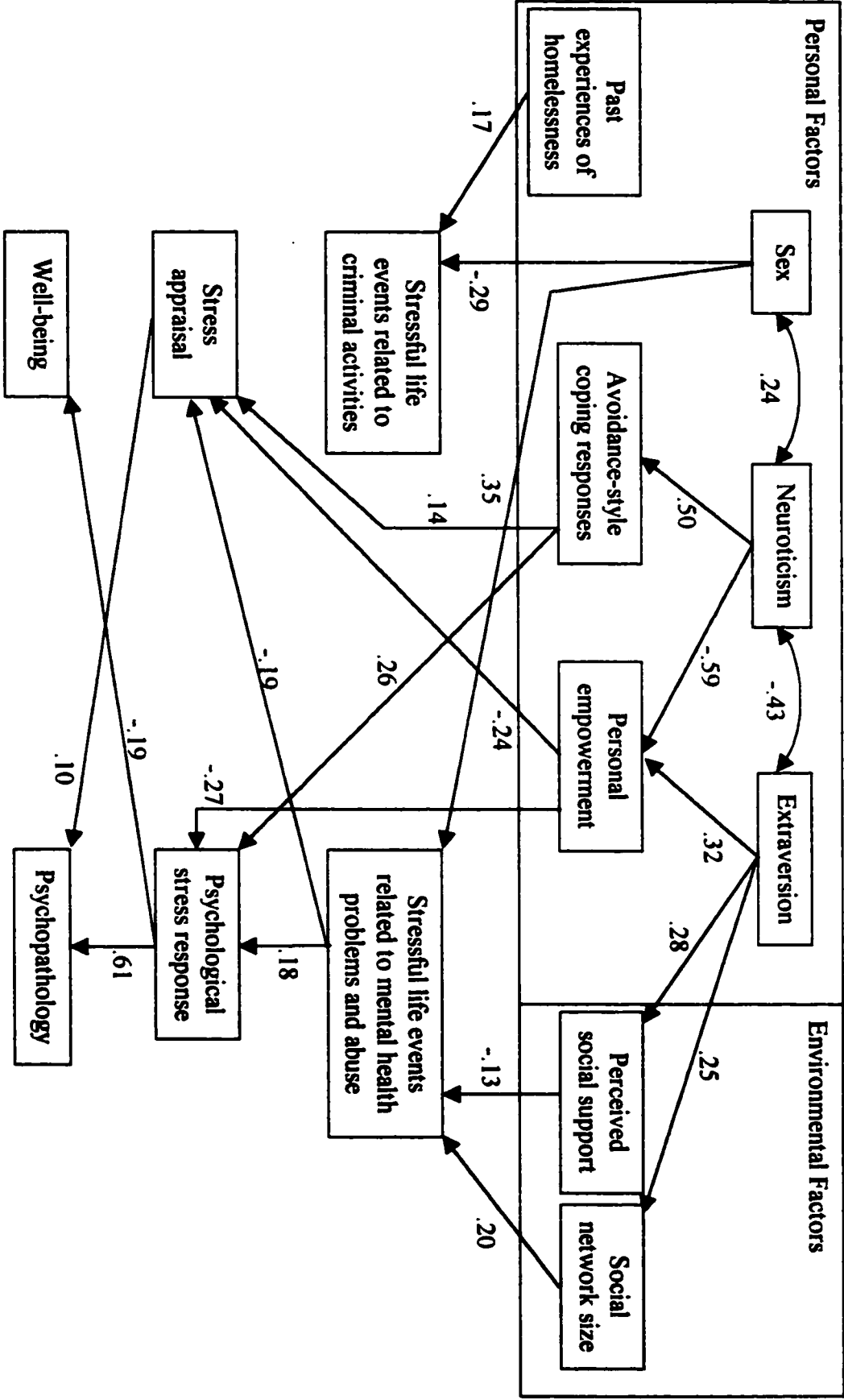


Table 8**Results from Model Testing**

	χ^2	df	CFI	AGFI	RMSEA	ECVI	$^1\Delta \chi^2$ (Δdf)
Hypothesized Model	525.98	64	0.64	0.62	0.18	2.67	-
Neuroticism → Stressful life events (Mental health and abuse)	443.90	62	0.70	0.67	0.16	2.32	82.08* (1)
Neuroticism → Stress response	353.44	61	0.77	0.70	0.15	1.94	90.46* (1)
Extraversion → Personal empowerment	321.72	60	0.80	0.72	0.14	1.81	31.72* (1)
Social network → Perceived Social Support	286.85	59	0.82	0.73	0.13	1.66	34.87* (1)
Personal Empowerment → Well-being	248.64	58	0.85	0.78	0.12	1.50	38.21* (1)
Personal Empowerment → Psychopathology	208.26	57	0.88	0.80	0.11	1.33	40.38* (1)
Well-being → Psychopathology	189.70	56	0.90	0.82	0.10	1.26	19.16* (1)
Past experiences of homelessness → Perceived social support	175.96	55	0.91	0.83	0.10	1.21	13.74* (1)

¹ *p<.01

χ^2 = Chi-square statistic; df= Degrees of Freedom; CFI= Comparative Fit Index; AGFI= Adjusted Goodness of Fit Index; RMSEA= Root Mean Square Error of Approximation; ECVI= Expected Cross Validation Index

	χ^2	df	CFI	AGFI	RMSEA	ECVI	$\Delta\chi^2$ (Δ df)
Final (all non-significant paths removed)	185.80	65	0.91	0.85	0.09	1.16	9.84* (1)
Final model (Stressful life events related to criminal activity removed)	161.66	54	0.92	0.85	0.09	1.02	24.14 (11)

modification indices will first be described, followed by the results of the revision process.

Modification indices. Subsequent to the testing of the proposed model, modifications to the model were made by the examination of modification indices (MI) developed during each analysis of the model. Modification indices are additional pathways (not initially theorized) that if added to the model would increase the fit of the data to the observed model. The modification indices reflect the misspecification of the hypothesized model by providing indication of what additional predictive pathways could be added to the model (Byrne, 1990). It is also important to note that modification indices are specific to the sample under study (Schindler, personal communication, April 18, 2000). Only modification indices that had a theoretical justification (such as compatibility with existing research) were added to the final model. In addition, only modification indices above 6.00 were considered, as those under 6.00 were unlikely to change the adequacy of the overall model.

Therefore, the fit indices for the proposed model and subsequent models (each tested after the addition of one additional pathway) are shown in Table 8. Each row in the table represents an alteration made to the model, and the resulting change in fit statistics. The model was tested after the addition of each modification index. The change in the Chi-Square statistic and the significance level of the change is also reported in order to determine if the modification to the model represents a significant improvement to the overall model.

After all modification indices have been added, a final analysis of the model was run to remove all non-significant pathways at once. Non-significant pathways were determined by the critical ratio (CR) for each pathway, which is the unstandardized coefficient or parameter estimate divided by its standard error. Given its similarity to a z-score, its values are typically evaluated like

a z-score, by considering values that exceed +2.00 or are smaller than -2.00 to be statistically significant (T. Neilands, personal communication, May 19, 2000).

9.63 Results of Revisions with Modification Indices

In total, eight pathways were added to the model and ten non-significant pathways were deleted.

Before the description of the revised pathways to the model, it should be noted that two correlational relationships were found during model testing. The first relationship was (as expected) between neuroticism and sex ($r = .24$) and the second relationship was between neuroticism and extraversion ($r = -.43$) and found as a result of modifications during model testing. The directionality of the relationship between neuroticism and sex indicated that females reported higher levels of neuroticism than males, or that a greater incidence of neuroticism was associated with being female. The relationship between neuroticism and extraversion suggests that increased susceptibility to psychological distress (neuroticism) was related to decreased frequency of engaging in acts of interpersonal intimacy (extraversion) for this sample.

The first modification index chose was to include the prediction of stressful life events related to experiences of mental health and abuse by neuroticism. Theoretically, this suggested that increased susceptibility to psychological distress was predictive of increased incidence of stressful life events related to experiencing mental health problems and abuse. Although this was a significant change to the model, modification indices improved only slightly (see Table 8).

The second pathway added to the model was the prediction of psychological stress response by neuroticism. Theoretically, this suggested that increased susceptibility to psychological distress is predictive of reacting to being homeless with increases in cognitive,

physical, affective and behavioral symptoms of stress. The addition of this pathway was a significant change to the model, yet the fit statistics were still mediocre to poor for the overall model.

The third pathway added to the model was the prediction of personal empowerment by extraversion. Theoretically, this suggested that aspects of extraversion, such as warmth, gregariousness, assertiveness, activity, excitement-seeking and positive emotions were predictive of an individual's perception of mastery and control over his or her life. The addition of this pathway was a significant change to the model, yet although the fit statistics improved, they remained mediocre for the overall model (see Table 8).

The fourth pathway added to the model was the prediction of perceived social support by the size of the social network. Theoretically, this suggested that increased numbers of persons in the social network was predictive of increased levels of perceived social support available to the individual. The addition of this pathway was a significant change to the model, and although the fit statistics improved slightly, they remained in the mediocre range.

The fifth pathway added to the model was the prediction of well-being by personal empowerment. Theoretically, this suggested that increased levels of personal mastery and control predicted increased levels of life satisfaction reported by individuals. The addition of this pathway was a significant change to the model, but still did not represent an overall adequate fit of the observed data.

The sixth pathway added to the model was the prediction of psychopathology by personal empowerment. Theoretically, this suggested that decreased levels of personal mastery and control predicted increased levels of psychiatric symptoms. This was a significant change to the model,

but provided only small improvements to the overall fit of the model.

The seventh pathway added to the model was the prediction of psychopathology by well-being. Theoretically, this suggested that increased ratings of well-being or life satisfaction predicted decreased levels of psychiatric symptoms. This was a significant change to the model and improved the CFI to the level ($CFI = 0.90$) that the model could be considered an acceptable fit of the data. However, the AGFI was still in the mediocre-good range, so the one additional pathway that had theoretical justification from the standpoint of the transient stress model was examined.

The eighth pathway added to the model was the prediction of perceived social support by past experiences of homelessness. Theoretically, this suggested that increased numbers of past experiences of homelessness predicted decreased levels of perceived social support available. This supported the theory presented by Grigsby et al. (1990) that suggested that chronic homelessness (conceptualized as either lengthy or repeated experiences of homelessness) was a precursor for the continuing loss of social support that resulted in social isolation. This was a significant change to the overall model, and improved the CFI to 0.91 and the AGFI to 0.83 (see Table 8).

9.64 Deleted Pathways

The ten pathways deleted from the model are shown in Table 9. Each path had a critical ratio below 2.00 and was therefore excluded from the final model. The removal of all non-significant pathways improved the fit statistics of the model. More specifically, the CFI was 0.91, the AGFI increased to 0.85, and the RMSEA was 0.09, indicating the model to be a mediocre (yet approaching good) fit of the data.

Table 9**Deleted Pathways from the Proposed Transient Stress Model**

<u>Deleted Pathway</u>	<u>Critical Ratio</u>
Neuroticism → Past experiences of homelessness	-0.60
Past experiences of homelessness → Stressful life events related to mental health problems and abuse	1.76
Social network → Stressful life events related to criminal activities	0.79
Stressful life events related to criminal activities → Psychological stress response	-0.11
Stressful life events related to criminal activities → Stress appraisal	-0.76
Perceived social support → Stress appraisal	-0.66
Perceived Social Support → Stress response	-1.92
Personal empowerment → Psychological stress response	0.01
Stress appraisal → Well-being	-1.02
Stress appraisal → Psychopathology	1.21

9.65 Results of the Final Model

The final statistic examined was the percentage of variance explained by predictor variables for each dependent variable in the model. This was reviewed by examining the squared multiple correlations which are shown in Table 10. Given that the variable representing stressful life events related to criminal activities had only 11% of its variance explained, and three of the five proposed pathways related to it were determined to be non-significant (see Table 9), it was decided to remove the variable from the model, as it provided a limited contribution to the overall explanatory ability of the model. Although the removal of the variable was not a significant change (as determined by the change in the Chi-square statistic), the removal of the variable improved the other fit statistics of the model. The final model is shown in Figure 5.

The final model had the lowest Chi-Square statistic (indicating the best fit) of any of the models examined, $\chi^2=161.66$, a CFI = 0.92, indicating an acceptable fit of the data, and an AGFI = 0.85 indicating a good fit, but likely a somewhat lower value because of the complexity of the model and the presence of 13 variables and 22 pathways in the final model (Byrne, 1990). In addition, the RMSEA was 0.09, indicating a mediocre (approaching good) fit of the model to unknown data. More specifically, the probability that this model could explain the stress and coping experiences of a new sample of persons who were homeless. Finally, the ECVI was 1.02, almost at the value of 1.00 (determined as a value for a good index) as the index of discrepancy between this model and the expected fit of another sample of 230 persons who are homeless.

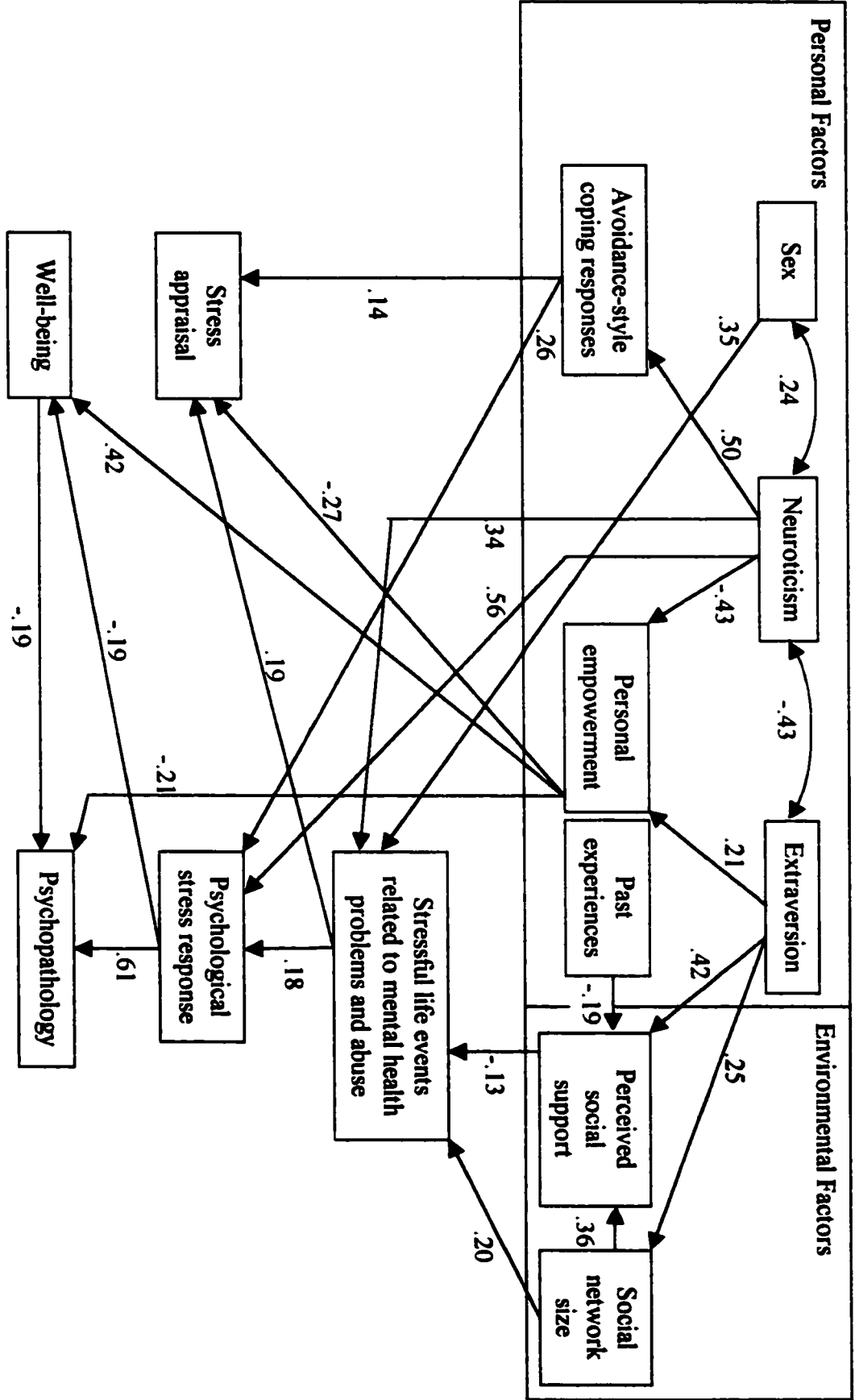
Overall, the initial transient stress model provided a mediocre fit of the observed data. Once eight modification indices were added in the model and ten non-significant pathways were deleted, the final model provided a good fit of the data, and an explanation of the relationships

Table 10**Percentage of Variance Explained by Predictor Variables for Each Dependent Variable**

<u>Dependent Variable</u>	<u>Percentage of Variance Explained</u>
Avoidance-style coping responses	25%
Personal empowerment	44%
Perceived social support	42%
Social network size	6%
Stressful life events related to criminal activities	11%
Stressful life events related to mental health problems and abuse	32%
Stress appraisal	18%
Psychological stress response	69%
Well-being	29%
Psychopathology	71%

Figure 5

Results of Final Model Testing



between personal and environmental factors and stress reaction variables in the prediction of psychopathology and well-being for the sample.

Overall, the model suggests that individual differences in personality do not directly predict levels of psychopathology or well-being, but rather, they are mediated through personal and environmental factors, the experience of stressful life events related to experiencing mental health problems and abuse and stress reactions (appraisal and psychological response).

9.7 Post Hoc Analyses of Stressful Life Events Scale

Post Hoc analyses were conducted for the Stressful Life Events scale, as it was a scale created for the study. Analyses were also done in order to further understand the stress experiences of the study population.

Although only 13 of 39 items from the Stressful Life Events scale were used in the final factor solution and subsequent analyses, the range of stressful life events reported are important to be considered given the focus of the present study on experiences of stress while being homeless. Therefore, the full range of stressful life events reported is presented in Table 11. Chi-square tests were conducted to compare the differences between the number of males and females that experienced each stressful life event in the past 12 months. Differences between males and females that were statistically significant were found for 17 stressful life events.

Social network. Items assessing changes to the social network demonstrate that most respondents had disruption to their network due to break-up of a relationship and/or losing contact with network members. Over two-thirds of males and females reporting losing contact with friends, and over half of males and females reported losing contact with family members in

Table 11**Stressful Life Events Reported by Females and Males**

<u>Life Domain</u>	<u>Stressful Life Event</u>	<u>Females (N=111)</u>		<u>Males (N=119)</u>		<u>X²</u>
		<u>n¹</u>	<u>%²</u>	<u>n</u>	<u>%</u>	
Social Network	Broke up with romantic partner	67	60	70	59	.06
	Separated or divorced	17	15	15	13	.36
	Widowed	1	>1	2	2	.27
	Lost contact with family members	65	59	72	61	.09
	Lost contact with friends	76	68	80	67	.04
	Experienced death of partner	13	12	11	9	.38
	Experienced death of family member	46	41	42	35	.93
	Experienced death of friend	38	34	55	46	3.43
	Mental Health Problems	Been given a psychiatric diagnosis	34	31	18	15
Experienced mental health problems		53	48	26	22	17.19**
Been admitted to a psychiatric hospital		20	18	9	8	5.71*
Victimization						
Victimization	Victim of a violent crime	54	49	37	31	7.47**
	Sexually abused	35	32	14	12	13.43**
	Physically abused	66	59	32	27	25.12**
	Emotionally abused	84	76	57	48	18.99**
	Abused by a romantic partner	53	48	17	14	30.52**
Involvement with the Legal System	Picked up for panhandling	7	6	14	12	2.06

1 number reporting stressful life event occurring in past 12 months

2 percentage of total study population (per gender)

* p < .05 **p < .01

Table 11 (continued)

Picked up for disturbing the peace	16	14	22	18	.69
Picked up for drunk and disorderly behavior	11	10	29	24	8.36**
Arrested	26	23	55	46	13.12**
Charged but not convicted	16	14	40	34	11.51**
Held in jail overnight	26	23	58	49	15.93**
Convicted of a crime	16	14	35	29	7.49**
Served a jail sentence	11	10	25	21	5.36*
Substance Use					
Used alcohol to the point that it interfered with daily activities	35	32	65	55	12.52**
Used drugs to the point that it interfered with daily activities	41	37	55	46	2.04
Living Conditions					
Been evicted	51	46	59	50	.30
Been unable to find a decent place to live	88	79	81	68	3.83*
Recently moved from another country	3	3	3	3	.01
Chose to leave where living because unhappy there	88	79	82	69	3.31
Asked to leave home (by parents/partner)	48	43	47	39	.34
Come out of the hospital	46	41	31	26	6.15*
Come out of jail	10	9	39	33	19.37**
Employment					
Lost a job	44	40	60	50	2.70
Been unable to find a job	71	64	70	59	.87
Not received income assistance	39	35	50	42	1.15
Had less income this year than year before	68	61	61	51	.02
Dropped out of school or training program	40	36	42	35	.02
Kicked out of school or training program	12	11	27	23	5.76*

the past year. However, there were no statistically significant differences between males and females for any life events involving social network changes.

Mental health problems. More females than males reported experiencing stressful life events related to mental health problems. In fact, almost half of female respondents reported experiencing mental health problems in the past year, compared to almost one-quarter of male respondents. A third of female respondents reported being given a psychiatric diagnosis in the past year, compared to 15% of male respondents. A smaller number of females reported having been admitted to a psychiatric hospital (18%), however rates were still higher than those reported by males (8%). Differences between males' and females' experiences of all three life events related to mental health problems were statistically significant, with a higher number of females than males reporting experiencing each event: being given a psychiatric diagnosis ($X^2 = 7.93$, $p < .01$), experiencing mental health problems ($X^2 = 17.19$, $p < .01$), and being admitted to a psychiatric hospital ($X^2 = 5.71$, $p < .05$).

Victimization. Overall, high rates of victimization were reported, with females reporting higher rates for all types of victimization than males. For both males and females, the most common occurrence of victimization was emotional abuse (76% for females, 48% for males). Almost half of all female respondents reported having been the victim of a violent crime (49%) and having been abused by a romantic partner (48%). All types of victimization had statistically significant differences between males and females: being the victim of a violent crime ($X^2 = 7.47$, $p < .01$), being sexually abused ($X^2 = 13.43$, $p < .01$), being physically abused ($X^2 = 25.12$, $p < .01$), being emotionally abused ($X^2 = 18.99$, $p < .01$), and being abused by a romantic partner ($X^2 =$

30.52, $p < .01$).

Involvement with the legal system. Relative to the other life events, fewer respondents reported involvement with the legal system in the past year. More males reported experiencing every life event related to involvement with the legal system than females. The most common involvement for both males and females was being held in jail overnight; this was reported by almost one-quarter of female respondents (23%) and by almost one-half of male respondents (49%). There were statistically significant differences between males and females for life events related to: more males being picked up for drunk and disorderly behavior ($X^2 = 8.36$, $p < .01$), more males being arrested ($X^2 = 13.12$, $p < .01$), more males being charged but not convicted ($X^2 = 11.51$, $p < .01$), more males being held in jail overnight ($X^2 = 15.93$, $p < .01$), more males being convicted of a crime ($X^2 = 7.49$, $p < .01$), and more males serving a jail sentence ($X^2 = 5.36$, $p < .05$).

Substance use. Overall, responses showed a high level of substance use that interfered with participants' daily activities. One third of females reported both alcohol and drug use that interfered with daily activities, compared to one-half of males reporting problematic alcohol and drug use. There was a statistically significant difference between the number of males and females that reported using alcohol to the point that it interfered with their daily functioning, with a higher number of males reporting problematic alcohol use ($X^2 = 12.52$, $p < .01$). However, the difference between males and females for drug use was not statistically significant.

Living conditions. Overall, responses showed a high degree of residential instability. The most common events reported by both males and females were being unable to find a decent place to live and choosing to leave where they were living because they were unhappy there (reported

by 79% of females and 69% of males). Almost half of the sample (46% of females and 50% of males) also reported being evicted in the past year. Differences between males and females existed on two items pertaining to living conditions in the past year, and both items were related to discharge from an institution. More females reported having come out of the hospital in the past year than males ($\chi^2 = 6.15$, $p < .05$), but more males reported coming out of jail ($\chi^2 = 19.37$, $p < .01$).

Employment. Almost two-thirds of the sample (64% females and 59% males) reported being unable to find a job in the past year. Furthermore, almost half of the sample (40% females and 50% males) reported having lost a job in the past 12 months. Over one-third of the study population (36% females and 35% males) reported having dropped out of a training program. The only employment event in which males and females showed a statistically significant difference was on being kicked out of school or a training program in the past year ($\chi^2 = 5.76$, $p < .05$), with males reporting a greater frequency than females.

9.8 Post-Hoc Analyses of Measures of Well-Being and Psychopathology

Post-hoc analyses were conducted on the measure of well-being (Satisfaction with Life Scale) and the measure of psychopathology (General Health Questionnaire) to determine the distribution of scores among the study population. For both measures, post-hoc analyses were conducted for four subgroups based on age and sex. These groups included adult males, adult females, youth males, and youth females. Responses from persons interviewed in the family shelters and those not using shelters were classified according to age and gender of respondent to allow for the creation of the four subgroups for the analysis. Again, the rationale for using the sub-groups for the post-hoc analyses was to allow for an examination of well-being and

psychopathology between groups based on age and sex.

9.81 Well-Being

Total scores on the Satisfaction with Life Scale were examined to determine the overall level of life satisfaction reported by participants. Following the cut-off scores for the scale (Pavot & Diener, 1993), the distribution of satisfaction scores is shown in Table 12. Over one-quarter of participants in all sub-groups reported being “extremely dissatisfied” with their lives. In all groups, less than ten percent of respondents reported being satisfied with their lives. In fact, only 6% of adult females and 4% of adult males reported being “extremely satisfied” with their lives. No youth females or males reported being “extremely satisfied” with their lives.

Interestingly, the mean score for all four sub-groups was 14, which is classified as “dissatisfied”. This is much lower than the score found in other study populations. Neto (1993) found a mean of 24 (classified as “slightly satisfied”) for adolescents in public school in Portugal; Arrindell, Meeuwesen and Huyse (1991) found a mean of 23.6 (classified as “satisfied”) for a sample of medical outpatients with physical health conditions in The Netherlands, and Diener et al. (1985) found a mean of 23.5 (classified as “slightly satisfied”) for a sample of American university undergraduate students, and a mean of 25.8 (classified as “satisfied”) for a sample of elderly persons. Interestingly, in community samples taken in Japan and Australia, Japanese females were found to have the lowest levels of life satisfaction ($M = 18.6$) and the highest reported levels of loneliness, whereas Australian males were found to have the highest levels of life satisfaction ($M = 23.6$) and the lowest levels of loneliness (Schumaker, Shea, Monfries & Groth-Marnat, 1993). Although loneliness was not directly assessed in this study, the high

Table 12**Distribution of Reported Life Satisfaction Scores**

	<u>Level of Satisfaction</u>					
	Extremely Dissatisfied (5-9)	Dissatisfied (10-14)	Slightly Dissatisfied (15-19)	Slightly Satisfied (20-25)	Satisfied (26-30)	Extremely Satisfied (31-35)
Adult Females (N = 64)	36%	19%	17%	15%	9%	4%
Youth Females (N = 43)	27%	29%	22%	18%	4%	0%
Adult Males (N = 71)	27%	39%	17%	7%	6%	4%
Youth Males (N = 48)	29%	31%	15%	19%	6%	0%

percentage of persons reporting disruptions to their social network and loss of contact with network members (assumed to result in being more lonely) may be related to the low levels of life satisfaction reported.

9.82 Psychopathology

From the results of the General Health Questionnaire (GHQ), the “caseness” of the study population was determined. “Caseness” refers to “the proportion of the population that would be thought to have a clinically significant psychiatric disturbance if they were interviewed by a clinical psychiatrist” (Goldberg, 1972, p. 3). For the study population, “caseness” was determined for each sub-group and is shown in Table 13. The GHQ is considered to be “a screening instrument [to be included] in community surveys to identify ‘potential cases’” (Goldberg, 1972, p. 35). Results from the study population indicated that over half of the participants in each sub-group had scores that suggested that they had reported symptoms of a diagnosable mental health problem. Many of the items on the GHQ are related to diagnostic criteria listed in the Diagnostic and Statistical Manual (DSM-IV) for depression and generalized anxiety disorder (e.g., changes in sleeping patterns, feeling unhappy and depressed, feeling nervous, difficulty with concentration) (American Psychiatric Association, 1994).

The percentage of “cases” found in the study population is elevated in comparison to the prevalence rate of psychiatric disorders found in a community sample of Ontario residents aged 15-64. Offord et al. (1996) reported that in the Ontario sample the prevalence rate of one or more psychiatric disorders was 18.6% (1 in 5 Ontarians), and 1 in 4 among 15-24 year olds. Therefore, the study population was 3 to 4 times more likely to report symptoms of a diagnosable psychiatric

Table 13**Frequency of "Caseness" Reported on the General Health Questionnaire**

<u>Sub-group of Study Population</u>	<u>Percentage of "Caseness"</u>
Adult Females (N = 64)	71%
Youth Females (N = 43)	62%
Adult Males (N = 71)	54%
Youth Males (N = 48)	58%

disorder than a member of a community sample of Ontario residents.

10.0 Analysis of Qualitative Responses

To supplement quantitative measures used, a number of qualitative questions were added to the interview protocol. Qualitative questions were added to expand upon responses to quantitative items, and to further explore the stress and coping experiences of respondents. Qualitative responses were analyzed using the methodology proposed by Kirby and McKenna (1989) in which content files were created and thematic analysis was conducted on content from the qualitative responses. Qualitative questions used for this analysis included:

1. Is there anything else you'd like to tell me about the life events you've experienced in the past year?
2. Are there other ways that you deal with a problem?
3. Is there anything you would like to change about the amount of control you have over your life right now?
4. Thinking about the people who are important to you, how do they give you support? How do you give them support? Is there anything you would like to change about your relationships with others?
5. Is there anything you would like to change about the amount of control you have over your life right now?
6. You stated that there was something good coming out of you being homeless. Can you tell me more about that?

These questions were located in the interview after quantitative scales querying about different aspects of stress and coping examined for the hypothesized model.

Responses were recorded verbatim and then a thematic analysis was conducted. Results for each question are presented in tables classified by both the theme of the response and by the subgroup of the respondent. Subgroups included adult males, adult females, youth males, youth females. Although quantitative analyses were conducted with only english respondents (n = 226) the qualitative analyses included the translated responses of four french respondents (n = 230).

This was done in an attempt to learn as much as possible about all participants in the study. Again, responses from persons interviewed in the family shelters and those not using shelters were classified according to age and gender of respondent to allow for the creation of the four subgroups for the analysis. Similar to the rationale of using four sub-groups in the post-hoc analyses, sub-groups were used for the qualitative analyses to allow for the examination of similarities and differences of experiences between groups based on age and sex. Themes emerging from each item are discussed in terms of their representation in each sub-group.

10.1 Stressful Life Events

From the total sample, 62 persons (27% of the sample) responded to the first qualitative question (“Is there anything else you’d like to tell me about the life events you’ve experienced in the past year?”) and reported additional stressful life events. Despite the fact that the question asked only about life events (to allow for the reporting of either positive or negative stressful life events), only negative life events were reported. Five main themes emerged from responses, which included disruption to social network, substance use, health, acculturation and life on the streets. The number of respondents reporting stressful life events for each theme is shown in Table 14.

Twenty-four persons reported disruptions to their social network, more specifically, separation from friends, family members and romantic partners, losing contact with children because of Children’s Aid Society involvement, death of social network members (included by one respondent to be death of a pet), and parental abuse and sexual abuse by a family member (non-parent). Each respondent in this category reported increased loneliness and/or stress as a result of disruption to his/her social network. Many more females reported disruption to their social network than males, and more adult females reported disruption than youth females. The

most frequent disruptions to the social network reported by youth females was the experience of parental abuse. This is similar to the finding by Wolfe and her colleagues (1999) was that homeless adolescents reported significantly more parental maltreatment, physical aggression and family conflict than a comparison group of adolescents. The most frequent disruptions to the social networks reported by adult females was the loss of a child. One adult female stated that when she lost custody of her children to the Children's Aid Society, "nothing was the same then, I had nothing to live for. I tried to commit suicide and then I ended up coming to the shelter when I got out of the hospital".

Fifteen respondents reported substance use (either their own, involvement of others around them or their use of detoxification services) as a stressful life event. All groups except persons living in family shelters had members report drug involvement as a stressful event. More males than females reported drug use as a stressful event, and more adults than youths reported it as a stressful event. This does not imply that more adults use drugs, but that they report their involvement or use to be a stressful life event. Many respondents reported that given the amount of stress in their life, it was "too difficult to remain sober", yet paradoxically, the use of substances provided additional stress in their lives. In addition, three respondents (youth and adult female and adult male) reported attempting to commit suicide in the past year with intentional drug overdoses.

Despite the number of persons reporting involvement with the legal system in the past year, only two people reported it as a stressful event. One female youth reported being charged for prostitution, and one female adult reported feeling stressed because her child had been given a jail sentence during her period of homelessness.

Table 14**Qualitative Responses to Stressful Life Events Scale**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females (N = 66)</u>	<u>Youth Females (N = 45)</u>	<u>Adult Males (N = 71)</u>	<u>Youth Males (N = 48)</u>
Disruption to Social Network	Separation from family, friend or partner	1	1	3	0
	Loss of child	3	1	1	1
	Parental abuse	1	4	0	0
	Death of network member	3	0	1	1
	Sexual abuse (by family member)	2	1	1	1
Substance Use	Drug use	3	1	6	4
	Intentional drug overdose	1	1	1	0
Health					
	Failing physical health	3	1	1	1
Acculturation					
	Adjust to Canadian culture	0	1	0	0
Life on the Streets					
	Criminal activity	1	1	0	0
	Lack of financial resources	1	0	1	0
	General conditions of life on the street	0	3	1	3
	Having to leave squat	0	1	0	0

Six persons reported that their failing physical health was a stressful event, and this was reported by more adult females than any other group. One adult female stated that being “sick on the streets” made coping with being homeless even more difficult. Dealing with the effects of failing physical health while living in an emergency shelter or on the street, rather than in a private home or hospital, was considered by the three adult females to be very stressful, and difficult to manage.

Acculturation issues were reported by one female youth, with the stress being the struggle to assimilate the traditions of Canadian females with those of their own cultural background. More specifically, she reported that she felt less accepted by her peers at school because of her cultural background and less accepted by members of her own cultural group because she left her family home and was living in an emergency shelter.

Finally, respondents indicated that being homeless was a stressful life event. Respondents from all subgroups reported difficulty coping with the experience of living on the street, including lack of financial resources, conditions of life while living on the street and having to leave a “squat” (viewed by the respondent as her home) under a bridge. The youth female who reported having to leave her squat indicated that she was forced to leave her “real family” and separated from a place that she considered to be her home. Although many respondents indicated only that life of the street was difficult or stressful, two poignant quotes from adult males (one staying in a shelter and the other living on the streets) capture the sentiment of others on the perceived toll that homelessness has taken on their lives. The respondent using the men’s shelters stated that “it’s not a life I’d want anyone else to have. It’s hell, like you’re sitting there and the best thing you have to look forward to is a meal. It’s not a life. It is so close to death that all you have to do

to die is fall over". The respondent living on the street reported that "it [being homeless] has been sheer hell. It has taken a toll on my self-esteem, given me a negative attitude and made me withdraw from society".

In summary, stressful life events in the past year reported by respondents in qualitative responses seemed to be related as either a contribution or consequence of being homeless, and for some, that the experience of being homeless itself was a very stressful life event.

10.2 Coping Responses Inventory

In response to the question "Are there other ways that you deal with a problem?" 109 (47% of the sample) reported alternative coping responses. Of the 11 themes of coping responses identified, seven were classified as "behavioral avoidance" styles of coping, two were classified as "behavioral approach" styles of coping, one was classified as a "cognitive avoidance" style and one was a "cognitive approach" style of coping (see Table 15).

Behavioral avoidance strategies were the most common type of coping response reported. All behavioral avoidance strategies reported contained the common element of being described by respondents as a way to "escape" their problems. The most common avoidance strategy reported by all subgroups was substance use (either alcohol or drugs) as a way to cope with (and subsequently escape from) a problem. One adult male reported gambling as a way to escape from his problem, citing that gambling contained the same addictive features as substance use.

Other avoidance strategies reported involved running away (from home or a group home setting), taking walks as a way to leave the situation and reading (described by all groups as a way to keep busy while escaping the reality of problems). Violent avoidance strategies included initiating physical fights with others as a way to release internalized anger and frustration. An

Table 15**Qualitative Responses from the Coping Resources Inventory**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females (N = 66)</u>	<u>Youth Females (N = 45)</u>	<u>Adult Males (N = 71)</u>	<u>Youth Males (N = 48)</u>
Behavioral Avoidance	Substance use	8	6	2	11
	Gambling	0	0	1	0
	Running away	1	2	0	2
	Reading	2	2	1	1
	Taking walks	2	0	3	2
	Initiating physical fights	1	0	0	1
	Self-injury	1	2	0	2
Behavioral Approach	Writing poetry or songs	2	1	0	2
	Seeking counseling services (variety of services employed)	2	0	5	0
Cognitive Avoidance	Keep busy to ignore problems	5	5	3	2
Cognitive Approach	Try to keep a positive attitude	3	1	5	2

adult female compared initiating fights to other acts of self-injury such as self-mutilation. Youth females, youth males and adult females reported self-injury as a way of coping with problems, or with memories of traumatic experiences. Variation between the subgroups occurred in the method of self-injury used, with female respondents (both youth and adult) reporting cutting themselves, and youth males reporting punching or banging their heads against walls. In addition, both adult and youth females reported attempting suicide as a way to permanently escape from their problems.

Behavioral approach styles of coping used by respondents included finding ways (written or verbal) to express their feelings about their experiences with others. All subgroups (except adult males) had respondents who indicated that writing poetry or songs about their experiences, with the intention of sharing them with others so that people could “better understand their lives”. Adult males and females reported seeking staff resources such as counselors, outreach workers and housing support workers to discuss their problems.

The cognitive avoidance strategy reported by all subgroups was “keeping busy so that I don’t think about my problems”. The cognitive approach strategy reported by 11 respondents, again with representation in all subgroups, was trying to keep a positive attitude and to see the benefits or lessons learned in the situation.

Overall, both behavioral and cognitive approach and avoidance styles of coping responses were used, however, it is interesting to note that behavioral styles were more frequently employed than cognitive styles and that avoidance styles were used more frequently employed than approach styles. This suggests that as a population, respondents are more likely to engage in activities to “escape” (at least temporarily) their problems, which is considered to be the least

effective way of coping with stressful events (Moos, 1992).

10.3 Provision of Social Support

Participants were asked three qualitative questions related to social support: (1) Thinking about the people who are important to you, how do they give you support? (2) How do you give them support? and (3) Is there anything you would like to change about your relationships with others? Responses for each question were analyzed separately.

Receipt of social support from others. In response to the question about how others support them, 228 responses were given. Thematically, responses ranged from emotional support to instrumental support to being given no support (see Table 16). Emotional support was the most common response given from all subgroups of the study population. Interestingly, the number of female and male youths reporting the types of emotional support they received from others was almost identical, whereas it differed for adult males and females. The most common form of emotional support reported by females (both adult and youth) was “having someone there to listen” and “providing advice”. For males, the most common type of emotional support reported was “providing encouragement”, reported by more adult than youth males. The experience of receiving support from others was positive for most respondents, but negative for some others. This dichotomy is expressed in two quotes from respondents. First, a youth male describes receiving emotional support as “people I care about tell me that I am doing a good job, which makes me feel that I am something to be proud of”. In contrast, an adult male describes his support from family members as “people try to be overly optimistic. They use tricks like expressing their disappointment in me to try to motivate me to do things”. Adult males and youth females classified their receipt of emotional support as being homeless with a “buddy who would

Table 16**Qualitative Responses about Receiving Social Support from Others**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females (N = 66)</u>	<u>Youth Females (N = 45)</u>	<u>Adult Males (N = 71)</u>	<u>Youth Males (N = 48)</u>
Emotional Support	Having someone there to listen	25	18	17	18
	Providing advice	9	8	7	8
	Providing encouragement	1	1	4	2
Instrumental Support	Providing food	3	0	1	2
	Providing money	6	3	7	3
	Providing clothing	2	1	0	0
	Providing a place to stay	5	1	3	8
	Providing "necessary" items	1	0	0	3
No Support	Reported receiving no support from others	10	4	12	4
	Receive only professional support	6	1	0	0

look out for them”, who would provide unconditional support and who would help them overcome obstacles by sharing the experiences with them. One youth female reported that being homeless and traveling between cities was less stressful for her because she knew that her friend (also a homeless youth female) would “stick with me, no matter what”.

Forty-five respondents reported receiving instrumental support from others. This was defined as the receipt of money, food, clothing, a place to stay or other material items respondents deemed necessary (i.e., four respondents reported that others gave them drugs to support them). Respondents from all subgroups reported receiving instrumental support, particularly money, from others. Numbers of females and males reporting instrumental support from others were similar, with more males (particularly youth males) reporting being given a place to stay. One adult in the community sample described receiving support from others as receiving “a place to crash, get food and do laundry”.

A disturbing finding was that 30 respondents reported in their qualitative responses that they received no support from others. Lack of support was reported by more females than by males, and in addition, seven female respondents (six adult and one youth) indicated that they only receive support from professionals (case managers, outreach workers and shelter staff). Sadly, one adult female reported that even though persons in her life provided only negative forms of support, she maintained contact with them “just to hear their voices”. One youth female reported that since becoming homeless she had lost her support network, and added “homeless people just become friends with one another so that they can stick together”. She added that making acquaintances with other people who were homeless people was an important form of “survival” while living on the street.

Provision of social support to others. Two hundred responses were given to the question of how participants supported others. In similar classifications to the ways that they reported receiving support, the most common form of providing support to others was the provision of emotional support, classified as being available to listen and provide advice (see Table 17). Almost all female participants in the study (81%) reported providing emotional support to others by “being there to listen”. An interesting addition from twelve respondents (equal numbers of males and females) that was not mentioned in the earlier question was participants’ actions to “build the confidence of my friends and tell them that I care about them”. Respondents from all subgroups reported attempts to build the confidence of others and to assure them that they would “take care of them”.

Thirty respondents (from all subgroups) reported that they would support others by “helping them any way I can”, without providing specific examples. This was the most frequent response by both youth males and youth females. Twenty-one respondents gave examples of provision of instrumental support that ranged from giving others money or food or stating that they were supporting staff at emergency shelters by cooperating with the rules. The most frequent and specific way of providing instrumental support reported was “providing money”, which was reported most frequently by adult males. Similarly, adult males and youth females reported that the way they provided support to others was by “showing them that I am trying to improve my life”.

A method for support provision reported by an adult female (and echoed by two adult males) was “doing them a favour and staying away”. Nineteen respondents (represented in all subgroups) indicated that they did not or could not support others at the time of the interview. As

Table 17**Qualitative Responses about Provision of Social Support to Others**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females</u> (N = 66)	<u>Youth Females</u> (N = 45)	<u>Adult Males</u> (N = 71)	<u>Youth Males</u> (N = 48)
Emotional Support	Being there to listen	33	18	12	20
	Provide advice	6	5	4	2
	Build their confidence by telling them that I care about them	4	2	2	4
Instrumental Support	Help in any way I can	8	9	8	6
	Provide food	1	0	2	0
	Provide money	3	1	7	4
	Volunteer at drop-in centre	0	0	1	0
	Show them I am trying to change my life	0	1	1	0
	Cooperate with shelter rules	2	0	0	0
Do Not Provide Support					
	Do not/cannot provide support to others	4	2	9	4
	Stay away from them	1	0	2	0

stated by one youth male “sometimes when you are homeless, no one thinks to come to you for support”.

Changes to relationships with others. Eighty-nine respondents indicated that they would like to change their relationships with others. Thematically, the types of changes ranged from wanting to improve relations with others to wanting to change aspects of themselves in order to better relate to others in the future (see Table 18).

Twenty-five respondents (from all sub-groups) reported wanting to improve relationships with friends and family members, which was reported most frequently by adult females and youth males. One adult male described this change as “I want to have contact with my son so that even though I am here he doesn’t think I’m garbage and he knows that we come from the same place”. Adult males and females indicated that they wanted to be treated with more respect by their friends and family, and six adult respondents (four males and two females) indicated that they wished that they had the resources to help their friends and family more (by the provision of instrumental support). One adult woman described this as “I wish I had the money to have a place for them [friends and family members] to stay. I feel useless when I can’t help them. While I am staying here [emergency shelter] I can’t help my friends”.

Respondents indicating that they wanted to change aspects of themselves gave examples ranging from wanting to learn how to control their anger and aggressive tendencies, wanting to be more assertive or increase their self-confidence to wanting to control their patterns of substance abuse first. The most frequent change sought by respondents was “to be more confident and open”. This desired change was reported by more adult males than any other sub-group. One adult male stated that “I wish I could change how much I drank, but I can’t turn the clock back,

Table 18**Changes to Relationships with Others**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females</u> (N = 66)	<u>Youth Females</u> (N = 45)	<u>Adult Males</u> (N = 71)	<u>Youth Males</u> (N = 48)
Improve Relations with Others	Improve relations with family	8	5	4	7
	Would like to help them more	2	0	4	0
	Be treated with more respect	2	0	2	1
	Stay away from abusive people	1	1	1	1
Improve Aspects of Self	Be more confident and open	10	3	12	4
	Learn to control anger	4	4	2	0
	Want to stop addiction first	1	1	4	1
No Relations with Others	Don't have relations with others	2	2	4	1
	Not possible (too transient)	0	0	2	0
	Prefer to be by myself	1	1	0	0

but I have big shoulders so I'll carry the blame". Ten respondents reported wanting to learn to control their anger; reported most frequently by adult females, and not at all by youth males.

One youth female reported that because of stressful life events that she had endured. "I don't trust anyone anymore". In addition, one adult male stated that "being a loner is good. If you don't have people depending on you, you are not responsible for anyone else". Two adult males stated that because of their transient lifestyle it was not possible to have relations with others, and two females (one youth and one adult) stated that they preferred to be by themselves. Nine respondents stated that they chose to have no relations with others.

10.4 Personal Empowerment

When asked if there was anything they would like to change about the amount of control you have over their life right now, 83 respondents (38% of the sample) responded. Twelve themes emerged, ranging from specific areas of respondents' life in which they felt they needed more control, to more general statements about having no control over their lives, needing more control or having all the control they currently need (see Table 19).

Life domains in which respondents indicated they needed more control included: education (more specifically wanting to complete their education), employment, housing, physical and mental health, changing their criminal record, getting their children back and no longer being homeless. The most frequently reported change by females, both adult and youth, was having control over their housing (more specifically their access to safe and affordable housing) and for males, both adult and youth, was stopping their substance abuse. The other most frequent response for youth males was wanting to change their life by no longer being homeless.

Table 19**Qualitative Responses about Personal Empowerment**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females</u> (N = 66)	<u>Youth Females</u> (N = 45)	<u>Adult Males</u> (N = 71)	<u>Youth Males</u> (N = 48)
Increased Control in Life Domains					
	Education	0	1	2	0
	Employment	2	0	3	1
	Substance abuse	2	1	4	2
	Housing	7	3	2	0
	Physical health	0	0	2	0
	Mental health (need counseling)	3	2	0	0
	Change criminal record	0	0	1	0
	Want children back	1	0	1	1
	To stop being homeless	0	0	0	2
General Statements about Lack of Control					
	Less control by government	4	0	1	1
	Want to set own rules	0	1	0	1
	Want to be more independent	4	2	2	3
	Feel have no control over life	1	2	2	1
	Do not want to be judged	1	0	1	0
No Change					
	Have all control required	0	0	0	6
	Not feasible while homeless	1	1	3	1

In general statements about wanting more control, many respondents indicated that they wanted less control by “government” (who they conceptualized as both welfare and health care service providers). The most common response by both males and females was wanting to become more independent. One adult female stated “I wish I had enough control to make my own decisions and not have them made by welfare”. With respect to control by health care professionals, one adult male stated “just because I’m homeless or have an alcohol problem doesn’t mean that doctors or social workers can try to control me by telling me what to do next”. These respondents also stated that they wanted to be able to choose the services they received and the programs that they participated in, rather than having mandatory services thrust upon them. Similarly, respondents reported wanting to make their own rules, feel more independent and in control of their life, and to not be judged by others.

Overall, two-thirds of those wanting to change the amount of control in their lives expressed sentiments indicative of being able to personally obtain the additional control they needed, and one-third stated that they would be unable to personally obtain the necessary control, believing that first their situation of being homeless would have to be changed. Many expressed that being homeless was actually a result of taking control of their past experiences. For example, one youth female stated that “when I left my house it was a way of taking control of my life and my own future, so no one else will mess up my life for me”. Similarly, respondents expressed that the amount of control they currently had over their life was better than before, and that being homeless allowed them to make independent decisions about their future. Six youth males, but no females, reported having all of the control they required in their life. In addition, six persons, four males and two females stated that changing the amount of control they had over their life was

“not feasible while I am homeless”.

10.5 Stress Appraisal

In the Stress Appraisal measure, one item asked participants the question: “Is anything good coming out of being homeless?” If participants chose the response categories of “definitely yes” or “mainly yes”, they were asked an additional qualitative question of the end of the scale that read “you stated that some good was coming out of being homeless, can you tell me more about that?” One hundred and twenty-eight respondents (56% of the sample) responded that something good was coming out of being homeless, and their qualitative responses were grouped into four themes: development of skills, freedom, positive benefits and learning experiences (see Table 20).

Respondents from all subgroups reported that being homeless had helped them develop skills. The most frequent skill development reported by females was increased self-confidence (reported by more adults than youths) and learning self-reliance (reported by more youths than adults). Responses are similar to those found by Summerlin (1996) who spoke with 145 men who were homeless about what they had learned from their experience of homelessness. The most common theme he reported was an increase in feelings of self-efficacy and trust in their own abilities.

In the present study, the most frequent skill development reported by males (both adults and youths) was learning self-reliance. One youth male respondent reported “as long as it [being homeless] doesn’t drag me too low, I think it has built character”. Being homeless was described by one youth male as “street school” in which “I learn a lot of skills”. Another area of skill development reported by two adult females and one adult male was developing motivation for the

Table 20**Qualitative Responses from Stress Appraisal Measure**

<u>Theme of Response</u>		<u>Frequency per group</u>			
		<u>Adult Females (N = 66)</u>	<u>Youth Females (N = 45)</u>	<u>Adult Males (N = 71)</u>	<u>Youth Males (N = 48)</u>
Development of Skills	Increase self-confidence	6	2	2	1
	Learn self-reliance	1	7	3	4
	Develop motivation for future	2	0	1	0
Freedom	From abusive environment	5	4	0	0
	From rules and regulations	1	2	5	3
Positive Benefits					
	Chance to meet people	8	4	1	5
	Enjoy "transient lifestyle"	0	1	0	3
	Free food	1	0	1	0
Learning Experiences					
	State as a good learning experience	3	4	2	6
	Help to prepare for the future	7	1	1	2
	Help access services	0	1	3	0
	Learn to not judge others	3	1	1	4
	Appreciate what once had	4	0	3	4

future. An interesting benefit reported by both males and females was freedom. For females, being homeless meant freedom from abuse, and for males (and a few females) it meant freedom from rules and regulations. One adult female stated “if I hadn’t left my abusive family I would be dead by now”.

Positive benefits of homelessness also included the opportunity to meet people (the most frequent benefit listed by both females and males) and learn more about others, the opportunity to enjoy a “transient” lifestyle and to have access to free food. One adult male who had been homeless over a year stated “when you spend time with other people who are homeless you get like a family, you get adapted to them and there is a lot of love and friendship on the street”. Many respondents mentioned meeting people that they considered part of their “family”, with family defined by emotional and instrumental support, rather than genetics.

Finally, respondents indicated that being homeless had been a good learning experience, either to prepare for the future, to access services or to learn not to judge others and to appreciate what they once had. The most common response from males was that being homeless was “a good learning experience” (in general terms), whereas for females, the most common response was that being homeless was helping them prepare for the future. Two adult females indicated that they were better able to save money while being homeless, and six adult females stated that being homeless put them on the priority list for subsidized housing. Seven respondents stated that being homeless was helping them to access support services and learn to set goals and develop what they described as the “required motivation” to change their current situation and four adult males reported that they were accessing addiction services through the emergency shelter.

One adult female respondent described having a new perspective on persons who were

homeless, and that “now that I know that anyone could be homeless, I will have more compassion for others when I leave here because we have been in the same situation”. Three youths (two males and a female) reported that being homeless was an important learning experience for them so that they could ensure that they change their future parenting styles to prevent children from having to make the same choices that they did. One youth male stated “ this [the experience of being homeless] will help because in the future I won’t treat my kids like this [how I was treated by an abusive parent] so that they don’t end up being homeless”. Interestingly, more adult females, followed by youth males, responded that being homeless was a good learning experience, with fewest youth females reporting a good learning experience.

In the theme of appreciation for what they once had, respondents expressed that, having “lost everything”, they “no longer took having possessions and friends for granted”. One adult female stated she was “no longer materialistic. I realize that everything can be replaced, except people, so now I don’t take them for granted and I have more compassion towards them”. Finally, one adult female stated that she viewed the experience of being homeless as a “test” that required her to learn more about herself and to appreciate all of the things that she had in her life.

Qualitative responses about the positive experiences of being homeless are not considered to lessen the quantitative findings on the extent of stress experienced by the population. Instead, they provide another dimension to the complex issue of dealing with the experience of being homeless by suggesting that for some people, important lessons can be learned even under difficult circumstances.

In conclusion, qualitative analyses provided additional information about the stressful events that participants had endured, the ways that they coped with problems, their receipt and

provision of social support, changes they would like to make to their life and their perceived benefits of being homeless. Analysis by sub-group provided details about the ways in which females' experiences of homelessness (and associated life events, coping strategies, and social support) differed from males'. Also, although youths generally reported more similar responses than adults, all four groups had distinct impressions of, and reactions to, being homeless.

11.0 Discussion

The objective of the present study was to examine the experiences of persons who are homeless from a stress and coping perspective. More specifically, the study tested a transient stress and coping model for persons who are homeless adapted from Moos and Schaefer's (1993) Integrated Conceptual Framework of Stress and Coping and Dohrenwend's (1978) Social Stress model.

A transient stress model, such as the one presented in the final model, appears to be a useful way of conceptualizing how persons who are homeless appraise, respond to, and cope with their experience of being homeless. The final model demonstrated that personal and environmental factors play a role in the occurrence of stressful life events and stress response, but that only personal empowerment and stress response were directly associated with levels of well-being and psychopathology. Overall, it appears that a transient stress model is an appropriate framework with which to consider the experiences of persons who are homeless. This framework does not provide "pathologized" classifications of persons who are homeless, nor does it suggest that homelessness is exclusively related to mental illness, although relationships with mental health problems were certainly found. Instead, the model focuses on the dynamic processes used by individuals to understand and react to their experience of being homeless. It includes the

importance of personal factors (from personality traits to gender, coping styles and perceptions of mastery) as well as the importance of environmental variables in reacting to being homeless. It demonstrates the efficacy of combining Moos and Schaefer's (1993) integrated conceptual framework, and Dohrenwend's (1978) social stress model to understand how coping with being homeless (and associated life events) contribute to feelings of subjective well-being and reported levels of psychiatric symptomatology. Unlike previous models of homelessness, this model demonstrates the importance of personal and environmental factors in the occurrence of stressful life events and the subsequent stress reaction and reports of well-being or psychopathology. It further suggests that for many individuals, being homeless may be considered a stressful event during which other stressful life events and reactions to the stress associated with being homeless are determined, at least in part, by individual personality traits and coping responses.

The addition of qualitative responses provided more information about individuals' processes of coping with being homeless, as explained in their own words. Moreover, it allowed for the examination of differences between groups defined by sex and age in their reporting of stressful life events, coping responses, social support, personal empowerment and stress appraisal. Even with the differences observed, many useful themes of coping responses, perceived social support, feelings of control, and perceived benefits of being homeless could be clustered into thematically related categories across the sub-groups of individuals (distinguished by age and sex).

For example, both males and females, youth and adult, reported disruption to their social network as the most frequent stressful life event, and all groups employed behavioral avoidance coping strategies more frequently than any other type of coping response. In addition, all groups reported emotional support in the form of "listening" to be the most frequent form of support they

received from, and gave to, others. Also, the most common ways in which all groups wanted to change their relationships with others was to improve relations with their families and to be more confident and open with others.

Differences also emerged between the sub-groups broken down by gender. Common aspects of homelessness experiences for females (both adult and youth) included experiences of abuse, whereas for males they more frequently involved criminal activities. An interesting difference between sub-groups based on gender is in their appraisal of the stress associated with being homeless. More males reported homelessness providing them with “freedom” from rules and regulations, whereas for females, it was more common that homelessness represented freedom from abuse, thereby underscoring differences in how males and females appraise, and subsequently respond to, the experience of being homeless.

Despite the many things demonstrated by the transient stress model, there are issues related to understanding a person’s experiences of being homeless that are not explained by the model. Factors related to homelessness are presented, but the issue of why people become homeless (once or many times) is not explained. Although the model introduces the idea of individual differences with the inclusion of personality traits, it does not account for the full influence of an individual’s personality on his or her stress and coping process in two ways. First, it does not include all potential personality factors. It might be interesting to see the influence of the other three factors in the five-factor mode of personality (i.e., agreeableness, conscientiousness and openness, Costa & McCrae, 1992) on the stress and coping process. Second, the model does not fully explain why some individuals appraise and react to being homeless as more stressful than others. Although relationships between personal and stress-

related factors and stress appraisal are shown in the model, the model does not fully explain the differences in levels of appraisal and response. The meaning of each significant relationship found in the revised model will now be reviewed.

11.1 Review of Relationships in the Transient Stress Model

In the revised model, the relationships between personality traits with other personal and environmental factors were first examined, followed by the impact of these personal and environmental factors on the occurrence of stressful life events and stress reaction (appraisal and response). The model then proposed that these stress-related variables (appraisal and psychological stress response) would predict self-perceptions of well-being and psychopathology.

Overall, the model supported the proposition that personality traits were related to personal and environmental factors, which in turn influenced stress reactions and well-being or psychopathology. Testing the adequacy of the proposed model revealed that additional pathways could be added to the model (and others deleted) to improve it.

To explore the findings from the present study, each variable proposed in the transient stress model will be reviewed in terms of its importance. Next, the practical applications of a transient stress model to understand the experiences of persons who are homeless will be discussed.

Variables in the transient stress model will be reviewed, starting with personal and environmental factors at the top or start of the model and working through to well-being and psychopathology at the bottom or end of the model.

11.11 Personal Factors

All personal factors played unique roles in the transient stress model, and each will briefly

be reviewed.

Neuroticism. In the final model, neuroticism was found to be related to extraversion, sex, avoidance-style coping responses, personal empowerment, stressful life events related to experiencing mental health problems and abuse, and psychological stress response. Endler, Rutherford and Denisoff (1997) suggest that the concept of neuroticism can be broken down into three facets:

1. **Stress management/competence:** reflecting an ability to handle a crisis, make decisions under pressure, ability to withstand teasing from others and to feel comfortable in the presence of persons in authority;
2. **Shame/embarrassment:** reflecting experiencing guilt and shame, fearing doing foolish things or regretting one's actions; and
3. **Vulnerability to depression:** reflecting feelings of helplessness, low self-worth and discouragement about the future.

Conceptualizing neuroticism using these facets can help explain its significant negative relationship with extraversion in the model as experiencing shame and embarrassment, being vulnerable to depression and having a low tolerance for stress or dealing with others precludes the experiences of those persons with higher ratings on the facet scales of extraversion, namely, warmth, openness and gregariousness.

This conceptualization of neuroticism can also explain the positive relationship to avoidance-style coping responses (e.g., similar to some of the impulsivity and fear of doing foolish things seen in the shame/embarrassment facet); its positive relationship with the occurrence of stressful life events related to experiencing mental health problems and abuse (particularly as they

would be expected to increase the individual's vulnerability to depression); its positive relationship with psychological stress response and the negative relationship with personal empowerment (which could be conceptualized as stress management/competence).

The relationship between neuroticism and sex suggests that higher incidence of neuroticism is associated with female gender. Costa and McCrae (1992) report higher normative values for neuroticism for a female sample compared to a male sample, as do Dunkley et al. (1997) who noted that male and female university students scored differently on measures of self-criticism, depression and neuroticism.

The finding of a relationship between neuroticism and stressful life events related to mental health and abuse suggested that increased neuroticism predicted the occurrence of stressful life events related to having mental health problems or experiencing abuse in the past year. Similar findings have been reported in previous research. For example, in a four-year longitudinal study of young adults, Magnus and his colleagues (1993) found that a high incidence of neuroticism predisposed people to report more negative objective life events. In addition, Ormel and Wohlfarth (1991) found that persons with higher levels of neuroticism experienced more distress from the same environmental stressors than those persons with lower levels of neuroticism. Therefore, for the study population, a higher incidence of neuroticism was related to both the increased likelihood of experiencing psychological disturbances and the reporting of such events.

This finding also relates to the "feminist theory of abuse" (Courtois, 1988). The theory states that more females than males experience abuse (a finding also seen with the study population), and that the power and degradation experienced by victims (especially victims of abuse at an early age), creates lasting behavioral and temperament changes conditioning females

to become passive and dependent (Finkelhor and Browne, 1985; Russell, 1986). Finkelhor and Browne (1985) suggest that early experiences of abuse “alter children’s cognitive and emotional orientation to the world, and create trauma by distorting children’s self-concept, world view, and affective capacities” (p. 530-531). These alterations are also conceptualized as increasing an individual’s susceptibility to (further) psychological distress, or increasing levels of neuroticism. Further, the experience of abuse and its resultant personality adaptations is hypothesized to place females at continued risk for being abused later in their life, known as the re-victimization hypothesis (Runtz, 1987; Russell, 1986; Walker, 1984).

Results indicated that increased neuroticism was associated with increased psychological stress response (physical, cognitive, affective and behavioral responses) as a result of being homeless. The finding is similar to that of Watson and Pennebaker (1989) who found that negative affectivity (often conceptualized as neuroticism) influenced self-reports of stress measures (including physical, affective, cognitive and behavioral items) more than the symptoms of a physical health condition did.

The relationship between neuroticism and personal empowerment suggested that lower levels of susceptibility to psychological distress were associated with increased levels of personal mastery and control. Endler et al.’s (1997) conceptualization of “stress management/competence” as a facet of neuroticism can help explain this finding. In particular, lower levels of neuroticism reflect an increased ability to handle a crisis, make decisions during stressful times and belief in oneself to be competent around others, corresponds to personal empowerment as defined in the study (i.e., feeling powerful, confident about decisions, and feeling able to overcome barriers).

In summary, neuroticism played an important role in the examined transient stress model

by demonstrating associations with extraversion, sex, avoidance-style coping responses, personal empowerment, the occurrence of stressful life events, and psychological stress response.

Extraversion. In the final model extraversion was associated with neuroticism and was found to have a positive relationship with social network size, perceived social support and personal empowerment. More specifically, this suggests that an individual's willingness to engage in acts of interpersonal intimacy were associated with the number of persons he or she had in his or her social network, the amount of social support he or she perceived as available, and personal perceptions of mastery and control.

The relationship between extraversion and social network size suggests that increased levels of warmth, gregariousness and positive emotions (all facets of the extraversion construct, Costa & McCrae, 1992) are associated with having more persons in one's social network. It is likely that the more warmth an individual displays towards others, the more likely he or she would be to have an increased number of friends, or positive relationships with family members or service professionals. Watson (1988) noted that increased levels of positive affect (which was also conceptualized as displaying warmth, gregariousness and positive emotions, similar to the construct of extraversion) were positively related to the number of close friends reported (as cited in Watson & Clark 1997).

The positive relationship between extraversion and perceived social support can be understood in a similar manner to the relationship between extraversion and social network size. Again, it is likely that the more warmth an individual displays towards others, the more likely he or she would be to perceive reciprocal social support from others. Further, the provision of social support scale used to measure perceived support in this study was constructed based on a

typology of six benefits provided by relationships: attachment, social integration, reassurance of worth, reliable alliance, guidance and opportunity for nurturance (as defined in Cutrona, 1986). It is therefore assumed that the different facets of extraversion related to engaging in acts of interpersonal intimacy would be associated with perceiving increased levels of each of the relational benefits, both in terms of perceiving support from others, and in terms of being able to support others.

Analysis of the qualitative responses from study participants indicated that they received support from others, especially in the form of emotional and instrumental support (such as food, money, clothing and housing). It is expected that such facets of extraversion as warmth and positive emotion would be related to receiving emotional support, whereas assertiveness, which also makes up extraversion, might be related to an individual's ability to ask for, and subsequently receive, instrumental support. Similarly, gregariousness and warmth, which are elements of extraversion may be related to the relational benefit of "opportunity for nurturance". Qualitative responses revealed that participants supplied social support to others in the form of emotional and instrumental support and that for some the ability to provide support to others, however limited, was an important social role for them.

The positive relationship between extraversion and personal empowerment can be understood as increased feelings of mastery and control are assumed to increase an individual's level of sociability and likely their frequency of engaging in acts of interpersonal intimacy towards others.

In summary, extraversion played an important role in the examined transient stress model by demonstrating associations with environmental factors such as social network size, perceived

social support, and the personal factor of personal empowerment.

Sex. As previously mentioned, in the final model being female was associated with higher levels of neuroticism and a greater occurrence of stressful life events related to mental health problems and experiences of abuse.

Burt and Cohen (1989) found higher rates of mental health problems in females who were homeless as compared to homeless males. In addition, North and Smith (1993) found that females who were homeless had different histories and characteristics than males, with females being more likely to have experienced mental health problems and victimization, but less likely to have participated in criminal activity and experienced substance abuse.

Theories that attempt to account for sex differences in the occurrence of mental health problems (most specifically depression), suggest that differences are the result of either (1) the individual's reaction to her/his depressive symptoms (i.e., males tend to distract themselves from thinking about their symptoms, and females ruminate about their symptoms), or (2) differences in life circumstances (that contribute to depression) of males and females (Belliveau, 1995; Nolen-Hoeksema, 1987; Stoppard, 1990). Evidence supporting the later theory was reported by Belliveau (1995) who found that women who live in financially constrained circumstances are more likely to experience symptoms of depression in comparison to women with fewer financial constraints or in comparison to prevalence rates of males with depression.

Findings in the present study of the relationship between being female and experiencing stressful life events related to mental health problems and abuse are consistent with the increased prevalence rates of abuse directed at females, compared to males in the general population (Status of Women Canada, 1999). In fact, Statistics Canada reported that at least 51% of all Canadian

women have experienced at least one incident of physical or sexual violence as defined under the Criminal code (as cited in Status of Women Canada, 1999). This does not suggest that males are not victims of abuse; however, the prevalence rates for females are elevated in comparison to those for males, and this high rate is also reflected in the findings of the present study for the homeless population with an association between sex and the occurrence of stressful life events related to experiencing mental health problems and abuse.

In summary, sex played an important role in the transient stress model by further distinguishing differences between the experiences of males and females in relation to homelessness, particularly as it relates to the stressful life events they have experienced in the period leading up to, and during, being homeless.

Avoidance-style coping responses. In the final model, avoidance-style coping responses had a positive relationship with both stress appraisal and psychological stress response, and as previously mentioned, was associated with increased levels of neuroticism.

The relationship between avoidance-style coping responses and stress appraisal was anticipated in that coping strategies that do not address the problem (i.e., avoid it) are expected to increase the amount of stress appraised in the situation since the issue or stressor has not been directly addressed. The analysis of avoidance-style coping responses in different samples has found relationships with stress appraisal or related factors. Adolescents who employed avoidance-style coping responses in dealing with family relocation overseas were found to report higher levels of stress associated with readjustment than those who employed approach-style strategies (Vercruysse & Chandler, 1992). Although homelessness is a different life event than family relocation, both contain elements of residential instability and readjustment to a (potentially)

stressful residential situation. Rijavec and Donevski (1994) found in a sample of college students that “successful” coping (defined by resolving the stressful situation and therefore lowering levels of appraised stress) was achieved by the use of approach-style coping responses, but that “unsuccessful” coping (defined as an increased or maintained level of stress appraisal) was achieved by the use of avoidance-style coping responses. These findings support the positive relationship between increased use of avoidance-style coping responses and increased levels of stress appraisal.

The relationship between avoidance-style coping responses and psychological stress responses can be understood in a similar manner. Again, it is expected that individuals who coped with being homeless by either “discharging” emotions on others or by resigned acceptance of their situation (considered to be passivity or avoidance of employing an active coping strategy), were expected to subsequently experience more physical, affective, cognitive and behavioral symptoms of stress than those who actively approached their situation in an attempt to change it.

In summary, avoidance-style coping responses played an important role in the transient stress model by differentiating between the types of coping responses used and their resultant effect of levels of stress appraisal and psychological stress response.

Personal empowerment. In the final model, personal empowerment was negatively associated with neuroticism and positively associated with extraversion. Personal empowerment also had relationships with stress appraisal, well-being and psychopathology.

The negative relationship between personal empowerment and stress appraisal was anticipated as increased feelings of personal mastery and control were assumed to be related to decreased levels of stress appraised in relation to being homeless. Increased feelings of personal

ability to overcome barriers, confidence about decisions made and that plans will succeed are conceptually opposite from items of the stress appraisal such as appraising being homeless as a threat to one's self, not knowing in advance that the individual would become homeless, and not having had sufficient time to get ready to handle being homeless.

These findings are similar to those of Epel, Bandura and Zimbardo (1999) who noted that homeless men with high levels of self-efficacy had shorter experiences of homelessness and conducted more housing and employment searches than those with lower levels of self-efficacy. Therefore, an individual with increased perceptions of his or her ability to handle barriers and stressful events (such as being homeless) is less likely to then appraise high levels of stress associated with being homeless.

The positive relationship between personal empowerment and well-being suggests that individuals with increased perception of their sense of mastery and control are more likely to report higher levels of satisfaction with their life. Items of the well-being scale such as: "I am satisfied with my life; if I could live my life over I would change almost nothing, and so far I have gotten the important things I wanted in my life" are assumed to be positively related to feelings of mastery and control over one's life. This finding corresponds with Emmons and Diener's (1985) finding that, for university students, the strongest correlate of subjective well-being was interpersonal competencies (conceptualized by them as intelligence, surgency, self-sufficiency and tough poise). Overall, conceptualizations of mastery and control have been demonstrated and were found in the present study to be associated with overall ratings of well-being.

The negative relationship between personal empowerment and psychopathology suggested that decreased feelings of personal mastery and control were associated with increased levels of

psychiatric symptoms. Items from the General Health Questionnaire (Goldberg, 1972), used in the present study to measure psychopathology, including asking respondents about the extent to which they feel incapable of making decisions, unable to face problems, or feel they manage situations worse than others are conceptually opposite from feelings of mastery and control. Therefore, the lower an individual perceives his or her levels of personal mastery or control, the more likely he or she would be to have a heightened perception of inability to handle stressful situations and report thoughts and feelings making up psychiatric symptoms.

In summary, personal empowerment played an important role in the transient stress model in explaining how perceptions of personal mastery and control directly affect the stress appraisal process, and influence levels of well-being and psychopathology.

Past experiences of homelessness. In the final model, past experiences of homelessness was associated only with perceived social support. The negative relationship between previous experiences of homelessness and perceived social support is supported by Grigsby et al.'s (1990) conceptualization of "chronic homelessness" in which increased duration and frequencies of homelessness produce over time loss of social support and eventual isolation.

In summary, past experiences of homelessness played an important role in the transient stress model by demonstrating its relationship to decreased perceived social support. In addition, the lack of significant relationships between personality factors and past experiences of homelessness suggests that homelessness is a stressful life event that is triggered especially by environmental factors.

11.12 Environmental Factors

The two environmental factors, perceived social support and social network size played

unique roles in the transient stress model.

Perceived social support. In the final model perceived social support was associated with increased levels of extraversion and had associations with past experiences of homelessness, social network size and the occurrence of stressful life events related to mental health problems and victimization. The relationships between perceived social support and extraversion and past experiences of homelessness have already been discussed. The relationship with social network size will be discussed in the following section.

The negative relationship between perceived social support and the occurrence of stressful life events related to mental health problems and victimization suggested that increased levels of social support perceived as being available to the individual were associated with decreased occurrences of being physically or emotionally abused (by a romantic partner or someone else) and experiencing mental health problems.

This finding is associated with the “buffering hypothesis” of social support that posits that social support exerts beneficial effects in the presence of stress by protecting people from the pathogenic effects of such stress” (Cohen & Syme, 1985, p. 7). The finding was also supported by the qualitative responses given by study participants that indicated that the additional stressful life events that occurred most commonly were disruptions to their social network in the form of abuse or separation from network members. This meant that the more (positive) support an individual perceived himself or herself as having, the less likely he or she would be to have been victimized or have experienced mental health problems in the past year.

The perception of less supportive social relationships may influence either the occurrence of stressful life events or their reporting. For example, if an individual’s sources of social support

are the perpetrators of the abuse being reported, then it is more likely that he or she would perceive a low level of social support being available. Low levels of available social support were associated with not just victimization experience, but also the experience of mental health problems. This relationship is similar to the findings by DeLongis, Folkman and Lazarus (1988) that married couples with unsupportive social relationships were more likely to experience an increase in psychological and somatic problems related to everyday life hassles and stressors.

In summary, perceived social support played an important role in the transient stress model both in its association with extraversion, and also in its negative relationship with the occurrence of stressful life events related to mental health problems and experiences of abuse.

Social network size. As previously mentioned, in the final model increased levels of extraversion were associated with the size of an individual's social network. In addition, the size of the social network had a positive relationship with perceived social support and a negative relationship with the occurrence of stressful life events related to mental health problems and experiences of abuse.

The relationship between social network size and perceived social support suggested that the more persons in an individual's social network, the more likely he or she would be to assume that social support was available from network members. Although in the present study the amount of support given by each network member was not investigated, it is assumed that for most persons, more persons listed in their social network the more likely they are to perceive that others are available to support them.

The positive relationship between social network size and the occurrence of stressful life events related to mental health problems and experiences of abuse suggested that members of the

network might be perpetrators of abuse, or that the network itself, even if large, may not necessarily be supportive for some individuals. In fact, Coyne and DeLongis (1986) noted that although most theories of social support implicitly assume that support networks are supportive, social support is best conceived of as contributing to varying personal experiences rather than a set of objective circumstances, and that many of these experiences may in fact be negative or upsetting. In two studies using samples of spouses caring for a spouse with Alzheimer's disease levels of depression for the caregiver were predicted by the caregiver's upset or dissatisfaction with his or her social network, and concluded that the salience of upsetting events within a social network was predictive of depression over time (Fiore, Becker & Coppel, 1983; Pagel, Erdly & Becker, 1987).

In summary, social network size played an important role in the transient stress model by demonstrating its association with extraversion and perceived social support. Although social networks may be extensive for some individuals they may not be uniformly a source of positive support, but rather vary by circumstances of individuals. Further considerations of social networks, therefore, need to consider both the size of the network and the perceived helpfulness of all of the members of the network.

11.13 Occurrence of Stressful Life Events

In the initial predicted model there were two factors identified as being related to stressful life events: those related to criminal activities and those related to experiencing mental health problems and abuse. After assessing the explanatory ability of the initial model, only stressful life events related to experiencing mental health problems and abuse was kept in developing the final model. In the initial model testing, stressful life events related to criminal activities showed small

relationships with sex and past experiences of homelessness. This suggested that involvement in criminal activities in the past year was associated with the male gender and also with increased numbers of past experiences of homelessness. This finding, although not in the final model, was consistent with the theory proposed by Grigsby et al. (1990) that suggested that some individuals who are “chronically homeless” develop an affiliation with other persons who are homeless and live on the streets by “functioning outside of traditional roles” (p. 143). This is interpreted as persons who became disaffiliated by becoming homeless now becoming “reaffiliated” with persons living on the street, thereby becoming involved in criminal activities and in substance abuse.

For the factor of stressful life events related to mental health problems and abuse that remained in the final model, the occurrence of these events was associated with increased levels of neuroticism, being female, perceived social support and the size of the social network. In addition, the occurrence of these stressful life events was associated with stress appraisal and psychological stress response.

The positive relationship between the occurrence of stressful life events related to mental health problems and abuse with stress appraisal suggested that increased occurrence of these stressful life events was associated with increased levels of stress appraised in relation to being homeless. In correspondence with the finding that many participants’ current reason for being homeless was fleeing parental or spousal abuse, it is expected that because the stress appraisal measure asks about issues such as having enough time to prepare for being homeless and being homeless as a result of something someone else did (both as indicators of high levels of appraised stress), that persons who experienced stressful life events involving abuse would be expected to appraise increased levels of stress associated with being homeless.

The positive relationship between the occurrence of stressful life events related to mental health problems and abuse with psychological stress response suggested that increased occurrence of these stressful life events was associated with increased levels of physical, cognitive, behavioral and affective symptoms of stress response. Herman (1992) noted that although symptoms of persons who have experienced abuse are specific to the individual, a high proportion of victims exhibit symptoms of Post-Traumatic Stress Disorder (PTSD). As listed by the American Psychiatric Association (1994), the symptoms of PTSD can include persistent symptoms of: difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance, and exaggerated startle response (p. 427). These symptoms are similar to items from the psychological stress measure including: startling easily, difficulty concentrating, difficulty falling asleep, difficulty controlling emotions and feeling tense, anxious, worried and restless. Therefore it is assumed that the association between these stressful life events and psychological stress response is indicative of the stress response being associated with the abuse that individuals endured as an antecedent to, or during, their experience of being homeless.

In summary, stressful life events related to experiencing mental health problems and abuse played an important role in the transient stress model by its prediction of both stress appraisal and psychological stress response.

11.14 Stress Reaction

Two stress reaction variables, stress appraisal and psychological stress response, had unique roles in the transient stress model.

Stress appraisal. In the final model, stress appraisal did not predict either well-being or psychopathology. This suggested that, for the study sample, the level of stress appraised in

association with being homeless did not directly influence an individual's ratings of life satisfaction or well-being, nor the level of psychiatric symptoms reported.

An issue that may be involved in the surprising role of stress appraisal in the transient stress model is the item in the stress appraisal measure that asked participants "if anything good was coming out of being homeless". Over half the sample (n=120) indicated that there was something good coming out of being homeless, and when followed up with a qualitative question as to what was good about the situation, the range of responses from skill development to freedom, suggested that despite the stress associated with being homeless experienced by participants, many also saw benefits of their current situation. This might explain why the mixed perception (i.e., stressful and beneficial) of being homeless was not related to end-points of the model such as overall ratings of well-being or levels of psychiatric symptoms.

Another issue that may be involved in the role of stress appraisal in the final model is the adequacy of the measure itself. The internal consistency of the measure was low, and therefore may not have provided an adequate measure of stress appraisal for this population.

Despite the lack of predictive relationships with well-being and psychopathology, stress appraisal was related to other key variables in the model. Specifically, findings showed that the level of stress appraised is decreased by personal perceptions of mastery and control, and increased by experiences of mental health problems and victimization and coping with problems by choosing to avoid them and not dealing with them directly.

Psychological stress response. In the final model, psychological stress response had a negative relationship with well-being and a positive relationship with psychopathology.

The negative relationship between psychological stress response and well-being suggested

that if an individual displayed increased levels of physical, cognitive, behavioral and affective response to a stressful event (such as being homeless) he or she would be expected to report decreased levels of well-being. Pavot, Diener, Colvin and Sandvik (1991) reported that the structure of well-being has been conceptualized as consisting of two major components: an emotional or affective component and a judgmental or cognitive component. This conceptualization suggests that the relationship between psychological stress response and well-being may be due to the emotional or affective component of well-being. Items of the psychological stress measure, such as feeling lonely and misunderstood, feeling worried, crying easily, and feeling stressed contain similarities to the affective component of well-being.

The positive relationship between psychological stress response and psychopathology can be understood by examining the overlap in the underlying constructs. Aspects of the stress reaction measured by the psychological stress response are similar to symptoms investigated by the General Health Questionnaire (used to examine psychopathology). For example, items from the Psychological Stress Measure that query feeling tense or worried, having difficulty concentrating or sleeping or crying easily or having an increased startle response are similar to experiences investigated by the General Health Questionnaire such as feeling unhappy and depressed, feeling things piling up, not being able to do things because nerves were too bad and being unable to enjoy normal day-to-day activities.

In summary, psychological stress response played an important role in the transient stress model by being associated with neuroticism, avoidance-style coping responses and the occurrence of stressful life events related to experiencing mental health problems and abuse. In turn, it predicted levels of well-being and psychopathology.

11.15 End Points of the Model

The two end points, well-being and psychopathology, also played important roles in the transient stress model.

Well-being. As previously mentioned, well-being was associated with personal empowerment, psychological stress response and psychopathology in the final model. The finding that well-being and psychopathology are associated suggests that if an individual reports a low level of well-being, he or she is more likely to experience increased levels of psychiatric symptoms.

Arrindell et al. (1991) also found an association between well-being (measured with the satisfaction with life scale) and psychopathology (measured with the General Health Questionnaire) for a sample of medical outpatients ($r = -.48$), which is similar to the findings for the study population. A possible explanation for this relationship is that an individual who disagrees with items such as “my life is close to ideal” or “the conditions of my life are excellent” is likely to also endorse items on the psychopathology measure such as feeling things piling up, being unable to enjoy day-to-day activities, feeling unhappy and depressed, or not feeling that he or she was managing as well as others in a similar situation. In addition, Pavot and Diener (1993) found that life satisfaction had higher correlations with negative affect than with positive affect, suggesting that life satisfaction was more likely influenced by the experience of negative emotions such as those making up psychiatric symptoms. It is important to note that the study population reported much lower levels of life satisfaction than other samples in the general population (as reviewed in the results section).

In summary, well-being played an important role in the transient stress model by being

associated with personal empowerment and the occurrence of stressful life events related to experiencing mental health problems and abuse. In addition, well-being and psychopathology were related in coping with the stress of being homeless.

Psychopathology. In the final model, psychopathology was predicted by personal empowerment and psychological stress response and well-being. In turn, it did not have a predictive role with any variables in the model.

As previously mentioned, levels of psychopathology in the sample suggested that the presence of diagnosable psychiatric disorders were three to four times higher in comparison to a community sample of Ontario residents (Offord et al., 1996). Although no causal links between homelessness and psychopathology can be drawn from this study, this finding suggested that there is an increased association between mental health problems and homelessness as compared to Ontarians who are stably housed.

In conclusion, each variable in the final transient stress model played a role in understanding those factors that influence an individual's appraisal of, response to, and coping with, the stress associated with being homeless. The practical applications of this model will now be discussed.

11.2 Implications of Findings for Intervention

The transient stress model presents a number of directions for interventions with persons who are homeless. First, the information about this cross-section of the population should be considered in developing services to meet their needs. For example, consideration should be given to the stressful life events participants reported experiencing, including residential and employment instability, involvement with the legal system, experiencing mental health problems

and substance abuse problems, and high rates of disruption to social networks and experiences of victimization. All of these stressful life events should therefore be considered when developing and delivering interventions to persons who are homeless.

Other personal factors should also be taken into account in developing interventions. Specifically, the fact that males and females, as well as youths and adults, report different experiences as they relate to homelessness suggests that interventions customized to different subgroups of persons who are homeless need to be considered. Further, the fact that a majority of respondents reported having had past experiences of homelessness indicates that these past experiences should be examined to understand individual risk factors and life domains that can be addressed to prevent future episodes of homelessness. The important role of personal empowerment in the prediction of stress appraisal, stress response and well-being is another noteworthy finding. Interventions to increase individuals' sense of mastery and control over their lives are considered crucial to decrease their stress reactions and improve their well being during their experience(s) of homelessness.

The findings surrounding coping responses also suggest some implications for intervention. The finding that most participants utilized avoidance-style coping responses, despite their association with increased stress appraisal and response, suggests a need to provide information and education to participants about alternative coping strategies to deal with their circumstances.

Implications relating to environmental factors include assessing available support (i.e., the size, quality, and the perceived supportiveness of an individual's social network). Given the high rates of disruption to social networks reported, it may be important to work with individuals to

regain connectedness to network members, or to develop new relationships that provide positive forms or social support.

Implications of findings concerning stress-related variables tested in the model provide a window on experiences reported by a homeless population. Findings suggest that interventions should be developed to reduce the level of stress for individuals who are homeless while assisting them to cope more effectively with their situations. Although literature is not currently available on models of stress management instruction for persons who are homeless, there is little reason to suggest that other efficacious models such as stress inoculation training (Meichenbaum, 1985), in which a repertoire of coping skills are developed in an attempt to “inoculate” the person from future stressful situations or relaxation and anxiety reduction techniques such as progressive muscular relaxation, breathing exercises and addressing avoidant behaviors (Davis, Robbins Exhelman & McKay, 1996), could not be used with this population. Manuals for these procedures and other cognitive-behavioral techniques (done in either individual or group format) make no mention of location of the individual’s housing, and place little differential emphasis on the source of the stressor. Therefore, application of empirically-validated interventions with the general population are worthy of consideration with a population of persons who are dealing with multiple stressors, including the experience of being homeless. Based on the findings in the study, intervening effectively with an individual’s appraisal of, and response to, the stress associated with being homeless has the potential to improve well-being and decrease psychopathology.

Finally, the rates of well-being and psychopathology for the study population need to be used to inform both service delivery systems and also advocacy and public education groups. The high prevalence rates of psychiatric problems in the study population, compared to the general

population, suggest the need to include mental health outreach and case management services in any intervention designed for the population.

In addition, the very low rates of life satisfaction reported need to be considered by services that strive to improve the quality of life of individuals in the community, but can also be used to challenge the myth (often present in the media) that most people are homeless by choice. As seen by the range of stressful experiences reported by this population, it is unlikely that experiencing such high levels of stress and low levels of well-being would be by choice, further demonstrating that services need to be developed in order to break the cycle of homelessness.

Perhaps two of the most important considerations in the development of interventions for persons who are homeless are the heterogeneity of the population and the understanding that one focus of intervention is not sufficient. The findings throughout the present study that different sub-groups of the population have different needs and experiences suggests that interventions must be designed to meet their self-defined needs. As Acosta and Toro (2000) observed, homeless adults in Buffalo, New York reported dissatisfaction with community-based services, and stated that formal mental health services were often not their most important needs, when compared to the need for housing, safety, education, transportation, medical services and employment. This finding suggests that, although psychologically-based interventions may be important for some persons who are homeless, their experiences also need to be examined within the larger context of all of their self-defined needs.

Although the present study focused on the experiences of persons dealing with the stress of being homeless by examining individual-level experiences, individual-level interventions are not sufficient to end their experiences of homelessness. As Shinn and Tsemberis (1998) note, housing

is a key element of ending homelessness. Therefore, although structural variables were not the focus of the present study, their importance in individuals' experiences of, and desires to end, homelessness need to be considered.

11.3 Limitations of the Study and Suggestions for Future Research

Future research in this area should work to address some of the limitations of the present study. A major limitation of the present study was the inability to perform random sampling procedures for all 200 participants using emergency shelters. Due to restraints imposed by shelter staff in some shelters, the variation in the sampling technique used meant that the representativeness of the sample was probably lacking for at least some of the sub-groups. In addition, staff intervention (i.e., staff stating to interviewers that the person selected was unable to participate in an interview for physical or mental health reasons and therefore not contacting the selected participant to solicit their involvement) in the recruitment of participants in shelters in which random sampling was used placed another limitation of the ability to interview a random sample of participants. The variation in sampling procedures and the different rates of resident change in each emergency shelter also made it difficult to have equal numbers of each sub-group in the study, thus providing an over-representation of adult males compared to other groups. In addition, the low number of adults from family shelters (and the anecdotal reports from staff that the most prevalent cultural group in the shelter, persons from Somalia, were not interested in participating in the study) limited the representation of persons who were homeless and living with their families in the study.

Further, the lack of population data for most shelters provided a significant limitation in terms of establishing the representativeness of the study population to the homeless population in

Ottawa-Carleton. Although Toro and Wall (1991) compared sampling methodologies used with homeless adults and found that no seasonal differences were observed in the measured variables, the present study conducted interviews predominantly in one season (February – May 1999), thereby not exploring possible differences that might exist in shelter population during different seasons of the year.

Another limitation of the present study was its cross-sectional design. The correlational data produced by a cross-sectional design did not facilitate establishing causal direction between the examined variables.

Another limitation was the exclusive reliance on self-report measures for data collection. This methodology could have produced an unknown amount of inflation or under-reporting in responses.

An additional limitation was the item content overlap present in some of the measures. More specifically, items from the neuroticism scale of the NEO-PI, the Psychological Stress Measure and the General Health Questionnaire were sufficiently similar in content to have possibly inflated the relationships between these three variables. Although AMOS would have removed variables with a high degree of multicollinearity, the overlap of some of the items of the scales should be considered .

A final limitation was the applicability of some of the measures to experiences of persons who were homeless. Although an effort was made to find the most appropriate measures possible, some measures may not have adequately captured the experiences of the study population. For example, although participants reported that they used many of the coping responses listed in the Coping Responses Inventory, strategies that were reported by many participants (such as

substance abuse) were not included in the inventory and were only revealed in the analysis of qualitative responses. Also, the low internal consistency of the approach-style coping responses scale meant that approach-style coping responses used by the study population could not be reliably examined. Thus, the inventory scores did not provide the entire picture of how persons coped with their experiences. In addition, the low internal consistency of the stress appraisal measure also suggests that an improved measure of stress appraisal needs to be considered for future research. Another example was the Provision of Social Relations scale used to assess perceived social support. Although participants endorsed many of the items, receipt of instrumental support (such as food, housing, clothing and money) identified as being vital to many participants in the qualitative responses was not included in the scale.

The present study suggests many directions for future research. Obviously, the first is to replicate the present study while addressing the limitations related to sampling methodology. In addition, an attempt to replicate the present study with the addition of relevant items to some of the scales mentioned above may give a more complete picture of how individuals appraise, react to, and cope with their experiences of being homeless. Also, the addition of items such as the other three factors of the Five-Factor Model of personality may be useful to more clearly explore the role of individual personality traits in the stress and coping process.

Future research could focus on integrating the reason for current experience of homelessness and duration of homelessness into the transient stress model. For example, the reason for being homeless and the length of time homeless may have significant impact on the stress and coping processes used in responding to being homeless. It would also be important to understand how persons cope with their experiences by placing the present study into a panel

study format in which the same participants are interviewed six months or a year later to assess changes in their situation and resultant changes on their stress and coping processes. This may also provide information as to what coping methods or other factors were involved in having someone become housed rather than remain homeless, and to understand what factors the individual attributes to the change in his or her circumstances.

Finally, future research should more closely examine the sub-groups of the homeless population (defined by sex and age) to determine differences in their stress and coping processes in order to plan intervention and support services that will best meet their needs.

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Appendix A**Neuroticism and Extraversion Scales of the NEO-PI-R**

Please answer the following questions by telling me how much you agree or disagree with each of the statements. The choices are: strongly disagree, disagree, neutral, agree, or strongly agree.

SD=Strongly Disagree

D=Disagree

N=Neutral

A=Agree

SA=Strongly Agree

	SD (1)	D (2)	N (3)	A (4)	SA (5)
1. I am not a worrier					
2. I like to have a lot of people around me					
3. I often feel inferior to others					
4. I laugh easily					
5. When I'm under a great deal of stress, sometimes I feel like I am going to pieces					
6. I don't consider myself especially "light-hearted"					
7. I rarely feel lonely or blue					
8. I really enjoy talking to people					
9. I often feel tense and jittery					
10. I like to be where the action is					
11. Sometimes I feel completely worthless					
12. I usually prefer to do things alone					
13. I rarely feel fearful or anxious					
14. I often feel as if I'm bursting with energy					
15. I often get angry with the way people treat me					
16. I am a cheerful, high-spirited person					

17. Too often, when things go wrong, I get discouraged and feel like giving up					
18. I am not a cheerful optimist					
19. I am seldom sad or depressed					
20. My life is fast-paced					
21. I often feel helpless and want someone else to solve my problems					
22. I am a very active person					
23. At times I have been so ashamed I just wanted to hide					
24. I would rather go my own way than be a leader of others					

Appendix B**Coping Responses Inventory**

In this section I am going to ask you about some of the things you do to cope with being homeless. For each way of coping that I describe, please tell me how often you use it.

0 = No, Not at all
 1 = Yes, Once or Twice
 2 = Yes, Sometimes
 3 = Yes, Fairly Often
 9 = Not Applicable/No Response

<i>In coping with being homeless...</i>	No, Not at All	Yes, Once or Twice	Yes, Sometimes	Yes, Fairly Often	N/A N/R
1. Do you talk with a romantic partner or a relative about the problem?	0	1	2	3	9
2. Do you pray for guidance and/or strength?	0	1	2	3	9
3. Do you talk with a friend about the problem?	0	1	2	3	9
4. Do you talk with a professional person (such as a doctor, lawyer, clergy, social worker)?	0	1	2	3	9
5. Do you try and help others deal with a similar problem?	0	1	2	3	9
6. Do you seek help from persons or groups with the same type of problem?	0	1	2	3	9
7. Do you try and think of different ways to deal with the problem?	0	1	2	3	9
8. Do you try to anticipate or guess how things would turn out?	0	1	2	3	9
9. Do you try and find out more about the situation?	0	1	2	3	9
10. Do you go over in your mind what you would do?	0	1	2	3	9
11. Do you try to anticipate or guess the new demands that the problem would put on you?	0	1	2	3	9
12. Do you try to learn to do more things on your own?	0	1	2	3	9

13. Do you cry to let your feelings out?	0	1	2	3	9
14. Do you yell or shout to let off steam?	0	1	2	3	9
15. Do you take it out on others when you felt angry or depressed?	0	1	2	3	9
16. Do you take a chance and do something risky?	0	1	2	3	9
17. Do you keep away from people in general?	0	1	2	3	9
18. Do you do something that you didn't think would work, but at least you were doing something?	0	1	2	3	9
19. Do you feel that time would make a difference--the only thing you can do is wait?	0	1	2	3	9
20. Do you remind yourself how much worse things could be?	0	1	2	3	9
21. Do you realize that you have no control over the problem?	0	1	2	3	9
22. Do you think the outcome will be decided by fate?	0	1	2	3	9
23. Do you accept it; nothing can be done?	0	1	2	3	9
24. Do you lose hope that things will ever be the same?	0	1	2	3	9

A. Are there other ways (that were not mentioned already) that you use to deal with a problem?

Appendix C**Personal Empowerment Scale**

In the next set of questions I am going to ask you about the amount of control you feel over your life right now. You tell me how much you agree or disagree with the following statements. Please use the following scale to respond to the items.

- 1=Strongly Disagree
 2=Disagree
 3=Agree
 4=Strongly Agree
 9=Not Applicable/No Response

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A N/R
1. I generally accomplish what I set out to do	1	2	3	4	9
2. I have a positive attitude about myself	1	2	3	4	9
3. When I make plans, I am almost certain to make them work	1	2	3	4	9
4. I am usually confident about the decisions I make	1	2	3	4	9
5. I am often able to overcome barriers	1	2	3	4	9
6. I feel powerless most of the time	1	2	3	4	9
7. Making waves never gets you anywhere	1	2	3	4	9
8. You can't fight City Hall	1	2	3	4	9
9. When I am unsure about something, I usually go along with the group	1	2	3	4	9
10. Experts are in the best position to decide what people should do or learn	1	2	3	4	9
11. Most of the misfortunes in my life were due to bad luck	1	2	3	4	9

12. Usually, I feel alone	1	2	3	4	9
13. People are limited only by what they think possible	1	2	3	4	9
14. I can pretty much determine what will happen in my life	1	2	3	4	9
15. I am generally optimistic about the future	1	2	3	4	9

A. Is there anything you would like to change about the amount of control you have over your life right now?

Past Experiences of Homelessness

For each experience of being homeless you've had, I am also going to ask you about where you stayed or slept during that time and what season of the year it was when you were homeless.

[illegible]

Appendix E**Social Network Size**

*Next I want to ask you about the people in your life. I'd like you to list the initials of the people who are important in your life, regardless of whether you like them or not, and with whom you've had contact in the past SIX months. There are three categories: **family, friends, and professionals**. Please list only those people who are important to you.*

A. Family - *First of all tell me about family members who are important to you and with whom you have had contact in the past six months. Please tell me your relationship with them, if they are male or female, whether or not they are homeless, and the number of times you have had contact with them in the past month..*

A. FAMILY

Initials	Relationship	Male	Female
1.			
2.			
3.			
4.			
5.			
6.			
7.			

B. FRIENDS

Now, tell me about your friends, again giving me their initials, whether they are male or female and the amount of contact you've had with them in the past month. Also, I would like you to tell me if any of the people you list are homeless.

Initials	Are They Homeless?	Male	Female
1.			
2.			
3.			

4.			
5.			
6.			
7.			

C. SERVICE PROFESSIONALS

Now, tell me about professionals or community support workers whom you consider important and you have had contact in the past six months, giving me their initials, their role or job, and whether they are male or female.

Initials	Role (e.g, nurse, clergy, welfare worker)	Male	Female
1.			
2.			
3.			
4.			
5.			
6.			

A. Is there anyone else who is important to you that you haven't mentioned? Who are they?

Appendix F**Perceived Social Support**

This section is about your relationships with others. I'm going to read a series of statements, and for each, could you please tell me whether you strongly disagree, disagree, agree or strongly agree. Looking at the following list of alternatives for each statement, do you...

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A No R.
1. There are people I can depend on to help me if I really need it	1	2	3	4	9
2. I feel that I do not have any close personal relationships with other people	1	2	3	4	9
3. There is no one I can turn to for guidance in times of stress	1	2	3	4	9
4. There are people who depend on me for help	1	2	3	4	9
5. There are people who enjoy the same social activities that I do	1	2	3	4	9
6. Other people do not view me as competent	1	2	3	4	9
7. I feel personally responsible for the well-being of another person	1	2	3	4	9
8. I feel part of a group of people who share my attitudes and beliefs	1	2	3	4	9
9. I do not think other people respect my skills and abilities	1	2	3	4	9
10. If something went wrong, no one would help me	1	2	3	4	9
11. I have close relationships that provide me with a sense of emotional security and well-being	1	2	3	4	9
12. There is someone I could talk to about important decisions in my life	1	2	3	4	9
13. I have relationships where competence and skill are recognized	1	2	3	4	9
14. There is no one who shares my interests and concerns	1	2	3	4	9
15. There is no one who really relies on me for their well-being	1	2	3	4	9
16. There is a trustworthy person I could turn to for advice if I were having problems	1	2	3	4	9

17. I feel a strong emotional bond with at least one other person	1	2	3	4	9
18. There is no one I can depend on for aid if I really need it	1	2	3	4	9
19. There is no one I feel comfortable talking about problems with	1	2	3	4	9
20. There are people who admire my talents and abilities	1	2	3	4	9
21. I lack a feeling of intimacy with another person	1	2	3	4	9
22. There is no one who likes to do the things I do	1	2	3	4	9
23. There are people I can count on in an emergency	1	2	3	4	9
24. No one needs me to care for them anymore	1	2	3	4	9

B. Thinking about the people who are important to you, how do they give you support?

C. How do you give them support?

D. Is there anything you would like to change about your relationships with others?

Appendix G**Stressful Life Events Scale**

I'm going to name different events that can occur in some people's lives. Please tell me how many of these events have happened to you in the PAST YEAR.

Employment

I'd like to ask you some questions about employment. In the past year, have you...

- | | | |
|--|---|---|
| 1. Lost your job (for example, quit, fired, laid off) | Y | N |
| 2. Been unable to find a job | Y | N |
| 3. Not received income assistance
(e.g. General Welfare Assistance) | Y | N |
| 4. Had less income this year than the year before | Y | N |
| 5. Dropped out of school or a training program | Y | N |
| 6. Been kicked out of school or a training program | Y | N |

Housing

Now I'd like to ask you some questions about housing. In the past year, have you...

- | | | |
|--|---|---|
| 7. Been evicted from where you were living | Y | N |
| 8. Been unable to find a decent place to live | Y | N |
| 9. Recently moved from another country | Y | N |
| 10. Chose to leave where you were living because
you were unhappy there | Y | N |
| 11. Been asked to leave your home by your parents
or a romantic partner | Y | N |
| 12. Come out of the hospital | Y | N |
| 13. Come out of jail (after serving a sentence) | Y | N |

Social Network

Now I'd like to ask you some questions about changes to your relationships. In the past year, have you...

- | | | |
|--|---|---|
| 14. Broke up with a girlfriend/boyfriend | Y | N |
| 15. Been Divorced or Separated from a romantic partner | Y | N |
| 16. Been Widowed | Y | N |
| 17. Lost contact with family members | Y | N |
| 18. Lost contact with friends | Y | N |
| 19. Experienced the death of a romantic partner | Y | N |
| 20. Experienced the death of a family member | Y | N |

- | | | |
|---|---|---|
| 21. Experienced the death of a friend (other than a romantic partner) | Y | N |
|---|---|---|

Mental Health

Now I'd like to ask you some questions about mental health issues. In the past year, have you...

- | | | |
|---|---|---|
| 22. Been given a psychiatric diagnosis | Y | N |
| 23. Experienced mental health problems | Y | N |
| 24. Been admitted to a psychiatric hospital | Y | N |

Substance Use/Abuse

Now I'd like to ask you some questions about alcohol and drugs. In the past year have you...

- | | | |
|---|---|---|
| 25. Used alcohol to the point that it interfered with your daily activities | Y | N |
| 26. Used drugs to the point that it interfered with your daily activities | Y | N |

Legal History

Now I'd like to ask you some questions about your involvement with the legal system. In the past year have you been...

- | | | |
|--|---|---|
| 27. Picked up for panhandling | Y | N |
| 28. Picked up for disturbing the peace | Y | N |
| 29. Picked up for drunk and disorderly behaviour | Y | N |
| 30. Arrested | Y | N |
| 31. Charged but not convicted | Y | N |
| 32. Held in jail overnight (e.g., lock-up) | Y | N |
| 33. Convicted of a crime | Y | N |
| 34. In Jail (e.g., served a jail sentence) | Y | N |

Victimization

Now I'd like to ask you some questions about your experiences being victimized by someone. In the past year have you...

- | | | |
|---|---|---|
| 35. Been a victim of a violent crime | Y | N |
| 36. Been sexually abused | Y | N |
| 37. Been physically abused | Y | N |
| 38. Been emotionally abused | Y | N |
| 39. Been abused by a spouse or romantic partner | Y | N |

Is there anything else you'd like to tell me about the life events you've experienced in the past year?

Appendix HStress Appraisal Measure

The next set of questions are about how you managed or thought about being homeless. Please answer the questions about the situation by choosing the response alternative that best matches your situation

	Definitely No	Mainly No	Mainly Yes	Definitely Yes	N/A N/R
1. Did you know in advance that you were going to become homeless?	1	2	3	4	9
2. Did you have enough time to get ready to handle being homeless?	1	2	3	4	9
3. When you became homeless, did you think of it as a threat?	1	2	3	4	9
4. When you became homeless, did you think of it as a challenge?	1	2	3	4	9
5. Did you become homeless as a result of something you did?	1	2	3	4	9
6. Did you become homeless as a result of something someone else did?	1	2	3	4	9
7. Is anything good coming out of being homeless? If response is a 3 or 4, be sure to see item #7b below	1	2	3	4	9
8. Do you think your situation of being homeless will be resolved soon?	1	2	3	4	9
9. If it will be resolved soon, do you think it will work out all right for you?	1	2	3	4	9

#7B: You stated that there was some good coming out of you being homeless. Can you tell me more about that?

Appendix I**Psychological Stress Measure**

In this section I would like to ask you some questions about both your thoughts and some of the things that have been going on in your body in the last 4 or 5 days. There are no right or wrong answers. Give you overall first impression. Using these response alternatives, please indicate how much you experience each of these things.

	Not At All	A Bit	Some	Much	Very Much	N/A N/R
1. I am tense and nervous (wrought)	1	2	3	4	5	9
2. I feel that my throat is tight or my mouth is dry	1	2	3	4	5	9
3. I feel rushed, I do not seem to have enough time	1	2	3	4	5	9
4. I have a tendency to skip meals or forget to eat	1	2	3	4	5	9
5. I go over ideas in my mind over and over again, I have repetitive thoughts, my head is full of thoughts	1	2	3	4	5	9
6. I feel lonely, isolated, misunderstood	1	2	3	4	5	9
7. I suffer from physical aches and pains: sore back, headaches, tense neck stomach aches	1	2	3	4	5	9
8. I feel preoccupied, tormented or worried	1	2	3	4	5	9
9. I have sudden changes in bodily temperature (very warm or very cold)	1	2	3	4	5	9
10. I forget about things I have to do or get	1	2	3	4	5	9
11. I cry easily	1	2	3	4	5	9
12. I feel tired	1	2	3	4	5	9
13. My jaws are tight	1	2	3	4	5	9
14. I feel calm	1	2	3	4	5	9
15. I sigh heavily or I have to catch my breath suddenly	1	2	3	4	5	9

16. I have diarrhea, intestinal cramps, or constipation	1	2	3	4	5	9
17. I feel anxious, worried, distraught	1	2	3	4	5	9
18. I startle easily; things or noises make me jump	1	2	3	4	5	9
19. I take more than half an hour to fall asleep	1	2	3	4	5	9
20. I feel confused; my thoughts are muddled; I lack concentration and I cannot focus my attention	1	2	3	4	5	9
21. My facial features are drawn; I have bags or rings under my eyes	1	2	3	4	5	9
22. I feel a great weight on my shoulders	1	2	3	4	5	9
23. I feel restless; I need to move constantly; I cannot stay still	1	2	3	4	5	9
24. I have difficulty controlling my reactions, emotions, moods or gestures	1	2	3	4	5	9
25. I feel stressed	1	2	3	4	5	9

Appendix J**Satisfaction with Life Scale**

I am going to read 5 statements with which you may agree or disagree. Looking at the following list of alternatives, please tell me how strongly you agree or disagree with each item.

- 1= Strongly Disagree
 2= Disagree
 3= Slightly Disagree
 4= Neither Agree nor Disagree
 5= Slightly Agree
 6= Agree
 7= Strongly Agree
 9= Not Applicable/No Response

	SD	D	SLD	NA	SLA	A	SA	N/R
1. In most ways my life is close to ideal	1	2	3	4	5	6	7	9
2. The conditions of my life are excellent	1	2	3	4	5	6	7	9
3. I am satisfied with my life	1	2	3	4	5	6	7	9
4. So far I have gotten the important things I wanted in my life	1	2	3	4	5	6	7	9
5. If I could live my life over, I would change almost nothing	1	2	3	4	5	6	7	9

Appendix K**General Health Questionnaire**

The next few statements describe ways that you may have been feeling recently. Please indicate how often you have been feeling that way based on the following choices.

Have you recently...	Not at All	No More than Usual	Rather More than Usual	Much More than Usual
1. Lost much sleep over worry?	1	2	3	4
2. Felt constantly under strain?	1	2	3	4
3. Felt you couldn't overcome your difficulties?	1	2	3	4
4. Been feeling unhappy and depressed?	1	2	3	4
5. Been losing confidence in yourself?	1	2	3	4
6. Been thinking of yourself as a worthless person?	1	2	3	4
7. Found everything getting on top of you?	1	2	3	4
8. Been taking things hard?	1	2	3	4
9. Been feeling nervous and strung-up all of the time?	1	2	3	4
10. Found at times you couldn't do anything because your nerves were too bad?	1	2	3	4
11. Been having restless, disturbed nights?	1	2	3	4
12. Felt capable of making decisions about things?	More so than usual	Same as usual	Less Capable than usual	Much less Capable
13. Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
14. Been able to face up to your problems?	More so than usual	Same as usual	Less Able than usual	Much less Able
15. Been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
16. Been managing as well as most people would in your shoes?	Better than most	About the same	Rather less well	Much less well

17. Felt on the whole you were doing things well?	Better than usual	About the same	Less well than usual	Much less well
18. Been able to feel warmth and affection for those near you?	Better than usual	About the same	Less well than usual	Much less well
19. Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
20. Been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

Appendix L

Recruitment Protocol

I am contacting you to invite you to participate in a study on the health status, service use and experiences of stress and coping of persons who are homeless in Ottawa-Carleton. The purpose of this study is to find out about some of the experiences that persons who are homeless have had, including their health, the medical services that they use, who they receive support from, and how they have coped with some of the stressful experiences that they have had. The research is being conducted by Dr Tim Aubry and his associates from the University of Ottawa and for the Alliance to End Homelessness in Ottawa-Carleton.

Your participation in the study will involve an interview that will take between one and a half and two hours with a member of the research team. In the interview, we will ask you about your background, your health status, your past experiences and how you coped with them, and who you turn to for support. We will interview you in a private office here at the agency/shelter. We will pay you \$10 for participating in the study.

Your decision about whether or not to participate in the study will have no effect on the services that you receive here now or in the future. You can withdraw at any time during the interview. As well, you can refuse to answer any questions in the interview that make you feel uncomfortable. There is a possibility that a small amount of discomfort may be associated with some of the questions. At the end of the interview, a debriefing form with the name and contact numbers of the closest community health centre which provides mental health and crisis services will be given to you.

All the information collected in the interviews will remain strictly confidential. In other words, only the members of the research team will see this information. As well, we will only be using the information collected in the study for research purposes. In reporting findings, we will only discuss a summary of the results. We will never reveal the identity of those participating in the study. Not even the people working here will know your answers to interview questions.

Do you have any questions about the study?

Would you be interested in participating?

Appendix M**Consent Form**

**Research Leader: Dr Tim Aubry, School of Psychology, University of Ottawa
562-5800 ext. 4815**

I, _____, am interested in participating in the study on the health status and stress and coping experiences conducted by Dr Tim Aubry and his research associates. The purpose of this study is to find out about some of the experiences that persons who are homeless have had, including their health, the medical services that they use, who they receive support from, and how they have coped with some of the stressful experiences that they have had.

I understand that I would be asked to have an hour and a half to two hour interview with a member of the research team in a private office here at this agency/shelter. I have been told that the interview will ask questions about my background, my health status, my past experiences and how I coped with them, and who I turn to for support. I understand that I you can withdraw at any time during the interview. As well, I have been told that I can refuse to answer any questions in the interview. I have been told that my decision about whether or not to participate in the study will have no effect on the services that I receive here now or in the future I have also been told that I will be paid \$10 for participating in the study. I have been told that there is a possibility that a small amount of discomfort may be associated with some of the questions, and that at the end of the interview, a debriefing form with the name and contact numbers of the closest community health centre which provides mental health and crisis services will be given to me.

It was explained to me that all the information collected in the interviews will remain strictly confidential. In other words, only the members of the research team will see this information. As well, I have been told that the only information that will be used for research purposes. In reporting findings, I have been told that the research team will only discuss a summary of the results. They will never reveal the identity of those participating in the study. Not even the people working here will know my answers to interview questions.

There are two copies of the consent form, one which the researchers keep and one which I keep. If I have any questions or concerns about the study, I can call Susan Farrell at 562-5800 ext. 4454 or Dr Tim Aubry at 562-5800 ext. 4815.

By signing below, I agree to participate in this study.

PARTICIPANT'S SIGNATURE

DATE

RESEARCHER'S SIGNATURE

DATE

Appendix N**Debriefing Form****Thank You for Participating in Our Study!**

Thank you for taking the time to be a part of our study. We really appreciate your time and efforts. Sometimes people like to know a little more about the study and what we do with the results once they have finished being interviewed. We developed this study to look at some of the experiences in peoples' lives and to see how that related to the experience of being homeless. We are also interesting in finding out more about how people cope with their experiences, so that services could be developed in the future to help people deal with some of the challenges or problems in their life.

The results will be shared (in a discussion of all 230 people that we interviewed) with some of the service directors and people in the Alliance to End Homelessness in Ottawa-Carleton. We will have a summary of results available at all of the places we came to interview, and you can ask the shelter director to see them. If you would like your own copy of the information, or if you have any further questions about this study, please call Susan Farrell (562-5800 ext 4454) or Dr Tim Aubry (562-5800 ext 4815) at the University of Ottawa.

If you are feeling distressed, uncomfortable or like you need to talk to someone about the things that you discussed in the study today, please contact the Sandy Hill Community Health Centre (221 Nelson Street, 789-7752 or 239-4006 after hours).

Appendix OCorrelation Matrix for Variables in Transient Stress Model

	NE	EX	SEX	AVC	APC	PE	PEH	PSR	SNA	SLE1	SLE2	SA	SR	WB
NE														
EX	.43**													
SEX	.24*	-.05												
AVC	.50**	-.23*	.11											
APC	.01	.31**	.13	.08										
PE	-.59**	.49**	-.12	-.34**	.26*									
PEH	-.04	-.01	-.04	.07	.01	-.05								
PSR	-.33**	.51**	.02	-.12	.36**	.50**	-.16							
SNA	-.01	.26*	.07	-.07	.25*	.16	.12	.44**						
SLE1	-.03	.06	-.30**	.10	-.02	-.01	.19	.06	.05					
SLE2	.42**	-.10	.44**	.23*	.20*	-.15	.09	-.11	.22*	.03				
SA	.43**	-.24*	.17	.28**	-.06	-.35**	-.03	-.22*	-.01	-.02	.26*			
SR	.78**	-.42**	.26*	.59**	.04	-.49**	.00	-.31**	.03	.05	.48**	.48**		
WB	-.49**	.30**	.02	-.16	.13	.52**	-.11	.31**	-.05	-.13	-.27*	-.28**	-.39**	
PSY	.78**	-.49**	.21*	.43**	-.09	-.61**	.01	-.39**	-.03	.06	.40**	.45**	.79**	-.54**

* $p < .05$ ** $p < .01$ level

NE=Neuroticism; EX=Extraversion; SEX=Sex; AVC=Avoidance-style coping responses; APC= Approach-style coping responses; PE= Personal Empowerment; PEH= Past Experiences of Homelessness; PSR= Perceived Social Support; SNA= Social Network Assessment; SLE1= Stressful Life Events related to Criminal Activities; SLE2= Stressful Life Events related to experiencing mental health problems and abuse; SA= Stress Appraisal; SR= Stress Response; WB= Well-being; PSY= Psychopathology.