EXPLORING THE IMPACT OF SOCIAL SUPPORT AND

CHRONIC DISTRESS ON DRUG ADDICTION SEVERITY

by

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ABSTRACT

The present study investigated whether the relationship between social support and drug use severity is mediated by one's level of psychological distress. Scales measuring chronic distress, social support, and drug abuse were administered to a sample of drug users attending an outreach service in St. John's, NL (n = 50). In conjunction, a subset of matched participants was extracted from the Canadian Community Health Survey (CCHS) database (n = 25); these participants were also self-reported drug users and answered questions pertaining to the study variables. Initial bivariate analyses determined that further tests of mediation were not warranted due to a lack of significant correlation among the study variables. However, follow-up comparisons indicated that drug users within St. John's, NL were significantly more distressed, had lower social support, and greater severity of drug use compared to the overall CCHS population. Extreme severity of distress and drug abuse were consistent across the sample, therefore, a lack of variability among these factors might explain the lack of significant results. Since the mental health status of this sample was so poor, it is recommended that they be treated as a unique study group, or receive treatment prior to future research on this topic.

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List of Abbreviations

CCHS..Canadian Community Health Survey

CIDI... Composite International Diagnostic Interview

DAST-20...Drug Abuse Screening Test 20-item Scale

DSM-IV-TR...............Diagnostic and Statistical Manual of Mental Disorders IV (Text Revision)

HIV..Human Immunodeficiency Virus

ICD...International Classification of Diseases

K-10...Kessler Psychological Distress 10-item Scale

MOS-SSS... Medical Outcomes Survey Social Support Scale

WHO...World Health Organization

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Exploring the Impact of Social Support and Chronic Distress on Drug Addiction Severity

Social support has a substantial impact on our psychological well-being as well as our physical health and longevity (Graham, Christian, & Kiecolt-Glaser, 2007; Karren, Smith, Hafen, & Jenkins, 2010). While social support is instrumental to everyone's overall health status, it can be particularly beneficial to individuals who encounter high levels of stress in their daily lives. One widely known mechanism behind social support is stress buffering (Cohen, 2004) which works by lowering distress while providing an increased sense of self-worth, belonging, and purpose (Karren, et al., 2010). In this manner, a strong network of social support can offer nurturance and reinforcement to the individual so that they are better able to deal with life's difficulties (Tracy, Munson, Peterson, & Floersch, 2010).

Social support is also well established as a protective factor against substance abuse, and has been shown to increase the chances of recovery among those affected by drug addiction (Burkey, Kim, & Breakey, 2011; Dobkin, De Civita, Paraherakis, & Gill, 2002). In particular, previous research has demonstrated that social support can have positive effects on the maintenance and cessation of drug abuse; specifically, social support is associated with reduced drug use and better treatment outcomes (Bohnert, German, Knowlton, & Latkin, 2010). However, little is known about how social support leads to better treatment outcomes for this population.

It has been established that having social support in one's life is beneficial to the severity of other mental health problems (Graham, et al., 2007), which may have implications for drug addiction research. Social support has been deemed a protective factor against many mental illnesses such as depression (Wareham, Fowler, & Pike, 2007), as it has the ability to lower one's level of psychological distress, which further leads to reduced symptoms of the mental illness

(Cohen, 2004). Unfortunately, the literature on the relationship between psychological distress and drug use is negligible, and has only been examined among individuals that are already enrolled in a treatment program (Dobkin, et al., 2002; Hassel, Nordfjaern, & Hagen, 2013). While these studies have been vital to increasing our understanding of how distress impacts treatment outcomes, they often overlook individuals whom are not yet willing/able to participate in a treatment program. Currently, there are no studies that examine the combined influence of distress and social support on the severity of drug use. This gap in the literature should be explored because if psychological distress is mediating the relationship between social support and drug use, it could have a large impact on one's ability and motivation to seek treatment.

The current study explores whether, and the extent to which psychological distress is a mediating factor between social support and drug use severity, specifically, for individuals not enrolled in a treatment program. The goal is to examine the relationship between social support, distress, and drug use, while additionally comparing the mental health of drug users in St. John's, NL to a matched sample of Canadian drug users, as well as the overall CCHS population.

Defining Social Support

Social support is defined as the degree to which a person's basic social needs are met through interaction with other people (Karren et al., 2010). However, since social support is an extremely multi-faceted term (Veiel & Bauman, 1992), it can also encompass potential consequences of interpersonal relations, and may not always be interpreted accurately by the individual that is receiving the support (Karren et al., 2010). For example, an individual may not acknowledge the presence of positive social support, but can still reap the benefits. They may also be unaware of the potentially negative effects of certain types of social support in their lives. Generally, however, social support can come in many forms, can be tangible or intangible, and is always provided to an individual by someone within their social network (Graham, et al., 2007).

Researchers have identified several types of social support, allowing for the analysis of their use in daily life and impact on overall health status (Cohen, 2004). For instance, material aid or behavioural assistance has been defined as tangible support; positive affect, empathy, or encouragement has been defined as emotional support; offering of advice, information, or feedback has been defined as informational support; expression of love and affection has been defined as affection support; and the availability of others to do fun things with you has been defined as positive social interaction (CCHS – Mental Health; Statistics Canada, 2012).

Considering we encounter so many types of social support in daily life, it is not surprising that it has such a large impact on our mental and physical health (Karren, et al., 2010). While some types of social support have a more general effect on well-being, such as informational or emotional support, other types of social support are most effective when its provision depends on a specific problem at hand (Cohen, 2004). For instance, if an individual is encountering a financial stress and is provided tangible support, they will be better equipped to deal with this stress and less likely to engage in negative coping strategies. Similarly, if stress is caused by the loss of a loved one, positive social interaction will have a more direct effect on one's overall well-being. Since drug users experience a great deal of general and problem-specific stress in daily life, there has been a growing interest in the role of social support in health maintenance and disease etiology for this population.

Social Support and Drug Use

Studies have observed that the presence of social support has been associated with help-seeking behaviours among drug users (Davey et al., 2007; Gyarmathy & Latkin, 2008; Sapra, et al., 2013). Generally, individuals are more likely to seek treatment, enter a rehabilitation program, and use other medical services, such as HIV testing, if they are provided support from

someone within their social network (Davey et al., 2007; Gyarmathy & Latkin, 2008). Therefore, social support may improve the health and wellness of drug users, particularly by helping address the co-morbidity of other mental and physical health issues among this population. This is important, considering drug users are at an elevated risk for illness and death compared to non-drug using individuals (Fernando, 1993).

When drug users are not yet ready to accept that they have a substance abuse problem, or are not willing to seek out treatment, they are particularly vulnerable to the effects of social support. While social support has a host of positive benefits for drug users, the source of the social support is an extremely important factor (Goehl, Nunes, Quitkin, & Hilton, 1993). Since the individual is still abusing drugs, it is likely that most of the peers in their social network are also drug users; this poses a threat through modelling and conditioning, as an individual has a far greater chance of initiating and maintaining drug use if someone in their social network is also a drug user (Buchanan & Latkin, 2008). Drug-using peers can act as dysfunctional role models by reinforcing maladaptive behaviors, or acting as environmental cues for drug availability, which has been shown to elicit craving and withdrawal symptoms (Childress, McLellan, & O'Brien, 1986). Therefore, in order for social support to be beneficial, it must come from someone who is not currently using drugs, and is supportive of recovery (Davey, et al., 2007; Tracy et al., 2010).

It is important to note that while social support is associated with help-seeking behaviours and better treatment outcomes, there is a continued need to ascertain the exact nature of the relationship between social support and drug use. The mechanism behind social support is not fully understood for individuals who are currently abusing drugs, and should be studied in further detail.

Social Support and Psychological Distress

The buffering model proposes that social support protects, or buffers, the individual from potentially adverse effects of stressful events, particularly when their well-being is endangered by stress (Cohen, 2004). When multiple stressful events occur, the problem-solving capacity of the individual is strained and can lead to a serious health condition such as substance abuse. The individual no longer has the capacity to use positive coping mechanisms to deal with stress, and their mental and physical health is compromised as a result. When social support is available, and is provided by someone who is supportive of recovery and is not currently using drugs, the individual is equipped with tools to dismantle the stress in their lives, allowing them to interrupt or prevent a negative reaction to stress (Cohen, 2004). For example, an individual who attends an outreach service and speaks to a social worker on a daily basis is much more likely to find stable housing or employment than someone who is living on the street and not utilizing these resources. Therefore, the individual with social support may experience less psychological distress, which may interrupt their desire to use drugs to cope with negative life circumstances.

Although the buffering model represents a process through which social support may affect well-being, there is still a great deal of uncertainty behind this theory, particularly when applied to drug users that are not enrolled in a treatment program. However, there are numerous studies that support the buffering model, using rehabilitated individuals as participants. For instance, Goehl et al. (1993) found that social support aided in coping with feelings of stress among methadone maintenance patients. Similarly, it was also observed that social support predicted less psychological distress and more positive coping among homeless people who were experiencing a substance abuse problem (Stein, Dixon, & Nyamathi, 2008). The support provided by social networks have, therefore, been hypothesized to protect drug users from the

harmful effects of stress, providing them with a positive means of coping with their mental illness.

An alternative view of the relationship between social support and distress, argues that a lack of social support can cause or exacerbate symptoms of distress when an individual is experiencing a difficult life circumstance. Dickens (2012) examined the early experiences of individuals receiving substance abuse treatment and found that almost all participants who reported low to no social support also reported symptoms of psychological distress. During qualitative interviews, many individuals stated that this distress was due to a lack of social support (e.g., not seeing their family members while in the program). Additionally, many individuals experienced difficulties with their recovery process. Furthermore, Dobkin, et al. (2002) found that symptoms of psychological distress were higher among substance users who had low social support at intake than those that reported high social support. Participants with low social support also experienced higher severity of drug and alcohol abuse, and were more likely to drop out of treatment.

The fact that social support can buffer levels of distress, and that a lack of social support can cause or further distress, is vital in understanding the relationship between social support, distress and drug use. In summary, social support can buffer one's level of psychological distress, leading to more effective coping skills and an increased sense of belonging and purpose (Cohen, 2004; Karren et al., 2010). Additionally, social support is essential to treatment entry and retention. It is vital to ensure, however, that social support comes from someone who is supportive of recovery and is not a drug user, and that the treatment plan utilize the positive effects of social support by incorporating others from the client's social network.

The Current Study

The current study hypothesizes that positive social support leads to a decrease in distress, which leads to lower drug use severity. Understanding *how* social support leads to reduced drug use and better treatment outcomes can be especially important for drug users who have not yet sought treatment (Wasserman, Stewart, & Delucchi, 2000). If psychological distress is, indeed, a mediating factor between social support and drug use severity and this is not addressed, the individual may experience difficulty attempting to seek recovery help. This is an important concern to address, as only one third of people who are dependent on drugs are enrolled in a treatment program (Gyarmathy & Latkin, 2008). The findings of this study may, therefore, have important implications for interventions that could promote treatment entry across Canada.

Method

Participants

A sample of participants was recruited from Street Reach – a community outreach organization in St. John's, NL. Guided by the principles of harm reduction, this organization provides basic care items, food, needle exchange, and drop-in support for individuals experiencing difficult life circumstances such as homelessness and poverty (Street Reach, 2014). Participants were recruited through snowball sampling (Lewis-Beck, Bryman, & Liao, 2014), as well as through flyers that were placed in the main gathering areas of the organization. In order to participate, individuals were required to meet three selection criteria: must be 18 years or older, a self-reported drug user, and have used drugs within the past 12 months. Participants were also required to have completely answered questions pertaining to the three study variables; namely, social support, psychological distress, and severity of illicit drug use. Participants that failed to complete the questionnaires, stated that questions were not applicable, or gave no response, were excluded. As a result, a total of 50 of the 54 participants were selected for this

portion of the study (39 Male, 78%; 11 Female, 22%). Table 1 provides the frequencies for

age, marital status, education, employment, and income for this sample.

Table 1

Demographics for Community Sample

Demographic variable	*n*	%
Age		
20 to 24 years	1	2.0
25 to 29 years	3	6.0
30 to 34 years	6	12.0
35 to 39 years	9	18.0
40 to 44 years	6	12.0
45 to 49 years	6	12.0
50 to 54 years	7	14.0
55 to 59 years	5	10.0
60 to 64 years	7	14.0
Marital Status		
Married	2	4.0
Common Law	4	8.0
Divorced	6	12.0
Single	37	74.0
Other	1	2.0
Level of Education		
Grade 8 or Less	11	22.0
High School	27	54.0
Business/Trade (No HS)	3	6.0
Business/Trade (HS)	5	10.0
University Degree (HS)	3	6.0
Other	1	2.0
Employment Status		
Unemployed	41	82.0
Self Employed	1	2.0
Employed	8	16.0
Total Personal Income		
$0-6,200	11	22.0
$6,201-10,400	22	44.0
$10,401-15,600	9	18.0
$15,601-20,800	3	6.0
$20,801-26,000	5	10.0

Note. *n* = 50.

In addition, participant data from the Canadian Community Health Survey was used in this study. The CCHS is a cross-sectional survey that collects health information for the general Canadian population. The present study utilized data from the 2012 CCHS mental health questionnaire, which provided estimates for major mental disorders and the provision of mental health services across the country (CCHS – Mental Health; Statistics Canada, 2012). Data from a total of 25,113 individuals, randomly selected from ten provinces were collected by trained Statistics Canada interviewers. The combined (household and person) response rate for this survey was 68.9%, representing 28.3 million Canadians (Statistics Canada, 2013).

A subset of participants was extracted from the total population. Participants were selected for this portion of the study based on three main criteria. Firstly, since the present study is focused upon the adult population, only participants between 18 and 69 years of age were studied. The coding procedures of the age variable used by CCHS states that participants aged 18 years old are to be included within the adult population. Secondly, only those who reported that illicit drug use interfered with their lives on a daily basis in the past 12 months were selected. Similarly, respondents were required to have completely answered questions pertaining to the study variables; those participants who failed to answer questions within either of these modules, those who stated that the questions were not applicable, or who gave no response, were excluded. As a result, a total of 25 participants were selected from the overall CCHS population (12 Males, 48%; 13 Females, 52%). Table 2 provides the frequencies for age, marital status, education, employment, and income for this sample.

Table 2

Demographics for CCHS Sample

Demographic variable	*n*	%
Age		
18 to 19 years	4	16.0

20 to 24 years	10	40.0
25 to 29 years	3	12.0
30 to 34 years	2	8.0
35 to 39 years	3	12.0
45 to 49 years	2	8.0
65 to 69 years	1	4.0
Marital Status		
Married	1	4.0
Widowed, separated, divorced	4	16.0
Single	20	80.0
Education		
Less than High School (HS)	6	24.0
HS, No Post-Secondary	4	16.0
Some Post-Secondary	5	20.0
Post-Secondary Certificate/		
Diploma/University Degree	10	40.0
Worked at a Job or Business in Past Year		
Yes	17	68.0
No	8	32.0
Total Personal Income		
Less than $20,000	13	52.0
$20,000-$39,999	6	24.0
$40,000-$59,999	1	4.0
Not Stated	5	20.0

Note. *n* = 25

Data Collection, Community Sample

Procedure.

Ethics approval for the present study was granted by the Interdisciplinary Committee on Ethics in Human Research (see Appendix A). Once approval was established, the primary researcher made contact with interested organizations and provided them with information about the study as well as a copy of the consent form (see Appendix B). Approval for data collection was given by two interested parties (Street Reach (Community Youth Network) and Turnings);

however, participants were only recruited from Street Reach due to unforeseen circumstances experienced by the Turnings organization.

During data collection, eligibility was established and informed consent was given by each participant. Participants were then brought to an isolated room to avoid any potential distractions. This location was selected by the Street Reach staff in accordance with emergency protocol and was the standardized room for study completion across participants. Participants were administered the measurement package which included a measure of drug use severity (DAST-20), psychological distress (K10), and social support (MOS-SSS) (See Appendices C, D, and E). If a literacy issue occurred, the primary researcher assisted the participant by reading the questions aloud and confirming their understanding.

Participants were compensated with a $5 Tim Horton's gift card for the completion of the measurement package. Individuals who were interested in seeking drug treatment or information on drug addiction were referred to an on-site social worker. All protocols were approved by the Community Youth Network as well as the Street Reach organization prior to implementation.

Data Collection, CCHS Sample

Procedure.

The CCHS questionnaire was administered using computer-assisted interviewing. Samples identified by area frames were interviewed using the computer-assisted personal interviewing method. Samples selected from random digit dialling and telephone lists were interviewed using the computer-assisted telephone interviewing method. When the selected respondent was absent or could not complete the interview, a specified recall protocol was followed. However, if the respondent failed to participate after three attempts, they were removed from the sample. Since the questions asked were of personal nature, and/or would be

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beyond the scope of the respondent's close friend or relative, proxy interviews were not conducted. Only information obtained from active respondents were included in the sample (Statistics Canada, 2013).

Minimizing non-response and survey weighting.

In order to minimize non-response an introduction letter and brochure were sent to the home of each participant prior to contact with the interviewer. The purpose of this information was to highlight the importance of the study and provide examples as to how participant data would be used; this increased the probability that individuals would participate during the interview process.

Survey weighting was also used to obtain a representative sample. This was done to ensure that every individual in the sample represented themselves, as well as several other people who had not been sampled. In all analyses, survey weighting ensured that differential response rates and variation in selection were adjusted for. Therefore, the weighting phase has allowed us to derive meaningful estimates from the survey (Statistics Canada, 2013).

Study Variables and Instruments

The present study examined social support, psychological distress, and drug use severity. Severity of illicit drug use was measured in the community sample using the Drug Abuse Screening Test (DAST-20; TriHealth, 2012). The DAST-20 is a 20-item, yes/no, self-report instrument that is used for clinical screening and treatment evaluation in the substance abuse field (Møller & Linaker, 2010). The DAST-20 has moderate to high levels of validity, sensitivity and specificity (Yudko, 2007). The test–retest reliability was found to have an α coefficient of .78 (n = 45) (El-Bassel, Schilling, Schinke, & Orlandi, 1997). Questions pertain to drug use, withdrawal symptoms, as well as physical, social and psychological consequences of drug use (see Appendix C).

Severity was defined using the DAST-20 scoring system which rates participant responses on the following scale: 0 ('No problems reported'), 1-5 ('Low level of drug abuse'), 6-10 ('Moderate level of drug abuse'), 11-15 ('Substantial level of drug abuse'), and 16-20 ('Severe level of drug abuse'). Scores for this instrument were later transformed to a scale that ranged from 0-10 so that general comparisons between samples could be made.

Severity of illicit drug use was measured in the CCHS sample using the Composite International Diagnostic Interview (CIDI; Clotter, 2000). The CIDI is a diagnostic tool used to assess substance abuse according to the definitions and criteria of both the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000) and the Diagnostic Criteria for the Research of the International Classification of Diseases (ICD-10; World Health Organization, 1992).

Substance abuse was examined in the CIDI to operationalize the DSM-IV-TR's diagnosis of a substance abuse disorder. Section D of the Substance Abuse Module includes questions pertaining to amphetamines and other stimulants, cannabinoids, cocaine, PCP and other hallucinogens, inhalants, heroin and other opiates, barbiturates and other sedatives/tranquillizers, as well as club drugs. The Substance Abuse Module includes questions about the onset and recency of specific withdrawal symptoms, physical, social and psychological consequences for each category of substances, as well as the respondent's impairment and treatment seeking patterns (See http://www.hcp.med.harvard.edu/wmhcidi/ftpdir_public/CAPI%20Instrument /CAPI%20V21.1.3/CAPI%20V21.1.3_Illegal%20Substance%20Use.pdf).

Using questions asked by this module of the CIDI, as well as questions from Canada's Alcohol and Other Drugs Survey (Statistics Canada, 1994), drug users were defined and then categorized according to the severity of their drug use. Severity was defined by the degree to

which illicit drug use has interfered with their lives on a daily basis. In this manner, the CCHS rates participant responses on a scale ranging from 0, indicating low severity of drug abuse, to 10, indicating high severity of drug abuse.

Two different scales were used to measure drug use severity in this study; this decision was based on anticipated challenges associated with working with the community sample. Although the CIDI can reveal a substantial amount of information pertaining to drug use, it is quite long and requires a higher degree of concentration compared to the DAST-20. Since participants in the community sample are transient in their visits and may have concentration difficulties due to comorbid health issues and/or intoxication, it was reasoned that a more concise and easily administered instrument was required. Since the DAST-20 has an excellent success rate among other studies in the field (Møller & Linaker, 2010), and is a valid and reliable way to measure drug use severity (El-Bassel et al., 1997; Yudko, 2007), this scale was selected for the community sample.

An individual's level of psychological distress was measured in the community sample and the CCHS sample by the Kessler Psychological Distress Scale (K10). The K10 measures psychological distress in terms of chronicity of distress symptoms, and is a common and valid way to screen for mental disorders in clinical and epidemiologic settings (Kessler et al., 2002). The K10 has moderate to high levels of validity, sensitivity and specificity (Arnaud et al., 2010). Cronbach's alpha coefficient was determined to be .84 (n = 71) (Arnaud et al., 2010).

For each item, a five-level response scale was used based on the amount of time the respondent reported experiencing the particular problem. Questions include "During the past month, how often did you feel nervous?," "During the past month, how often did you feel worthless?," and "During the past month, about how often did you feel so depressed that nothing could cheer you up?". The response options ranged between 1 ('none of the time'), and 5 ('all of

the time'), thus low scores indicated low levels of psychological distress and high scores

indicated high levels of psychological distress (see Appendix D). The total derived K10 score

ranges between 0 and 40.

Finally, the MOS Social Support Survey (MOS-SSS) was used in both samples to

evaluate one's perception of the amount of social support available to them. Support

measures are distinct from structural and health-related measures of social support; they are

reliable (Tangible: $\alpha = 0.92$; Emotional/Informational: $\alpha = 0.96$; Affection: $\alpha = 0.91$; Positive

social interaction: $\alpha = 0.94$; Overall: 0.97), and fairly stable over time (Sherbourne & Stewart,

1991).

The MOS-SSS consists of 19 items which measure five dimensions of functional

social support; tangible support, emotional support, informational support, affection, and

positive social interaction (CCHS – Mental Health; Statistics Canada, 2012). Empirical

analyses conducted by Sherbourne and Stewart (1991) indicated that emotional support and

informational support should be scored together so the following four subscales were

derived:

1. Tangible support (minimum = 0, maximum = 16)

2. Affection (minimum = 0, maximum = 12)

3. Positive social interaction (minimum = 0, maximum = 16)

4. Emotional/informational support (minimum = 0, maximum = 32)

For each item, participants were asked to indicate how often each type of social

support was available to them. Social support was assessed on a 5-point scale, ranging from

"none of the time" to "all of time", as having occurred in the past 12 months. Higher scores

on the subscales indicated more self-reported social support (see Appendix E). One's

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overall level of social support was determined by compiling the scores on each of the four subscales of social support. Responses such as "don't know", "refusal" or "not stated" were excluded from this study.

Results

Sample Characteristics

The community sample was primarily composed of individuals who were male (78%), single (74%), approximately 40 years of age (M = 44.34, SD = 11.18), and had a disadvantaged background, demonstrated by their low income, education, and employment (see Table 2). Since individuals were attending an outreach service, these demographics are fitting. As previously mentioned, participants who visit Street Reach are often experiencing a difficult life circumstance (Street Reach, 2014). In fact, among those recruited, most individuals were homeless or had an unstable living arrangement of some kind (e.g., group home, shelter, couch surfing, etc.).

Recruiting participants "from the streets" poses unique problems for researchers, which may deter them from recruiting this population. In fact, studies have shown that issues with recruitment and retention multiply when participants are mentally ill, and increase at an even greater level when participants have residential instability, or a substance abuse problem (Hough et al., 1996). Therefore, characteristics of the community sample (e.g., lack of fixed address, degree of distress, and drug use) make them particularly unique, and important to current drug addiction research.

The CCHS sample consisted of approximately the same number of males (48%) and females (52%) who were mostly single (80%), and between 20 and 24 years of age (40%). The majority of participants reported that they were employed in the past year (68.0%). However, there was no indication of current employment status within the questionnaire (CCHS – Mental

Health; Statistics Canada, 2012). In addition, 60% of participants received an education, with either a partially completed or completed post-secondary program. However, despite recent employment and a higher level of education, most participants in the CCHS sample made less than $20,000 per year (52%).

In summary, the samples were similar in terms of marital status and level of income. However, participants in the community sample were mostly male, had a higher average age, and lower level of education compared to the CCHS sample (see Table 1 and Table 2). Therefore, although individuals in both samples were drug users, there are substantial differences between these groups in terms of their demographics. In addition, these samples differed greatly with regards to their living arrangements; all of the individuals in the CCHS sample had a fixed address, with 44% of participants living alone or with others, while the majority of the community sample lacked a fixed address and were struggling with homelessness or poverty.

Such differences in current life circumstances are anticipated to influence the study variables (i.e., psychological distress, social support, drug abuse severity). For instance, since participants in the community sample were striving to meet their basic needs, they may hold a different set of priorities that could affect their drug abuse patterns and/or their desire to seek treatment. However, it is hypothesized that Maslow's (1943) theory, the hierarchy of needs, could be applied in the event that differences in life circumstances impact the study variables.

Mediation Analysis

A mediation analysis was proposed to test the hypothesis that psychological distress mediates the relationship between social support and drug use severity. In order for tests of mediation to be warranted, all zero-order correlations between variables of interest must be statistically significant (Howell, 2010).

Bivariate correlations between the three study variables were conducted for the community sample as well as the CCHS sample. It was discerned that no significant zero-order correlations existed between these variables for the community sample (see Table 3). Since the target variables of interest were not significantly related to one another, tests of mediation were not applicable for this sample.

Table 3

Correlations Between Measures: Community Sample

Measure	Social Support	Psychological Distress	Drug Use Severity
Social Support		-.081	-.115
Psychological Distress	-.081		.238
Drug Use Severity	-.115	.238	

Note. *p<.01

The CCHS sample yielded a significant correlation between psychological distress and drug use severity; however, no other zero-order correlations were significant (see Table 4). Since only one of the relationships in this meditational model was significant, tests of mediation were also not warranted for this sample.

Table 4

Correlations Between Measures: CCHS Sample

Measure	Social Support	Psychological Distress	Drug Use Severity
Social Support		-.200	.046
Psychological Distress	-.200		.096
Drug Use Severity	.046	.543*	

Note. *p<.01

Overall, it was concluded that psychological distress did not mediate the relationship between social support and drug use severity in either of these samples given the absence of statistically significant zero-order correlations among these variables.

Social Support, Distress and Drug Use: Comparing the Community Sample to the CCHS

Sample and Overall CCHS Population

The community sample and CCHS sample were compared in terms of the four subtypes of social support, psychological distress, and severity of drug use. Table 3 presents the means and standard deviations for both groups. One sample t-tests determined that the community sample and CCHS sample were not significantly different in terms of psychological distress. However, the groups differed significantly on all types of social support (see Table 5). Furthermore, while the scales measuring drug use severity were different for these two groups, analyses indicated that the drug use reported from the community sample was more extensive than that of the CCHS sample (see Table 5).

Table 5

Community Sample Compared to CCHS Sample

Variables (means, SD)	Community Sample (n = 50)	CCHS Sample (n = 25)	p Value	Effect Size (Cohen's d)
Social Support				
Tangible	4.00 (4.37)	10.30 (4.34)	p = .00	d = -1.45
Affection	5.18 (4.02)	8.70 (2.97)	p = .00	d = -1.00
Positive Social Interaction	6.20 (4.24)	11.70 (4.25)	p = .00	d = -1.30
Emotional/Informational	12.50 (7.93)	23.26 (7.31)	p = .00	d = 1.41
Overall	27.88 (18.22)	53.96 (16.50)	p = .00	d = 1.50
Psychological Distress	17.94 (10.01)	16.08 (8.67)	p = .20	d = 0.20
Drug Use Severity	6.12 (2.79)	3.88 (2.83)	-----	d = 0.80

The community sample and the overall CCHS population were then compared in terms of the four subtypes of social support, psychological distress, and severity of drug use. Table 6 presents the means, standard deviations, exact p values, and effect sizes for both groups. A series of one sample t-tests revealed that the community sample was significantly more distressed and had significantly lower amounts of social support in their lives compared to the

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overall CCHS population; this was true across subtypes of social support as well as for overall social support (see Table 6). Similar to prior comparisons between the community sample and CCHS sample, it appears that the community sample experienced more extensive drug use than the overall CCHS population.

Table 6

Community Sample Compared to Overall CCHS Population

Variables (means, SD)	Community Sample ($n = 50$)	CCHS Population ($N = 25113$)	p Value	Effect Size (Cohen's d)
Social Support				
Tangible	4.00 (4.37)	13.17 (3.35)	p = .000	d = -2.36
Affection	5.18 (4.02)	10.58 (2.34)	p = .000	d = -1.64
Positive Social Interaction	6.20 (4.24)	13.53 (3.17)	p = .000	d = -2.00
Emotional/Informational	12.50 (7.93)	27.23 (5.89)	p = .000	d = -2.11
Overall	27.88 (18.22)	64.82 (13.09)	p = .000	d = -2.33
Psychological Distress	17.94 (10.01)	4.54 (5.26)	p = .000	d = 1.68
Drug Use Severity	6.12 (2.79)	0.56 (1.29)	-----	d = 2.56

Discussion

The results of the present study are not consistent with previous literature on social support, psychological distress and drug use. It was anticipated that psychological distress would mediate the relationship between social support and drug use severity among participants in both the community sample and the CCHS sample. This hypothesis was based on the findings of other studies that demonstrated that social support reduces drug use (Bohnert et al., 2010) and lowers psychological distress among individuals with a substance abuse problem (Goehl et al., 1993; Stein et al., 2008). Although the literature supporting this theory was quite strong, statistically significant correlations between the study variables were not observed; therefore, tests of mediation were not applicable.

Predicted relationships were not observed for various reasons. Firstly, the sample size of each group was extremely small. It was anticipated that there would be a greater number of individuals in the CCHS population that met the study criteria. Unfortunately, since several Provinces did not use the drug abuse portion of the questionnaire, researchers were restricted to an extremely small sample (n = 25). Similarly, the community sample was meant to have approximately 100 participants. However, due to unforeseen circumstances, one of the two organizations that agreed to take part in the study could no longer participate, resulting in a sample size that was much smaller than anticipated (n = 50). It is important to note that even if sample sizes were larger, effect sizes were still very small (see Table 5). Thus, it is unlikely that even with larger samples statistically significant relationships would have been observed.

Furthermore, predicted relationships between the study variables were not observed in the community sample due to unique sample characteristics. The community sample reported extreme levels of drug abuse and psychological distress that were consistent across the majority of participants. Forty percent (40%) of participants were categorized as having a severe level of drug abuse, and forty-eight percent (48%) were categorized as having a severe mental disorder based upon their psychological distress scores. Since this sample was homogenous in terms of their poor mental health status, a lack of variability among questionnaire scores may have accounted for the lack of significant correlations among the study variables. Similar to attempting to measure spirituality among those who attend church, or love of shoes among those who shop at a shoe store, it is difficult to measure distress or drug use severity in this particular sample since most participants were experiencing mental health conditions that should demand hospitalization.

The mental health status of the community sample calls for urgent attention, particularly when their questionnaire scores are compared to drug users in the CCHS sample, and the overall CCHS population. Prior to quantitative comparisons, it was anticipated that the community and CCHS samples would be similar in terms of drug use severity, level of social support, and level of psychological distress. Although there were some demographic similarities (see Table 1 and Table 2) and both groups reported similar psychological distress scores, there were important differences between these two samples. The community sample experienced extremely low levels of social support and high levels of drug abuse compared to the CCHS sample, whose scores aligned with the overall CCHS population (see Table 5).

In addition, the community sample was significantly different from the overall CCHS population in terms of psychological distress, social support and drug use severity (see Table 6). Results indicated that participants in the community sample were nearly four times as distressed as the overall CCHS population, and had only half the amount of social support in their lives (see Table 6). As previously mentioned, low levels of social support and high levels of distress can have detrimental effects on overall health, therefore, the severe mental health condition of this group should be addressed.

Maslow's (1943) popular theory, the hierarchy of needs, may explain why these individuals are not currently seeking medical attention for their drug abuse and distress, or attempting to build a greater number of social relationships. Maslow theorized that human needs could be organized into a hierarchy based on their power to motivate an individual. According to this theory, there are five needs: physiological, safety, love, esteem, and self-actualization. Basic human needs (starting with the physiological) are most critical and are, therefore, at the base of

the hierarchy, while self-actualization is at the top. Maslow believed that higher-order needs arise only after lower needs are completely satisfied.

If you have few resources in life and are lacking basic needs and a minimum standard of safety, the hierarchy of needs will begin with food, clothing, and shelter (Nasiri, 2012). Many individuals who are experiencing homelessness or poverty lack these resources, and these resources are further depleted when an individual is also a drug user. If someone is constantly hungry and concerned about their safety, they cannot be motivated to meet other higher-order needs. Therefore, drug users have unique barriers that they must overcome before they can be motivated to move up the hierarchy toward love, esteem and self-actualization.

Participants in the community sample were recruited through an outreach organization; therefore, it can be assumed that their basic needs are not being met on a daily basis (this is evidenced by financial instability and low scores on the tangible support scale). Since participants are focused on meeting basic needs, they may not be motivated to build or maintain relationships with others and benefit from social support. This leaves their need for love and esteem unmet. Likewise, they may not be motivated to seek out treatment for mental health problems because their desire to meet lower-order needs is dominating. Results of the present study support this theory; among the subtypes of social support, participants reported their lowest form as tangible support, followed by affection.

Limitations

As with other studies, we note that there are several limitations that must be addressed. The most central limitation of the study is associated with the lack of significant results. As previously mentioned, it is likely that a lack of correlation between study variables was associated with low sample size and homogeneity among participants. Although tests of

mediation could not be conducted, significant comparisons were made between the community sample and the overall CCHS population which contributed to existing literature, and also offered insight into the unique experiences of drug users whom are experiencing homelessness and poverty.

Furthermore, certain variables predetermined by the CCHS posed limitations to this study. For instance, only a small number of Provinces used the drug abuse portion of the questionnaire, assessment of health status was based on self-report only, and the measure of drug abuse severity was different than the measure used in the community sample. Together, these limitations may have influenced participant response, confounding present results.

An additional limitation to this study is that the CCHS and community samples may have been influenced by unequal distribution of sample characteristics. For instance, the community sample was predominantly male (39 males, 78%), and predominately single (37 single, 74%). This may have been a confounding variable in the study since male and female participants, and single and married participants respond differently to questions pertaining to social support. This is especially important for the affection variable, since men may be less accepting of or comfortable with displays of affection, and participants who are single may rank affection much lower than participants who are married (Wareham et al., 2007). Researchers attempted to control for this in the community sample by including additional demographic variables, however, since there was a low number of participants in the community sample and researchers had limited control of CCHS data, demographics for both groups proved to be unequal.

Future Research

Future research should be conducted in order to further explore the relationship between social support, chronic distress, and drug use severity. Since this study was correlational in

nature, it precludes a demonstration of causation; this is an important limitation that is often

addressed through the use of an experimental design, however, it is not recommended for this

particular study. Manipulation of the independent variable (social support or chronic distress) is

not feasible or ethically appropriate. It would also be difficult to randomly assign participants to

conditions.

Future research should instead focus on obtaining a sample that is more representative of

the average drug user, allowing results to be generalized. For instance, researchers could collect

data from multiple outreach sites, and employ random sampling. Recruiting participants from

multiple outreach sites would increase the number of participants substantially, thus increasing

power and variability.

If psychological distress mediates the relationship between social support and drug use

severity, this should be examined among participants whom have met their basic needs, but are

not currently enrolled in a treatment program. It is important for future research to include a

measure of basic needs in the questionnaire package, and to collect data from a sample that is

more diverse in their current life circumstance. It is recommended that participants with extreme

mental health scores be treated as a unique study group or receive professional care prior to

participating.

Finally, future researchers should conduct qualitative interviews using a semi-structured

interview guide in addition to collecting quantitative data. While questionnaires are extremely

useful for measuring study variables of interest, the nature of this study calls for a more

comprehensive analysis. During data collection several participants expressed interest in

speaking about their drug use patterns as well as their daily struggles with distress and a lack of

social support. However, since the objective of this study was to collect questionnaire scores, this

valuable information was lost. Future research should utilize a mixed-methods design in order to capture the full experience of the participant. Qualitative data may also be used to assist researchers in their analysis of quantitative results.

Implications

Despite limitations, the present study provides valuable information to future researchers, healthcare professionals, and individuals dealing with drug addiction problems. The theory that was tested in this study can contribute to existing literature on drug addiction, social support and psychological distress; this is an area of particular importance that should be further explored.

The present study may also help to raise awareness about the mental health status of drug users who are experiencing poverty and homelessness. Research shows that despite the high prevalence of mental illness among drug users, the use of mental health services is low for this population (Sapra et al., 2013). In addition, being homeless poses an even greater risk that mental health treatment will not be sought (Ganesh, Campbell, Hurley, & Patten, 2013). Consequently, the number of drug users that are experiencing homelessness and poverty, who are living with a severe mental health problem, will continue to rise. The results of the present study, and the application of Maslow's hierarchy of needs to these results, can shed light on the current demand for services among this population, and offer insight into why these individuals are not currently seeking treatment services.

Lastly, study findings can be applied to current drug addiction programs so that changes that promote treatment entry can be made. Drug users who are living in the community and lack essential resources are an important population who are, unfortunately, often isolated and ignored. If drug addiction programs were to incorporate the fulfillment of basic needs as an initial step to recovery, treatment entry may increase substantially. In addition, programs that

focus on lowering psychological distress and providing health-enhancing forms of social support may have positive benefits for current drug users.

Rehabilitation from a drug addiction problem is a difficult journey, especially for individuals with co-morbid mental health issues and life stressors such as homelessness and poverty. Researchers and health professionals must aim to address the needs of these individuals by taking a person-centered approach to care, and by doing everything possible to address their current concerns.

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Appendix A

Letter of Ethics Approval

ICEHR Number:	**20140212-SC**
Approval Period:	July 11, 2013 – July 31, 2014
Funding Source:	
Responsible Faculty:	Dr. Ken Fowler Department of Psychology, Faculty of Science
Title of Project:	*From stats to streets: A mixed-methods approach to studying the effects of social support and distress on drug addiction*

July 11, 2013

Ms. Valerie Hodge
Department of Psychology, Faculty of Science
Memorial University of Newfoundland

Dear Ms. Hodge:

Thank you for your email correspondence of June 14, 18, 19 and 20, 2013 addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) concerning the above-named research project.

The ICEHR has re-examined the proposal with the clarification and revisions submitted and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* to July 31, 2014.

If you intend to make changes during the course of the project which may give rise to ethical concerns, please forward an amendment request with a description of these changes to Theresa Heath at icehr@mun.ca for the Committee's consideration.

The *TCPS2* requires that you submit an annual status report on your project to the ICEHR before July 31, 2014. If you plan to continue the project, you need to request renewal of your ethics clearance, including a brief summary on the progress of your research. When the project no longer requires contact with human participants, is completed and/or terminated, you need to provide the final report with a brief summary, and your file will be closed. The annual update form is on the ICEHR website at http://www.mun.ca/research/ethics/humans/icehr/applications/.

We wish you success with your research.

Yours sincerely,

Gail Wideman

Gail Wideman, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

GW/th

copy: Supervisor – Dr. Ken Fowler, Department of Psychology, Faculty of Science

Appendix B

Informed Consent Form

Title: *From stats to streets: A mixed-methods approach to studying the effects of social support and distress on drug addiction.*

Researcher: Valerie Hodge, M.Sc. Candidate (Experimental Social)

Psychology Department, Memorial University of Newfoundland

(709) 277-4502, v.d.hodge@mun.ca

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

You are invited to take part in a research project entitled *"From stats to streets: A mixed-methods approach to studying the effects of social support and distress on drug addiction."*

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, *Valerie Hodge*, if you have any questions about the study or for more information not included here before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction: My name is Valerie Hodge, and I am a current Master's student in Experimental Psychology. As part of my Master's thesis, I am researching how social support and distress can affect drug use. This research is being conducted under the supervision of Dr. Ken Fowler.

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Social support has been shown to reduce drug use and lead to better treatment outcomes for individuals suffering from drug addiction problems. Currently, there are no research studies assessing the effects of social support *and* distress on drug use severity. Therefore, we do not know if better treatment outcomes reported in studies are related to positive social support, or to lower distress levels. This is important because individuals with drug addiction problems must interact with others in their social network and deal with distress in daily life, so these factors can have an impact on their desire to get clean, or their ability to stay clean.

Purpose of study: To examine the relationship between social support, distress, and drug abuse.

What you will do in this study: This study will involve filling out three short questionnaires.

Length of time: 10-15 minutes.

Withdrawal from the study: You have the right to not answer any question or withdraw from the study at any time. If you choose to withdraw from the study, your responses will not be used in data collection.

Possible benefits: Your participation in this study will help advance research on social support, distress, and drug use.

Possible risks: You are not required to continue the study if you experience discomfort or anxiety during any part of the study, or if you feel uncomfortable. In the event that you feel stress, we ask that you please contact the Health and Community Services Crisis line at *1-888-737-4668*, where a counselor will be available to speak with you. You are also invited to contact Dr. Sarah Francis (R. Clinical Psychologist) after your participation, in order to set up an appointment; *709- 864-4897*.

Anonymity and Confidentiality: Each participant in this study will be assigned a unique number. This number will link your consent form with your questionnaire package, and is not connected to your name in any way. The researcher is the only person that has access to your information.

If you choose to withdraw your information, the researcher will identify your data using your number, and your data will be removed from the study. You are free to withdraw your information up until **September 1, 2013**. Data will be securely stored on Memorial University Campus for a period of at least five years as required by Memorial University policy on Integrity in Scholarly Research. The informed consent forms will be kept separate from your questionnaires once returned.

Please do NOT write your name anywhere on the questionnaires. If you do, the questionnaire(s) will be immediately stored in a separate pile, and later destroyed. If you write your name on the questionnaires, you will have to complete a new questionnaire package.

Reporting and Obtaining Results: Data will be used by the researcher for the propose of papers and presentations. Results will be shared with your community organization through a formal report.

Questions: You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact: *Valerie Hodge; 709-277-4502, v.d.hodge@mun.ca* or *Dr. Ken Fowler; 709-864-7672, kfowler@play.psych.mun.ca.*

Consent: Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future.
- You understand that any data collected from you up to the point of your withdrawal will be destroyed.

If you sign this form, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Your signature:

I have read what this study is about and understood the risks and benefits. I have had adequate time to think about this and had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation at any time.

☐ I confirm that I have reached the age of 19 years.

_____   _____

Signature of participant   Date

Researcher's Signature:

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

_____   _____

Signature of Principal Investigator   Date

Appendix C

Drug Abuse Screening Test (DAST-20) Items

Questions
These questions refer to the past 12 months.   **Circle the Response**

1.	Have you used drugs other than those required for medical reasons?	Yes	No
2.	Have you abused prescription drugs?	Yes	No
3.	Do you abuse more than one drug at a time?	Yes	No
4.	Can you get through the week without using drugs?	Yes	No
5.	Are you always able to stop using drugs when you want to?	Yes	No
6.	Have you had "blackouts" or "flashbacks" as a result of drug use?	Yes	No
7.	Do you ever feel bad or guilty about your drug use?	Yes	No
8.	Does your spouse (or parents) ever complain about your involvement with drugs?	Yes	No
9.	Has drug abuse created problems between you and your spouse or your parents?	Yes	No
10.	Have you lost friends because of your use of drugs?	Yes	No
11.	Have you neglected your family because of your use of drugs?	Yes	No
12.	Have you been in trouble at work (or school) because of drug abuse?	Yes	No
13.	Have you lost your job because of drug abuse?	Yes	No
14.	Have you gotten into fights when under the influence of drugs?	Yes	No
15.	Have you engaged in illegal activities in order to obtain drugs?	Yes	No
16.	Have you been arrested for possession of illegal drugs?	Yes	No
17.	Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	Yes	No
18.	Have you had medical problems as a result of your drug use? (e.g. memory loss, hepatitis, convulsions, bleeding, etc.)	Yes	No
19.	Have you gone to anyone for help for a drug problem?	Yes	No
20.	Have you been involved in a treatment program specifically related to drug use?	Yes	No

Appendix D

Kessler Psychological Distress Scale (K10) Items

Please tick the answer that is correct for you:	All of the time (Score 5)	Most of the time (Score 4)	Some of the time (Score 3)	A little of the time (Score 2)	None of the time (Score 1)
In the past 4 weeks, about how often did you feel tired out for no good reason?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel nervous?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel hopeless?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel restless or fidgety?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel so restless you could not sit still?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel depressed?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel that everything was an effort?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?	☐	☐	☐	☐	☐
In the past 4 weeks, about how often did you feel worthless?	☐	☐	☐	☐	☐

Appendix E

Medical Outcomes Survey Social Support Scale (MOS-SSS) Items

Next are some questions about the support that is available to you.

1. About how many close friends and close relatives do you have (people you feel at ease with and can talk to about what is on your mind)?

Write in number of close friends and close relatives: ☐☐

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it?

(Circle One Number On Each Line)

	None of the Time	A Little of the Time	Some of the Time	Most of the Time	All of the Time
2. Someone to help you if you were confined to bed	1	2	3	4	5
3. Someone you can count on to listen to you when you need to talk	1	2	3	4	5
4. Someone to give you good advice about a crisis........	1	2	3	4	5
5. Someone to take you to the doctor if you needed it	1	2	3	4	5
6. Someone who shows you love and affection	1	2	3	4	5
7. Someone to have a good time with	1	2	3	4	5
8. Someone to give you information to help you understand a situation..	1	2	3	4	5
9. Someone to confide in or talk to about yourself or your problems	1	2	3	4	5
10. Someone who hugs you	1	2	3	4	5
11. Someone to get together with for relaxation..............	1	2	3	4	5
12. Someone to prepare your meals if you were unable to do it yourself..	1	2	3	4	5
13. Someone whose advice you really want......................	1	2	3	4	5
14. Someone to do things with to help you get your mind off things	1	2	3	4	5
15. Someone to help with daily chores if you were sick	1	2	3	4	5
16. Someone to share your most private worries and fears with...	1	2	3	4	5
17. Someone to turn to for suggestions about how to deal with a personal problem	1	2	3	4	5
18. Someone to do something enjoyable with	1	2	3	4	5
19. Someone who understands your problems	1	2	3	4	5
20. Someone to love and make you feel wanted	1	2	3	4	5