Being homeless: The influence of personality and coping styles on health outcomes.

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Thesis presented for the degree of Master of Philosophy

University of Stirling

December 2011
**Declaration**

I hereby declare the work in this thesis to be my own, except where otherwise stated.

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December 2011
Acknowledgements

I would like to thank the late Professor Len Dalgleish, my principal supervisor for his enthusiasm and drive which was a constant source of encouragement throughout the research period. I thank Professor Andrew Watterson for his supervision of this thesis, providing the feedback, constructive debate, challenge and support which was required to complete this work and Dr. Josie Evans for her assistance and support. Thanks are due also to the officers of Stirling Council’s homelessness service, who assisted in the recruitment of participants and without whom, none of this could have happened. Finally, I am grateful for the strength and reassurance received from my wife Mary, and my children Kenneth and Kirsty.
Abstract

In 2007/2008 there were 56,561 applications to Scottish local authorities by individuals or households seeking assistance under the homeless persons legislation. This thesis examines the legislative background to homelessness and considers issues of definition. The link between homelessness and health outcomes is reviewed and homelessness is identified as a stressor. People react differently to being homeless and the influence of personality, and coping styles on health outcomes, measured by a modified version of the General Health Questionnaire (Goldberg and Hillier, 1979), was examined. Ninety-six people who had applied to a local authority for assistance due to homelessness completed a questionnaire and participated in an interview at a single session.

The Ten Item Personality Index (Gosling, et. al, 2003) and the Internal-External scale (Rotter, 1966) were used to measure personality and the Ways of Coping Questionnaire (Folkman and Lazarus, 1988) was used to measure coping styles. The data was analysed using descriptive, correlational and regression analysis for the quantitative data and a reporting framework, which was developed to report on the qualitative data.

It was found that emotional stability, planful problem solving, seeking social support and accepting responsibility were significant predictors of both mental and physical symptoms. Conscientiousness, and accepts responsibility were significant predictors of (social) dysfunction. Locus of control was found to have no significant influence on health outcomes. An interesting finding was that seeking social support as a
coping style had the result of worsening health outcomes. Further analysis revealed that the outcome of seeking support is important and that to fail to achieve this can have a detrimental effect on health outcomes. The interview data gives an account of what being homeless means from a participant’s perspective and provides useful context to the quantitative data. The interview results were consistent with, and supported the questionnaire results.

The implication of these results for an intervention strategy for homeless people assisted by a local authority is discussed, and a possible intervention is suggested which would enhance coping skills and improve access to health care for this group.
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Chapter One  Introduction

1.1 Background

There were 56,561 applications to Scottish local authorities by individuals or households seeking assistance under the homeless persons legislation in the year 2007/2008. This is a large number of people who have experienced this major disruption in their lives.

During a twenty year career dealing with homelessness in a local authority setting, firstly as a caseworker, then assessment officer and finally as manager of a homelessness service, I have observed that homelessness can affect every part of a persons’ daily life and that individuals react very differently to the experience of becoming homeless. Some people appear to react well, and to take everything in their stride whereas others are unable to function in any capacity. My interest, coming from my observation and experience, is in considering the factors that may account for these differences in reaction to homelessness and to explore ways in which the health outcomes of homeless people may be improved.

The aim of this thesis is to consider the immediate health outcomes of being homeless on a person and to examine what influence individual differences may have on this. A further aim is to outline potential interventions for improving health outcomes that are implied by the research findings.
1.2 Methodology

This thesis uses both quantitative and qualitative methods to obtain data that is analysed using descriptive, correlational and regression analysis for the quantitative data and a reporting framework, which was developed to report on the qualitative data.

The personal experience of homeless people is an important part of the research in this thesis. Interviews were conducted to obtain direct information on what it means to be homeless, what effect the experience of homelessness has on an individual and how they cope with the situation. The content of the interviews not only support the questionnaire results but give a greater insight into the personal experience of homelessness. It is a reminder that there are people behind the statistics and that the results reported relate to the real life experiences of the people participating.

1.3 Previous Literature

In each chapter the relevant literature is reviewed and relevance to the aims and methodology of this thesis is discussed.

Much of the literature does not consider homelessness as an influential factor in itself but use it only as a descriptor for a specific population. This is important as studies relating to a particular sub group such as single homeless people or homeless mothers etc., whilst important, cannot be readily generalised to the wider population of homeless people. It is my contention that homelessness itself is a stressor and therefore should be considered as such in research within the overall homeless
population. Previous studies have not considered being homeless as a potential stressor or where this is acknowledged, have considered a specific sub group. The research presented in this thesis is important in addressing this issue.

1.4 Thesis overview

Chapter two provides an analysis of the problem in defining exactly what homelessness means and various definitions are reviewed. In this thesis, the statutory definition provided in the Housing (Scotland) Act, 1987 is used, given that the participants are drawn from those people who have made an application to a local authority for assistance under the terms of this legislation.

An overview of the legislative background to homelessness and the statutory obligations of local authorities in dealing with homelessness is reported and discussed. Of particular interest in this respect is the work of the Homelessness Task Force in Scotland, which has made far reaching changes to the way homelessness services are delivered. The impact of the Health and Homelessness Standards, which were introduced in Scotland in April 2005 (Scottish Executive 2005), to improve access to health care will be considered. The health needs of homeless people are discussed and studies linking homelessness to health outcomes reviewed.

Chapter three considers the influence that individual factors have on perceived health outcomes for homeless people. Homelessness is a stressor and there is a strong relationship between homelessness and health outcomes. People vary in the effect that becoming homeless has on them and it is central to this thesis to consider what factors may account for this difference in reaction. The concepts of coping, personality and locus of control are considered as potential influences in this respect.
The issues surrounding the health outcomes of becoming homeless are reviewed and the definition and measurement of coping styles, personality and locus of control and their influence on health outcomes is considered. Health outcomes are defined as the mental, physical and social aspects of health.

The concept of stress is reviewed and the transactional theory of stress which implies that different people will react differently to a given stressor is considered as it may link directly to, and offer an explanation for, my observations highlighted above. The implications of this theory are discussed.

The concept of personal coping strategies are reviewed and discussed. It is important, as coping, in addition to providing a possible explanation of individual differences in response to stress, is potentially open to change through intervention. If coping is related to health outcomes then the health outcomes of homeless people may be improved. A review of personality will be conducted providing an overview of the literature and the implications of personality potentially influencing health is discussed.

Locus of control is considered as an example of a cognitive style, which may influence health. Locus of control, as used in this thesis is a ‘world view’ concept, as whether or not an individual believes they can influence a situation by taking action may have a bearing on the appraisal process and their subsequent action.
Arising from the review, the following research questions are addressed:

1. **What influence do coping styles have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?**

2. **What influence does personality have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?**

3. **What influence does locus of control have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?**

4. **What implications are there for intervention strategies?**

Chapter four considers the research methodology and outlines the measures to be used, procedure to be adopted and discusses the ability of the model to answer the research questions posed.

The chapter provides a review of the instruments to be used, providing psychometric data where available and gives an overview of the data analysis strategy to be adopted. Early recruitment difficulties are discussed and the solutions adopted to resolve these difficulties reported. The resulting method, with a questionnaire completed by the interviewer asking the questions, and a semi-structured interview conducted immediately afterwards proved to be very successful.

Chapter five reports on the results of data collected and provides an analysis and discussion of their relevance to the aims of the thesis and to the research questions.
posed. Three sets of independent variables - personality, coping and locus of control are considered in relation to the health effect caused by homelessness. The health effect is measured by three dependent variables; (a) somatic symptoms, (b) anxiety / insomnia and (c) social dysfunction. To test which coping methods and individual difference factors exert the most influence on the health outcomes of homelessness applicants, three multiple linear regression analysis were performed.

The study found that emotional stability was a significant predictor of both anxiety/ insomnia and somatic symptoms. Conscientiousness is a significant predictor of social dysfunction. Planful problem solving, seeking social support and accepting responsibility were significant predictors of both anxiety/insomnia and somatic symptoms. Accepting responsibility was a significant predictor of social dysfunction.

The results of the qualitative data are reviewed and discussed with particular reference to the comparison between the personal interview data and the quantitative data obtained by questionnaire. The qualitative data supports the quantitative findings and provides an individual perspective as context for the questionnaire data.

Chapter six provides a review of the research findings. The implications of the research findings for practice are discussed. In turn, interventions which may assist in improving the health outcomes of people who have applied for assistance are suggested. More specifically, following the earlier review of the health outcomes of being homeless and the wider health needs of homeless people, an intervention is discussed, aimed at addressing immediate health outcomes for homeless people. The conclusion then considers directions for future research.
Chapter 2 Homelessness

2.1 Introduction

A review of literature was conducted by a computerised search on ASSIA, CINHAL, Medline, Proquest, Psych Info, and Web of Science databases. Key words included homelessness, health, coping, stress, personality and control which were used singly and in combination. All methods and types of research were included.

Homeless has been identified as a major social issue in most developed countries Toro (2007). There is considerable research on the definition of homelessness, causes of homelessness, who are the homeless and what policy responses are most effective. (Minnery and Greenhalgh, 2007)

Toro (2007) reports that findings in the United States and other developed nations show some similarity in the characteristics of homeless populations. For example, studies in and outside of the United States generally find more men than women among the adult homeless, high rates of substance abuse and mental illness, and an overrepresentation of groups that have traditionally been discriminated against. The highest concentrations of homeless people tend to be found in the poorest areas of the large urban areas. (Helvie & Kunstmann, 1999).

2.2 Causes of Homelessness: Structural or Individualistic

Minnery and Greenhalgh argue that the causes of homelessness are important to both the research community who try to understand it and to the policy community who
try to find solutions. Debate on causes has previously focussed on either sociostructural causes, such as changing labour markets, the housing system, poverty, the nature of the welfare state or individual psychological factors affecting individual agency such as alcohol dependence, social and behavioural problems or substance use (Glasser, 1994; Neale, 1997). Research would however suggest that both structural and individualistic factors are relevant to explain the many factors which influence homelessness. (Avramov, 1999; Forrest, 1999; Tomas & Dittmar, 1995; Sosin, 2003; Anderson & Christian, 2003)

There is an increasing consensus that homelessness should be viewed as a dynamic process which might in fact be long term. Forrest (1999) argued that the idea of a range of potentially precipitating factors recognizes that homelessness can have different causes and that while, for some, the experience of homelessness may be temporary in nature, for others it is a manifestation of an ongoing poverty of personal and social resources. In this context, homeless can be considered as a career, pathway, or trajectory (Minnery and Greenhalgh, 2007).

Viewing homelessness in this way allows a much greater consideration of difficult life events together with the associated support and care needs of the individual or group. Anderson (2001), identified a number of pathways into homelessness, which differed according to the person’s age (youth, adult and later life pathways) but could include many influences such as bereavement, loss of an adult caregiver or relationship breakdown. Anderson also identified a number of general pathways out of homelessness however their relative significance could not be quantified. These were resolving accommodation difficulties without recourse to statutory or voluntary agencies or after being rejected or withdrawing from such agencies. Another pathway identified was acceptance as statutory homeless and receiving mainstream
unsupported social housing. Finally, resettlement by statutory or voluntary agencies to accommodation with temporary support prior to receiving mainstream unsupported accommodation or into permanently supported accommodation.

Clapham (2002) argues that the pathway of a household is the continually changing set of relationships and interactions which it experiences over time in its consumption of housing. This definition includes changes in social relations as well as changes in the physical housing situation. Homelessness is seen as an episode or episodes in a person’s housing pathway.

A study by Nicholls (2009) further supports the assertion that individual and structural elements may combine to cause homelessness. Nicholls argues that the concept of agency must be acknowledged in studies concerned with the cause of homelessness. Agency in this context, refers to the internal decision-making process that leads to the acts of a person, which will produce effects. Nicholls argues that transgressive factors associated with homelessness (poor mental health, substance Misuse etc) are not always ‘actively’ engaged in, however are ‘real’ events and circumstances. These have causal powers and will involve some edgework that is actively engaged in, as an attempt to manage their effects. Agency is therefore present and plays a role in the outcomes that occur.

Three cases were presented from a qualitative, longitudinal study of transitions through homelessness, which was conducted in a city in Scotland. There were 28 participants, who were or recently had been homeless at the outset of the research. The sample comprised 13 women and 15 men, aged between 25 and 60. The study was conducted by initial questionnaire, followed by a face-to-face biographical interview and a series of in-depth interviews. Each was re-interviewed between two
to three times over 18 months. All reported problems with substance use, and/or mental ill health, and had a relative lack of resources, relying on welfare benefits, with some shoplifting, engaging in sexwork or begging for income. Accordingly, they could be regarded as having ‘multiple needs’. The three abstracted causes are: refusal to engage with support and accommodation; alcohol misuse; and street sex work. The cases illustrate that transgression can lead to homelessness and can be actively engaged in. This may be seen as a response to, and a means to escape, the context that the participants were in, however, whilst the context is structurally constituted, agency still has a part to play.

According to Nicholls (2009), there is no attempt to refute the importance of structural processes on affecting the life chances and experiences of individuals, but rather to show that agency is also an important factor that interacts within this. Only individuals can act, and individuals will always have choices, and reasons for the actions they take, although these reasons may be imperfect and informed by a thin rationality.

2.3 Responses to Homelessness – Policy versus Practice Interventions

Minnery and Greenhalgh (2007) argue that one of the outcomes of considering homelessness as a complex and dynamic event or pathway is that responses must take account of the diversities of a relevant target group. Policies and interventions considered as good practice must appropriately and adequately respond to a homeless population that is not homogeneous. They must combine prevention, early intervention, crisis intervention and long term support strategies. Services must facilitate the acquisition of skills that will lead to social competence, being housed, being financially stable and moving out of social exclusion.
Policies aimed at addressing homelessness must achieve prevention by dealing with a range of social and welfare issues, such as addressing specific accommodation needs, offering care and support, and supporting the social reintegration of excluded groups and individuals (Jerome et al., 2003).

The better policies and interventions link the provision of shelter with social support and capacity building, in the process dealing with both sociostructural and individual causes of homelessness.

According to Anderson (2003), sociology and social policy are central to an explanation of homelessness at a structural level, while psychology and consumer studies contribute to an understanding how people respond to being homeless. This is consistent with this thesis which will consider from a psychological perspective, how individual differences influence the perceived health outcomes of homeless people.

A major difference between the U.S. and European research literatures involves the differing social welfare systems that impact homeless. In most European nations, there is some form of guaranteed income, together with provision of low-income housing available to all citizens (Shinn, 2007). These social policies act to prevent many people becoming homeless, in contrast with the United States, where limited support is available only to specific groups eg people with children (now time-limited), those with a disability, and to senior citizens. Unlike the United States, most European nations also have free health care available to all citizens. Another difference stems from the disciplines from which researchers tend to come. In the United States, the researchers tend to come from academic psychology and sociology.
departments and schools of medicine and public health while, in Europe, they are more often found in policy, urban, and housing studies. (Toro 2007)

According to Minnery and Greenhalgh (2007), the U.K. is worthy of special attention as it is the only European state with a statutory responsibility toward homeless people, and the only country to have set up a task force to consider homelessness.

The next section will review the response to homelessness in the UK with specific reference to homelessness in Scotland, considering the scale of the problem, who is affected, definition of homelessness and the legislative background to the statutory duties placed on local authorities to respond. The health needs of homeless people will be examined and a review of studies linking homelessness to health outcomes provided.

Homelessness affects a wide diversity of households with a range of needs. It can affect those who have suffered a disaster (such as a fire or flood), people with debt problems, people with health or addiction problems, those who have experienced abuse, family breakdown and a whole range of other circumstances. Very often a homeless person may be affected simultaneously by a number of different but inter-related issues. Homelessness affects families with children, childless couples, same sex couples, single people (both men and women), single parents, all ethnic groups including gypsy travellers and refugees, and all age groups.

The Scottish Government statistical bulletin (Scottish Executive 2008) reported that 56,609 households made homeless applications to their local council in Scotland in 2007-08. This is a significant number of people and illustrates the potential scale of any additional problems, which may occur as a result of, or be exacerbated by homelessness. Statistics from 2007-08 (Scottish Executive, 2008) show that 50% of
those found to be homeless were single people, 11% were households with children, and 24% were single parents.

The immediate causes of homelessness vary greatly. Across Scotland as a whole, the two most significant reasons for homelessness are friends or relatives no longer being able to accommodate the household, 25%, and family or relationship breakdown (which may or may not involve violence or abuse) 27% (Scottish Executive, 2008).

2.4 Definition of homelessness

According to Pleace (2005), there has been a failure of academics, politicians, campaigners and other policy makers to clearly define homelessness. This section will provide a review of the issues surrounding a definition of homelessness and outline the definition to be used in this thesis.

2.4.1 Statutory Definition

The Housing (Scotland) Act 1987 (Scottish Executive, 1987) provides a definition of homelessness by stating that a person is homeless if they do not have any accommodation in the United Kingdom (UK) or elsewhere. Under this legislation a person is deemed to be homeless, even if they have accommodation, if:

• They cannot secure entry to the property

• There is a threat of domestic violence were the person to continue occupation of the property, regardless of whether the violent partner currently resides at that address

• The property is a mobile structure and the person has no place where they are entitled to place it and reside in it

• It is overcrowded or may endanger the health of the occupants
• It is temporary accommodation in which the local authority placed the person under their statutory duty to house unintentionally homeless people in priority need.

A person is threatened with homelessness if it is likely that they will become homeless within 2 months.

2.4.2 Other definitions

A wide range of definitions of homelessness are used in the literature including:

▪ sleeping rough
▪ living in temporary accommodation i.e. hostels or shelters
▪ living in insecure accommodation with friends / family
▪ involuntarily sharing accommodation with others
▪ intolerable property conditions, such as dampness or overcrowding.

(Fitzpatrick, Kemp and Klinker, 2000)

The statutory definition outlined at 2.2.1 does not in any way preclude the inclusion of any of the above categories in its definition. They are not mutually exclusive although people may occupy one group and not another e.g. a person sleeping rough may, depending on circumstances, be defined as homeless within the statutory definition although they may not.

2.4.3 Is the concept of homelessness useful?

Pleafce (1998), in a study of single homelessness, argued that homelessness is best understood as a set of consequences of social exclusion when there is a lack of support for those excluded. Homelessness was considered as an extreme consequence of poverty, which could only be understood by an analysis of social exclusion. This view was criticised by Fitzpatrick (2005) who identified that there are recurring patterns of events and circumstances which form pathways into
homelessness. This view is supported by Williams (2001) who argues that homelessness is a range of different social problems each of which require study, not a single problem. The term homelessness for Williams (2001) is not useful as it fails to reflect the complexity of the situation i.e. that there may be a series of social problems, which can be described as homelessness.

Pleace (2005) suggests an alternative categorisation method he calls the complexity thesis, which seeks to define homelessness by disaggregating the concept into verifiable and meaningful sub-groups. The danger with this approach is that by concentrating on defining homelessness through myriad sub groups based on many factors the definitions may be of little theoretical or practical use. Concentration on specific sub groups or indeed sub groups within sub groups may mean that the opportunities to develop interventions at a overall homeless population level may be lost.

This thesis uses the statutory definition adopted by Local Authorities in the UK in relation to the discharge of their statutory obligations. An applicant is homeless or potentially homeless if he or she has no suitable accommodation in the UK or elsewhere which they can be reasonably expected to occupy, or that they have accommodation but cannot gain entry for various reasons. I have used this definition as it will allow results to be generalised across the UK and it comprises a cross-section of people who have become or are about to become homeless. An important aspect here is that the research in this thesis considers health outcomes of people who are, or are about to become, homeless and therefore the participants in this research need to represent the broad spectrum of people in this situation and not one specific group. The statutory definition does not preclude those who may fall within the wider definitions outlined above.
2.5 Legislative background.

Legislation governing the rights of homeless people is set out in the Housing (Scotland) Act 1987, Part II, as amended by the Housing (Scotland) Act 2001. (Scottish Executive, 1987; 2001).

2.5.1 The Housing (Scotland) Act 1987 part II.

The Housing (Scotland) Act 1987 (Scottish Executive, 1987) part II, was the first revision of the homeless persons legislation and incorporated the homelessness provisions of the Housing (Homeless Persons) Act, 1977 (UK Government, 1977) as part ii of the new Act. It confirmed the three main tests established in the 1977 Act, which a local authority must consider in assessing an application from a person requesting assistance due to homelessness. Is the applicant:

- Homeless
- In priority need of accommodation and
- Not intentionally homeless.

People who have a priority need for accommodation

(a) a pregnant woman or a person with whom a pregnant woman resides or might reasonably be expected to reside.

(b) a person with whom dependent children reside or might reasonably be expected to reside.

(c) a person who is vulnerable as a result of old age, mental illness, personality disorder, learning disability, physical disability, chronic ill health, miscarriage or undergone an abortion, discharged from hospital, prison or the regular armed forces, or other special reason.
(d) emergency such as flood, fire or any other disaster.

(e) a person with whom a person referred to in paragraph (c) or (d) resides or might reasonably be expected to reside.

(f) a person aged 16 or 17.

(g) a person aged 18 to 20 who runs the risk of sexual or financial exploitation or involvement in the serious misuse of alcohol, any drug or any volatile substance, or that the person was previously looked after by a local authority.

(h) a person who, by reason of that person's religion, sexual orientation, race, colour or ethnic or national origins runs the risk of violence, harassment or domestic abuse.

If the applicant successfully passed these tests, an authority would then address the issue of whether the applicant has a ‘local connection’ with the authority to which he/she has applied for assistance. The procedural process outlined in the legislation is shown at figure 2.1.
Figure 2.1 Current Homeless Persons Legislation -

Housing (Scotland) Act 1987

Application

Homeless
- In priority need
  - Intentional
    - Local connection
      - No threat of domestic violence
      - Permanent accomm.
    - Local connection elsewhere
      - Threat of domestic violence
      - Permanent accomm.

Potentially Homeless
- Not in priority need
- Unintentional and in priority need

Neither Homeless or threatened
- All other circumstances
- No further action

- Unintentional
  - Local connection with authority
  - Local connection elsewhere
- Intentional
- No threat of domestic violence
- Steps to prevent homelessness
- Advice and assistance
- Refer to other authority
- Temporary accomm. plus advice
- Advice and assistance
2.5.2 Developments in homelessness legislation

The Scottish Executive established the Homelessness Taskforce (HTF) during August 1999 with a remit to review the causes and nature of homelessness in Scotland, to examine practice in dealing with cases of homelessness and to make recommendations on how homelessness in Scotland could best be prevented and tackled effectively when it occurred.

The Taskforce’s work was split into two distinct phases,

Phase 1.
In its first report (Scottish Executive, 2000), or Phase 1, the Homelessness Task Force (HTF) focused on legislative proposals which were incorporated into the homelessness section at Part 1 of the Housing (Scotland) Act 2001 (Scottish Executive, 2001).

There are two main sets of homelessness provisions within the Act, the first with the aim of reforming the role of local authorities:

- by placing a duty on each council to produce a homelessness strategy and to make advice and information available to everyone free of charge, and
- by establishing a single body to inspect councils and Registered Social Landlords (RSLs) called Communities Scotland.

The second with the aim of increasing the rights of homeless people:

- by giving everyone the right to temporary accommodation on application;
- by giving every non-priority applicant the right to temporary accommodation, advice and assistance;
• by giving minimum rights to hostel dwellers.

Phase 2

Phase two of the HTF ‘s work, following the 2001 Act, was to undertake a more fundamental review of homelessness policy and law, culminating in the publication of it’s second and final report in February 2002 (Scottish Executive, 2002). The report contained a series of recommendations with a timescale for implementation of ten years, designed to fundamentally change in the incidence of homelessness. Legislative change was required to implement some recommendations and this was achieved by the introduction of the Homelessness etc. (Scotland) Act 2003 (Scottish Executive, 2003a), enacted in January 2004. This Act gives everyone in Scotland the right to a home by 2012 and a series of changes were made to homelessness law to achieve this aim. One important recommendation of the HTF was to radically reform the homelessness tests introduced in 1977 (see section 2.3.1).

In order to ensure that by 2012 everyone who is accepted as unintentionally homeless will have the right to a permanent home, the priority need test which divides homeless households into those eligible for a permanent home and those who are not will be abolished. The first of the changes resulting from the 2003 Act was to extend priority need status to a relatively small number of additional groups and to introduce a strategy for the extension and eventual abolition of the priority need test.

The 2003 Act reforms two other homelessness tests – the intentionality test and the local connection test. When a local authority considers an applicant as homeless (i.e. they have passed the first of the homelessness tests, which establishes whether or not someone is homeless), they then have a duty to investigate whether that applicant is intentionally homeless i.e. has become homeless as a result of their own actions. The 2003 Act makes two changes on intentionality:
• The duty to investigate will become a power, which can be waived by a local authority

• Intentionally homeless people will have the right to a short tenancy with support.

These changes to the intentionality test have, at the time of writing, yet to be enacted.

The 2003 Act also gives the Executive the power to suspend the local connection test which means that local authorities can no longer refer a homeless applicant back to another authority in Scotland, (although they will still be able to do so if the applicant comes from elsewhere in the UK). The Scottish Executive formal consultation period on the changes to the local connection test ended in January 2007.

The 2003 Act also introduced powers for the Scottish Executive to limit the use of bed and breakfast (B&B) accommodation for families with children. Since December 2004 local authorities can only use B&B accommodation in specified circumstances. The Unsuitable Accommodation (Scotland) Order 2004 (Scottish Executive, 2004) requires that no families with children should be housed in 'unsuitable' accommodation and if it is provided, the maximum amount of time that a family can stay in the unsuitable accommodation is 14 days (unless the family consents to a longer period).

2.5.3 Health services and local authority provision for homeless people

In tandem with the changes in homelessness legislation, to improve access and services to homeless people as outlined above, there has been a drive to improve health service provision for homeless households. In recognition that many homeless
people have difficulties in accessing health care and in an effort to encourage multi-
agency working to resolve such issues, the Health and Homelessness Standards were
introduced in Scotland in April 2005 (Scottish Executive 2005).

The standards stress the need for NHS engagement at the level of director or above
and the need for partnership working at the local level. They ensure that the profile
and needs of homeless people are assessed locally via health and homelessness
action plans which are the planning tools used to deliver local initiatives via a multi-
agency steering group and the Community Health Partnership. The standards make it
the responsibility of the NHS Board to ensure that homeless people have equal
access to the full range of health services and that the NHS responds positively to the
health needs of homeless people without restricting them to specialist services.

These standards are important and may provide the framework within which the
health needs of homeless people can be addressed. This will have implications for
any health interventions which are suggested by this thesis.

2.6 The health needs of homeless people

2.6.1 Background

The range of health needs of the homeless population is not well met by the current
health services. Amongst the problems identified were;

- Difficulty in accessing and maintaining GP services due to lack of permanent
  address. In rural areas, access difficulties may be compounded by the remoteness
  of health care service points.

- Problems with continuity of care. Health services may respond to an immediate
  problem but provision of continuing is difficult care where people move in and
  out of homelessness.
Negative self-images, lack of self-esteem and feelings of worthlessness — all part of the damage done by homelessness — mean that many homeless people lack the ability and confidence to seek out appropriate health care.

It is difficult to tackle health problems effectively when people are living in poor accommodation and lack social support.

Scottish Executive Health Department (2001)

The White Paper, ‘Our National Health: a plan for action, a plan for change’ (Scottish Executive, 2000), highlighted the need to improve the health of homeless people. ‘Improving Health in Scotland: the Challenge’ (Scottish Executive, 2003b) and the White Paper ‘Partnership for Care’ (Scottish Executive, 2003c), built on the Scottish Executive’s commitment in this area. A range of health problems have been identified which are more common in homeless people than in the wider population. These include chronic conditions such as asthma, heart disease etc and infectious diseases, (Richman et al, 1991, Connelly and Crown, 1994, McMurray-Avila et al, 1999), together with anxiety, stress, self-harm and other mental health problems (Amery et al,1995, Gill et al, 1996, Vostanis et al, 1998). There are a significant minority of homeless people who have drug or alcohol addiction which may exist in addition to mental health problems and other multiple needs. (Scottish Executive, 2005).

2.6.2 Studies linking homelessness and health

The Office of National Statistics commissioned a survey of homeless people in Glasgow (Kershaw, Singleton and Meltzer, 2000). The survey covered a number of topics including mental and general health, substance misuse, accommodation, service use and diet and social functioning. Data was collected by face to face interview based on a questionnaire schedule. The sampling procedure was designed
to provide a representative sample of all people living in hostel accommodation or sleeping rough in Glasgow. There was an overall response rate of 78% (n=225). Within the total sample, 86% of respondents were men and 14% women, with 34% aged 55 years and over and 18% aged between 16 and 24 years. Most respondents were single (64%), with 27% divorced or separated.

The survey found that:

- 73% had experienced one or more neurotic symptom in the past week and 44% were assessed as having a neurotic disorder such as sleep problems, fatigue, worry, depressive ideas and depression.
- Over half experienced levels of hazardous drinking.
- 65% had a longstanding illness such as hepatitis or abscesses, chest complaints or mental illness.
- 27% reported that their general health was bad or very bad.
- 29% had attempted suicide.
- 18% had self-harmed.

The figures for suicide attempts and self-harm were substantially higher amongst young people.

These results are supported by research which shows that single homeless people face a range of risks to mental and physical health. Such risks include poor living conditions; poor diet, poor personal hygiene and high stress levels (Pleace and Quilgars, 1997; Hinton, et.al. 2001; Quilgars and Pleace, 2003). There are many sources of stress associated with single homeless people, among them hunger, fear of harm, physical discomfort and stigmatisation by some sections of society (Hinton et al, 2001; Quilgars and Pleace, 2003; Rees, 2009). There is also an association
between single homeless people, rough sleeping and mental health problems (Gill et al, 1996; Fazel et al, 2008).

These findings are further supported by a small study of street/homeless youth in Winnipeg (Higget, et. al. 2003). The study interviewed twelve people with experience of living on the street. The majority of participants were female (n = 9). The participants ranged in age from 15 to 27 years old however most were under 18 (n = 8). The sample was not representative but did cover a broad range of individuals and experiences. Higget et.al report that the participants in their study reported a higher than average number of health problems which were made worse by lack of medical attention. Most had acute health conditions such as injuries, respiratory infections and dermatological problems, and chronic diseases, including HIV and depression. Street sickness, which was described as respiratory problems and a feeling of malaise, was universal across this group.

It is important to recognise that these severe health problems are not confined to those sleeping rough, but also extend to those in temporary accommodation, those doubled up with friends or in hostels. They all have little stability, often have to share kitchens and bathrooms, have little privacy or security and may experience problems relating to damp or overcrowded conditions, and in turn poor health and well being.

Fitzpatrick et. al., (2007) conducted a study examining the extent of suicide ideation among homeless persons and providing a comparison with the overall homeless population using a randomized, representative cluster sample of 161 homeless adults living in a large metropolitan area in the Southeastern United States.
They argue that some symptoms of depression such as insomnia, problems eating and problems with others may reflect the circumstances of being homeless. In this context, the association between homelessness and depression is seen as evidence of the psychological suffering usually associated with homelessness.

A dependent variable was established based on respondent answers to the following question:

‘Since you’ve been homeless, have you ever thought about killing yourself?’ almost one-third (31%) of the homeless responded ‘yes’ to this question.

Three health-related variables were examined as predictors of suicide ideation; diagnosed mental health problem, indicating whether respondents had ever had a mental illness diagnosis from a doctor, self-assessed physical health which was measured by asking respondents to describe their health at the time of the interview (1 = poor, 2 = fair, 3 = good and 4 = excellent) and depressive symptomatology, which was assessed using the 20-item Centre for Epidemiological Studies Depression Scale (CES-D), a reliable instrument (Cronbach’s alpha = .89) used widely to assess self-reported depressive symptoms. The scale items reflect six major dimensions of depressive symptomatology: mood; feelings of guilt and worthlessness; helplessness and hopelessness; loss of appetite; sleeplessness; and psychomotor retardation. The scale ranges from 0–60 based on frequency of symptoms during the past week with responses from 0 = never, to 3 = most or all the time. A score of 16+ is used as a cutoff for ‘possible clinical caseness’, and a score of 21+ as a cutoff for ‘probable clinical caseness’.

The study found 31 percent of respondents had thoughts of committing suicide since becoming homeless which is 10 times higher than the annual percentage of the
The general US population reporting such thoughts (Gliatto & Rai, 1999; Kessler, et.al. 2005). The health and wellbeing variables indicate a sample of homeless that on average are clinically depressed with over two thirds of the sample meeting the minimum criteria of possible clinical caseness (+16). Forty percent of the sample reported being told by a doctor that they have a mental illness.

In a longitudinal study of 92 homeless mothers, Tischler and Vostanis (2007) reported on levels of coping, mental health and goal achievement. The participants were mothers who had been accepted as statutorily homeless and were resident in council-run temporary accommodation. All homeless mothers with children aged 3 and over were asked to participate. All participants were interviewed within three weeks of placement. The standardised measures were left with the mothers and they were asked to complete and return them. A follow-up interview was arranged four months after the original interview had taken place. In addition to psychosocial factors, health was measured using the General Health Questionnaire 28 (GHQ 28). The GHQ was scored using (The GHQ28 is discussed in more detail in chapter four.) In terms of the psychometric properties of the GHQ, co-efficient Alphas for the subscales ranged between 0.80 and 0.91. Complete data were collected from 72 participants at first interview and 44 at the second.

The results reported showed that at first interview, three quarters (n=56, 77.8%) of participants reported total GHQ scores within the clinical range, indicating the likelihood of mental health problems. Mental health improved significantly from the first to second interview however more than half (n=26, 59%) of the mothers still scored at or above the GHQ threshold indicating that they were ‘cases’ requiring clinical assessment.
Fitzpatrick, Pleadce and Jones (2005) reported that homeless families in rural areas may spend longer in temporary accommodation than those in urban areas and identified a range of health problems, which may result. These include an increased risk of dermatological problems, musculoskeletal problems, poor obstetric outcomes and a range of mental health problems.

The effect on children in homeless families living in temporary accommodation can be serious. There are many detrimental effects on the physical and emotional development of children living in unsettled or overcrowded accommodation with little room to play or do homework. Children in these circumstances are prone to behavioural disturbance, have higher levels of illness and infection, have poor sleep patterns and are more prone to accidental injury (Quilgars and Pleadce, 2003).

Health visitor contact can be extremely important and may be the most frequent point of contact, especially for homeless families. However, there can be a perception amongst some homeless people that the health visitor can be judgemental of their circumstances (Fitzpatrick, et al, 2005). Quilgars and Pleadce (2003) report that young homeless people may neglect their health needs unless they become debilitating, and may be reluctant to approach health services because they expect a hostile response.

It can be more difficult for homeless people to sustain continuity of care, to meet appointments made a long time in advance, or to participate in health improvement and health promotion activities, such as healthy eating and physical activity. This may be viewed as an outcome of social exclusion which can be defined as an individual being geographically resident in a society but not participating in the normal activities of citizens in that society, (Burchardt et al.,1999). The social exclusionary nature of homelessness means that people face barriers to
accessing basic physical necessities, such as a warm dwelling and adequate food, in addition to the psychological resources required for good health, including support networks, respite from stress and a sense of belonging, self esteem and hope. (Hodgetts et. al., 2007).

Maintaining contact with key workers such as the family GP, social workers, dentists and lawyers can be difficult if the household is accommodated temporarily some distance away from such support networks (Quilgars and Pleace, 2003).

In this thesis three domains of health are considered; somatic (physical) health, mental health and social health. The effect of being homeless on each of these domains will be examined.

According to the WHO definition, health means physical, mental and social well-being. Flick (2007) states that health is not a goal of life in itself but the basis for living autonomously by providing physical, mental and social resources. In the context of homelessness, health can be affected on all three of the above levels. Social well-being can be affected immediately by exclusion from social contacts and a stable social situation. Mental well-being can be influenced by being socially excluded, and physical health can be affected by incidents of violence, cold poor nutrition, or inadequate treatment of health problems.

2.6.3 Homelessness as a stressor

Much of literature does not consider homelessness as an influential factor on health outcomes for the overall homeless population but use it only as a descriptor for a specific population. Many studies, (Fitzpatrick, Pleace and Jones, 2005; Tischler and
Vostanis, 2007; Kershaw, Singleton and Meltzer, 2000; Klitzing 2003, Dalton and Pakenham, 2002; Unger, et al, 1998; Vostanis, Grattan and Cumella 1998) consider homeless people who also have other issues such as AIDS, drug or alcohol dependency or mental illness, who are living on the street or in homeless shelters or consider a specific group who are also homeless, such as homeless mothers, single people or children and families.

The contention in this thesis is that homelessness itself is a stressor and is in itself worthy of study in this context. This is consistent with Vostanis et. al. (1998), who argued that homelessness is a trauma and must be considered as such in any research.

Vostanis et. al. (1998) conducted a longitudinal study of the mental heath problems of homeless children and families in Birmingham. The study was designed to establish the extent of mental health problems among homeless children and their parents one year after re-housing by the local authority. The participants had originally been interviewed within two weeks of becoming homeless and at time of hostel residence. The participants were selected from a sample described in an earlier cross sectional study on homeless families (Vostanis, Crumella and Grattan, 1997) and comprised of 58 re-housed families with 103 children aged 2-16 years old. A comparison group was selected by matched sample of 21 low-income families in stable housing accommodation, with 54 children amongst the comparison sample.

Five research instruments were used in this study to assess mental health problems in children and families. The adult measures used were a semi-structured interview with the mother, which consisted of questions about family life, house moves, relationships with peers and family and behavioural problems of the children. This
was conducted by a research psychologist at the hostel. The General Health Questionnaire (Goldberg, 1978), was used as it is established as a valid, reliable screening questionnaire for use in surveys of adult mental health problems in the overall homeless population. The 28 item version was used, which generates scores for somatic symptoms, anxiety, social dysfunction and depression. Cut off scores were used to identify possible mental health dis-orders (caseness). The properties of the GHQ will be reviewed in the next chapter. The final adult measure was the Interview Schedule for Social Interaction (Henderson, Duncan-Jones, Byrne and Scott, 1981), which is a measure of a persons’ social network. Scales measure the availability and perceived adequacy of attachment relationships, social integration and the number of attachment relationships where the respondent has recently had unpleasant interaction or arguments.

The measures used to assess the children were the Child Behaviour Checklist (Achenbach, 1991) and the Vineland Adaptive Behaviour Scales (Sparrow, Bella and Cicchetti, 1984).

The Child Behaviour Checklist was used to measure behavioural and emotional problems and social competence in the children. Adapted scores (T scores) indicate whether the child is within the clinical range which would indicate referral to a child mental health service (T score >63) or within the social maladjustment range (T score <37). A questionnaire was completed for each child by a parent and was modified to exclude social competence questions for children aged 2-3 years old.

The Vineland Adaptive Behaviour Scales, communication domain, was used to measure the development of communication in the children. Scores are adapted according to norms from the overall homeless population and an age equivalent score is given which indicates the chronological age at which the child is functioning.
Vostanis et al. found that in relation to mental health problems and based on GHQ cut-off scores, the proportion of homeless mothers who reported mental health problems of clinical significance i.e., were cases, had decreased from 52% at initial interview to 26% at one year follow up. The GHQ total scores significantly decreased for the homeless participants (P=0.002, Wilcoxon test). However the proportion of homeless mothers who reported mental health problems of clinical significance remained statistically significantly higher (z=2.9, P=0.004) at follow up compared to the comparison mothers who were at 5%.

Homeless children improved on the Vineland communication scores over the study period, however this did not reach statistical significance (P = 0.07, Wilcoxon test). The age equivalent of communication for homeless children was significantly lower than chronological age (age equivalent 7.8 years v chronological age 8.5 years; P = 0.0001) whereas the comparison group showed age equivalent 9.1 years v chronological age 9.4 years; P = 0.16. The scores for homeless children on the child behaviour checklist showed no significant change (58.2 at baseline v 59.2 at follow up; P = 0.53). They were significantly more likely to be within the clinical range than the comparison group.

These results highlight the high level of mental health needs among homeless mothers and their children. Homeless families constitute a relatively heterogeneous population with complex health, social and educational problems, which often precipitate the episode of homelessness. These are related to underlying psychosocial factors, and are likely to persist, even after re-housing. (Vostanis, 1998). In two fifths of children and a quarter of mothers, mental health problems persisted after housing (Vostanis, 1998). This research has identified a potential long term impact of homelessness as it is often the case that stress / health consequences persist after the
individual or family have been re-housed and can exist for years after or may even be permanent.

If homelessness is considered as a stressor then the process of how an individual copes with stress is important. The study by Tischler and Vostanis (2007) outlined above considered coping in homeless mothers. Banyard and Graham-Bermann (1998) also examined stress, coping and depressed mood in a sample of 64 homeless mothers and a comparison group of 59 low-income mothers. Homeless mothers reported significantly higher levels of stress and depression, as well as greater use of avoidant and active-cognitive coping strategies. The concept of coping will be examined in detail in the next chapter.

The research reviewed above usefully identifies that homelessness is a traumatic event with health consequences and that the effects can persist over time. This however pertains only to homeless children and families and not the wider population of people who are homeless.

The implication is that it might be useful to take a step back and consider what effect being homeless itself has on health outcomes and what we can do about it by an early intervention. One implication of the research reported in this thesis is that it indicates a method of intervention at first contact which may influence the health outcome.

There is a growing recognition that homelessness impacts on a whole range of aspects of the lives of the people who experience it. Many research projects have therefore began to focus on particular dimensions of homeless peoples lives, such as health.
Pleace and Quilgars (1997) question the assumption that homelessness causes ill health. While they emphasise that the stresses associated with homelessness do increase the risk of ill health, many of these risks are shared with other socio-economically deprived sections of the population. For single homeless people in general, they argue, the key additional threat to their health is caused by inadequate access to healthcare services. People sleeping rough do however face additional problems due to the weather and danger from assault etc.

Homelessness is likely to have an adverse effect on a person’s mental health, as are other stressful events associated with homelessness, such as relationship breakdown (Bines, 1997). However, the effects of mental illness in combination with social and economic problems can also constitute possible triggers for homelessness by making it difficult to maintain accommodation and/or social support networks. (Connelly and Crown, 1994). Thus, some research has indicated that the majority of those with mental health problems were ill before they became homeless (Social Exclusion Unit (SEU), 1998).

This is consistent with the aims of this thesis. Homelessness, as a stressor, may affect health outcomes directly, or may exacerbate pre-existing conditions. Homelessness may also influence health outcomes by making access to health care difficult. Both aspects of the influence of homelessness on health outcomes will be considered and incorporated in any proposed interventions.

2.7 Summary

This chapter outlined the definitional issues around homelessness and has demonstrated that there is a strong relationship between homelessness and health.
The link between unmet health needs and homelessness is well established. Research among homeless people in Aberdeen found that 48% of the sample (n=169) had used the Accident and Emergency department within the last 12 months which was a higher contact rate than reported for specialist health services for homeless people (Love, 2002).

Homeless people experience higher levels of ill health than the overall homeless population. Many have drug and alcohol addiction problems and/or mental health problems and/or physical health problems. Their health needs are acute and many of these needs are unidentified and unaddressed. Many people experiencing homelessness fail to recognise, or cannot prioritise, their own health needs.

Many, especially those with substance misuse problems or chaotic behavioural patterns, find it difficult to cope with appointments systems and bureaucracy generally. Many use NHS services only when their health needs become critical.

Many studies focus on a specific population of homeless people who also have particular problems such as aids, drug or alcohol dependency or mental illness. The focus may also relate to accommodation type such as those living on the street or in homeless shelters (Garside et al, 1990; Bacon et al, 1996); or may focus on particular groups such as single homeless people (Anderson et al, 1993); or children. It is also often focused on quite narrow concerns, such as begging (Fitzpatrick and Kennedy, 2000). The results of these studies are difficult to generalise to the wider population of homeless people, as the findings are sample specific in nature. Whilst the results of these studies are important, they offer only a concrete first step. The focus of this thesis is on the overall homeless population of homeless people who are subject to
homelessness as a stressor. It is important to consider the immediate health effect of becoming or being homeless. That is, the state of being homeless provides the context and this research will consider the influence individual factors may have in the health outcomes of homeless people. Previous studies have not considered being homeless as a stressor in the overall homeless population, this thesis is important as it addresses this important issue.

The next chapter will consider what individual differences may influence the health outcomes of homeless people.
Chapter 3  Homelessness, Health and Individual Differences:
A Review.

3.1 Introduction
The previous chapter established the link between homelessness and health and that here might be a number of important factors determining health outcomes. The research in chapter two focuses on specific groups of people who are homeless and does not consider the health effect of being homeless within the overall population of homeless people. Whilst consideration is given to the longer term health effects of homelessness in terms of access to appropriate health care and predisposition of homeless people to take less care of themselves, the potential impact of homelessness as a health stressor is not considered. Therefore, this chapter will examine the influence social perceptions and individual difference factors have on health outcomes of homeless people in Scotland. It will review the issues surrounding the health effect of becoming homeless and will consider the definition and measurement of coping styles, personality and locus of control and their influence on health outcomes.

3.2 Health
Being homeless can influence health on several levels. Being homeless can lead to problems in accessing healthcare as well as securing the resources necessary to maintain good health. The nature of their existence can lead to those people who are homeless taking less care of their physical situation by not eating properly for example due to money issues or difficulty of cooking in shared accommodation. (Quilgars and Pleace, 2003; Scottish Executive Health Department, 2001). The temporary nature of the accommodation provided again may influence health by being difficult to heat and the longer term issues of being isolated from family and
friends may have an impact on health. It is my contention in this thesis that being homeless itself has an influence on health outcomes as a potential stressor which has both an immediate and longer term effect on an individual. Previous studies have not considered this.

### 3.2.1 Stress: an overview.

In exploring stress it is necessary to consider the historical context as the current definitions represent a fusion of the early theoretical attempts at a definition. The early work of Cannon (1932), Symonds (1947) and Selye (1956) gave insight into the origins of the concept of stress, and identified the potential health problems which can result from prolonged stress in an individual. Within the context of homelessness this may be crucial in understanding some of the difficulties experienced by homeless people in relation to health.

#### 3.2.2 Physiological functioning – only part of the story

Cannon and Selye base their theories largely on physiological functioning, although Selye focuses on the role of the pituitary-adrenocortical system. The GAS is concerned with the homeostatic maintenance of psychoendocrine functioning and says little about psychological aspects of stress, other than to include psychological stimuli as one category of possible stressors. Selye however used mainly physical stressors such as foot shock, water deprivation and physical restraint and it is debatable whether such stressors will produce the same reactions as psychological stressors. Another more fundamental problem exists with Selyes theory. The theory states that the stress response is linear and in relation to the disruption to homeostasis. It followed therefore that the degree of stress response could be predicted if the degree to which a stressor disrupts homeostasis in a body is known.
This mechanistic approach was largely disproved by experiments, which showed that psychological factors could affect the stress response. In one example, cited by Saplonsky (1999), a child is subjected to a painful procedure and the researcher wishes to know how great a stress response will be triggered. For Selye this is a linear progression mapping the relationship between the duration and intensity of the stimulus and the response. It was found however that if the child was able to reach out for its mother for comfort, the stress response was much less.

The crucial point here is that the physiological stress response can be affected by psychological factors. Two identical stressors with the same disruption to homeostasis can be perceived differently. The stress response can therefore be made larger or smaller depending on psychological factors. Psychological variables can modulate the stress response. Following from this, it was demonstrated by John Mason (1975) that in the absence of any change in physiological reality i.e. any disruption in homeostasis, psychological variables alone could trigger the stress response. Mason also questioned the ‘nonspecificity’ of the stress response and argued that homeostasis in fact predicts specificity – different stressors lead to different responses. Mason argued that any nonspecificity that exists reflects the adaptive value of preparing for action.

### 3.2.3 Stress: the role of appraisal

It is clear therefore that there is a psychological aspect to stress which neither Cannon nor Selye adequately addressed. Lazarus and colleagues (Lazarus and Folkman, 1984a; Lazarus and Launier, 1978) proposed a cognitive appraisal theory of stress, which addresses the interaction of the individual and their environment. This interaction is referred to as a transaction, as it takes into account the ongoing relationship between the individual and the environment. This ‘transactional’ theory
places the emphasis on the meaning that an event has for the individual and not on
the physiological responses. Lazarus and colleagues believe that an individual’s
appraisal of a situation determines whether an event is experienced as stressful or
not, making stress the consequence of appraisal. According to this theory, the way an
individual appraises an event plays a fundamental role in determining, not only the
magnitude of the stress response, but also the kind of coping strategies that the
individual may employ in efforts to deal with the stress. Stress arises from the way in
which an individual perceives and interprets events which occur in their external
environment.

According to the Transactional Theory of stress, the cognitive appraisal of stress is a
two-part process which involves a primary and secondary appraisal.

Primary appraisal – involves the determination of an event as stressful. Events are
first evaluated for their threat value. This first appraisal is intended to make certain
that individuals do not blindly enter dangerous situations, but recognise the situation
and plan how to deal with it. During primary appraisal the event can be categorised
as irrelevant, beneficial or stressful. If the event is appraised as stressful, the event is
then evaluated as either a harm/loss, a threat or a challenge. A harm/loss event refers
to an injury or damage that has already taken place. A threat event refers to
something that could produce harm or loss. A challenge event refers to the potential
for growth, mastery or some form of gain.

Lazarus argues that we cannot assess the origins of stress by looking solely at the
nature of the environmental event; rather stress is a process that involves the
interaction of the individual with the environment. These categories are based mostly
on an individual’s past experiences and learning. Also each of these categories
generates different emotional responses. Harm/loss can elicit anger, disgust, sadness
or disappointment. Threatening stressors can produce anxiety and challenging stressors can produce excitement. This theory helps to integrate both the motivational aspects of stress and the varying emotions that are associated with the experience of stress.

Secondary appraisal occurs after assessment of the event as a threat or a challenge. During secondary appraisal the individual now evaluates his/her coping resources and options. Coping responses are then evaluated for type and availability, as well as their effectiveness in removing the threats. According to the transactional theory, stress arises only when a particular transaction is appraised by the individual as relevant to his/her well-being. In order for an event to be appraised as a stressor, it must be personally relevant and there must be a perceived mismatch between a situation's demands and an individual’s resources to cope with it.

This two level appraisal process describes the cognitive and behavioural responses, as well as the emotional, neurophysiological, autonomic and endocrine responses that individuals have to external events. The appraisals determine the nature and magnitude of the individual’s psychological response as well as the physiological adjustments necessary.

In response to a stressor, individuals’ must make two judgments. Firstly they must feel threatened by the situation they encounter and secondly they must believe that they do not have sufficient resources and capabilities to deal with the threat. According to this theory, stress can only be fully understood if we take into account the ability of a person to cope with a potential stressor. Coping is defined by Lazarus and Folkman (1984b) as the process of managing the external and/or internal demands that are appraised as taxing or exceeding the resources of the person.
Coping will be considered fully in section 3.3.

This theory implies that different people will react differently to a given stressor depending on their appraisal of whether or not it is stressful, placing a demand on their adaptational capacities and their assessment of their ability to cope. This will vary between individuals and may vary for the same individual at different times. The transactional theory offers an explanation for the fact that people react differently to becoming homeless as a result of their appraisal of the situation.

3.2.4 Measuring health: a review

Health is defined in the World Health Organisation’s Constitution as “a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity” (World Health Organisation, 1948). There is, however, no clear definition with concepts such as functional ability, positive health, social health, subjective well being and quality of life being used widely (Bowling 2005). Bowling (2005) provides a detailed overview of the concept of health. In this thesis, the focus is on the stress of being homeless and therefore health is considered in relation to an individual’s reaction to stress, both mentally, physically and socially. (see chapter 2.4) In relation to health measurement, it is necessary for the purposes of this thesis that a general measure of health is used as the focus is on the somatic or physical, mental and social health domains. For this reason, measures which are disease specific, such as the Stanford Arthritis Centre Health Assessment Questionnaire (Fries, Spitz and Young, 1980), were not considered.

The General Health Questionnaire, (Goldberg 1978; Goldberg and Hillier 1979; Goldberg and Williams, 1988). The GHQ is designed as a screening questionnaire
and is a self report questionnaire. There are several short forms of the GHQ available including a 28 item version (GHQ28) which is scaled and can be analysed by sub-categories. This was designed specifically for research purposes. Although the GHQ does cover separate types of distress, it is not intended to distinguish among psychiatric disorders or to be used in making diagnoses. The results express the likelihood of psychiatric disorder. It is intended to use the GHQ 28 in this thesis as it offers the best fit with the aims of considering what factors may influence the stress and health outcomes of homeless people. The GHQ28 provides four scales which measure somatic health, anxiety and depression, social dysfunction and severe depression. This is consistent with the domains of health of interest in this thesis as outlined above. The instrument will be discussed fully in Chapter 4.2.3.

Other measures which are not disease specific were considered but were not appropriate for use in this study. The Sickness Impact Profile (Deyo, Inui and Leininger 1982) was developed as a measure of perceived health status and concentrates on sickness related dysfunction rather than disease. This measure is not suitable due to its focus on the impact of sickness on daily activities and behaviour. The Short Form-36 Health Survey Questionnaire (SF-36), (Stewart and Ware 1992) is a frequently used measure of generic health status (Bowling 2005). This instrument does not however target signs and symptoms relating to sleeping patterns and therefore may fail to provide the level of detail in relation to stress that is provided by the GHQ28 with its Anxiety / Insomnia scale. It has also been reported by Ware, Kosinsky and Dewey (2001), that some items in the SF36 are very complex and require responders to combine perceptions of physical and emotional problems that relate to relationships with family, friends, neighbours and other groups. For these reasons, the SF 36 will not be used in this thesis.
### 3.2.5 Studies using transactional model of stress and coping

The transactional model of stress and coping is current today. The following recent studies have used this model as the theoretical basis of stress, acknowledging the importance of a transaction between the individual and the environment in any stress response to a given situation.

Wirtz, et. al. (2006) used a transactional model in a study of stress in men. The study investigated whether individuals who appraise a situation as more threatening, challenging, and as exceeding their ability to cope, show greater stress reactivity of the coagulation activation marker D-dimer, indicating fibrin generation in the blood. In a stress reaction, one of the physiological changes which occurs is that the blood thickens to allow a greater amount of oxygen to be carried to the muscles. This is accompanied by an increased heart rate and higher blood pressure to assist in the response to the stressor. Forty-seven men (mean age 44 years) completed the Primary Appraisal Secondary Appraisal (PASA) scale which is a transactional stress questionnaire, and were then given the Trier Social Stress Test which is a combination of mock job interview and mental arithmetic task. Heart rate, blood pressure, plasma catecholamines, and D-dimer (co-agulation activation marker) levels were measured before and after stress, and during recovery up to one hour after stress. The study found that anticipatory cognitive appraisal is associated with blood coagulation activation and those individuals who appraised the stressor as more challenging and threatening experienced a greater procoagulant response.

The study reported that the PASA “Stress Index” correlated with total D-dimer between rest and 60 minutes after stress \( r = 0.30, p = .050 \) and D-dimer change from rest to immediately after stress \( r = 0.29, p = .046 \). It was also reported that Primary appraisal (combined “threat” and “challenge”) correlated with total D-dimer.
(r = 0.37, p = .017). D-dimer stress change (r = 0.41, p = .004) and D-dimer recovery (r = 0.32, p = .042).

Wirtz, et al. suggest that future intervention studies are required to show whether the procoagulant response to stress can be modified by teaching coping skills. The findings may have clinical implications in that they suggest that cognitive training of people with high anticipatory “primary appraisal” could provide a benefit. If cognitive training is directed at helping subjects to perceive a stressor as less threatening or challenging then the stress response might be less exaggerated. This has important implications for this thesis as it suggests possible cognitive interventions which may assist homeless people by modifying appraisal.

These findings were supported by a study by Srivastava (2005) which considered the effects of cognitive appraisal on the experience of occupational stress. The relationship between job stress and consequent job and health strains were studied among technical supervisors from transactional model perspective. It was found that low appraisal of demands and threats posed by stressful situations and high appraisal of available capability and resources mitigate the degree of stress.

Watson, Deary, Thompson and Li (2008) used the transactional model of stress as the theoretical framework in their study of stress and burnout in student nurses. The aim of the study was to study the relationship between personality, stress, burnout and psychological morbidity in nursing students in Hong Kong. Participants were nursing students (n=147) in a Hong Kong university department of nursing.

Five instruments were used in the study; General Health Questionnaire-12 (Goldberg and Williams, 1988), was used to measure psychological morbidity, NEO
Five Factor Inventory (Costa and McCrae, 1992), Maslach Burnout Inventory (Maslach and Jackson, 1986), Coping Inventory for Stressful Situations (Cosway, et al., 2000) and Stress in Nursing Students (Deary, et. al., 2003). These were administered by self report questionnaire. The main predictors of stress, burnout and psychological morbidity were found to be the personality trait neuroticism and the strategy of emotion-oriented coping with stress (See table 3.1). These results suggest that, in the context of homelessness, neuroticism and emotion-oriented coping strategies may be predictors of a poor health outcome.

Table 3.1 Multiple regression results for Watson, et al. (2005).

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable(s)</th>
<th>Adjusted R²</th>
<th>Standardised β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ</td>
<td>Neuroticism</td>
<td>.261</td>
<td>.520</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>Neuroticism</td>
<td>.319</td>
<td>.443</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Emotion-oriented coping</td>
<td>.344</td>
<td>.224</td>
<td>.049</td>
</tr>
<tr>
<td>Depersonalisation</td>
<td>Emotion-oriented coping</td>
<td>.086</td>
<td>.269</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>Agreeableness</td>
<td>.127</td>
<td>-.230</td>
<td>.045</td>
</tr>
<tr>
<td>Personal accomplishment</td>
<td>Neuroticism</td>
<td>.075</td>
<td>-.273</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Clinical stress</td>
<td>Emotion-oriented coping</td>
<td>.178</td>
<td>.372</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Clinical</td>
<td>.236</td>
<td>.266</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Confidence stress</td>
<td>Emotion-oriented coping</td>
<td>.165</td>
<td>.393</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>.235</td>
<td>.266</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Educational stress</td>
<td>Educational</td>
<td>.433</td>
<td>570</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Emotion-oriented coping</td>
<td>.508</td>
<td>.290</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Financial stress</td>
<td>Emotion-oriented coping</td>
<td>.162</td>
<td>.321</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Financial</td>
<td>.231</td>
<td>.293</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

3.2.6 Summary

In summary, an individual only experiences a stress response if they consider an event to be potentially endangering their well-being and also beyond their ability to cope with it. This definition locates stress as a relationship between the person and the environment, which is perceived as threatening and as taxing or exceeding their resources. Accordingly the stress process cannot be understood without reference to the process of coping which influences and is influenced by the individual's appraisal of the encounter with the environment. Coping is the management of the demands
placed on the individual as a result of a stressful encounter. This is a dynamic process, which is part of the mutually reciprocal, two-way relationship where appraisals are constantly changing as the person’s stressful encounter with the environment progresses and the individual reappraises events according to the circumstances.

3.3 Coping

3.3.1 Introduction

Within the context of this research, the definition of stress locates it as a relationship between the person and the environment, and accordingly the stress process cannot be understood without reference to the process of coping which influences and is influenced by the individual's appraisal of the encounter with the environment. Here, coping is the management of the demands placed on the individual as a result of a stressful encounter. This is a dynamic process, which is part of the mutually reciprocal, two-way relationship where appraisals are constantly changing as the person’s stressful encounter with the environment progresses and the individual reappraises events according to the circumstances. (Lazarus and Folkman, 1984a; 1984b).

Coping has been conceptualised as being either a trait that refers to stable properties of a person, or as a state dealing with transient reactions which change depending on the circumstances (Lazarus and Folkman, 1984b). In the state approach, coping is considered by Lazarus and Folkman (Folkman and Lazarus, 1980; Lazarus and Folkman, 1984a) as the thoughts and behaviours used to manage the internal and external demands of situations appraised as stressful by an individual.
Coping is seen as a process involving at least two stages: primary appraisal (i.e., is this something to bother about), and secondary appraisal (i.e., what can I do about it?). In addition, coping is seen as serving one of two functions: the problem-focused one, which is the concern that one might express with more practical approaches to managing a problem (i.e., addressing the problem causing distress), and emotion-focused which is concerned with regulating emotional reactions by controlling or ignoring them. Some examples of problem-focused coping are making a plan of action or concentrating on the next step. Examples of emotion-focused coping are engaging in distracting activities, using alcohol or drugs, or seeking emotional support. Emotions continue to be integral to the coping process throughout a stressful encounter as an outcome of coping, a response to new information, and as a result of reappraisals of the status of the encounter.

Psychological coping is unlike other more stable constructs. It is potentially malleable and open to change. Coping then is not simply an explanation of individual differences in response to stress but also as an avenue for targeted intervention to improve outcomes (Folkman and Moskowitz 2004).

3.3.2 Measurement of coping

Coping can be assessed using a series of questionnaires designed to capture the thoughts and behaviours that people use to manage stressful events (Folkman and Moskowitz, 2004). Participants normally answer retrospectively on how they coped with a specific stressful event or are asked to respond to scenarios of stressful situations.

Folkman and Moskowitz (2004) give examples of inventories intended for use in overall homeless population. The purpose of this section is to review the measures and their use in health settings and to reach a conclusion as to the most appropriate measure to address the aims of this thesis.
Ways of Coping (Folkman and Lazarus, 1980; 1985; 1988a; 1988b);

The Ways of Coping Checklist was developed in 1980 and later revised and as the Ways of Coping Questionnaire (WOCQ) in 1985. The response format was changed from Yes/No on the original to a 4-point Likert scale on the revised version. Redundant and unclear items were removed or reworded and the revised version contains several additional items. The ways of Coping Questionnaire consists of 50 items with 16 fill items and produces eight empirically derived scales. Responses are made after the participant is asked to consider a real life situation which caused stress during a specific period e.g. one week (Folkman et al. 1986). WOCQ scales with example items are outlined in table 3.1.

Table 3.1 Ways Of Coping Questionnaire scales with example items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
<th>Example Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confrontive coping</td>
<td>6</td>
<td>‘I stood my ground and fought for what I wanted’</td>
</tr>
<tr>
<td>Distancing</td>
<td>6</td>
<td>‘I went on as if nothing had happened’</td>
</tr>
<tr>
<td>Self-controlling</td>
<td>7</td>
<td>‘I tried to keep my feelings to myself’</td>
</tr>
<tr>
<td>Seeking social support</td>
<td>6</td>
<td>‘I talked to someone to find out more about the situation’</td>
</tr>
<tr>
<td>Accepting responsibility</td>
<td>4</td>
<td>‘I criticised or lectured myself’</td>
</tr>
<tr>
<td>Escape-avoidance</td>
<td>8</td>
<td>‘I hoped a miracle would happen’</td>
</tr>
<tr>
<td>Planful problem solving</td>
<td>6</td>
<td>‘I made a plan of action and followed it’</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>7</td>
<td>‘I changed or grew as a person’</td>
</tr>
</tbody>
</table>

A number of psychometric problems have been identified with this instrument. (Stone, et. al. 1991; Parker, Endler and Bagby, 1993; Schwartzer and Schwartzer, 1996). They report difficulties in replicating the factor structure and its stability and reliability. These issues will be discussed in sections 3.2.3 and 3.2.4 below.
Coping Strategy Indicator (Amirkhan, 1990);

In compiling this scale Amirkhan collected coping behaviours from existing scales and from previous research and reduced these 161 behaviours in a series of factor analysis with large samples of responders. The first sample responded to the items on a three point scale and 3 of the 17 dimensions were significant and formed the basis for all further enquiry. These three subscales, problem solving, seeking support and avoidance were adopted at this stage and further factor analysis led to the final version with 33 items, 11 for each subscale. According to Schwarzer and Schwarzer, (1996), this results gained for this instrument are not convincing as all factor solutions showed poor goodness-of-fit indices and only 21%, 33% and 37% of variance was accounted for at three stages of development. They conclude that the Coping Strategy Indicator is not convincing either empirically or theoretically.

COPE Inventory (Carver, Scheier and Weintraub, 1989.);

Carver et al, (1988), believed that the distinction between problem focused and emotion focused coping was too simple and that both should be subdivided to account for the many possible ways to regulate emotions or solve problems. The final version of the COPE contains 13 scales with 4 items in each. The COPE scales are detailed below with example items from each (Schwarzer and Schwarzer, 1996):

- Active coping, ‘I do what has to be done, one step at a time’
- Planning, ‘I make a plan of action’
- Suppression of competing activities, ‘I put aside other activities in order to concentrate on this’
- Restraint coping, ‘I force myself to wait for the right time to do something’
- Seeking social support for instrumental reasons, ‘I talk to someone to find out more about the situation’
• Seeking social support for emotional reasons, ‘I talk to someone about how I feel’
• Positive reinterpretation and growth, ‘I learn something from the experience’
• Acceptance, ‘I learn to live with it’
• Turning to religion, ‘I put my trust in God’
• Focus on and venting of emotions, ‘I let my feelings out’
• Denial, ‘I refuse to believe that it has happened’
• Behavioural disengagement, ‘I just gave up trying to reach my goal’
• Mental disengagement, ‘I daydream about things other than this’

The first five items relate to problem focused coping and the next five relate to emotion focused coping. The inventory is available as a trait or state version. Schwarzer and Schwarzer, (1996) argue that although the authors claim that the COPE is based on theory and therefore superior to other empirically based approaches, this is not actually the case as their use of factor analysis is not appropriate to test a theory. In addition, a second-order factor analysis did not reproduce the hypothesised structure.

**Coping Inventory for Stressful Situations (CISS),** (Endler and Parker 1990);
This instrument was developed by compiling coping behaviours that fitted the two coping functions of emotion regulation and problem solving. Factor analysis identified three factors; task-oriented, emotion-oriented and avoidance oriented coping. The avoidance scale can be divided into a Distraction scale and a Social Diversion scale. The final version of the scale is a 48 item inventory with 16 items per scale. Respondents are asked to rate each of the 48 items on a five point Likert scale ranging from (1) “Not at all” to (5) “Very much.” Respondents are asked to “indicate how much you engage in these types of activities when you encounter a
difficult, stressful, or upsetting situation.” The original scale is a trait measure and has limited value for situation specific coping responses however a situation specific version was developed to address this. (Endler and Parker, 1999). This is a 21-item measure for adults. Instructions are modified such that responses are given with a particular designated stressful situation in mind.

The structure of this measure does not have the emphasis on emotion and problem focused coping which is central to the Ways of Coping Questionnaire (Folkman and Lazarus, 1980). This is considered a useful distinction in terms of how individuals cope with the stress of becoming homeless.

3.3.3 Limitations of coping inventories

Whilst these inventories are useful in that they allow multidimensional descriptions of situation-specific coping thoughts and behaviours that people can self-report there are limitations in their design (Stone et. al., 1992; Stone et.al., 1991). Inventories had variations in the recall period (Porter and Stone, 1996), respondents recall of events may be unreliable (Coyne and Gottlieb, 1996) and problems were identified in items being confounded with their outcomes (Stanton et. al. 1994)

Folkman and Moskowitz (2004) consider that the most prominent of all the criticisms of the checklist approach concerns the problem of retrospective report and the accuracy of recall about specific thoughts and behaviours that were used one week or one month earlier (Coyne and Gottlieb, 1996). To overcome these problems, Stone and Neale (1984) developed the Daily Coping Inventory, a measure of daily coping efforts. Instead of asking participants to recall their most stressful event retrospectively across one week, two weeks, or a month, as with most inventories, participants were asked to consider the most stressful event occurring that day. The
momentary assessment procedure, however, has its own difficulties. As Stone et al. (1998) point out, their subjects were asked repeatedly to recall their coping efforts, which may have resulted in some coping not being reported, as participants may have thought they already had reported it. The momentary focus may result in reports of very concrete, discrete events, to the exclusion of ongoing or more abstract, complex problems. Momentary assessments might also elicit literal reports of specific thoughts and actions, and miss the broader conceptualisations of coping that are better perceived with the benefit of some retrospection, such as those that involve finding meaning. Conversely, retrospective accounts may be more subject to distortion associated with participants’ efforts to create a coherent narrative of what happened or to find meaning in the event. Stone et al. (1998) point out that retrospective accounts may in fact be superior predictors of future outcomes than the momentary assessments. One explanation offered for this is that what participants report as coping has become the “true story” for them and therefore predicts future actions.

According to Folkman and Moskowitz (2004) there is no gold standard for the measurement of coping. Momentary accounts address the problem of bias due to recall, but they may under represent the complexity of coping over time and the complexity of what people actually cope with. Retrospective accounts address the problems of complexity, but introduce the effects of coping processes that take place in the interim. Retrospective accounts, in a sense, may be telling us what the person is doing now to cope with what happened then, as well as what the person did then to cope with what happened then. They state that the measurement of coping is probably as much art as it is science. The art comes in selecting the approach that is most appropriate and useful to the researcher’s question. This point strongly influenced the choice of measure for coping used in this thesis.
3.3.4 Psychometric properties of coping scales

A difficulty with the grouping of coping responses concerns the evaluation of the psychometric qualities of coping scales based on the groupings. It is usual to expect measures of psychological constructs to have high levels of internal consistency, with alphas typically between 0.60 - 0.90 (Nunnally, 1978). Billings and Moos (1981) argue that this standard is not necessarily appropriate for coping scales: “typical psychometric estimates of internal consistency may have limited applicability in assessing the psychometric adequacy of measures of coping…. an upper limit may be placed on internal consistency coefficients by the fact that the use of one coping response may be sufficient to reduce stress and thus lessen the need to use other responses from either the same or other categories of coping” (Billings and Moos 1981, p. 145).

Another psychometric issue has to do with the expectation that a multifactorial scale should have factors that are independent of one another however some coping factors are used together and are not independent. Problem-focused coping, for example, is usually used in tandem with positive reappraisal or meaning-focused coping. This suggests that these two forms of coping facilitate each other. Looking for the positive in a difficult situation, for example, may encourage the person to engage in problem-focused coping. Conversely, effective problem-focused coping can lead to a positive reappraisal of the individual’s competence, or it may lead to an appreciation of another person’s contribution to the solution. To insist that coping factors be uncorrelated in order to achieve a psychometric purity by, for example, eliminating items that correlate across factors, may actually result in a reduction of the validity of the measure, Folkman and Moskowitz (2004).
3.3.5 Coping effectiveness

The contextual approach to coping that guides much of coping research states explicitly that coping processes are not inherently good or bad (Lazarus and Folkman, 1984b). Instead, the adaptive qualities of coping processes need to be evaluated in the specific stressful context in which they occur. A given coping process may be effective in one situation but not in another, depending, for example, on the extent to which the situation is controllable. Further, the context is dynamic, so that what might be considered effective coping at the outset of a stressful situation may be deemed ineffective later on. Thus, in preparing for an examination, it is adaptive to engage in problem-focused coping prior to the exam and in distancing while waiting for the results (Folkman and Lazarus, 1985). Conversely, when dealing with a major loss, such as the death of a spouse, it may be adaptive initially to engage in some palliative coping to deal with the loss and then later, after emotional equilibrium is returning, to engage in more instrumental coping to deal with future plans (Stroebe and Schut, 2001). The evaluation of coping in a contextual model requires a two-pronged approach. First, appropriate outcomes must be selected. Second, attention must be given to the quality of the fit between coping and the demands of the situation.

3.3.6 Use of Ways Of Coping Questionnaire

Aschbacher, et. al. (2005) used the 66 item revised Ways of Coping Questionnaire (Folkman and Lazarus, 1988b) to assess coping. The study evaluated whether coping processes affect haemostatic reactivity to acute psychological stress and whether these effects differ between caregivers of spouses with Alzheimer's disease (n=60) and non caregivers controls (n=33). Stress was induced by making participants deliver a speech on an assigned topic. Blood was drawn on three occasions to measure levels of the proco-agulant molecule D-dimer. They report no relationship
between avoidant coping and d-dimer, and greater use of problem focused coping was weakly associated with a decreased levels of D-dimer, \( (F(1,88) = 4.04, p = 0.048, \eta^2 = 0.04) \). This study is important in that it reports a direct influence of coping, in this case problem focused coping, on health. Those utilising problem focused coping experienced lower levels of stress, as measured by d-dimer.

Additionally, Chung, et. al., (2005) used the measure and General Health Questionnaire 28 in a study of community residents exposed to an aircraft or train crash (n= 148) with a control group (n = 90) who were not exposed to the crashes and lived in another city. The study was designed to develop a model to describe the relationship between post traumatic stress, general health, personality, death anxiety and coping strategies. The study used the Eysenck Personality Questionnaire (PEN), the Death Anxiety Scale and the Impact of Event Scale to measure personality, death anxiety and post traumatic stress. Table 3.2 reports the results for the variables under consideration in this thesis, coping, health and personality (Chung, et. al, 2005).

Table 3.2 Results for correlations (n=238) between personality, coping and health (Chung, et. al, 2005). All correlations reported significant at 0.01 or better.

<table>
<thead>
<tr>
<th></th>
<th>GHQA</th>
<th>GHQB</th>
<th>GHQC</th>
<th>GHQD</th>
<th>Cope - E</th>
<th>Cope –P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cope -E</td>
<td>0.508</td>
<td>0.587</td>
<td>0.369</td>
<td>0.457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cope -P</td>
<td>0.49</td>
<td>0.536</td>
<td>0.27</td>
<td>0.369</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrv</td>
<td>0.115</td>
<td>0.065</td>
<td>-0.178</td>
<td>-0.141</td>
<td>0.074</td>
<td>0.008</td>
</tr>
<tr>
<td>Neur</td>
<td>0.31</td>
<td>0.387</td>
<td>0.312</td>
<td>0.428</td>
<td>0.242</td>
<td>0.142</td>
</tr>
</tbody>
</table>

GHQA = Somatic problems; GHQB = Anxiety/Insomnia; GHQC = Social Dysfunction; GHQD = Depression; Cope – E = emotion focused coping; Cope – P = problem focused coping; Extrv = Extraversion; Neur = Neuroticism.
Psychoticism was not included in the final model as it did not predict any of the GHQ factors. In the model, direct links were added from extraversion to GHQC (social dysfunction) and GHQD (depression) and from neuroticism to GHQD (depression).

Chung, et al. grouped coping into problem and emotion-focused coping; therefore, no detail is available as to the influence of particular coping factors. They do not report sub-scale results for any of the measures used. The results reported show a direct link between neuroticism and a general health problem of depression and between extraversion and the general health problems of social dysfunction and depression.

The study also found a link between the use of emotion-focused and problem-focused coping and general health problems.

This is an important study with encouraging results as they show a link between coping and health, although the stressors in this study are different to becoming homeless.
3.4 Personality

3.4.1 Introduction

Another factor likely to influence the decision-making, coping and health outcomes of homeless people is personality. Semmer (2006, p73.), states that “There can be no doubt that personality plays an important role in the experience of stress and in the way people deal with stress”. The contribution of personality to stress by way of influencing cognitive appraisal and coping strategies is recognised as an important area for research (Vollrath, 2006).

A contemporary definition for personality is offered by Carver and Scheier (2000, p.5): “Personality is a dynamic organisation, inside the person, of psychophysical systems that create a person’s characteristic patterns of behaviour, thoughts, and feelings.” They argue that the term personality “conveys a sense of consistency, internal causality, and personal distinctiveness” (p.5).

3.4.2 Defining personality

Theories of personality

The trait approach to defining personality focuses on the differences between individuals on specific dimensions, (Eysenck, 1967, 1970; Costa and McCrae, 1992). The combination and interaction of various trait dimensions make personality unique to each individual. Trait theories view personality as the result of internal characteristics that are genetically based. Trait theories are measured by self-report questionnaires.

Further developments led to the identification of a five factor solution called the Big-Five personality dimensions (Goldberg,1981). The Big-Five framework has
considerable support and has become the most widely used and extensively researched model of personality (Gosling, Rentfrow and Swann, 2003). According to the Big-Five, there are five replicable, broad dimensions of personality: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience. Table 3.3 provides examples of some of the elements which define the Big Five factors.

Table 3.3 Definition of Big Five Factors

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>energetic, positive emotions, assertive, the tendency to seek stimulation and the company of others.</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others.</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>tendency to show self-discipline, act dutifully, aim for achievement; characterised by planned rather than spontaneous behaviour.</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>tendency to experience negative emotions or feelings, e.g. anxiety or anger.</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>appreciation for art, emotion, adventure, unusual ideas, imagination, and curiosity</td>
</tr>
</tbody>
</table>

The five factor model has been criticised (Block 1995; Eysenck, 1997; McAdams, 1992; and Pervin, 1994). It is argued that the Big Five does not explain all of human personality. Golberg (1993) agrees with this and counters that it was never intended
as a comprehensive personality theory, rather it was developed to account for the structural relations among personality traits. The methodology used to identify the dimensional structure of personality traits, factor analysis, is challenged for not having a universally-recognized basis for choosing among solutions with different numbers of factors. Another criticism is that the Big Five is not based on theory but is an investigation of descriptors that tend to cluster together under factor analysis. The Big-Five framework describes personality, it does not explain it. In this thesis, the focus is on the influence of personality on health outcomes for homeless people and, in this context, a description of personality traits is sufficient.

3.4.3 Measuring the Big-Five

Big five measures

There are a number of measures that reliably tap the dimensions of interest (John, et. al. 1991; Costa and MacRae, 1992). However, for reasons of experimental efficiency I selected the Ten Item Personality Inventory (TIPI): (Gosling et al. 2003). This is an extremely short, 10-item measure of the Big Five factors. It is very easy to administer and quick to complete and provides good psychometric properties, Convergent validity ranges from .65 to .87 and test-retest reliability ranges from .62 to .77.

3.4.4 The contribution of personality to the prediction of health outcomes.

McManus et al. (2004), used a five factor personality model to measure the effects of stress on health using the GHQ 12 (Goldberg 1972) as part of a large prospective study of doctors. The study reported on the extent to which stress, approaches to work, workplace climate, burnout and satisfaction with a career in medicine are predicted by measures of personality and learning style. A questionnaire was sent in 1990 to all EEC applicants to five UK medical schools participating in the study,
with a 93% response rate. Students who were accepted to the medical schools in 1991-1993 were followed up in their final year (1995-1998), with a response rate of 56% and at the end of their year as Pre Registration House Officers, when the response rate was 58%. In 2002 a tracing exercise was carried out to identify doctors on the medical register who had been part of the original survey. The response rate for the 2002 questionnaire was 63.3% (n=1668). The results for effects of stress on health as measured by the GHQ12 and personality, measured by an abbreviated questionnaire assessing the 'Big Five' personality dimensions are reported in table 3.5. Mcmanus, et. al. (2004), report that Doctors who have most effect of stress on their health have higher levels of neuroticism, both currently and previously. In this study the sample size was very large, so it is important to indicate the size of the effects. The largest effect of stress on health was 21.25%. Conscientiousness and Extraversion are also negatively linked to effects of stress. Figure 3.2 shows the relationship between personality and health taken from the path diagram reported by McManus, et.al. (2004).
Table 3.4 Pearson correlation (Significance; N) of effects of stress and personality, in the Pre Registration House Officer (PRHO) year and in 2002.

<table>
<thead>
<tr>
<th>Personality Trait</th>
<th>Time of Measurement</th>
<th>Effects of Stress on health (GHQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>PRHO 2002</td>
<td>0.192 (P &lt; .001; N = 972)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.461 (P &lt; .001; N = 1610)</td>
</tr>
<tr>
<td>Extraversion</td>
<td>PRHO 2002</td>
<td>-0.111 (P = .001; N = 970)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.243 (P &lt; .001; N = 1614)</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>PRHO 2002</td>
<td>0.012 (P = .721; N = 956)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.046 (P = .066; N = 1611)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>PRHO 2002</td>
<td>-0.028 (P = .376; N = 970)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.080 (P = .001; N = 1615)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>PRHO 2002</td>
<td>-0.045 (P = .165; N = 971)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.196 (P &lt; .001; N = 1610)</td>
</tr>
</tbody>
</table>

Correlations significant at p < 0.05 are in bold, and those with an absolute value of greater than 0.2 are underlined.

Figure 3.2: Path diagram showing relationship among the measures of personality and stress.

Strength of effect is shown alongside each line as a path (beta) coefficient.
Table 3.5 Indicative review of research measuring personality and health.

<table>
<thead>
<tr>
<th>Study</th>
<th>Content</th>
<th>N</th>
<th>Personality Variables</th>
<th>Health Variables</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chung, et. al. (2005)</td>
<td>Community residents exposed to aircraft or train crash</td>
<td>238</td>
<td>Eysenck Personality Questionnaire (Eysenck, 1967)</td>
<td>General Health Questionnaire 28 (Goldberg and Hillier, 1979)</td>
<td>Correlation reported between Neuroticism and health (0.35)</td>
</tr>
<tr>
<td>Löckenhoff, Sutin, Ferrucci and Costa Jr, (2008)</td>
<td>Association between personality and subjective mental and physical health in two samples of older adults Baltimore Longitudinal Study of Aging (BLSA) and Medicare Primary and Consumer Directed Care Demonstration (Medicare PCC)</td>
<td>BLSA 393 Medicare PCC 648</td>
<td>NEO PI-R (Costa and McCrae, 1992)</td>
<td>SF 36 (Stewart and Ware, 1992)</td>
<td>Regression results, after controlling for demographic variables, depression, and health conditions; Subjective mental health - negatively associated with N in both samples ( -0.274 MPCC, -0.304 BLSA), positively associated with C in both samples ( 0.070 MPCC, 0.136 BLSA); E positive for MPCC (0.098) and negative for BLSA (-0.075 Subjective physical health - negatively associated with N (-0.075) and positively associated with C (.179) in BLSA sample. No significant associations found in Medicare PCC sample.</td>
</tr>
<tr>
<td>Bunevicius, Katkute, and Bunevicius, (2008)</td>
<td>Study of medical students Aim to assess the relationship between anxiety and depression symptoms and Big-Five personality factors.</td>
<td>338</td>
<td>Ten Item Personality Inventory (TIPI) (Gosling, et. al, 2003)</td>
<td>Hospital Anxiety and Depression Scale (HADS) (Zigmond &amp; Snaith, 1983)</td>
<td>Anxiety and Depression negatively correlated with TIPI Emotional Stability scale, r =-0.39, p&lt;0.01 for anxiety and r =-0.2, p&lt;0.01 for depression.</td>
</tr>
<tr>
<td>Williams, O_Brien and Colder, (2004)</td>
<td>Study of undergraduates</td>
<td>135</td>
<td>NEO PI-R (Costa and McCrae, 1992) (Neuroticism and Extraversion scales)</td>
<td>Global Health Rating (Lorig et al., 1996)</td>
<td>Global Health correlated positively with neuroticism (0.40) and negatively with Extraversion (-0.26).</td>
</tr>
</tbody>
</table>
3.5 Locus of control

3.5.1 Introduction

In the previous sections of this chapter we have considered the way in which coping styles, and personality may influence the health outcomes for homeless. In the previous sections it was established that stress and therefore health outcomes is influenced by an individuals appraisal of the situation. In turn, this is followed by an assessment of resources available to deal with it. Locus of control (Rotter 1966, 1975) is example of an attributional style which may influence health. Here, Locus of control (Rotter 1966, 1975) is defined as an individual’s generalised expectancies regarding the forces that determine rewards and punishments. Individuals with an internal locus of control view events as resulting from their own actions. Persons with an external locus of control view events as being under the control of external factors such as luck. For example, a person with an internal locus of control will attribute the failure to meet a desired goal to poor personal preparation, whereas, one with an external locus of control will attribute failure to circumstances beyond the individual’s control. The way individuals interpret such events has a profound affect on their psychological well-being. If people feel they have no control over future outcomes, they are less likely to seek solutions to their problems. If a person believes that what happens to them is a matter of chance and they have no influence on this, the possibility of them taking action to try to solve the problems they face is remote. In such circumstances, it is possible that this lack of action could have consequences such as becoming homeless, inadequate personal care, poor attention to health matters etc.
3.5.2 Measuring locus of control

Multidimensional Health Locus of Control Scale (MHCL), (Wallston, Wallston, and DeVellis, 1978).

Since its introduction, the locus of control construct has undergone considerable elaboration and several context-specific instruments have been developed. Health researchers in particular have embraced locus of control as a concept for explaining health behaviour. Among the most widely used health-specific measures is the Multidimensional Health Locus of Control Scale (Wallston, Wallston, and DeVellis, 1978). This instrument retains the three dimensions of internality, chance and powerful others, as advanced by Levenson (1973), but concerns outcomes that are specifically related to health and illness, such as staying well or becoming ill. Using this model, health may be attributed to three possible outcomes - internal factors, such as self-determination of a healthy lifestyle, powerful others, such as one's doctor, or luck. The MHLC consists of three separate scales, Internal Health Locus of Control, Powerful Others Locus of Control and Chance Locus of Control. Table 3.6 gives example questions from each scale.

Table 3.6 Example Questions from MHCL Scales.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Example Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Health</td>
<td>‘I can pretty much stay healthy by taking good care of myself’</td>
</tr>
<tr>
<td>Powerful others</td>
<td>‘following doctors orders to the letter is the best way for me to stay healthy’</td>
</tr>
<tr>
<td>Chance</td>
<td>‘When I become ill, it’s a matter of fate’</td>
</tr>
</tbody>
</table>
Steptoe and Wardle (2001) reported inconsistent and small associations found between MHLC scores and health behaviour. They administered Form B of the MHLC along with a measure of 10 health behaviours to over 7000 university students in 18 European countries. When analyzing their data using partial correlations (controlling for age, sex and country), they found that IHLC scores were positively associated with four of the behaviours, CHLC scores were negatively associated with six of the behaviours and PHLC scores were positively associated with three and negatively associated with two of the health behaviours. The correlations, although statistically significant, were small (less than 0.125), typically accounting for no more than one percent of shared variance between health locus of control beliefs and health behaviours.

In relation to health outcomes, those with an internal locus should have an advantage because they believe they are in control of their own health. They should be more sensitive to health messages and seek more knowledge on health matters and should be more proactive in attempting to improve their health.

Several studies have used health-related locus of control scales in specific domains,

- smoking cessation (Georgio and Bradley, 1992)
- obesity (Saltzer1982, and Stotland and Zuroff 1990)
- diabetes (Ferraro, Price, Desmond and Roberts, 1987)
- tablet-treated diabetes (Bradley, Lewis, Jennings and Ward, 1990)
- hypertension (Stanton, 1987)
- arthritis (Nicassio et al., 1985),
• cancer (Pruyn, van der Borne de Reuver, de Boer, Bosman,ter Pelkwijk and de Jong, 1988)
• mental health (Wood and Letak, 1982 and Whitman, Desmond and Price, 1987)
• heart and lung disease (Allison, 1987).

Furnham and Steele (1993) provide a detailed survey of locus of control measures. For this thesis, specific domain measures of locus of control are not considered as the focus is on the potential influence on health outcomes associated with homelessness and a more generalised measure is needed. The more general health locus of control measures such as the MLHC, with their focus on health behaviours will not be considered further as their influence relates to predicting health behaviour, and not a direct influence on health. Locus of control as used in this thesis is a construct that may influence the stress response to homelessness by acting on the transaction and thereby influencing appraisal. The measure required is a general one, in essence whether an individual’s external / internal orientation influences health directly. It is about the individual’s general attribution of the source of an event, rather than their view of health behaviour.

3.5.3 Internal-External Scale (Rotter, 1966)

Rotter (1966) developed the Internal-External scale to measure locus of control and this scale is still current today. Historically, mean values for the scale range from 5.94 and 9.53, with standard deviation values of between 3.36 and 4.10 (Rotter, 1966)

Lin, Li and Lin (2007) used a modified Rotter’s Internal–External Control Scale in a cross sectional study of the relationship between job satisfaction and personal traits
in 317 health volunteers. The results showed that there was a negative correlation between locus of control orientation as a personal trait and overall job satisfaction ($r = -0.201, p < 0.01$).

Caughey (1996) used the Internal-External scale in a comparison study of the effect of job stress of fieldworkers ($n=23$) and administrative workers ($n=13$) in a social services district office. Locus of Control was considered as a potential influence on health. A standard multiple regression was carried out between the General Health Questionnaire and a number of variables including locus of control. However the study found that locus of control did not predict GHQ28 scores. The only variable to predict GHQ 28 was job demand, (beta weight .42, $p<0.05$). This is not surprising as job demand is the likely stressor in this study. In part the poor findings might be attributed to the low sample size, therefore it is still relevant to measure locus of control in this study.

Rotter (1975) expressed concerns with researchers’ interpretations of the locus of control concept. First, he has warned that locus of control is not a typology, it is not an either/or proposition, it is a continuum. Second, locus of control is a generalised expectancy and it will predict people's behaviour across situations. There may however be some specific situations where people, for example, who are generally external behave like internals. That is because their learning history has shown them that they have control over the reinforcement they receive in certain situations, although overall they perceive little control over what happens to them. This is consistent with the concept of personality as the interaction of the individual and the environment. ‘Conceptualized as a generalized expectancy, locus of control is an apt
descriptor of individual differences in perceived behaviour-outcome contingencies’.
(Leone and Burns, 2000, p.64.)

3.6 Proposed model

Stress is seen as a relationship between the person and the environment, which is perceived as threatening and as taxing or exceeding their resources and if homelessness is considered as a stressor then the process of how an individual copes with stress is important. Coping is the management of the demands placed on the individual as a result of a stressful encounter. Coping is seen as serving one of two functions: problem-focused which is concerned with more practical approaches to managing a problem by addressing the problem causing distress, and emotion-focused which is concerned with regulating emotional reactions by controlling or ignoring them. This concept of individuals interacting with the environment is also key to the categorisation of homelessness as a pathway – one of many interactions in relation to housing which involves both structural and individual elements.

Another factor which may account for the difference in reaction to the stress of homelessness is personality. The relationship between personality and health has been widely researched and there is strong evidence that personality factors have an influence on stress and perceived health outcomes. The model preferred in this thesis is a trait model, considering individual personality as a product of the combination of various traits which we all possess.

Locus of control, as used in this thesis, is a construct that may influence an individuals response to homelessness by acting on the transaction between the
individual and the environment, thereby influencing appraisal. A person’s belief in respect of whether or not they perceive that they can, by their actions, influence the outcome of a situation may be important in relation to their reaction to the health outcomes associated with homelessness. Locus of control, as used here, is about where the source of the event is located and does not infer any assessment of one’s ability or personal resources such as Self-efficacy theory which focuses on individual perceptions about the capacity to handle challenges (Bandura, 1994)

From this, the following research questions have been developed;

1. *What influence do coping styles have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?*

   From section 3.2 the expectation is that individual coping styles will have an influence on stress and health outcomes. Archbacher, et. al. (2005) report that those participants employing greater use of problem focused coping styles experienced lower levels of stress.

2. *What influence does personality have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?*

   From section 3.3 the expectation is that neuroticism (emotional stability) will have a negative influence on health outcomes (Lockenhoff, et. al. 2008, Bunevicius, et. al., 2008), and that conscientiousness and extraversion will have a positive influence on health outcomes (Lockenhoff, et. al. 2008).
3. **What influence does locus of control have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?**

From section 3.4 the expectation is that there is a weak relationship between Locus of Control and health. Caughey (1996) reported a 0.15 correlation between Locus of Control and health which is not statistically significant. Although the expected relationship is weak, it will be tested; however the influence of locus of control on the other independent variables will also be measured and reported so that indirect influence can be identified.

4. **What implications are there for intervention strategies?**

The purpose of this thesis, in identifying homelessness as a stressor which affects the overall population of homeless people and in identifying the factors which may influence an individual’s reaction to this, is to consider possible interventions which may improve health outcomes. The results obtained in this thesis will be used to suggest possible interventions which may assist people in dealing with the health outcomes of becoming homeless.

Figure 3.3 shows the model of relationship between variables to be tested in this thesis.
Figure 3.3
MODEL OF RELATIONSHIP AMONG VARIABLES

GENERAL HEALTH FUNCTIONING
- GHQ Score
- Somatic Symptoms
- Anxiety and Insomnia
- Social Dysfunction

COPING STRATEGIES
- Problem-focused
  - Confrontive coping
  - Planful problem solving
- Emotion-focused
  - Distancing
  - Self-controlling
  - Seeking social support
  - Accepting responsibility
  - Escape-avoidance
  - Positive reappraisal

LOCUS OF CONTROL
- Internal
- External

PERSONALITY
- Extraversion
- Agreeableness
- Conscientiousness
- Emotional Stability
- Openness to Experience

AGE
- 16-17
- 18-24
- 25 or over

REASON FOR HOMELESSNESS
- Parents/Friends/Relatives unable to accommodate
- Dispute with partner (violent)
- Dispute with partner (non-violent)
- Court Order
- Fire Flood or other Emergency
- Other

HOUSEHOLD COMPOSITION
- Single Person
- Single Parent
- Couple (with children)
- Couple (no children)
- Household member pregnant

SEX
- Male
- Female
Chapter 4  Study design and methodology

4.1 Introduction
This study is designed to answer the following research questions posed in Chapter 3;
‘What influence does personality on perceived health outcomes for homeless people? What influence does locus of control have on perceived health outcomes for homeless people? What influence does coping style have on perceived health outcomes for homeless people?’

4.1.1 Participants
Participants were homeless people who had applied for assistance to a local authority. All staff concerned in recruitment of participants for the study were briefed in the aims of the study and were able to answer questions. Written detail was provided for each person. Participation was completely voluntary and no attempt at persuasion was made. The inclusion criteria was that they had made application for assistance as detailed above and only those who were unable to give informed consent or who declined to participate were excluded.

4.1.2 Administration
Staff at the local authority were briefed to answer questions and the interviewer was available by phone to provide additional assistance should this be required. The participants were asked to volunteer take part in the questionnaire and interview. They were advised that their participation was voluntary and that they could decline to take part or withdraw at any time. Each participant was advised that the research was entirely separate from their application for assistance to the local authority and that there was no advantage or disadvantage in agreeing or declining to participate.
The instructions preceding the general health functioning section of the questionnaire specified that the research interest was the participant’s health since becoming homeless which focussed their response. The GHQ28 response scales were amended to reflect this by adding ‘since becoming homeless’ to the questions.

4.1.3 Informed consent
Prior to the interview commencing, each prospective participant was given an information sheet in ‘question and answer’ style, which detailed the nature of the research, why they had been asked to participate, what they would have to do and how the information would be handled. The information sheet also gave sources of advice and support in the area such as, local authority services (Housing and Social Work), NHS, Women’s Aid, Citizens Advice, Shelter etc, together with appropriate contact numbers. (A copy of the information sheet is provided at appendix 2.)

Written consent was obtained from each person agreeing to participate in the study prior to the commencement of the questionnaire / interview session and only after they had been given a further opportunity to ask any questions they might have. The interviewer was available to discuss this with them and answer any queries at this stage.

4.1.4 Location
All interviews took place in the participants homes, at a ‘neutral venue’ (i.e., cafe or community hall) which was easily accessible to them.

4.1.5 Data handling
No data pertaining to an individual person was stored in such a way that they were identifiable. The questionnaire required only a reference number which did not relate
to a name. After the interview was completed contact details were destroyed leaving all
data totally anonymous and all data handling complied fully with the requirements of

4.2 Design and Method

4.2.1 Early design
The original data collection method utilised a self-report questionnaire. Participants
were given the measure with a pre-paid return envelope. They were instructed to return
the measures within two weeks. In addition, consent forms included a section asking
participants to agree to a follow-up interview, which was to be arranged at a later date.
Unfortunately this method was unsuccessful and there were only 5 returns despite 200
questionnaires being distributed.

4.2.2 Revision to questionnaire and method
In order to collect data and taking into account the nature of the sample, the method
was revised to allow the questionnaire and interview to be conducted in two parts
within a single session. To increase the rate of participation, the questionnaire was
administered in a face-to-face interview in which the interviewer asked the questions
and completed the questionnaire. This process was adopted to minimise questionnaire
fatigue on the part of the participants and had the effect of ensuring that there is no
missing data (cf, Christian and Abrams, 2003). Any question where a participant
subsequently changed their answer was amended and the change initialled by both
participant and interviewer. This method also addressed any literacy issues which may
have arisen.

A semi-structured interview was conducted immediately following completion of the
questionnaire. The interview used questions designed to explore the individual’s
experience of homelessness, such as how it made them feel, what changed about them, how did it affect them and how did they deal with their situation. All interviews were taped with only one exception (the subject was uncomfortable with this method). In this case the interviewer took comprehensive notes with the subjects consent. Administration of measures typically took approximately one hour. All participants were asked for feedback after the session and there were no negative comments.

4.2.3 Recruitment

Recruitment of subjects began in September 2006, with local authority staff within the homelessness section recruiting subjects, by inviting applicants to participate in the study and making appointments on behalf of the interviewer. Initially, appointments were made up to one month in advance. However, problems were encountered, such as people failing to come to appointments or not being at home when the interviewer called, and although 85 interviews were arranged during the period September 2006 to March 2007, only 10 were conducted. A new recruitment procedure was developed, which gave a short period of notice to the participant (i.e., 24 hours was given which allowed participants sufficient time to change their mind or seek further information.) This resolved the problem and the subsequent ‘take–up’ rate was improved.

There were six occasions when a referral was made to a caseworker. In each instance the participant sought information relating to the progress of their application which the interviewer did not have. A formal risk assessment was completed by the interviewer and was included as part of the ethical approval submission. (All ethical approval documents reported at appendix 1)

An analysis of the demographics of the participants, comparing this sample with Stirling Council and Scottish Government Statistics is given in section 5.3.
4.3 Questionnaire

4.3.1 Outline of questionnaire design

The questionnaire contained five parts measuring health outcomes, personality, locus of control and coping styles (See Chapter 3). Additionally, sociodemographic data such as age, sex, reason for homelessness and family composition were also collected. (The questionnaire can be found at Appendix 4.)

4.3.2 Personality

Personality was measured using the ten-item personality inventory (Gosling, et.al, 2003). The ten-item personality inventory (TIPI) measures dimensions central to the ‘Big Five’ and has good efficacy (Muck et. al., 2007).

Gosling et al. (2003) report on the correlations between the 5 TIPI scales and the 44 item Big Five Inventory, as measures of the 5 personality dimensions, based on a sample of 1813 undergraduate students. They also report the test – retest reliability of the scales of the TIPI based on a subset 180 participants.

The TIPI, using 2 item scales, taps extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. The TIPI uses two related items (one of which is reversed) for each of the five sub scales to give a total of 10 items. Responses are indicated on 7 point scales, and related item scores are averaged to give a score between 1 and 7 for each of the five sub-scales. Table 4.1 gives the TIPI scales and associated items.
### Table 4.1  TIPI scales and items

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extraversion</strong></td>
<td>Extraverted, enthusiastic.</td>
</tr>
<tr>
<td></td>
<td>Reserved, quiet.</td>
</tr>
<tr>
<td><strong>Agreeableness</strong></td>
<td>Critical, quarrelsome. (r)</td>
</tr>
<tr>
<td></td>
<td>Sympathetic, warm.</td>
</tr>
<tr>
<td><strong>Conscientiousness</strong></td>
<td>Dependable, self-disciplined.</td>
</tr>
<tr>
<td></td>
<td>Disorganised, careless. (r)</td>
</tr>
<tr>
<td><strong>Emotional Stability</strong></td>
<td>Anxious, easily upset.</td>
</tr>
<tr>
<td></td>
<td>Calm, emotionally stable.(r)</td>
</tr>
<tr>
<td><strong>Openness to Experience</strong></td>
<td>Open to new experiences, complex.</td>
</tr>
<tr>
<td></td>
<td>Conventional, uncreative.(r)</td>
</tr>
</tbody>
</table>

### 4.3.3 Coping

Coping styles were measured using the Ways of Coping Questionnaire (Folkman and Lazarus 1988b). The measure assesses the thoughts and actions an individual has used to cope with a specific stressful encounter. Participants were asked to consider the most stressful experience they had encountered as a result of becoming homeless and responded to each of the 66 items using a 4-point Likert scale which indicates the frequency of use of each thought or action – never (0), sometimes (1), often (2) or always (3).

The questionnaire identifies eight coping scales confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape – avoidance,
Table 4.2 Ways of Coping Questionnaire – scales and items.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Scale Description</th>
<th>Item</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confrontive</td>
<td>Describes aggressive efforts to alter the situation and suggests some degree of hostility and risk taking.</td>
<td>• Stood my ground and fought for what I wanted.</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tried to get the person responsible to change his or her mind.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I expressed anger to the person(s) who caused the problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I let my feelings out somehow.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Took a big chance or did something very risky.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I did something which I didn’t think would work, but at least I was doing something</td>
<td></td>
</tr>
<tr>
<td>Distancing</td>
<td>Describes cognitive efforts to detach oneself and to minimise the significance of the situation.</td>
<td>• Made light of the situation; refused to get too serious about it.</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Went on as if nothing had happened.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Didn’t let it get to me; refused to think too much about it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tried to forget the whole thing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Looked for the silver lining, so to speak; tried to look on the bright side of things.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Went along with fate; sometimes I just have bad luck.</td>
<td></td>
</tr>
<tr>
<td>Self-controlling</td>
<td>Describes efforts to regulate one’s feelings and action.</td>
<td>• I tried to keep my feelings to myself.</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kept others from knowing how bad things were.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tried not to burn my bridges, but leave things open somewhat.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I tried not to act too hastily or follow my first hunch.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I tried to keep my feelings from interfering with other things too much.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I thought about how a person I admire would handle this situation and used that as a model.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I tried to see things from the other person’s point of view.</td>
<td></td>
</tr>
<tr>
<td>Seeking social support</td>
<td>Describes efforts to seek informational support, tangible support and emotional support.</td>
<td>• Talked to someone to find out more about the situation.</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Talked to someone who could do something concrete about the problem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I asked a relative or friend I respected for advice.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Talked to someone about how I was feeling.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Accepted sympathy and understanding from someone.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I got professional help.</td>
<td></td>
</tr>
</tbody>
</table>
### Accepting responsibility

Acknowledges one’s own role in the problem with a concomitant theme of trying to put things right.

- Criticized or lectured myself.
- Realized I brought the problem on myself.
- I made a promise to myself that things would be different next time.
- I apologized or did something to make up.

### Escape – avoidance

Describes wishful thinking and behavioural efforts to escape or avoid the problem. Items on this scale contrast with those on the Distancing scale, which suggests detachment.

- Wished that the situation would go away or somehow be over with.
- Hoped a miracle would happen.
- Had fantasies or wishes about how things might turn out.
- Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.
- Avoided being with people in general.
- Refused to believe that it had happened.
- Took it out on other people.
- Slept more than usual.

### Planful Problem Solving

Describes deliberate problem-focussed efforts to alter the situation, coupled with an analytic approach to solving the problem.

- I knew what had to be done, so I doubled my efforts to make things work.
- I made a plan of action and followed it.
- Just concentrated on what I had to do next – the next step.
- Changed something so things would turn out all right.
- Drew on my past experiences; I was in a similar situation before.
- Came up with a couple of different solutions to the problem.

### Positive reappraisal

Describes efforts to create positive meaning by focusing on personal growth. It also has a religious dimension.

- Changed or grew as a person in a good way.
- I came out of the experience better than when I went in.
- Found new faith.
- Rediscovered what is important in life.
- I prayed.
- I changed something about myself.
- I was inspired to do something creative.

### 4.3.4 Locus of control

Locus of control was measured using Rotter’s 29 item Internal External scale (1966).

Those with an external control see themselves as relatively passive agents and believe that the events in their lives are dependent on luck, chance and powerful persons or institutions. They believe that the probability of being able to control their lives by
their own actions and effort is low. Conversely, those with an internal locus of control believe that success or failure is due to their own efforts. They see themselves as active agents and trust in their capacity to influence their environment. They assume that they can control the events in their lives by effort and skill.

Within this scale, 23 items were designed to tap locus of control expectancies, with 6 filler items to obscure the purpose of the test. Each item consists of a pair of statements with participants choosing between an internal and an external alternative. Items were scored on a 0 – 23 scale with a low score indicating an internal control while a high score indicates external control.

Table 4.3 Locus of Control scale (* = external alternative, + = filler question)

1. A. Children get into trouble because their parents punish them too much.
   B. The trouble with most children nowadays is that their parents are too easy with them.

2. A.* Many of the unhappy things in people’s lives are partly due to bad luck.
   B. People’s misfortunes result from the mistakes they make.

3. A. One of the major reasons why we have wars is because people don’t take enough interest in politics.
   B.* There will always be wars, no matter how hard people try to prevent them.

4. A. In the long run people get the respect they deserve in this world
   B.* Unfortunately, an individual’s worth often passes unrecognised no matter how hard he tries.

5. A. The idea that teachers are unfair to students is nonsense.
   B.* Most students don’t realise the extent to which their grades are influenced by accidental happenings.

6. A.* Without the right breaks one cannot be an effective leader.
   B. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A.* No matter how hard you try some people just don’t like you.
   B. People who can’t get others to like them don’t understand how to get along with others.

8. A. Heredity plays the major role in determining one’s personality.
   B. It is one’s experiences in life which determine what they’re like.

9. A.* I have often found that what is going to happen will happen.
   B. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. A. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    B.* Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. A. Becoming a success is a matter of hard work, luck has nothing to do with it.
    B.* Getting a good job depends mainly on being in the right place at the right time.

12. A. The average citizen can have an influence in government decisions.
    B.* The world is run by the few people in power, and there is not much the little guy can do about it.

13. A. When I make plans, I am almost certain that I can make them work.
    B.* It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. A. There are certain people who are just no good.
    B. There is some good in everybody.

15. A. In my case getting what I want has little or nothing to do with luck.
    B.* Many times we might just as well decide what to do by flipping a coin.

16. A.* Who gets to be the boss often depends on who was lucky enough to be in the right place first.
    B. Getting people to do the right thing depends on ability, luck has little or nothing to do with it.

17. A.* As far as world affairs are concerned, most of us are the victims of
forces we can neither understand, nor control.

B. By taking an active part in political and social affairs the people can control world events.

18.  A.* Most people don’t realise the extent to which their lives are controlled by accidental happenings.

B. There is really no such thing as “luck”.

19.  A. One should always be willing to admit mistakes.

B. It is usually best to cover up one’s mistakes.

20.  A.* It is hard to know whether or not a person really likes you.

B. How many friends you have depends on how nice a person you are.

21.  A.* In the long run the bad things that happen to us are balanced by the good ones.

B. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22.  A. With enough effort we can wipe out political corruption.

B.* It is difficult for people to have much control over the things politicians do in office.

23.  A.* Sometimes I can’t understand how teachers arrive at the grades they give.

B. There is a direct connection between how I study and the grades I get.

24.  A. A good leader expects people to decide for themselves what they should do.

B. A good leader makes it clear to everybody what their jobs are.

25.  A* Many times I feel that I have little influence over the things that happen to me.

B. It is impossible for me to believe that chance or luck plays an important role in my life.

26.  A. People are lonely because they don’t try to be friendly.

B.* There’s not much use in trying too hard to please people, if they like you, they like you.

27.  A. There is too much emphasis on athletics in high school.
B. Team sports are an excellent way to build character.

28. A. What happens to me is my own doing.
   B.* Sometimes I feel that I don’t have enough control over the direction my life is taking.

29. A.* Most of the time I can’t understand why politicians behave the way they do.
   B. In the long run the people are responsible for bad government on a national as well as on a local level.

Historically, means for the Internal External scale range from 5.94 and 9.56, with standard deviation values of between 3.36 and 4.10. (Rotter, 1966; Lefcourt, 1966; Hersch & Sceibe, 1967). In contrast, more contemporary findings suggest a mean of 12.67 and standard deviation of 4.09 (Ashkanasy, 1985).

4.3.5 Main Study Measure

Perceived health outcomes were measured using the General Health Questionnaire (Goldberg and Hillier, 1979), see section 3.2.6 in Chapter 3 for measuring health review. The GHQ is designed for use in overall homeless population surveys, in primary medical care settings or among general medical outpatients (Goldberg and Williams, 1988). It was initially designed as a first-stage screening instrument for psychiatric illnesses that could then be verified and diagnosed. The questions ask whether the respondent has recently experienced a particular symptom, like abnormal feelings or thoughts, or type of behaviour. This study used the GHQ-28 (Goldberg and Hillier, 1979) which provides four response scales, measuring somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Table 4.4 gives GHQ28 scales and associated items from each scale.

Table 4.4  GHQ 28 scales and items

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Alpha</th>
</tr>
</thead>
</table>

84
<table>
<thead>
<tr>
<th><strong>Somatic symptoms</strong></th>
<th>0.83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Been feeling perfectly well and in good health?</td>
<td></td>
</tr>
<tr>
<td>Been feeling in need of a good tonic?</td>
<td></td>
</tr>
<tr>
<td>Been feeling run down and out of sorts?</td>
<td></td>
</tr>
<tr>
<td>Felt that you are ill?</td>
<td></td>
</tr>
<tr>
<td>Been getting any pains in your head?</td>
<td></td>
</tr>
<tr>
<td>Been getting a feeling of tightness or pressure in your head?</td>
<td></td>
</tr>
<tr>
<td>Been having hot or cold spells?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Anxiety/ insomnia</strong></th>
<th>0.88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost much sleep over worry?</td>
<td></td>
</tr>
<tr>
<td>Had difficulty in staying asleep once you are off?</td>
<td></td>
</tr>
<tr>
<td>Felt constantly under strain?</td>
<td></td>
</tr>
<tr>
<td>Been getting edgy and bad-tempered?</td>
<td></td>
</tr>
<tr>
<td>Been getting scared or panicky for no good reason?</td>
<td></td>
</tr>
<tr>
<td>Found everything getting on top of you?</td>
<td></td>
</tr>
<tr>
<td>Been feeling nervous and strung-up all the time?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Social dysfunction</strong></th>
<th>0.80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Been managing to keep yourself busy and occupied?</td>
<td></td>
</tr>
<tr>
<td>Been taking longer over the things you do?</td>
<td></td>
</tr>
<tr>
<td>Felt on the whole you were doing things well?</td>
<td></td>
</tr>
<tr>
<td>Been satisfied with the way you've carried out your task?</td>
<td></td>
</tr>
<tr>
<td>Felt that you are playing a useful part in things?</td>
<td></td>
</tr>
<tr>
<td>Felt capable of making decisions about things?</td>
<td></td>
</tr>
<tr>
<td>Been able to enjoy your normal day-to-day activities?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Severe depression</strong></th>
<th>0.91</th>
</tr>
</thead>
<tbody>
<tr>
<td>Been thinking of yourself as a worthless person?</td>
<td></td>
</tr>
<tr>
<td>Felt that life is entirely hopeless?</td>
<td></td>
</tr>
<tr>
<td>Felt that life isn't worth living?</td>
<td></td>
</tr>
<tr>
<td>Thought of the possibility that you might make away with yourself?</td>
<td></td>
</tr>
<tr>
<td>Found at times you couldn't do anything because your nerves were too bad?</td>
<td></td>
</tr>
<tr>
<td>Found yourself wishing you were dead and away from it all?</td>
<td></td>
</tr>
<tr>
<td>Found that the idea of taking your own life kept coming into your mind?</td>
<td></td>
</tr>
</tbody>
</table>

The ‘Severe Depression’ scale was not included in this measure as four of the seven items in this scale relate to suicide and it was considered that this may cause unnecessary distress to the participants.

### 4.4 Interview
4.4.1 Outline of interview

A key element of this thesis was the desire to capture the thoughts and feelings of those experiencing homelessness, to gain insight into what being homeless means for them. Denzin & Lincoln (2000) argue that a qualitative research approach, because of its focus on the contextual situation and the interpretive nature of the method, makes the world of the participant both visible and understandable. This view is supported by Miles & Huberman (1994) who highlighted the strengths of the data which can be obtained through qualitative research. Two examples they give are particularly relevant to this thesis. Firstly, the data are well suited to locate meanings or perceptions that people place on events and processes in their lives and secondly, the data are useful as a means of explaining or illuminating quantitative data collected from the same setting.

The use of a qualitative approach in this thesis, in addition to the quantitative data obtained through the questionnaire, is important as it allows us to seek a fuller understanding of what it is to experience homelessness from the perspective of the homeless person.

A semi structured interview was used in an effort to gather more detailed information about the factors which are relevant in determining how a person reacts to homelessness. Such information included factors that individuals perceive may have assisted them to cope better. Additional questions were asked around the areas of support and coping (‘How did the individual feel?’ , ‘How are they now?’ , ‘What do they think would have made things better?’).(See Appendix 8)

4.4.2 Interview procedure
Following questionnaire administration the interview was conducted. With participants being offered a short break if required. Interviews were taped, with the permission of the participant. The interviews varied in duration between 30 – 60 minutes, with most being around 45 minutes. Further details of the interview procedure is given in the Qualitative data results section of the next chapter.
Chapter 5  Results and Discussion

5.1 Introduction

The focus in this thesis is to examine the influence that individual difference factors have on perceived health outcomes, physical, mental and social, for homeless people. The issues surrounding the health effect of becoming homeless were reviewed and the definition and measurement of coping styles, personality and locus of control together with their influence on perceived health outcomes was examined. This chapter reports the results of the analyses of the quantitative and qualitative data collected and discusses the implications of these results for the research questions posed in chapter 3, section 3.5.

5.2 Data analysis strategy: quantitative

Descriptive, correlational and regression analyses were used to examine the relationship between the psychological health (measured by GHQ28) of homeless applicants, their individual characteristics (measured by TIPI and IE scale) and their use of different coping methods (measured by WOCQ).

Three sets of independent variables - personality traits (measured by the TIPI), coping styles (measured by the Ways of Coping scale) and locus of control (measured by IE scale), were considered in relation to the health outcomes, (measured by the GHQ28). To test which coping methods and individual difference factors influence the health outcomes of homelessness three multiple linear regression analysis were performed.
5.3 Participant demographics

The sample (N=96) used in this thesis comprised of people who had made an application for assistance to a local authority due to homelessness. Table 5.1 reports the participant demographics of the sample. The results are discussed in relation to the statistics reported on the operation of the homeless persons legislation by the Scottish Government for the year 2007/2008. (Scottish Executive, 2008).

Table 5.1: Participant Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study Sample N=96</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>16 -17yrs</td>
<td>11</td>
</tr>
<tr>
<td>18-24 yrs</td>
<td>39</td>
</tr>
<tr>
<td>25-59yrs</td>
<td>45</td>
</tr>
<tr>
<td>60yrs or over</td>
<td>1</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
</tr>
<tr>
<td>Family Composition</td>
<td></td>
</tr>
<tr>
<td>Single person</td>
<td>43</td>
</tr>
<tr>
<td>Single parent</td>
<td>29</td>
</tr>
<tr>
<td>Couple no children</td>
<td>8</td>
</tr>
<tr>
<td>Couple with children</td>
<td>10</td>
</tr>
<tr>
<td>Household member pregnant</td>
<td>6</td>
</tr>
<tr>
<td>Reason for Homelessness</td>
<td></td>
</tr>
<tr>
<td>Parents, friends, relatives unable to accommodate</td>
<td>56</td>
</tr>
<tr>
<td>Court order</td>
<td>7</td>
</tr>
<tr>
<td>Dispute with partner (non-violent)</td>
<td>13</td>
</tr>
<tr>
<td>Dispute with partner (violent)</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td>When will participant be homeless</td>
<td></td>
</tr>
<tr>
<td>Tonight</td>
<td>90</td>
</tr>
<tr>
<td>Within one week</td>
<td>2</td>
</tr>
<tr>
<td>Within one month</td>
<td>3</td>
</tr>
<tr>
<td>Within two months</td>
<td>1</td>
</tr>
<tr>
<td>Is this the first application</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>34</td>
</tr>
<tr>
<td>Yes</td>
<td>62</td>
</tr>
</tbody>
</table>
Table 5.2: Comparison between Study Sample, Stirling Council and Scotland

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study Sample</th>
<th>Stirling Council</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20.8</td>
<td>58.7</td>
<td>52.1</td>
</tr>
<tr>
<td>Female</td>
<td>79.2</td>
<td>60.2</td>
<td>67.8</td>
</tr>
<tr>
<td><strong>Family Composition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single person</td>
<td>44.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single parent</td>
<td>30.2</td>
<td>18.7</td>
<td>24.3</td>
</tr>
<tr>
<td>Couple no children</td>
<td>8.3</td>
<td>6.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Couple with children</td>
<td>10.4</td>
<td>7.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Household member pregnant</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reason for Homelessness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents, friends, relatives</td>
<td>58.3</td>
<td>38</td>
<td>24.7</td>
</tr>
<tr>
<td>unable to accommodate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Court order</td>
<td>7.3</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Dispute with partner (non-</td>
<td>13.5</td>
<td>12</td>
<td>16.4</td>
</tr>
<tr>
<td>violent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispute with partner (violent)</td>
<td>14.6</td>
<td>18</td>
<td>10.4</td>
</tr>
<tr>
<td>Other</td>
<td>6.3</td>
<td>9.6</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Note: household member pregnant is included as part of households with children and not reported separately for Stirling and Scotland.

Overall, the differences in sample statistics are within reasonable levels with the thesis sample closer to the Stirling figure than the Scottish. There are however four areas where the difference in sample statistics should be noted:

- The thesis sample comprised almost twice as many females and half as many males as the Stirling and Scottish figures which were roughly similar.
- The thesis sample had a lower number of single people at 45% compared with 60% and 68% for Scotland and Stirling respectively.
- The thesis sample had a higher number of single parents at 30% compared with 24% and 19% for Scotland and Stirling respectively.
- Being asked to leave accommodation, as a reason for homelessness, was higher at 58% in the thesis sample compared with 25% and 38% for Scotland and Stirling respectively.

These figures would suggest that the thesis sample has a high proportion of female single parents who had been asked to leave their last accommodation and had become homeless. This may be because this group are more likely to respond positively when asked to participate in the research. However, the sample still is a cross-section of homeless people from a range of household types and reasons for homelessness and does not represent one particular group to the exclusion of others.

5.4 Descriptive Statistics

A correlation matrix for the key study variables is provided at Table 5.3. I will comment on those which are over 0.3 and are therefore considered moderate or high. Correlations between measures and outcomes will be reported later in this chapter. Means and standard deviations are also provided.

5.4.1 Correlations between variables.

Coping

In problem focused coping styles, confrontive coping and planful problem solving correlate (.349). In emotion focused coping styles, Distancing correlates with Self Controlling (.330) and Escape avoidance (.332). Self controlling correlates with Distancing (.330), Accepts Responsibility (.336), Escape avoidance (-.546), and
Planful Problem Solving (.312). Seek social support correlates with Planful Problem solving (.316). Accept Responsibility correlates with Escape \ avoidance (.336) and Self Controlling (.417). Escape \ Avoidance correlates with Planful Problem Solving (-.422), Accept Responsibility (.417), Distancing (.332) and Self controlling (.546). Positive reappraisal correlates with Planful Problem Solving (.322) and Escape \ Avoidance (-.442). The implications of these intercorrelations are discussed further in sections 5.4.2 and 5.5.1.

Individual Difference Variables.
Extraversion correlates with Agreeableness (-.412), Conscientiousness (-.388) and Open to experience (.478). Agreeableness correlates with extraversion (-.412).
Conscientiousness –correlates with extraversion (-.388) and emotional stability (.356).
Emotional stability correlates with conscientiousness (.356). Open to experience correlates with extraversion (.478).

Coping and individual Difference variables
Confrontive coping correlates with Extraversion (.325), Agreeableness (-.337) and Conscientiousness (-.300). Accept Responsibility correlates with Extraversion (-.438) and Emotional Stability (.308). Planful Problem Solving correlates with Conscientiousness (-.314). Distancing correlates with agreeableness (-.329),

For locus of control, the only significant correlation is with the coping variable positive reappraisal (.329).
Table 5.3 Correlation Matrix – key study variables  (N = 96)

```
|                      | extraversion | agreeableness | conscientiousness | emotional stability | open to experience | Somatic symptoms | anxiety \ insomnia | social dysfunction | confrontive distancing | self controlling seek social support | accept responsibility escape \ avoidance planful problem solving positive reappraisal external locus of control |
|----------------------|--------------|---------------|-------------------|---------------------|--------------------|------------------|-------------------|----------------------|----------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| extraversion         | Pearson Correlation | -0.412*      | 1                 |                     |                    |                  |                   |                      |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| agreeableness        | Pearson Correlation | -0.388*      | 0.253*           | 1                   |                     |                  |                   |                      |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| conscientiousness    | Pearson Correlation | 0.138        | -0.158           | 0.356*              | 1                   |                  |                   |                      |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| emotional stability  | Pearson Correlation | 0.478*       | -0.094           | -0.78               | 0.039              | 1                |                   |                      |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| open to experience   | Pearson Correlation | -0.147       | 0.345*           | 0.134              | -0.456*            | 0.076            | 1                |                      |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| somatic symptoms     | Pearson Correlation | -0.292       | 0.346*           | -0.007             | -0.390*            | 0.049            | 0.867*           | 1                    |                          |                                      |                                    |                                  |                                      |                                      |                                    |
| anxiety \ insomnia  | Pearson Correlation | 0.050        | 0.117            | -0.430*            | -0.139             | -0.060           | 0.594*           | 0.502*               | 1                      |                                      |                                    |                                  |                                      |                                      |                                    |
| social dysfunction   | Pearson Correlation | -0.325       | -0.337*          | -0.300*            | 0.042              | 0.222            | 0.057            | 0.076               | 0.033                  | 1                          |                                    |                                  |                                      |                                      |                                    |
| confrontive distancing | Pearson Correlation | 0.105        | -0.329*          | -0.029             | 0.094              | 0.005            | -0.008           | -0.119              | -0.035                 | 0.235                     | 1                          |                                    |                                  |                                      |                                    |
| self controlling     | Pearson Correlation | -0.031       | 0.003            | -0.192             | -0.140             | 0.014            | 0.322*           | 0.239               | 0.203                  | 0.242                     | 0.330                     | 1                          |                                    |                                  |                                      |                                    |
| seek social support  | Pearson Correlation | 0.078        | 0.187            | 0.040              | 0.122              | -0.240*          | 0.076            | 0.017              | -0.018                | 0.131                     | -0.145                   | 0.085                      | 1                          |                                    |                                      |                                    |
| accept responsibility | Pearson Correlation | -0.438       | -0.220           | -0.031             | -0.308*            | -0.166           | 0.416*           | 0.457*              | 0.294*                 | -0.114                    | 0.186                    | 0.336                     | -0.209                   | 1                          |                                    |                                      |                                    |
| escape \ avoidance   | Pearson Correlation | 0.050        | 0.073            | -0.272*            | -0.145             | -0.119           | 0.379*           | 0.263*              | 0.426*                 | 0.265                    | 0.332                    | 0.546                     | 0.043                    | 0.417                    | 1                          |                                    |                                      |                                    |
| planful problem solving | Pearson Correlation | -0.065       | -0.146           | -0.216*            | 0.161              | -0.235           | -0.237           | -0.035              | 0.188                  | 0.129                    | -0.121                   | -0.190                    | 0.089                    | 0.143                    | 0.270                    | 0.329*                   | 1                          |                                    |                                      |                                    |
| positive reappraisal | Pearson Correlation | -0.079       | 0.033            | -0.214*            | 0.189              | -0.059           | -0.218           | -0.244              | -0.344*                | -0.016                    | -0.051                   | -0.131                    | -0.112                    | -0.106                   | -0.442                    | 0.322                     | 1                          |                                    |                                      |                                    |
| external locus of control | Pearson Correlation | -0.066       | -0.146           | -0.216*            | 0.161              | -0.235           | -0.237           | -0.035              | 0.188                  | 0.129                    | -0.121                   | -0.190                    | 0.089                    | 0.143                    | 0.270                    | 0.329*                   | 1                          |                                    |                                      |                                    |
| ** p 0.01  * p 0.05 |
```
5.4.2 General Health Questionnaire, (GHQ28).

Table 5.4 reports the means, standard deviation and Cronbach’s Alpha for the GHQ28 subscales together with the total scale values.

Table 5.4: Descriptive statistics for GHQ28

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic Symptoms</td>
<td>1.79</td>
<td>.706</td>
<td>.83</td>
</tr>
<tr>
<td>Anxiety / Insomnia</td>
<td>2.06</td>
<td>.744</td>
<td>.87</td>
</tr>
<tr>
<td>Social Dysfunction</td>
<td>1.59</td>
<td>.546</td>
<td>.72</td>
</tr>
<tr>
<td>Total Scale</td>
<td>5.44</td>
<td>1.768</td>
<td>.92</td>
</tr>
</tbody>
</table>

There are 7 Items in each scale

The internal consistency coefficients are good for all scales. Values should be equal to, or exceed .7 (Nunnally, 1978).

The values for the alphas for the global scale corresponds closely to the results reported by Goldberg and Williams (1988), who reported a mean value for Cronbach’s alpha of .93 for the GHQ-60 (single study using English and Chinese versions); .87 for the GHQ-30 (across five studies) and .85 for the GHQ-12, (single study with three groups of participants). However Nagyova et al (2000) report alpha’s for the total scale of the GHQ-28 of between .91 and .94 in five studies conducted in Slovakia, France, Holland, Norway and Sweden. The alphas for the total score in table 5.2 are consistent with this. Unfortunately means, standard deviation and Cronbach’s alpha values for the GHQ-28 subscales were not reported by Nagyova et al (2000) and to the author’s knowledge, psychometric properties of the GHQ 28 have not been published.
5.4.3 Ways of Coping Questionnaire.

There are two methods of scoring: raw, which describes the coping effort for each of the eight types of coping and relative, which describes the proportion of effort represented by each type of coping. The raw scores comprise of the sum of the participants response to the items in a given scale whereas the relative scores describe the contribution of each scale relative to all the scales combined. Using relative scoring controls for the unequal number of items within each scale and may highlight relations among ways of coping that are blurred when raw scoring is used. (Vitaliano, Maiuro, et al. 1987). In this thesis raw scoring was used as the focus was to identify the influence of coping styles on perceived health outcomes. As such, the proportion of effort represented by each scale was not relevant. A scale score was calculated by averaging a participant’s response scores for the items in a scale. This also controls for the unequal number of items in each scale.

Table 5.5 reports the means, standard deviation, Cronbach’s alphas and number of items for each sub-scale of the Ways of Coping Questionnaire.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confrontive</td>
<td>14.13</td>
<td>3.106</td>
<td>.376</td>
<td>6</td>
</tr>
<tr>
<td>Distancing</td>
<td>14.26</td>
<td>3.522</td>
<td>.593</td>
<td>6</td>
</tr>
<tr>
<td>Self Controlling</td>
<td>17.49</td>
<td>3.479</td>
<td>.529</td>
<td>7</td>
</tr>
<tr>
<td>Seeking Social Support</td>
<td>14.96</td>
<td>3.485</td>
<td>.553</td>
<td>7</td>
</tr>
<tr>
<td>Accept Responsibility</td>
<td>10.64</td>
<td>2.047</td>
<td>.204</td>
<td>4</td>
</tr>
<tr>
<td>Escape / Avoidance</td>
<td>19.99</td>
<td>3.815</td>
<td>.456</td>
<td>8</td>
</tr>
<tr>
<td>Planful Problem Solving</td>
<td>14.60</td>
<td>3.097</td>
<td>.417</td>
<td>6</td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>13.76</td>
<td>2.775</td>
<td>.244</td>
<td>7</td>
</tr>
</tbody>
</table>
The alpha values are low for this sample compared with those reported by Folkman and Lazarus (1988b) and this may reflect the difficulties referred to in section 3.2.2, 3.2.3, and 3.2.4 with the factor structure of items in the WOCQ. As already discussed in chapter 3, sections 3.23 and 3.24, and chapter 4, section 4.3.5, the method adopted by Folkman and Lazarus, (1985) and Folkman, et. al. (1986) in using the same subjects on several occasions, in order to achieve a sufficient sample size to produce a stable structure, is problematic. The result is that the structure may not be as stable as reported (Stone, et. al. 1991; Parker, Endler and Bagby ,1993; Schwartz and Schwartz, 1996) and the nature of some questions, which have been reported as complicated, vague or inapplicable (Parker, Endler and Bagby, 1993) may lead to lower alphas.

Unfortunately a factor analysis on this study data was not performed since with 50 variables and 8 factors, 96 participants was not adequate to yield a stable solution, (Guadignola and Velicer, 1988). This means that there may be concerns about the measurement properties of these variables however, as reviewed in section 3.2.6 of chapter 3, there are a number of recent studies (Aschbacher, et. al, 2005; Chung, et. al, 2005), that have found useful results using the WOCQ.

If there are measurement difficulties with the WOCQ, this will be reflected in a lack of relationship between ways of coping and health outcomes in the subsequent data analysis.
5.4.4 Locus of control

Locus of Control was measured by the 29 item I.E. scale (Rotter, 1966). A mean of 12.42 and standard deviation of 3.46 is reported.

Rotter (1966) reports mean values of between 5.94 and 9.56 and standard deviation values of between 3.36 and 4.10 of the I-E scores for a variety of different populations. However, the mean value for locus of control reported in the present study is very consistent with that reported by Ashkanasy (1985) (M= 12.67, SD = 4.09). Cronbach’s alpha cannot be calculated for Locus of Control because of its forced choice response format.

5.4.5 Ten Item Personality Inventory.

Table 5.6 reports the means, standard deviation and number of items for each of the subscales of the Ten Item Personality Inventory.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>4.057</td>
<td>1.90</td>
<td>2</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>4.057</td>
<td>1.41</td>
<td>2</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.432</td>
<td>1.58</td>
<td>2</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>3.323</td>
<td>1.64</td>
<td>2</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>4.667</td>
<td>1.43</td>
<td>2</td>
</tr>
<tr>
<td>Total Scale</td>
<td>21.01</td>
<td>3.66</td>
<td>10</td>
</tr>
</tbody>
</table>

The mean scale score for Extraversion and Agreeableness are the same in table 5.4. These were checked and the equality is coincidental.
Gosling et al (2003) reported the following norms: extraversion (M= 4.44, SD=1.45), agreeableness (M= 5.23, SD= 1.11), conscientiousness (M=5.4, SD= 1.32), emotional stability (M=4.83, SD=1.42), openness to experience (M=5.38, SD=1.07).

The means reported in the current study are all lower than those reported by Gosling and a one-sample t-test was done to analyse the difference in means. The results are reported in table 5.7.

Table 5.7: One sample t-test for TIPI norms against thesis results.

<table>
<thead>
<tr>
<th>Scale</th>
<th>2-tailed p-value</th>
<th>t</th>
<th>df</th>
<th>Std. Error of difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.0512</td>
<td>1.9751</td>
<td>95</td>
<td>0.194</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>&lt;0.0001</td>
<td>8.1511</td>
<td>95</td>
<td>0.144</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>&lt;0.0001</td>
<td>6.0028</td>
<td>95</td>
<td>0.161</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>&lt;0.0001</td>
<td>9.0034</td>
<td>95</td>
<td>0.167</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>&lt;0.0001</td>
<td>4.8853</td>
<td>95</td>
<td>0.146</td>
</tr>
</tbody>
</table>

The p-values reported show that difference in means for extraversion is not significant while the other scales achieve significance at <0.0001. This may reflect the differences in the sample of undergraduates used by Gosling and homeless people in the current study. However, for the purposes of this thesis, the focus is on how well the TIPI subscales correlate or predict health outcomes and therefore the differences in means is not an issue.

The structure of the TIPI with two items per scale makes it impossible to do item analysis. Gosling et al (2003) calculated test / retest reliability in a large sample (n=1830) of undergraduates and found a correlation of 0.72. Convergent correlations and
convergent validity was also good. The TIPI correlates well with the original Big Five Inventory (Gosling, et al. 2003).

Overall the descriptive statistics on all the scales used in this study were similar in magnitude to the literature with the exception of personality, however the main focus of the study is to test how scale variables relate to perceived health outcomes rather than to define norms from the scales in this population.

5.5 Regression results

A multiple regression tests how the variation in the dependent variable, in this case health outcome, depends on the variation in the independent variables. The results of a multiple regression are expressed in the amount of variance of the dependent variable that is explained by the independent variables together with measures of the relative importance of the independent variables. Across the analyses a p-value of 0.05 or less is considered statistically significant.

The tables of results for each dependent variable report the standardised regression weight (Beta), and the associated p-value testing the null hypothesis that the weight for that independent variable is zero. The table also reports simple correlations between the independent variable and the dependent variable. Also reported are the squared semi partial correlations, $sr^2$, for each independent variable. For each independent variable, it indicated how much the $R^2$ increases when that variable is added to the model after all the other variables are in the model (Tabachnick and Fidell, 1996). Hence it is a measure of the relative importance of the independent variables. It measures an independent variables unique contribution to the prediction of the dependent variable.
Cooksey (1996) describes how these can be re-expressed to give the relative weight uniqueness (RWu) for each independent variable. The relative weight uniqueness describes the proportion of the total amount of uniquely explained variance in criterion scores attributable to the independent variable. Each RWu represents the proportion (%) of the uniquely predictable variance that is attributed to each independent variable after considering all previously added independent variables.

5.5.1 Somatic symptoms

A standard multiple regression was performed with somatic symptoms as the dependent variable and scales of the Ways of Coping Questionnaire, Ten Item Personality Inventory and Internal External Scale as independent variables, \( R^2 = 45.8\% \ F(14, 81) = 4.89, p = <.001 \). This is statistically significant and the amount of variance accounted for is large. Table 5.8 presents detailed results of the relationship of the independent variables to Somatic Symptoms.

Table 5.8: Dependent Variable: Somatic Symptoms.

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>P value</th>
<th>Simple-r</th>
<th>Sr^2%</th>
<th>Rw_u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.027</td>
<td>0.84</td>
<td>-0.15</td>
<td>0.02</td>
<td>0.1</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.160</td>
<td>0.13</td>
<td>0.35</td>
<td>1.41</td>
<td>5.2</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-0.023</td>
<td>0.87</td>
<td>-0.13</td>
<td>0.01</td>
<td>0.1</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-0.341</td>
<td>&lt;0.01</td>
<td>-0.46</td>
<td>8.06</td>
<td>30.0</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>0.164</td>
<td>0.15</td>
<td>0.08</td>
<td>1.28</td>
<td>4.8</td>
</tr>
<tr>
<td>Coping Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive</td>
<td>0.127</td>
<td>0.24</td>
<td>0.06</td>
<td>0.83</td>
<td>3.1</td>
</tr>
<tr>
<td>Distancing</td>
<td>-0.119</td>
<td>0.29</td>
<td>-0.01</td>
<td>0.68</td>
<td>2.5</td>
</tr>
<tr>
<td>Self controlling</td>
<td>0.195</td>
<td>0.07</td>
<td>0.32</td>
<td>2.04</td>
<td>7.6</td>
</tr>
<tr>
<td>Seeks Social Support</td>
<td>0.228</td>
<td><strong>0.02</strong></td>
<td>0.08</td>
<td>3.28</td>
<td><strong>12.2</strong></td>
</tr>
<tr>
<td>Accepts Responsibility</td>
<td>0.241</td>
<td><strong>0.02</strong></td>
<td>0.42</td>
<td>3.17</td>
<td><strong>11.8</strong></td>
</tr>
<tr>
<td>Escape Avoidance</td>
<td>0.166</td>
<td>0.19</td>
<td>0.38</td>
<td>1.05</td>
<td>3.9</td>
</tr>
<tr>
<td>Planful Problem Solving</td>
<td>-0.331</td>
<td><strong>0.01</strong></td>
<td>-0.14</td>
<td>4.84</td>
<td><strong>18.0</strong></td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>0.040</td>
<td>0.70</td>
<td>-0.22</td>
<td>0.09</td>
<td>0.3</td>
</tr>
<tr>
<td>Locus of Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Locus of Control</td>
<td>0.058</td>
<td>0.66</td>
<td>-0.05</td>
<td>0.12</td>
<td>0.4</td>
</tr>
</tbody>
</table>
There are four variables that are significant predictors in relation to somatic symptoms. From the personality scale, emotional stability accounts for 30.0% of the total unique variance for somatic health and the negative beta weight means that the greater the emotional stability the less likely one is to experience somatic symptoms. This result is consistent with that reported in the review of Mcmanus et al., (2004), in section 3.4.4.

From the coping scale, planful problem solving accounts for 18.0% of the total unique variance for somatic health and the negative beta weight means that planful problem solving has the effect of reducing somatic symptoms. Accepts responsibility accounts for 11.8% of the total unique variance for somatic health and the positive beta weight indicates that accepting responsibility is likely to lead to an increase in somatic symptoms. Seeks social support accounts for 12.2% of the total unique variance for somatic health and the positive beta weight indicates that seeking social support increases the likelihood of experiencing somatic symptoms. This may seem counter intuitive however the scale measures the frequency with which a particular coping style is employed, not the outcome or efficacy of the style. It is possible that due to their status as homeless persons this style may be ineffective and this may account for the influence on somatic symptoms. The outcome of seeking social support is not measured in the present study.

The items in the ‘seeks social support’ subscale which are most related to somatic health are item 22, ‘I got professional help’ (r = .31, p = .002), item 31, ‘I talked to someone who could do something concrete about the problem’ (r = .21, p = .043) and item 42, ‘I asked advice from a friend I respected’ (r = -.25, p = .013). The difficulties of homeless people in accessing health care has been well reported (Vostanis, 1998; Quilgars and Pleace, 2003; Fitzpatrick, et. al. 2005; Kershaw, et. al. 2000). It is likely that whilst a person’s coping style may be to get professional help or to talk to
someone who could do something concrete about the problem, the difficulty in accessing such support may lead to an increase rather than decrease in somatic symptoms. However, if the coping style is to ask advice from a friend they respected, this may lead to a decrease in somatic symptoms. It is often the case that social support is not available although this may be a preferred coping style in response to a particular situation. There is further evidence from the interview data reported in section 5.5 which suggests that whilst the ways of coping scale is measuring the frequency with which a coping style is adopted it does not address the outcome of such attempts and a number of participants (50%) identified social support as something which they sought but did not have.

It is important to note that that while the result for seeking social support is interpretable in the way outlined above caution is needed. This is because there are indications that seeking social support may be a suppressor variable as the simple $r^2$ is less than the semi partial $r^2$, (Velicer 1978). This is partially due to the pattern of correlations among the independent variables, particularly among the Ways Of Coping scales. The correlation matrix for the Ways of Coping Questionnaire scales is reported at appendix 7.

An implication of the intercorrelations among the ways of coping scales is that any intervention based on coping styles must consider ways of coping as a set and not concentrate on individual scales. This is consistent with the Ways of Coping as part of a transactional model of stress and coping. In this model, coping styles can vary depending on the appraisal of the situation. It is essential therefore that any proposed interventions take account of this and consider all possible coping strategies. Taken as a set, the Ways of Coping scales account for around 42% of the unique variance, with seeks social support, accepts responsibility and planful problem solving the only
significant contributors. This result on the influence of coping is consistent with the results of the study by Chung, et. al, (2005) reported in section 3.3.6.

Locus of control has no direct relationship with health outcomes in relation to Somatic Health. This is consistent with the expectation outlined in the research question in section 3.5 in chapter 3, and with the results reported by Caughey (1996). A detailed analysis of the influence of locus of control is presented in section 5.4.4.

5.5.2 Anxiety / insomnia

A standard multiple regression was performed with anxiety / insomnia as dependent variable and scales of the Ways of Coping Questionnaire, Ten Item Personality Inventory and I.E Scale as independent variables. $R^2 = 48.58\%$ $F (14, 81) = 5.46, p<.001$. As with Somatic Symptoms, this is statistically significant and the amount of variance accounted for is large. Table 5.9 reports the beta weight and corresponding p values. Squared semi-partialis and relative weight uniqueness are also reported.
Table 5.9: Dependent Variable: Anxiety / Insomnia.

<table>
<thead>
<tr>
<th>Personality</th>
<th>Beta</th>
<th>P value</th>
<th>Simple-r</th>
<th>Sr%</th>
<th>Rw_u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>-0.254</td>
<td>0.07</td>
<td>-0.15</td>
<td>2.15</td>
<td>8.4</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.031</td>
<td>0.88</td>
<td>0.02</td>
<td>0.05</td>
<td>0.2</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-0.060</td>
<td>0.69</td>
<td>-0.03</td>
<td>0.10</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Emotional Stability</strong></td>
<td>-0.234</td>
<td><strong>0.02</strong></td>
<td>-0.19</td>
<td>3.78</td>
<td><strong>14.7</strong></td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>0.205</td>
<td>0.08</td>
<td>0.14</td>
<td>2.00</td>
<td>7.8</td>
</tr>
<tr>
<td>Coping Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive</td>
<td>0.091</td>
<td>0.41</td>
<td>0.07</td>
<td>0.43</td>
<td>1.7</td>
</tr>
<tr>
<td>Distancing</td>
<td>-0.173</td>
<td>0.14</td>
<td>-0.12</td>
<td>1.45</td>
<td>5.6</td>
</tr>
<tr>
<td>Self controlling</td>
<td>0.173</td>
<td>0.12</td>
<td>0.13</td>
<td>1.61</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Seeks Social Support</strong></td>
<td>0.233</td>
<td><strong>0.02</strong></td>
<td>0.19</td>
<td>3.43</td>
<td><strong>13.3</strong></td>
</tr>
<tr>
<td>Accepts Responsibility</td>
<td>0.323</td>
<td>&lt;0.01</td>
<td>0.24</td>
<td>5.67</td>
<td><strong>22.1</strong></td>
</tr>
<tr>
<td>Escape Avoidance</td>
<td>0.003</td>
<td>0.98</td>
<td>0.00</td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Planful Problem Solving</strong></td>
<td>-0.318</td>
<td>&lt;0.01</td>
<td>-0.21</td>
<td>4.46</td>
<td><strong>17.4</strong></td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>-0.091</td>
<td>0.40</td>
<td>-0.07</td>
<td>0.46</td>
<td>1.8</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>-0.054</td>
<td>0.69</td>
<td>-0.03</td>
<td>0.10</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Four variables are significant predictors of anxiety / insomnia. From the personality scale, emotional stability accounts for 14.7 % of the total unique variance for anxiety / insomnia and the negative beta weight means that the greater the emotional stability the less likely one is to experience anxiety/insomnia.

From the coping scale, accepts responsibility accounts for 22.1 % of the total unique variance for anxiety / insomnia and the positive beta weight means that accepting responsibility is likely to increase the likelihood of experiencing anxiety / insomnia.

Planful problem solving accounts for 17.4 % of the total unique variance for anxiety / insomnia and the negative beta weight means that planful problem solving has the effect of reducing anxiety / insomnia. Seeks social support accounts for 13.3 % of the total unique variance for anxiety / insomnia and the positive beta weight means that seeking
social support has the effect of increasing the likelihood of experiencing anxiety / insomnia.

This result in relation to seeks social support again seems counter intuitive however, as discussed above in relation to somatic symptoms, the status of the sample may explain the result. It is possible that due to their status as homeless persons this style may be ineffective as the avenues to achieve social support are not available. Therefore the inability to obtain social support, (eg speaking to friends or family or seeking professional help) as a result of being homeless may actually increase anxiety \ insomnia. In these results, there is no evidence of seeking social support or other predictor acting as a suppressor variable.

Locus of control has no direct relationship with health outcomes in relation to anxiety / insomnia. This is consistent with the literature relating to the research question outlined in section 3.5 in chapter 3. A detailed analysis of the influence of locus of control is presented in section 5.5.4.

**5.5.3 Social Dysfunction**

A standard multiple regression was performed with social dysfunction as dependent variable and scales of the Ways of Coping Questionnaire, Ten Item Personality Inventory and Internal External scale as independent variables, $R^2 = 41.2\%$ $F (14, 81) = 4.06$, $p = <.001$. As with somatic symptoms and anxiety / insomnia, this is statistically significant and the amount of variance accounted for is large.

Table 5.10 reports the beta weight and corresponding $p$ values. Squared semi-partial and relative weight uniqueness are also reported. There are two variables that are significant predictors in relation to social dysfunction; Conscientiousness accounts
for 35.3% of the total unique variance for social dysfunction and the negative beta weight means that the more conscientious the less likely one is to experience social dysfunction. It is interesting to note that whilst the predictors of the somatic and anxiety/insomnia scales are emotional stability, planful problem solving, seeks social support with accepts responsibility also influencing somatic symptoms, it is conscientiousness and accepts responsibility which influence social dysfunction. Somatic health and anxiety/insomnia share common influences and, for this reason, will be shown together in the final model presented at Figure 1.

Accepts responsibility accounts for 16.6% of the total unique variance for social dysfunction. The positive beta weight means that the effect of accepting responsibility is to increase the likelihood of experiencing social dysfunction.

Locus of control has no direct relationship with health outcomes in relation to social dysfunction. This is consistent with the research question outlined in section 3.5 in chapter 3, and with the results reported by Caughey, (1996). A detailed analysis of the influence of locus of control is presented in section 5.4.4.
<table>
<thead>
<tr>
<th>Personality</th>
<th>Beta</th>
<th>P value</th>
<th>Simple-r</th>
<th>Sr²%</th>
<th>Rw_u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.052</td>
<td>0.72</td>
<td>0.05</td>
<td>0.09</td>
<td>0.5</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.163</td>
<td>0.16</td>
<td>0.12</td>
<td>1.45</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>Conscientiousness</strong></td>
<td>-0.471</td>
<td><strong>&lt;0.01</strong></td>
<td>-0.43</td>
<td><strong>6.45</strong></td>
<td><strong>35.3</strong></td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>0.185</td>
<td>0.07</td>
<td>-0.14</td>
<td>2.37</td>
<td>13.0</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>-0.056</td>
<td>0.65</td>
<td>-0.06</td>
<td>0.15</td>
<td>0.8</td>
</tr>
<tr>
<td>Coping Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive</td>
<td>-0.057</td>
<td>0.63</td>
<td>0.03</td>
<td>0.17</td>
<td>0.9</td>
</tr>
<tr>
<td>Distancing</td>
<td>-0.069</td>
<td>0.58</td>
<td>-0.03</td>
<td>0.23</td>
<td>1.3</td>
</tr>
<tr>
<td>Self controlling</td>
<td>-0.059</td>
<td>0.62</td>
<td>0.20</td>
<td>0.18</td>
<td>1.0</td>
</tr>
<tr>
<td>Seeks Social Support</td>
<td>-0.037</td>
<td>0.73</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Accepts Responsibility</strong></td>
<td>0.236</td>
<td><strong>0.04</strong></td>
<td>0.29</td>
<td><strong>3.03</strong></td>
<td><strong>16.6</strong></td>
</tr>
<tr>
<td>Escape Avoidance</td>
<td>0.192</td>
<td>0.17</td>
<td>0.43</td>
<td>1.41</td>
<td>7.7</td>
</tr>
<tr>
<td>Planful Problem Solving</td>
<td>0.075</td>
<td>0.56</td>
<td>0.10</td>
<td>0.25</td>
<td>1.4</td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>-0.192</td>
<td>0.10</td>
<td>-0.34</td>
<td>2.03</td>
<td>11.1</td>
</tr>
<tr>
<td>Locus of Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Locus of Control</td>
<td>-0.105</td>
<td>0.47</td>
<td>0.03</td>
<td>0.38</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### 5.5.4 Locus of control

Those with an external control see themselves as passive agents and believe that the probability of being able to control their situation by their own actions and effort is low. Conversely, those with an internal locus of control believe that success or failure is due to their own efforts, and that they can control the events in their lives by effort and skill.

The results reported for the dependent variables of somatic health, anxiety and insomnia and social dysfunction show that locus of control has no significant influence on health outcomes for homeless people. This is consistent with the literature (Caughey, 1996) who found a weak relationship which was not statistically
significant. locus of control, in specific health versions may influence health behaviour which may in turn influence health e.g. those with an internal locus of control may be more likely to go to a doctor of to seek out health information etc.

However, in section 3.5.2, it was argued that specific health locus of control measures were not appropriate for use in this thesis and accordingly no further analysis will be done in this area.

It may be that locus of control is unrelated to any variable measured. From simple correlations it can be seen that locus of control is not related to health outcomes, however, to test whether other independent variables are related to locus of control a multiple regression analysis was conducted.

| Table 5.11 Dependent variable : locus of control. |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Beta            | P value         | Simple-r        | $\text{Sr}^2\%$ | $\text{Rw}_{\text{u}}$ |
| Extraversion    | -0.316          | <0.01           | -0.08           | 5.27            | 15.3               |
| Agreeableness   | -0.291          | <0.01           | -0.29           | 6.65            | 19.3               |
| Conscientiousness| -0.531          | <0.01           | -0.43           | 18.10           | **52.4**           |
| Emotional Stability | 0.101          | 0.29            | -0.09           | 0.76            | 2.2                |
| Openness to Experience | -0.225       | 0.02            | -0.30           | 3.76            | 10.9               |

One variable, conscientiousness, relates to both locus of control and a health variable, social dysfunction. For somatic health and anxiety / insomnia, independent variables that are related to locus of control are not related to the two health outcomes. For social dysfunction, locus of control is related to conscientiousness which is related to social dysfunction.
A mediational model was tested to see if locus of control mediated the relationship between conscientiousness and social dysfunction. Since locus of control was not related to social dysfunction it was not a significant mediator.

5.5.5 Antecedent variables

The antecedent variables of age, sex, family composition, reason for homelessness were measured together with information on when applicants were to become homeless and whether or not this was their first application. The relation of these variables to the independent variables and the dependant variables was tested. Post hoc pairwise tests were done to test for significance using a Bonferoni adjustment for multiple comparisons. The antecedent variables were measured as categorical variables (see table 5.10). Age was measured in three groups as there was only one participant in the over 60 category and this was recoded into the 25-59 category. The variable ‘when homeless’ was left out as 90 participants were homeless on the date of interview.

From analyses already conducted and reported earlier the following individual variables were related to health outcomes in some way; conscientiousness, emotional stability, accepts responsibility, seeks social support and planful problem solving.

A univariate analysis of variance (ANOVA) was conducted with each of the above individual difference variables as the ‘dependent variable’ and the five antecedent variables as factors. The model was adjusted to be a main effect only model because the interactive effects of the five antecedent variables was not of interest and to maintain an adequate df to test for effects. This was also a preferable analysis to test each factor (antecedent variable) separately since the 5 factor anova approach takes
into account relationships among the antecedent variables. Table 5.12 reports the Antecedent variables results.

Table 5.12  F-ratios and effect size (partial $\eta^2$) for individual variables related to health outcomes.

<table>
<thead>
<tr>
<th>Antecedent Variables</th>
<th>Conscientiousness</th>
<th>Emotional Stability</th>
<th>Accepts Responsibility</th>
<th>Seeks Social Support</th>
<th>Planful Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Sex</td>
<td>ns</td>
<td>6.9, .01</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Family Composition b</td>
<td>ns</td>
<td>4.3, .003</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Reason For Homelessness</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>First Application</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

a  F-ratio tested with 1, 83 df
b  F-ratio tested with 4, 83 df.
ns  not significant

Results

Out of the 25 effects tested, three effects were statistically significant. For emotional stability, males ($m = 3.9$) were more emotionally stable than females ($m = 2.8$), $F (1, 83) = 7.15, p = .009, \eta^2 = 7.9\%$. There was also a difference for emotional stability across the five types of family composition, $F (4, 83) = 4.43, p = .002$, $\eta^2 = 17.6\%$. There were two significant differences between the means in emotional stability for family composition: couples with no children ($m = 1.7$) differed from single parents ($m = 3.6$) and household member pregnant ($m = 4.8$).
5.5.6 Summary of regression results

The study found that emotional stability was a significant predictor of both anxiety and insomnia and somatic symptoms. Conscientiousness is a significant predictor of social dysfunction. Planful problem solving, seeking social support and accepting responsibility were significant predictors of both anxiety and insomnia and somatic symptoms. Accepting responsibility was a significant predictor of social dysfunction.

There are four variables that are statistically significant predictors in relation to somatic symptoms.

- Emotional stability accounts for 30.0% of the total unique variance and the negative beta weight means that the greater the emotional stability the less likely one is to experience somatic symptoms;

- Planful problem solving accounts for 18.0% of the total unique variance and the negative beta weight means that planful problem solving has the effect of reducing somatic symptoms.

- Seeks social support accounts for 12.2% of the total unique variance and the positive beta weight indicates that seeking social support increases the likelihood of experiencing somatic symptoms. This result and its implications is discussed fully in sections 5.4.1.

- Accepts responsibility accounts for 11.8% of the total unique variance and the positive beta weight indicates that accepting responsibility is likely to lead to an increase in somatic symptoms.

There are four variables that are statistically significant predictors in relation to anxiety / insomnia;
• Emotional stability accounts for 14.7 % of the total unique variance for and the negative beta weight means that the greater the emotional stability the less likely one is to experience anxiety/ insomnia.

• Accepts responsibility accounts for 22.1 % of the total unique variance and the positive beta weight means that accepting responsibility is likely to increase the likelihood of experiencing anxiety / insomnia.

• Planful problem solving accounts for 17.4 % of the total unique variance and the negative beta weight means that planful problem solving has the effect of reducing anxiety / insomnia.

• Seeks social support accounts for 13.3 % of the total unique variance and the positive beta weight means that seeking social support has the effect of increasing the likelihood of experiencing anxiety / insomnia. This result and its implications is discussed fully in section 5.4.2.

There are two variables that are significant predictors in relation to anxiety / insomnia;

• Conscientiousness accounts for 35.3 % of the total unique variance and the negative beta weight means that the more conscientious the less likely one is to experience social dysfunction.

• Accepts Responsibility accounts for 16.6% of the total unique variance and the positive beta weight means that the effect of accepting responsibility is to increase the likelihood of experiencing social dysfunction.

The results presented in this section are consistent with those reported by Chung et. al, (2005) reviewed in section 3.3.6 and Mcmanus, et. al, (2004), reviewed in section 3.4.4. Both studies report a relationship between neuroticism and health outcomes. Chung also reports a relationship between coping and health outcomes.
5.6 Qualitative data results: the people behind the statistics

Data was collected by a mixed method approach, but both the questionnaire and interview were conducted within a single session. Further, the questionnaire was completed in a face-to-face interview in which the interviewer asked the questions and completed the questionnaire.

5.6.1 Data analysis strategy: qualitative

The interview data was analysed using a thematic framework. After familiarisation with all the data to identify emerging themes or issues, the key issues, concepts and themes that have been expressed by the participants form the basis of a thematic framework that can be used to filter and classify the data. (Ritchie & Spencer, 1994).

A sample of twenty interviews were transcribed and the answers categorised for each question. All statements were looked at and those with similar themes collected. The categories were developed using common themes which described a range of responses. For example, responses such as ‘sick to my stomach’, ‘nervy’, ‘worried’, ‘on edge’ and ‘anxious’ were categorised as worried or anxious. Various groupings were tried until the best fit was identified. Initial themes were based on the interview schedule and the measure scales eg. personality, coping, health, feelings, structural issues, and were then further refined to sub categories which are reported in this chapter. A scoring table was developed and the answers of all other interviews were entered on the table directly from the taped recording. This avoided the need to transcribe all interviews whilst ensuring that pertinent information was captured. Where a subsequent answer did not fit the existing categories a category was added to the table for that question.
5.6.2 Results tables: structure of tables and information reported.

The results from the interviews are reported below for each question by category label. It should be noted that the total responses for each question vary and are more than the total number of participants. This is due to the fact that many participants gave more than one description in answer to a question (i.e., in answer to the question ‘how did this make you feel?’) a participant may have answered ‘worried, upset, angry’ which would be entered under three separate items. Whilst this causes some reporting difficulties in that there may be multiple answers to each question, it was vital to capture an individual’s experience of being homeless and to limit responses to a single item would have detracted from the narrative.

Each table reports on the response by category label, gives the number of responses to each category and shows this as a percentage of the number of responses. This adjusted reporting addresses the difficulties outlined above. The table also gives example comments made by participants.

Question 1, ‘How would you describe yourself?’, considers how the participants described themselves. This question related to their general belief about the sort of person they were - not specifically since becoming homeless. Table 5.13 reports the response given by participants.
Table 5.13: Q1 How would you describe yourself?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.2% (27 responses) stated</td>
<td>“… I’m quite quiet and reticent… I don’t like too much attention.”</td>
</tr>
<tr>
<td>that they considered themselves to be shy.</td>
<td></td>
</tr>
<tr>
<td>14.6% (23 responses)</td>
<td>“.. I think I am fairly sociable… I get on not bad with most people”</td>
</tr>
<tr>
<td>stated that they thought that</td>
<td></td>
</tr>
<tr>
<td>they were outgoing</td>
<td></td>
</tr>
<tr>
<td>12.7% (20 responses)</td>
<td>“… a placid sort of person… never too loud or causing bother”.</td>
</tr>
<tr>
<td>stated that they considered</td>
<td></td>
</tr>
<tr>
<td>themselves to be quiet</td>
<td></td>
</tr>
<tr>
<td>12.7% (20 responses) Low self</td>
<td>“a nobody…..just a waste of space”</td>
</tr>
<tr>
<td>esteem</td>
<td></td>
</tr>
<tr>
<td>12.1% (19 responses)</td>
<td>“I’m pretty up beat about most things…quite bubbly really”</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td></td>
</tr>
<tr>
<td>6.4% (10 responses)</td>
<td>“.. affable, I make friends easily”</td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
</tr>
<tr>
<td>4.5% (7 responses)</td>
<td>“… happy go lucky that’s me, nothing bothers me”</td>
</tr>
<tr>
<td>Easy going</td>
<td></td>
</tr>
<tr>
<td>4.5% (7 responses)</td>
<td>“ I suppose I’m a decent, nice person … I wouldn’t hurt anyone if I could help it..”</td>
</tr>
<tr>
<td>Nice person</td>
<td></td>
</tr>
<tr>
<td>3.8% (6 responses)</td>
<td>“ genial and good humoured; well most of the time anyway..”</td>
</tr>
<tr>
<td>Pleasant</td>
<td></td>
</tr>
<tr>
<td>3.2% (5 responses)</td>
<td>“ people say I’m clever… I don’t have any qualifications but I’m, no daft either “</td>
</tr>
<tr>
<td>Intelligent</td>
<td></td>
</tr>
<tr>
<td>2.6% (4 responses)</td>
<td>“ I tend to be focussed.. When I put my mind to do something I always see it through.”</td>
</tr>
<tr>
<td>Focussed</td>
<td></td>
</tr>
<tr>
<td>1.9% (3 responses)</td>
<td>“ I try to be forgiving and compassionate  sometimes it’s hard though.. “</td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
</tr>
<tr>
<td>3.8% (6 responses) Other</td>
<td></td>
</tr>
<tr>
<td>normal</td>
<td></td>
</tr>
<tr>
<td>ordinary</td>
<td></td>
</tr>
<tr>
<td>human being</td>
<td></td>
</tr>
<tr>
<td>paranoid</td>
<td></td>
</tr>
</tbody>
</table>
From the above responses it can be seen that there were 52 participants who thought they were outgoing, enthusiastic or friendly and 47 participants who thought they were shy or quiet. Additionally, 20 reported that they had low self esteem. Although self esteem is not measured directly this is potentially relevant to three of the social dysfunction scale items eg, ‘Felt on the whole you were doing things well?’,’ Felt that you are playing a useful part in things?’ and ‘Felt capable of making decisions about things?’.

Question 2, ‘How did you feel when you realised you would be homeless?’, considered participants thoughts and feelings about becoming homeless. It was intended to provide information on the effect that becoming homeless has on a person and may give an indication of individual differences in response. Table 5.14 gives the responses to this question together with example comments.

When participants realised they would be homeless the main two reactions were worry (72 responses) and sadness (52 responses). Thirty one participants reported that they were angry and upset, whilst 28 participants reported that they felt scared. Twenty one participants reported that they felt nothing at all. This question relates to the results found for the anxiety / insomnia sub-scale of the GHQ28 reported in section 5.4.2, and supports the assertion in this thesis, and in the literature, that homelessness has an effect on perceived health outcomes. It is should be noted that only two responses stated that becoming homeless had no effect and both had been in a similar position previously.
Table 5.14: Q2 How did you feel when you realised you would be homeless?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
</thead>
</table>
| 33.0% (72 responses) stated that they were worried or anxious. | “I felt sick to my stomach……I didn’t know what was going to happen”  
“ I was on edge and jumpy all the time..”  
“ I was concerned… more about the kids than myself …it was constantly on my mind.” |
| 23.8% (52 responses) stated that were down or sad | “I felt low myself at the start…a sort of black mood took over…” |
| 12.8% (28 responses) stated that they were scared | “….scared, because I knew I was going into a B and B, scared because I was going to share?” |
| 9.6% (21 responses) felt nothing. | “It was weird… I didn’t feel anything at all … I think I sort of shut down, if you know what I mean ..” |
| 7.3 % (16 responses) were angry | “I was raging… how could this be happening to me… what had I done to deserve this?” |
| 6.9% (15 responses) were upset | “I felt like crying, but I told myself ..you’re not going to cry ..” |
| 2.7% (6 responses) felt alone | “ suddenly no-one wants to know you… you’re totally on your own “ |
| 2.7% (6 responses) felt dazed or stunned | “ I couldn’t believe it, I was in a sort of daze for ages just staring like a zombie” |
| 1.0% (2 responses) Other | “….it was ok! ..... I knew what to expect.” |

Question 3, ‘What effect did this have on you?’, considered the effect of becoming homeless, and is closely linked to the previous question. It gives more detailed information on the effect that becoming homeless has as a potential stressor and therefore as an influence on perceived health outcomes for homeless people. Table 5.15 gives the responses to this question together with example comments.
Table 5.15: Q3 What effect did this have on you?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.0% (37 responses) stated that they were nervous / panicky</td>
<td>“I lost all confidence…. became jumpy and twitchy at the slightest thing.”</td>
</tr>
<tr>
<td>16.4% (32 responses) stated that were stressed</td>
<td>“…you know just stressing about what’s going to happen and what am I going to do and am expecting a baby and I’m thinking well where am a gonna be..”</td>
</tr>
<tr>
<td>15.4% (30 responses) stated that they were depressed</td>
<td>“I have never been so down…. its not like me to be this way usually…”</td>
</tr>
<tr>
<td>10.3% (20 responses) feared for the future.</td>
<td>“…recently I have been feeling like this I don’t know what’s happening so I am panicking even more and I am not usually like that, usually I take each day as it comes but now I seem to be thinking more ahead when I shouldn’t be…. I worry about what’s going to happen.”</td>
</tr>
<tr>
<td>8.2% (16 responses) were upset</td>
<td>“I couldn’t stop crying… the slightest wee thing would set me off.”</td>
</tr>
<tr>
<td>7.7% (15 responses) felt powerless /loss of control</td>
<td>“…not knowing it’s the lack of control and you don’t know what’s happening it’s out of your hands ………”</td>
</tr>
<tr>
<td>7.7% 15 experienced insomnia</td>
<td>“… I can’t sleep with all this stuff going on in my head….”</td>
</tr>
<tr>
<td>7.2% (14 responses) felt lonely</td>
<td>“…for the first time ever I knew I was totally alone, no one to turn to ……..it’s a scary place to be.”</td>
</tr>
<tr>
<td>2.1% (4 responses)felt suicidal</td>
<td>“.. I thought … what’s the point. I’d be better off dead”.</td>
</tr>
<tr>
<td>1.5% (3 responses) felt that homelessness had a positive effect on them</td>
<td>“Everything that has happened… I didn’t want any of it but I think I’m better…stronger for it.”</td>
</tr>
<tr>
<td>1.5% (3 responses)stated that they had more responsibility</td>
<td>“ I had to sort myself out and take my own decisions and stand by them… I’ve had to grow up fast.”</td>
</tr>
<tr>
<td>3.1% (6 responses) Other Weak Went dancing Self harm Compromised Withdrawn Overdose</td>
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</table>
Becoming homeless had the effect of causing nervousness, stress and insomnia in 84 responses whilst 50 stated that they were depressed and feared for the future. It is useful to note that 6 responses felt that becoming homeless had a positive effect on them. These results again relate to the results found for the sub-scales of the GHQ28 reported in section 5.4 and further confirms the effect of homelessness as a stressor.

Question 4, 'What changed about you?', gives more detailed information on the effects of homelessness, and provides a valuable insight into the individuals’ experience of being homeless. Table 5.16 gives the responses to this question together with example comments.

The main changes reported by participants since becoming homeless are being cut off from family support (32), losing control (27), suffering poor health and losing confidence. These changes reported are negative and confirm the questionnaire findings in relation to family support discussed in sections 5.4.1 and 5.4.2 earlier in this chapter. The information on losing control, losing confidence and suffering from poor health, confirms the effect of homelessness on health reported by Kershaw, Singleton and Meltzer, (2000) and Tischler and Vostanis (2007).

The responses outlined in Table 16 link directly to response scales within the General Health Questionnaire 28 and Ways of Coping Scale which were used in the quantitative data collection. For example, being cut off from family and friends is an element of seeking social support, drinking more relates to avoidant coping styles and blaming yourself is an element of accepting responsibility. Deterioration in health, losing control and losing confidence are related to perceived health outcomes as measured by the GHQ 28.
Table 5.16: Q4 What changed about you?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.8% (32 responses) stated that were cut off from family / friends</td>
<td>“…. I canny go and knock my mum’s door. She’ll phone the police if I do that. Even if I stop to speak to my mum in the street she looks through me, it’s like she’d seen a ghost.”</td>
</tr>
<tr>
<td>16.7% (27 responses) stated that they felt that they had lost control</td>
<td>“…things just happen to you….you don’t have any say, its like begging for scraps.”</td>
</tr>
<tr>
<td>14.2% (23 responses) reported a deterioration in their health</td>
<td>“..I’ve been no well for weeks now… I get anything that’s going round. I think I’m run down because of the way I have to live just now.”</td>
</tr>
<tr>
<td>11.1% (18 responses) felt less confident</td>
<td>“ I used to be ok, you know quite confident, but now I take a back seat more. I don’t like myself just now, I don’t feel like me.”</td>
</tr>
<tr>
<td>9.9% (16 responses) stated that they drank more</td>
<td>“ I hit the bevy a bit hard at first.. but I’m ok now.”</td>
</tr>
<tr>
<td>8.6% (14 responses) reported that they became more independent</td>
<td>“ I had to rely on myself more to decide what to do and to see it through… I’d no one to ask for advice”</td>
</tr>
<tr>
<td>6.8% (11 responses) blamed themselves for their situation</td>
<td>“ I just kept thinking that I should have been able to sort things out before it got to this stage “</td>
</tr>
<tr>
<td>4.9% (8 responses) felt that they had more responsibility</td>
<td>“I’ve had to deal with things on my own to get over this … its not easy; I’ve always been able to rely on someone else”</td>
</tr>
<tr>
<td>3.1% (5 responses) felt that they became stronger</td>
<td>“I think I’m stronger in myself because I’ve just had to get on with it”</td>
</tr>
<tr>
<td>2.5% (4 responses) stated that they developed a better appreciation of others</td>
<td>“ I don’t judge people the way I used to… it can happen to anybody….. I know now that everyone has a story to tell.”</td>
</tr>
<tr>
<td>2.5% (4 responses) Other Became more focussed 2 Nothing 1 Everything 1</td>
<td></td>
</tr>
</tbody>
</table>
Question 5, ‘What do you consider to be the major difficulties and difficult situations you have had to deal with?’, considers the major issues experienced as a result of becoming homeless. It is important to capture the main difficulties from the homeless person’s viewpoint as this will shed light on areas where intervention may be required and most importantly where it will be of most use to homeless people.

Participants considered the major difficulties associated with homelessness are loneliness and being unable to talk to people (62 responses), lack of money and benefit problems (61 responses), lack of personal space (30 responses) and access to children. The responses to this question confirm that being homeless affects many aspects of a person’s life and that that actually being without accommodation is the tip of the iceberg. This is consistent with the studies by Williams (2001) and Pleace (1998, 2005) concerning the definition of homelessness, reported at section 2.2.3 in Chapter 2. The comments made by respondents on loneliness and being unable to talk to people are particularly important as this details the devastating effect of homelessness and points to an area where intervention may have a positive effect. Table 5.17 gives the responses to this question together with example comments.
Table 5.17: Q5 What do you consider to be the major difficulties and difficult situations you have had to deal with?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
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<tbody>
<tr>
<td>28.2% (40 responses) stated that loneliness was the major difficulty they faced</td>
<td>“It’s just like no-one cares, no-one to speak to, the most horrible feeling in the world was being completely alone.”</td>
</tr>
<tr>
<td>24.6% (35 responses) stated that lack of money was the main problem for them</td>
<td>“The money situation and not having any food having to pay rent and not have any money coming in… you’re really having to scrape by with nothing at all.”</td>
</tr>
<tr>
<td>21.1% (30 responses) reported that not having personal space was a major issue</td>
<td>“You’ve not got a place, you’ve no got neighbours, like no place to keep things you treasure, no place to see your family. Nowhere to spend quality time with your family.”</td>
</tr>
<tr>
<td>18.3% (26 responses) felt the benefits system presented a major difficulty</td>
<td>“…the social and that. Paid us only three weeks that and you get no help…saying your due money but the system works against you…” “having to wait for benefits if your benefits are late they can take weeks to come in ….”</td>
</tr>
<tr>
<td>16.9% (24 responses) stated that their main difficulty was access to children</td>
<td>“…I have access to my three kids three nights a week but this place is no suitable for visits and what do I do if they want to stay over …it’s very very difficult thing, David, to leave the children but on the other hand I’ve got to …it’s torture.”</td>
</tr>
<tr>
<td>15.5% (22 responses) can’t talk to people</td>
<td>“You feel all your old friends look down on you and everything because you’re in the homeless.I felt like see when they take you away you don’t want to say to them I’m starting in the homeless because I just felt they like judge you and then have a lower opinion of you because of that.”</td>
</tr>
<tr>
<td>3.5% (5 responses) Other Communal living 3 Prison 1 Being outside society 1</td>
<td></td>
</tr>
</tbody>
</table>
Question 6, ‘What do you do to cope with difficult situations – what works for you?’ reports on how the participants deal with challenging situations. This was a general question about coping methods and strategies used by the participants. A full discussion on coping is provided in section 3.3 in Chapter 3, however the responses to this question are linked directly to the coping section (GHQ28) of the measure, and provide insight into the actual experience of coping by relating actual behaviour to the scales and items of the measure. The detail of coping with homelessness specifically, is explored in the next question. Table 5.18 gives the responses to this question together with example comments.
<table>
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<tr>
<th>Responses</th>
<th>Example comments</th>
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<tbody>
<tr>
<td>37.6 (71 responses) stated that their preferred coping mechanism was to talk to family / friends</td>
<td>“Getting a lot of support. My mum and dad give me a lot of support….and there’s another lady, Linda, she’s been giving me a lot of support. She does youth support …”.</td>
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<tr>
<td>19.0% (36 responses) stated that they just get on with it</td>
<td>“…what’s happened has happened get on with it and make something of yourself…. I know myself that I need to get back up …. I need to start getting on with my life .I need to get with it basically.”</td>
</tr>
<tr>
<td>11.6% (22 responses) reported that they use alcohol</td>
<td>“… a good drink helps….takes your mind off your problems for a while at least.”</td>
</tr>
<tr>
<td>9.5% (18 responses) stated that they accept the situation</td>
<td>“I just kind of manage the situation it’s just kind get on with it I just put a wee bubble round myself and pretend that I’m still young and happy.”</td>
</tr>
<tr>
<td>8.5% (16 responses) stated that they look ahead to the future</td>
<td>“…and that’s me I go about as though nothing’s wrong there’s got to be a light at the end of the tunnel somehow like eventually you are going to get your own place and it’s gonna be a cheaper rent and that means you can actually get working.”</td>
</tr>
<tr>
<td>7.9% (15 responses) stated that they suffer the situation till it goes away</td>
<td>“you can’t change it so you just have to put up with it … time usually sorts it out one way or another.”</td>
</tr>
<tr>
<td>4.2% (8 responses) reported that they use drugs</td>
<td>“I’ve tried about everything you can smoke or snort , but you soon learn that you only feel better for a while and the problems are still there “</td>
</tr>
<tr>
<td>1.6% (3 responses) Other Read 2 Hide away 1</td>
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</table>

In terms of coping behaviour, 71 participants stated that they would use social support, 36 just get on with things, 22 use alcohol as a means of coping, 18 accept the situation and 16 look ahead to the future. The high number of participants using
social support is consistent with the findings reported in the questionnaire data in relation to the somatic symptom and anxiety / insomnia subscales of the General Health Questionnaire as reported in sections 5.4.1 and 5.4.2 earlier in this chapter. As already discussed, the positive direction of effect suggests that seeking social support increases the likelihood of experiencing somatic symptoms and anxiety / insomnia. While this seems counter intuitive it is possible that the fact that people cannot access social support although it is their preferred coping method leads to the result reported. The outcome of seeking social support may be the main focus rather than the fact that social support was sought.

The responses reported in Table 5.18 are again closely linked to the scales and items of the Ways of Coping Scale used as an independent variable in this thesis. Talking to family and friends is linked to seeking social support, while just getting on with it, using alcohol or drugs and suffering until the situation goes away, are all aspects of avoidant coping. Looking ahead to the future relates to planful problem solving.

Question 7, ‘What helped you to deal with your situation?’, outlines what factors helped the respondents cope with homelessness. This is a specific question about what they actually did to cope with being homeless and is therefore separate from, but linked to, the previous question.

Table 5.19 gives the responses to question 7, together with example comments.
Table 5.19: Q7 What helped you to deal with your situation?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Example comments</th>
</tr>
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<tbody>
<tr>
<td>25.6% (33 responses) stated that drink helped them to deal with their situation</td>
<td>“…because of everything that happened… I turned to alcohol to blot it all out.”</td>
</tr>
</tbody>
</table>
| 23.3% (30 responses) stated that support from family and friends helped them to deal with being homeless | “I rely on my friends a lot just now, they let me rant and moan when I’m feeling down….. I don’t know what I’d do without them”  
“if I’ve got a problem I can go and talk to my friends and it makes be feel better because I’m sharing my problems rather than just building it up if I build it up I’d end up going to the doctors saying look put me on anti-depressants.” |
| 21.7% (28 responses) reported that a positive attitude helped             | “….Look on the bright side… you have to believe that there will be something better at the end of this.”                                                                                                              |
| 19.4% (25 responses) stated that they made plans for the future           | “I think about what will happen in the future and what I’ll do when I get a house and I can start again. Most of it is just dreams… its all cr*p though cause nothing turns out like you think.” |
| 10.1% (13 responses) stated that they try to remember that there is always someone worse off | “….knowing for a fact that there’s somebody worse off than you but that doesn’t help my situation knowing there’s some poor *******suffering more than me, it’s no a salve to my wounds. I know for a fact there’s hundreds of other people living on a dollar a day. I mean they would cut off their right arm probably to be sitting where I am – know what I mean?” |

Participants reported that drink helped them to deal with their situation with 33 citing this, 30 reported that social support helped them, 28 stated that a positive attitude helped and 25 stated that making plans for the future helped them. It should be noted here that only 30 responses stated that social support helped them whilst table 5.16 reports that 71 reported using social support as a coping behaviour. This suggests that the outcome for 41 participants was not successful and is consistent with the
explanation of the results given in sections 5.4.1, that the outcome of seeking social support is important as failing to obtain support when sought can have a negative effect on perceived health outcomes. This suggests that one possible avenue for intervention might be in providing social support to homeless people who may be excluded or in giving assistance to maintain existing support mechanisms.

Question 8, ‘What would have helped you that you did not have?’, examines the realities of being homeless and considers, in a practical way, what the participants believed would have helped them cope with their situation. Table 5.20 gives the responses together with example comments.
Table 5.20: Q8 What would have helped you that you did not have?

<table>
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<tr>
<th>Responses</th>
<th>Example comments</th>
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<tbody>
<tr>
<td>31.8% (48 responses) stated that family / friends support would have helped but was not available</td>
<td>“I had no one to turn to … It’s just like no-one cares, no-one to speak to, the most horrible feeling in the world was being completely alone…..it would have been good to talk to someone who cares .”</td>
</tr>
<tr>
<td>19.9% (30 responses) stated that more control would have helped them when homeless</td>
<td>“…the way I became homeless was the biggest shock and that ‘s what shocked me I hadn’t controlled the situation and I did become homeless. If I didn’t then I probably would not be feeling like this.”</td>
</tr>
<tr>
<td>17.2% (26 responses) stated that advice would have helped</td>
<td>“… better information and help with what is happening and what to do about it……they forget you don’t know what’s going on.”</td>
</tr>
<tr>
<td>16.6% (25 responses) reported that agencies working better together would have been beneficial.</td>
<td>“I think the job centre and the homeless section they could’ve actually worked together and actually made the rent cheaper and it means people could actually have got out to work rather than just sitting about actually thinking about it.”</td>
</tr>
<tr>
<td>14.6% (22 responses) stated that employment would have been useful</td>
<td>“…I know me I would rather be out working and kept myself busy day by day.”</td>
</tr>
<tr>
<td>16.6% (16 responses) stated that more money would have helped</td>
<td>“you’re always skint and don’t have enough to get by…..I don’t mean being flash or anything, just getting by takes more that you get from the social.”</td>
</tr>
<tr>
<td>3.1% (3 responses) Other. Better life choices 2</td>
<td></td>
</tr>
<tr>
<td>Being elsewhere 1</td>
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</table>

Half of the participants (48) stated that social support would have helped them but was not available to them, 30 thought that more control would have helped, 26 considered that the provision of advice would have assisted and 25 believed that agencies working more closely together would have helped them but was not available. The high figure in relation to lack of social support again reinforces the point made above concerning the questionnaire results which found that seeking social support had a negative affect on the somatic health and anxiety / insomnia sub-scales of the GHQ28. It is clear that the outcome of seeking social support as a
coping strategy is important. The fact that the interview results are consistent with this explanation means that it is less likely that seeking social support is acting as a suppressor variable in its relationship to the somatic health sub-scale.

In section 5.4.1 it was reported that the items in the ‘seeks social support’ subscale which are most related to somatic health are item 22, ‘I got professional help’, item 31, ‘I talked to someone who could do something concrete about the problem’ and item 42, ‘I asked advice from a friend I respected’ If the results of the quantitative data were known prior to the interview stage, a specific questions about professional help and seeking support would have been asked. The study design prevented this as the questionnaire and interview were conducted in the same session and no analysis of the quantitative data was possible before the interview stage.

Another issue worthy of note is the fact that, despite the efforts of the Scottish Government to facilitate joint working between agencies through the Health and Homelessness Standards, it is still evident from the responses that, on the ground, there is still a disconnection. Over 50% of responders stated that better advice (27.1%) and agencies working together to address their needs (26%), would have assisted them.

5.6.3 Qualitative Data Summary

The interview results show that, when faced with homelessness people become anxious, worried, feel a sense of powerlessness and fear for the future. When asked what changed about them, 32 stated that they became cut off from family and friends, loss of control (27), deterioration in health (23) and loss of confidence (18).
The major difficulties experienced ranged from difficulties with the benefit system (26), lack of money (35), access to children (24), loneliness (40), can’t talk to people (22) and not having a personal space (30).

In relation to what works in terms of coping, 71 (37.6%) of participants responded that talking to friends or family was a way of coping with difficult situations although only 33 (23.3%) reported this as helping to deal with their situation. Forty eight (31.8%) participants responded that family support was something that would have helped them, but they did not have access to. It is interesting to note that, whilst all participants reported that they were adversely affected by becoming homeless, the effect of homelessness was in fact positive for some. Two participants reported that they were more focussed, 14 more independent and 5 reported that they became stronger as a person.

This is shown clearly in the case of Ms. ‘A’ who was separated with two children under school age. She had become homeless as a result of leaving a violent partner and although she found her current situation stressful, living in temporary accommodation in a block of flats, she considered this a step towards a resolution of her difficulties and can see a better future as a result. She states ‘I’d say I became a stronger person more independent in myself because I never actually stayed myself. I have always like been with, my parents or with an ex husband or a boy friend or whatever, I have never actually stayed on my own and I had to survive on my own. Now I have survived on my own and have my own money and everything it’s strange but it’s made me a stronger person in myself’.

Another subject Miss ‘B’ who is a single person gives testament to the problems of maintaining social support networks.
“You feel all your old friends look down on you and everything because you’re in the homeless. I felt like you don’t want to say to them I’m starting in the homeless because I just felt they like judge you and then have a lower opinion of you because of that. Q Did you lose friends because of that? I actually did because well not just really through the homeless because I grew up in Dunblane and most of my friends were quite snooty. I had to move into the homeless and that day I was moving I had my bags well I left my hand bag and my phone in the taxi so that was all my friends addresses gone. I was staying in St. Ninians and I didn’t have the money to go back and forth to Dunblane to keep in touch. I lost touch with quite a lot of them and some of then were like Oh she’s staying in St. Ninians now and that and had no time for me really and then I got new friends with the people that were there….I did lose a lot of friends when I went back to Stirling I kept texting them and phoning them and they just never replied to my texts and that but as I said they’re not true friends and I made new ones…..”.

5.7 Results Summary.

The results reported in this chapter answer the research questions posed in chapter 3. The results are discussed below in relation to the research questions relating to the expected influence of coping, personality and locus of control on the perceived health outcomes of homeless people.

What influence do coping styles have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?

From section 3.2 the expectation was that individual coping styles would have an influence on stress and health outcomes. Archbacher, et. al. (2005) report that those
participants employing greater use of problem focused coping styles experienced improved health outcomes. The results support this expectation as planful problem solving was found to have a negative influence on both anxiety / insomnia and somatic symptoms. This means that increased use of this style which is problem focussed will reduce the anxiety / insomnia and somatic symptoms experienced.

*What influence does personality have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?*

From section 3.3 the expectation was that neuroticism (emotional stability) would have a negative influence on health outcomes under stress (Lockenhoff, et. al. 2008, Bunevicius et. al., 2008), and that conscientiousness and extraversion will have a positive influence on health (Lockenhoff, et. al. 2008). The results in relation to personality confirm that there is a relationship between personality and health and supports the expectation that increased emotional stability will have the effect of reducing the amount of anxiety / insomnia and somatic symptoms experienced. The results do not support Lockenhoff et. al.(2008), as no significant influence was found for extraversion and conscientiousness was related negatively to social dysfunction. This negative beta weight means that the more conscientious a person is, the less socially dysfunctional they will be.

*What influence does locus of control have in the perceived health outcomes of people applying for local authority assistance as a result of homelessness?*

From section 3.4 the expectation is that there is a weak relationship between Locus of Control and health. The results for locus of control support Caughey (1996) who
reported a 0.15 correlation between locus of control and health which is not statistically significant. Locus of control has no direct influence on the stress on becoming homeless.

The qualitative results are consistent with the questionnaire results reported. In relation to the apparent counter intuitive result where seeking social support has a positive beta weight and therefore its use actually increases the level of anxiety / insomnia and somatic symptoms experienced, the interview data was useful in allowing an understanding of the effect of seeking but not obtaining social support. This supported the assertion that the result of seeking social support was important. In addition the interview results are important in that they give an outline of what it means to be homeless from the point of view of those who are experiencing homelessness. It confirms that homelessness is a stressor and that homelessness is about much more than being without a home. It concerns aspects of health, interaction with family and friends, feelings of loneliness and lack of self esteem and engagement with other service providers.

The next chapter will review the issues surrounding homelessness and the experience of homelessness and will explore possibilities for intervention which may improve the perceived health outcomes of people who are homeless.

Figure 3.3 outlines the original model which was tested in this thesis. Figure 5.1 shows the resulting model after regression. The paths shown take into account the correlations among independent variables.
Coping Strategies
- Emotion Focussed
  - Distancing
  - Self-Controlling
  - Accepting Responsibility
  - Escape-Avoidance
  - Positive Re-appraisal
  - Seeks Social Support
- Problem Focussed
  - Confrontive Coping
  - Planful Problem Solving

Health Outcomes
- Somatic Symptoms
- Anxiety \ Insomnia
- Social Dysfunction

Personality
- Extraversion
- Agreeableness
- Conscientiousness
- Emotional Stability
- Openness to Experience

Figure 5.1
Chapter 6: Conclusion and implications for intervention and practice.

6.1 Introduction

The reason for conducting the research presented in this thesis was my observation, based on over twenty years experience dealing with homelessness in a local authority, that homelessness affects an individual in the physical, mental and social aspects of their daily life and that people react differently to the experience of becoming homeless. The aim of this thesis has been to consider the immediate health effects of being homeless on a person and to examine what influence individual differences may have on this.

In the year 2007 / 2008 there were 56,561 applications to Scottish local authorities by individuals or households seeking assistance under the homeless persons legislation. The concept of homelessness was reviewed and various definitions, including rough sleeping, living in hostels, in insecure accommodation were considered. Some authors (Williams, 2001; Pleace, 1998; Pleace 2005) consider that the term homelessness is not useful as it fails to reflect the complexity of the situation i.e. that there may be a series of social problems, which can be described as homelessness. Given that the participants are drawn from people who have made an application for assistance to a local authority under the homelessness legislation, the statutory definition, that a person is homeless if they do not have any accommodation in the United Kingdom or elsewhere, was used.
6.2 Homelessness and health

The link between homelessness and poor health, both mental and physical, has been well established in the literature (Kershaw, et. al., 2000; Fitzpatrick, et. al., 2005; Quilgars and Pleace, 2003; Tischler and Vostanis 2007).

There has been a drive by government to improve health service provision for homeless households. In recognition that many homeless people have difficulties in accessing health care and in an effort to encourage multi-agency working to resolve such issues, the Health and Homelessness Standards were introduced in Scotland in April 2005 (Scottish Executive, 2005).

There are six standards which identify:

- the need for NHS engagement at the level of director or above
- the need for partnership working at the local level
- the profile and needs of homeless people are assessed locally via health and homelessness action plans
- the NHS Board ensures that homeless people have equal access to the full range of health services
- NHS responds positively to the health needs of homeless people without restricting them to specialist services
- The health and homelessness action plan is the planning tool used to deliver local initiatives via a multi-agency steering group and the Community Health Partnership.

These standards are important and may provide both the framework and impetus for a health based intervention to be discussed in section 6.8.2.
6.3 Homelessness as a stressor

Many studies focussed on a specific population of homeless people who also had particular problems such as AIDS, drug or alcohol dependency or mental illness. The focus also related to accommodation type such as those living on the street or in homeless shelters (Garside et al, 1990; Bacon et al, 1996), or on particular groups such as single homeless people (Anderson et al, 1993); or homeless children. It has also often focused on quite narrow concerns, such as begging (Fitzpatrick and Kennedy, 2000). The results of these studies are difficult to generalise to the main population of homeless people, as the samples used are specific in nature. Whilst the results of these studies are important they do not go far enough. The focus of this thesis is on the health outcomes of the overall population of people who are or are becoming homeless. It is important to consider the immediate health effect of being homeless, that is, the state of being homeless provided the context and this research considered the influence individual factors may have in the perceived health outcomes of homeless people. However, in addition to knowing this, it is also important to explore whether there are individual differences in the way that people manage this experience, to help better identify interventions.

In considering homelessness as a stressor, the transactional model of stress was used. This ‘transactional’ theory places the emphasis on the meaning that an event has for the individual and not on the physiological responses. Lazarus and colleagues believe that an individual’s appraisal of a situation determines whether an event is experienced as stressful or not, making stress the consequence of appraisal. According to this theory, the way an individual appraises an event plays a fundamental role in determining, not only the magnitude of the stress response, but also the kind of coping strategies that the individual may employ in efforts to deal with the stress. The stress process therefore, cannot be understood without reference
to the process of coping which influences and is influenced by the individual’s appraisal of the encounter with the environment. This has implications for potential interventions as, given that coping influences perceived health outcomes as reported in the model tested, interventions based on improving access to those coping strategies which are most effective should be more successful than others which do not.

To extend what is known about homeless people’s health perceptions and coping three measures were used. These were coping, locus of control and other individual difference variables. The results are reported below for the three scales measured in relation to health, somatic symptoms (physical), anxiety / insomnia (mental) and social dysfunction (social). The study found that emotional stability (i.e. Neuroticism) was a significant predictor of both anxiety/insomnia and physical symptoms. Conscientiousness is a significant predictor of social dysfunction. Planful problem solving, seeking social support and accepting responsibility were significant predictors of both anxiety/insomnia and physical symptoms. Accepting responsibility was a significant predictor of social dysfunction.

This supports the wider literature on homelessness and health which show that homeless people have poor health outcomes in relation to those housed (Kershaw, Singleton and Meltzer, 2000; Pleace and Quilgars, 1996; Gill et al, 1996; Hinton, 2001; Quilgars and Pleace, 2003; Fazel et al, 2008). The literature however, does not consider homelessness itself as a health stressor and does not consider what individual difference factors or coping strategies might influence this. The thesis presented fills this gap in the literature by identifying the impact of being homeless on health outcomes and further, by identifying individual factors influencing this, can suggest interventions which are designed to address this issue.
Neither Locus of control or antecedent variables were found to have a significant influence on perceived health outcomes.

**6.4 Being homeless: the individual’s perspective**

An important part of the research in this thesis was to interview homeless people to understand better how they were constructing their experiences and to shed light on the more qualitative measure findings. The interview results show that, when faced with homelessness people become anxious, worried, feel a sense of powerlessness and fear for the future. When asked what changed about them, 32 stated that they became cut off from family and friends, loss of control (27), deterioration in health (23) and loss of confidence (18).

The major difficulties experienced ranged from difficulties with the benefit system(26), lack of money (35), access to children (24), loneliness (40), can’t talk to people (22) and not having a personal space (30).

In relation to what works in terms of coping 74% (71) responded that talking to friends or family was a way of coping with difficult situations although only 31% (30) reported this as helping to deal with their situation. Forty-eight (50 %) responded that family support was something that would have helped them but they did not have it. It is interesting to note that, whilst all participants reported that they were adversely affected by becoming homeless, the effect of homelessness was in fact positive for some. Two reported that they were more focussed, 14 more independent and 5 reported that they became stronger as a person.
The results reported above again fully support the literature in this field. Difficulties with the benefits system and lack of money link closely with the structural elements of a person’s pathway through homelessness. It is a reminder that homelessness is a dynamic process with both individual and structural elements. (Avramov, 1999; Forrest, 1999; Tomas & Dittmar, 1995; Sosin, 2003; Anderson & Christian, 2003). The issues identified with lack of social support, loneliness, no access to children and no personal space are aspects of social exclusion and the literature identifying homelessness as an aspect of social exclusion is relevant. (Burchardt et al., 1999; Hodgetts et. al., 2007, Flick ,2007).

6.5 Strengths and limitations

There are a number of strengths. The study utilised a mixed methods procedures. Measures were administered in person which meant that there was no missing data. While the small sample size (n=96) is a limitation for generalisability, the sizes of the effects were large and so the findings are reliable. Yet, there were a number of disadvantages also. The sample was taken from one local authority in Scotland, which may again limit generalising across other local authorities in Scotland or in the UK. Further, the sample, derived from local authority applicants, did not access all types of homelessness prevalent in other areas. For example, the sample contained no rough sleepers and there was an over-representation of females and single mothers. A larger study could use stratified sampling techniques to address this issue.

The issues concerning the measurement of coping and the use of the Ways of Coping Questionnaire were discussed in section 3.3. These issues were addressed in this thesis by taking coping as a set rather than relying on individual scales. Taken this way and roughly aggregating across the three types of health outcomes, coping
accounted for about 40% of the unique variance in health outcomes. There are conceptual limitations in that only three indicators of individual differences, personality, coping and locus of control were included. While they span a useful range of concepts and were justified theoretically (coping) and practically (personality and locus of control) other cognitive style variables could have been included. However, this would have needed a much larger sample and the use of stratified sampling to investigate group effects, for example, differences between regions (rural/urban), types of homeless people and gender.

6.6 Implications for intervention

Individual differences in coping styles and personality influence the reaction of people to the stress of being homeless. It is important therefore to consider these aspects as potential avenues for intervention to improve the health outcomes of homeless people applying to a local authority for assistance. It is also important to consider possible interventions which may assist in improving access to health care for those who are homeless in order that their full range of health needs can be met, both proactively and reactively.

6.6.1 Coping

Coping is the dynamic process for the management of the demands placed on the individual as a result of a stressful encounter. Coping, unlike other concepts which may explain individual differences in response to stress, is potentially open to change by intervention. Coping in addition to offering an explanation of individual differences in stress response is important as potential avenue for targeted intervention to improve health outcomes. (Folkman and Moskowitz 2004). It follows
that effective coping will improve health outcomes by influencing the individuals appraisal of and adaptation to the stress of being homeless.

With respect to homelessness there has been a substantial provision of additional funding for intervention projects, however, these have largely been targeted at the prevention of homelessness. The Rough Sleepers Initiative launched in Scotland in 1997 (Fitzpatrick, Pleace and Bevan, 2005), is an example of such an intervention designed to prevent people becoming homeless. In the U.K, various projects have been developed in this area such as rent deposit guarantee schemes to allow homeless people access to private sector accommodation which would otherwise be unavailable to them. Much emphasis is placed on the provision of advice and assistance at an early stage, again to prevent homelessness occurring in the first place. These are necessary and important areas of work. However, from the evidence reported in this thesis, an intervention, delivered after people have become homeless, may help them to cope more effectively with the experience of being homeless. At present, such an intervention is not available.

6.86 Coping strategies are skills that can be learned.

A study by McMillan, Small, Weitzner, Schonwetter, Tittle, Moody, and Haley, (2005) found that a coping skills intervention was effective in improving caregiver quality of life, reducing distress related to patients’ symptoms and caregiving tasks compared with hospice care alone or hospice plus emotional support. A three group randomized controlled trial was conducted using a sample was drawn from consecutive admissions to a large non-profit community-based hospice in the south-eastern United States. The study comprised of baseline, 16 day, and 30 day assessments. The sample consisted of 329 family caregivers of hospice
patients with advanced cancer. The three groups were: a control group (n = 109) receiving standard hospice care, a group (n = 109) receiving standard hospice care plus three supportive visits, and a group (n = 111) receiving standard care plus three visits to teach a coping skills intervention. Caregiver quality of life, caregiver distress due to patient symptoms, caregiver distress due to tasks, and caregiver mastery were measured as outcomes. The coping skills intervention was reported to be effective in improving caregivers’ overall quality of life and in decreasing distress related to patients symptoms and caregiving tasks.

The Southampton Project
This project in Southampton was established with grant aid from the Rough Sleepers Unit to the Society of St James, a charity providing a range of services to homeless people. The aim was to set up a therapeutic project designed to maintain four men who had exhausted all other hostel opportunities in a dedicated cognitive behavioural therapy (CBT) house. A CBT therapist worked two mornings per week and five project staff were also trained in the basics of CBT. This form of intervention, although effective, can take a long time to develop - possibly up to two years for a person suffering severe and enduring mental health problems. For this reason, given the transient nature of many homeless people, a dedicated CBT intervention may not be possible for the participants in the research reported in this thesis. The project reports that there were improvements across a range of indicators such as alcohol consumption, violence, and social functioning for three of the four residents.

6.6.3 Summary
The above section identifies that coping strategies are a set of skills, which can be taught, and that this approach has been successful in improving outcomes in a range of interventions.
6.6.4 Personality

Due to the general conceptualisation of personality it is considered more difficult to change. Dweek, (2008) argues that while broad personality traits can be assessed they are not open to change, however beliefs are at the centre of personality and adaptive functioning and can be altered through interventions. Dweek states that beliefs are not easily changed but they give a starting point for intervention to change personality. Dweek believes that there are core beliefs or belief systems that shape an individuals goals and strivings and also their appraisal of and reaction to their environment. Two core beliefs are considered; beliefs about whether a persons’ attributes can be developed or not and beliefs about whether others will accept them or not. Beliefs and their impact are seen as a part of personality, underling aspects of adaptive functioning, and are able to be changed through interventions.

Although Dweek claims that this is changing personality, it seems that the areas open to change by intervention in her study relate to aspects of learned behaviour, which could be called coping or adaptation. I do not consider that this is changing personality but is an example of individual differences which influence a persons’ interaction with the environment and which can be changed.

Personality as defined by broad traits which are relatively stable over time are difficult to change and therefore interventions should concentrate on those factors such as coping which are more amenable.
6.7 Suggested intervention

In section 6.8.2 above, interventions were reviewed which seek to influence health outcomes by improving individual coping, firstly by a coping training intervention taught over three sessions and secondly, by a specific cognitive behavioural therapy intervention project.

Given the above and the results reported in this thesis, I will suggest a possible intervention to address the issue of improving the poor health outcomes reported as a result of homelessness.

6.7.1 Coping with homelessness workshops. A toolkit to enhance coping

The proposal is that local authorities provide a ‘coping with homelessness’ workshop for people applying for assistance. This could be provided as part of the advice and assistance which local authorities are statutorily required to provide although this is usually confined to the prevention of homelessness. An implication from the research in this thesis is that this early intervention would improve health outcomes for homeless people by enhancing the coping skills necessary to deal with the experience of being homeless.

This could be provided as a drop in facility with the aim of providing a toolkit of coping. This would impart the full range of coping possibilities as broadly outlined within the Ways of Coping scale. Training in all coping styles would be useful because of the situational nature of coping. What works best will depend on the situation. The drop-in format could also be used to impart more general information in relation to homelessness. This facility should be provided at a central location or
locations depending on the area covered to provide easy access for those wishing to participate. It could be run as often as required, depending on demand.

It would be necessary to have specialist trainers to deliver this workshop initially although there are a number of courses available which would permit staff members to be trained to a level that would allow them to deliver the workshop in house. Training available includes a four-session course in Cognitive Behaviour Therapy aimed at staff working in the homelessness field, run by the University of Southampton. The course is designed to examine the principles and basic behavioural skills involved in CBT and the process of CBT delivery. Other courses are available through the Centres of Expertise group, which provide training in CBT and stress management throughout the UK. Since the training would be in coping styles and not delivering a full cognitive behavioural therapy intervention, a much lower level of training of staff would be needed. A useful resource called MoodJuice is available on-line in the Forth Valley area offering access to a range of resources including self-help guides, problem solving handouts and access to other agencies.

The intervention would be evaluated using the GHQ and questionnaire schedule used in this thesis, with the way the GHQ questions are asked modified as appropriate to the circumstances. Participants should complete these before the workshop as a baseline and following the workshop for comparison.

6.7.2 Issues Arising from Intervention Model

Prior to this model being developed further, far less implemented, a significant and comprehensive consultation should be undertaken with potential service users. This consultation should consider whether the service users think it is worthwhile, is the
format correct, does it meet their needs and would they use such a facility. All views should be taken on board and, where possible, incorporated into a revised design.

The issue of poor uptake of services by homeless people has been well documented (Scottish Executive Health Department, 2001; Scottish Executive, 2005), and further work must be undertaken to understand and improve uptake where possible.

6.8 Concluding remarks

This thesis has identified that homelessness is a stressor and that individual difference factors and coping styles influence the health outcomes of homeless people. There is currently a gap in the existing research in this area which the model developed here fills.

The proposed intervention model, if implemented, will give applicants the coping skills necessary to deal more effectively with the experience of being homeless and would therefore improve perceived health outcomes for this group.

This thesis represents a journey, from an observation that people react differently to being or becoming homeless, to suggested early intervention which may assist in improving health outcomes for homeless people. Along the way, we have explored the relationship of homelessness to health outcomes, identified homelessness as a stressor and considered how individual factors such as personality, coping and locus of control may influence this relationship.

Further work is required to integrate this proposal fully into housing and health services. Although the suggestion is for a drop-in, there is no reason that this could not be delivered as part of a wider package of support provided to people who are
housed. This could also be delivered as part of a supported housing project for those who aspire to achieve a secure tenancy. Finally, it would be useful to explore how this proposal could be adapted to provide a preventative intervention to households identified as potentially homeless due to their circumstances.
References


Research.


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influenced by health status. *Journal of Research in Personality, 42*(5), 1334-1346.


In M. Zeidner & N. S. Endler (Eds.), *Handbook of Coping*. (pp. 133–150). New York: Wiley.


*Personality and Individual Differences, 3*(1), 84-87.


Appendix 1

Ethical Approval
### RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Probability</th>
<th>Unlikely 1</th>
<th>Possible 2</th>
<th>Likely 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Minor 1</td>
<td>Moderate 2</td>
<td>Serious 3</td>
</tr>
<tr>
<td>Assessment</td>
<td>1-3 = Low</td>
<td>4-6 = Medium</td>
<td>7-9 = High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Risk</th>
<th>Likelihood</th>
<th>Impact</th>
<th>Controls</th>
<th>Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Threat to Interviewer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>2</td>
<td>1</td>
<td>Pleasant, non threatening environment for interview.</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interviewer has over 20 years experience in the homelessness field.</td>
<td></td>
</tr>
<tr>
<td>Threatening behaviour</td>
<td>1</td>
<td>2</td>
<td>Interviewer has undergone personal safety training by Police and Suzy Lamplugh Trust.</td>
<td>Low</td>
</tr>
<tr>
<td>Physical injury</td>
<td>1</td>
<td>3</td>
<td>Interviewer has been trained in interview techniques including difficult interviews and diffusion of conflict / aggression.</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Threat toParticipant</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about sensitive issues may cause distress.</td>
<td>2</td>
<td>2</td>
<td>Pleasant, non threatening environment for interview.</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interviewer has over 20 years experience in the homelessness field.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Participant has volunteered to be interviewed</td>
<td></td>
</tr>
<tr>
<td>May believe participation will influence outcome of homeless application.</td>
<td>2</td>
<td>1</td>
<td>Clear information on separation of study from influence on homelessness application.</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mechanism in place to refer back to local authority (with participants consent) if info on application required.</td>
<td></td>
</tr>
</tbody>
</table>
Dear David

The Trauma of Homelessness

Thank you for submitting the clarification for your proposal, entitled as above, to the Departmental Research Ethics Committee on 10 July 2006. I am pleased to advise you that your proposal has been approved.

Kind regards

Len Dalgleish, PhD
Chair
Appendix 2

Information Sheet
Information Sheet

My name is David Bright and I am a post graduate student at Stirling University. You are invited to take part in a research study. Please take a few minutes to read the following information, which explains why this research is being done and what it will involve, before deciding if you wish to take part.

What is the research about?

I am conducting research on the health effects of homelessness on people and what they do to cope with the situation. The research will try to find out if certain personal characteristics allow some people to cope better than others and also what outside influences may be important.

Why have I been asked to take part?

You have been asked as you have recently become homeless and can tell me how this has affected you and how you cope with this problem. I need to gather as much information as possible to find out how people feel about becoming homeless and also what may have helped them at this time.

What will I have to do?

You will be asked to assist in the completion of a questionnaire by answering set questions which should take about 15 minutes, after which there will be a less formal interview to discuss your situation in greater detail.

What will happen to the information I give?

The information will be held by code on computerised data base for analysis. All information will be treated in the strictest confidence and you will not under any circumstances be identified in the data or in any subsequent publication. The information will be destroyed after five years. Stirling University is registered under the Data Protection Act 1984 and the study is conducted under the terms of this legislation.

What will you do with the results?

The results of this research will be used to look at how services are delivered to people who are homeless. It will suggest how best to help those people who may suffer adverse health effects as a result of being homeless and try to improve the situation. I hope that the results will be able to be used in other areas in addition to homelessness.

Does this affect my Local Authority application?

This research project is entirely separate from your application to the Local Authority and there is absolutely no benefit or disadvantage to your participating or declining. Your decision in respect of this research will have no bearing whatsoever on the outcome of your application. It is up to you whether or not to take part.

Where can I get further information?

If you are unsure about any aspect of the proposed research please do not hesitate to contact me on 01786 443186. If I am not available please leave a message with contact details and I will be in touch as soon as possible.

Whatever your decision I would like to thank you for your time and wish you well for the future.
I have gathered some information on other providers of support and assistance in your area, which you may find useful.

Stirling Council
Homelessness Service
Springkerse House
5 Springkerse Road
Stirling (24 Hrs.)
Tel. 0845 277 7000

Stirling Council
Social Work Services
Drummond House
Stirling
Tel 0845 277 7000

NHS
Forth Valley
Tel 01786 463031

Women’s Aid
Port Street
Stirling
Tel 01786 470897

Citizen’s Advice
Norman McEwan Centre
17 Upper Craigs
Stirling
Tel 01786 470239

Shelter
Housing Aid Centre
Dundee
Tel 01324 622 066

Samaritans
Tel 01382 225544

Childline Scotland
0870 3362910
Appendix 3

Consent Form
I agree to participate in the research study being conducted by David M Bright of Stirling University.

I have been given information concerning the nature and content of this research study. I understand what the study is trying to achieve and know what is expected from me.

I have been given the opportunity to ask questions and make enquiries and confirm that everything has been explained to me.

I am aware that;

- The data collected will be held on computer by code
- I will not be identified in the data or any subsequent publication
- Stirling University is registered under the Data Protection Act 1984 and the study will be conducted the terms of this legislation
- I can withdraw from the study at any time

I agree to participate in the research study

Signed  ------------------------------  Date  ------------------
(participant)

Signed  ------------------------------  Date  ------------------
(witness)
Appendix 4

Questionnaire
There are 132 questions divided into 5 sections.
Section one

In this first section I want to obtain some general information about you which will provide useful background when I am analysing the responses to the other sections of this questionnaire.

1. Your age

16-17 □ 18-24 □ 25 – 59 □ 60 or over □

2. Sex M □ F □

3. Occupation ........................................

3. Family Composition

- single person □
- single parent □
- couple (no children) □
- couple (with children) □
- household member □
- pregnant □

4. Reason for Homelessness

- parents, friends, relatives □
- unable to accommodate □
- court order □
- dispute with partner □
  (non violent) □
- dispute with partner □
  (violent) □
- fire, flood or other emergency □
- other (please specify) □

5. Is this your first homeless application

Yes □ No □

6. When will you be homeless

Tonight □ Within one week □ Within one month □ Within two months □
Section Two

In this section there are a number of personality traits that may or may not apply to you.

Please tell me the number for each statement which indicates the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

<table>
<thead>
<tr>
<th>Disagree strongly</th>
<th>Disagree moderately</th>
<th>Disagree a little</th>
<th>Neither agree nor disagree</th>
<th>Agree a little</th>
<th>Agree moderately</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

I see myself as:

1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganised, careless.
9. _____ Calm, emotionally stable.
10. _____ Conventional, uncreative.
Section Three

In this section each item consists of a pair of alternative statements lettered ‘A’ or ‘B’.

Please select the one statement from each pair which you more strongly believe to be the case as far as you are concerned and answer either A or B as appropriate.

Please select the statement you actually believe to be true rather than one which you think you should choose or the one you would like to be true.

Should you find that you believe both statements or neither one, please select the one you more strongly believe to be the case.

Please try to respond independently to each item when making your choice; do not be influenced by your previous choices.

This is a measure of personal belief and as such there are no right or wrong answers.
1. A. Children get into trouble because their parents punish them too much.
   B. The trouble with most children nowadays is that their parents are too easy with them.

2. A. Many of the unhappy things in people’s lives are partly due to bad luck.
   B. People’s misfortunes result from the mistakes they make.

3. A. One of the major reasons why we have wars is because people don’t take enough interest in politics.
   B. There will always be wars, no matter how hard people try to prevent them.

4. A. In the long run people get the respect they deserve in this world
   B. Unfortunately, an individual’s worth often passes unrecognised no matter how hard he tries.

5. A. The idea that teachers are unfair to students is nonsense.
   B. Most students don’t realise the extent to which their grades are influenced by accidental happenings.

6. A. Without the right breaks one cannot be an effective leader.
   B. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. A. No matter how hard you try some people just don’t like you.
   B. People who can’t get others to like them don’t understand how to get along with others.

8. A. Heredity plays the major role in determining one’s personality.
   B. It is one’s experiences in life which determine what they’re like.

9. A. I have often found that what is going to happen will happen.
   B. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. A. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    B. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. A. Becoming a success is a matter of hard work, luck has nothing to do with it.
   B. Getting a good job depends mainly on being in the right place at the right time.

12. A. The average citizen can have an influence in government decisions.
   B. The world is run by the few people in power, and there is not much the little guy can do about it.

13. A. When I make plans, I am almost certain that I can make them work.
   B. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. A. There are certain people who are just no good.
   B. There is some good in everybody.

15. A. In my case getting what I want has little or nothing to do with luck.
   B. Many times we might just as well decide what to do by flipping a coin.

16. A. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
   B. Getting people to do the right thing depends on ability, luck has little or nothing to do with it.

17. A. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
   B. By taking an active part in political and social affairs the people can control world events.

18. A. Most people don’t realise the extent to which their lives are controlled by accidental happenings.
   B. There is really no such thing as “luck”.

19. A. One should always be willing to admit mistakes.
   B. It is usually best to cover up one’s mistakes.

20. A. It is hard to know whether or not a person really likes you.
   B. How many friends you have depends on how nice a person you are.
21. A. In the long run the bad things that happen to us are balanced by the good ones.
   B. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. A. With enough effort we can wipe out political corruption.
   B. It is difficult for people to have much control over the things politicians do in office.

23. A. Sometimes I can’t understand how teachers arrive at the grades they give.
   B. There is a direct connection between how I study and the grades I get.

24. A. A good leader expects people to decide for themselves what they should do.
   B. A good leader makes it clear to everybody what their jobs are.

25. A. Many times I feel that I have little influence over the things that happen to me.
   B. It is impossible for me to believe that chance or luck plays an important role in my life.

26. A. People are lonely because they don’t try to be friendly.
   B. There’s not much use in trying too hard to please people, if they like you, they like you.

27. A. There is too much emphasis on athletics in high school.
   B. Team sports are an excellent way to build character.

28. A. What happens to me is my own doing.
   B. Sometimes I feel that I don’t have enough control over the direction my life is taking.

29. A. Most of the time I can’t understand why politicians behave the way they do.
   B. In the long run the people are responsible for bad government on a national as well as on a local level.
Section Four

I would like you to think of the time since you became aware that you were likely to become homeless.

I would like to know how your health has been since that time.

Please tell me which of the four answers applies most closely to you.
1. Been feeling perfectly well and in good health?

<table>
<thead>
<tr>
<th>Better since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Worse since becoming homeless</th>
<th>Much worse since becoming homeless</th>
</tr>
</thead>
</table>

2. Been feeling in need of a good tonic?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

3. Been feeling run down and out of sorts?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

4. Felt that you are ill?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

5. Been getting any pains in your head?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

6. Been getting a feeling of pressure or tightness in your head?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

7. Been having hot or cold spells?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>
8. Lost much sleep over worry?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

9. Had difficulty in staying asleep once you are off?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

10. Felt constantly under strain?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

11. Been getting edgy and bad-tempered?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

12. Been getting scared or panicky for no good reason?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

13. Found everything getting on top of you?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>

14. Been feeling nervous and strung up all the time?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>No more than before becoming homeless</th>
<th>Rather more since becoming homeless</th>
<th>Much more since becoming homeless</th>
</tr>
</thead>
</table>
15. Been managing to keep yourself busy and occupied?

<table>
<thead>
<tr>
<th>More so since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Rather less since becoming homeless</th>
<th>Much less since becoming homeless</th>
</tr>
</thead>
</table>

16. Been taking longer over the things you do?

<table>
<thead>
<tr>
<th>Quicker since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Longer since becoming homeless</th>
<th>Much Longer since becoming homeless</th>
</tr>
</thead>
</table>

17. Felt on the whole you were doing things well?

<table>
<thead>
<tr>
<th>Better since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Less well since becoming homeless</th>
<th>Much less well since becoming homeless</th>
</tr>
</thead>
</table>

18. Been satisfied with the way you’ve carried out your task?

<table>
<thead>
<tr>
<th>More satisfied since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Less satisfied since becoming homeless</th>
<th>Much less satisfied since becoming homeless</th>
</tr>
</thead>
</table>

19. Felt you were playing a useful part in things?

<table>
<thead>
<tr>
<th>More so since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Less useful since becoming homeless</th>
<th>Much less useful since becoming homeless</th>
</tr>
</thead>
</table>

20. Felt capable of making decisions about things?

<table>
<thead>
<tr>
<th>More so since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Less so since becoming homeless</th>
<th>Much less capable since becoming homeless</th>
</tr>
</thead>
</table>

21. Been able to enjoy your day-to-day activities?

<table>
<thead>
<tr>
<th>More so since becoming homeless</th>
<th>Same since becoming homeless</th>
<th>Less so since becoming homeless</th>
<th>Much less since becoming homeless</th>
</tr>
</thead>
</table>
Section Five

For the questions in this section I want you to think about the most stressful experience you have encountered as a result of being homeless.

This will be different for each individual and I would ask that you remember what was most stressful for you about being homeless and think of this when answering the questions.

For each question, give the answer that describes how often you did each thing when you were dealing with the stress of being homeless.
1. I just concentrated on what to do next - the next step

2. I try to analyse the problem in order to understand it better

3. I turned to work or another activity to take my mind off things.

4. I felt that time would make a difference - the only thing was to wait.

5. I bargained or compromised to get something positive from the situation.

6. I did something that I didn’t think would work, but at least I was doing something.

7. I tried to get the person responsible to change his or her mind.

8. I talked to someone to find out more about the situation.

9. I criticised or lectured myself.

10. I tried not to burn my bridges, but leave things open somewhat.
<table>
<thead>
<tr>
<th></th>
<th>Never did that</th>
<th>Sometimes did that</th>
<th>Often did that</th>
<th>Always did that</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I hoped for a miracle.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12. I went along with fate, sometimes; I just have bad luck.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. I went on as if nothing had happened.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. I tried to keep my feelings to myself.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. I looked for the silver lining, so to speak; I tried to look on the bright side of things.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16. I slept more than usual.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. I expressed anger to person(s) who caused the problem.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18. I accepted sympathy and understanding from someone.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>19. I told myself things that helped me feel better.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>20. I was inspired to do something creative about the problem.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>21. I tried to forget the whole thing.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>22. I got professional help.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>23. I changed or grew as a person.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Never did that</td>
<td>Sometimes did that</td>
<td>Often did that</td>
<td>Always did that</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>--------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>24.</td>
<td>I waited to see what would happen before doing anything.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I apologised or did something to make up.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>I made a plan of action and followed it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>I accepted the next best thing to what I wanted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I let my feelings out somehow.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>I felt I had brought the problem on myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>I came out of the experience better than I went in.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>I talked to someone who could do something concrete about the problem.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>I tried to get away from it for a while by resting or taking a vacation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>I tried to make myself feel better by eating, drinking, smoking, using drugs or medications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>I took a big chance or did something very risky to solve the problem.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never did that</td>
<td>Sometimes did that</td>
<td>Often did that</td>
<td>Always did that</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>35.</td>
<td>I tried not to act too hastily or follow my first hunch.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>I found new faith.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>I maintained my pride and kept a stiff upper lip.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>I rediscovered what is important in life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>I changed something so that things would turn out all right.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>I generally avoided being with people.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>I didn’t let it get to me; I refused to think too much about it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>I asked for advice from a friend I respected.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>I kept others from knowing how bad things were.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>I made light of the situation; I refused to get too serious about it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>I talked to someone about how I was feeling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never did that</td>
<td>Sometimes did that</td>
<td>Often did that</td>
<td>Always did that</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>--------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>46.</td>
<td>I stood my ground and fought for what I wanted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>I took it out on other people.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>I drew on past experiences; I was in a similar situation before.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>I knew what had to be done.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>I refused to believe that it had happened.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>I promised myself that things would be different next time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>I came up with a couple of different solutions to the problem.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>I accepted it since nothing could be done.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>I tried to keep my feelings from interfering with other things too much.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>I wish that I could change what had happened or how I felt.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never did that</td>
<td>Sometimes did that</td>
<td>Often did that</td>
<td>Always did that</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>--------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>56. I changed something about myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. I daydreamed or imagined a better time or place than the one I was in.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. I wished that the situation would go away or somehow be over with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. I had fantasies or wishes about how things might turn out.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. I prayed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. I prepared myself for the worst.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. I went over in my mind what I would say or do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63. I thought about how a person I admire would handle this situation and used this as a model.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64. I tried to see things from the other person’s point of view.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65. I reminded myself of how much worse things could be.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66. I jogged or exercised.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5

Questionnaire Answer Keys
### TIPPI - Answer Key

<table>
<thead>
<tr>
<th>Disagree strongly strongly</th>
<th>Disagree moderately</th>
<th>Disagree a little</th>
<th>Neither agree nor disagree</th>
<th>Agree a little</th>
<th>Agree moderately</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Ways of Coping Questionnaire - Answer Key

<table>
<thead>
<tr>
<th>Never did that</th>
<th>Sometimes did that</th>
<th>Often did that</th>
<th>Always did that</th>
</tr>
</thead>
</table>
Appendix 6

Interview Schedule
Interview Schedule

Q1. How would you describe yourself?

Q2. How did you feel when you realised you would be homeless?

Q3. What effect did this have on you?

Q4. What changed about you?

Q5. What do you consider to be the major difficulties and difficult situations you have had to deal with?

Q6. What do you do to cope with difficult situations – what works for you?

Q7. What helped you to deal with your situation?

Q8. What would have helped you that you did not have?
Appendix 7

Ways of Coping Questionnaire Scales - Correlation Matrix
## Ways of Coping Questionnaire Scales - Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Confrontive</th>
<th>Distancing</th>
<th>Self Controlling</th>
<th>Seek Social Support</th>
<th>Accepting Responsibility</th>
<th>Escape Avoidance</th>
<th>Planful Problem Solving</th>
<th>Positive reappraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Confrontive</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.235(*)</td>
<td>.242(*)</td>
<td>.131</td>
<td>-.114</td>
<td>.265(**)</td>
<td>.349(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.021</td>
<td>.018</td>
<td>.204</td>
<td>.270</td>
<td>.009</td>
<td>.000</td>
<td>.877</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td><strong>Distancing</strong></td>
<td>Pearson Correlation</td>
<td>.235(*)</td>
<td>1</td>
<td>.330(**)</td>
<td>-.145</td>
<td>.186</td>
<td>.332(**)</td>
<td>-.055</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.021</td>
<td>.001</td>
<td>.159</td>
<td>.070</td>
<td>.001</td>
<td>.594</td>
<td>.624</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td><strong>Self_controlling</strong></td>
<td>Pearson Correlation</td>
<td>.242(*)</td>
<td>.330(**)</td>
<td>1</td>
<td>.085</td>
<td>.336(**)</td>
<td>.546(**)</td>
<td>.312(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.018</td>
<td>.001</td>
<td>.410</td>
<td>.001</td>
<td>.000</td>
<td>.002</td>
<td>.205</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td><strong>Seek_soc_sup</strong></td>
<td>Pearson Correlation</td>
<td>.131</td>
<td>-.145</td>
<td>.085</td>
<td>1</td>
<td>-.209(*)</td>
<td>.043</td>
<td>.316(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.204</td>
<td>.159</td>
<td>.410</td>
<td>.041</td>
<td>.679</td>
<td>.002</td>
<td>.277</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td><strong>Accepting responsibility</strong></td>
<td>Pearson Correlation</td>
<td>-.114</td>
<td>.186</td>
<td>.336(**)</td>
<td>-.209(*)</td>
<td>1</td>
<td>.417(**)</td>
<td>.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>-.442(**)</td>
<td>.322(**)</td>
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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).