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#### THE UNIVERSITY OF CALGARY

Support-Seeking in Response to Life Events

by

Linda J. Henderson

#### A DISSERTATION

# SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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#### **ABSTRACT**

Although sociologists have been increasingly interested in understanding how supportive social relationships protect people from the negative consequences of stressful life experiences, clear understandings of social support's stress-buffering effects remain elusive. This dissertation investigates the importance of giving more serious attention to issues of "process" and "meaning" in the study of social support by integrating aspects of more traditional sociological approaches with social psychological insights from work on help-seeking to form a framework which places analytical focus on the decisions people make while seeking support in response to life events. Then data from a 1996-1997 community services survey conducted in Western Canada are used to examine the degree to which individuals experience different outcomes at key decision points in the supportseeking process and explore some of the factors which might account for this variability. The findings that individuals do vary considerably in (1) the levels of stress they perceive to be associated with life events, (2) the identification of the need for support to cope or deal with stressful situations, (3) the types and/or combinations of support resources which comprise their support-seeking strategies and (4) their evaluations of the levels of satisfaction associated with their support-seeking attempts may be consequential for furthering understandings of the relationships between stress, social support and wellbeing.

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#### CHAPTER 1

#### INTRODUCTION

When individuals experience a stressful life event - such as a divorce, serious illness or bereavement - how do they respond? Where do they turn for support? What are the effects of seeking support from others? These questions have been of increasing interest to sociologists, among other social scientists, since the mid 1970s, when a number of epidemiologists (e.g., Caplan 1974; Cassel 1976; Cobb 1976) proposed that supportive social relationships had positive effects on health and well-being, particularly in the face of stress. Literally thousands of research studies involving the concept of social support and its stress-buffering role have been published (Thoits 1995a:53). Considering the volume of research that has been conducted, it is somewhat puzzling that reviews of this work (e.g., by Antonucci 1990, 1991; Barrera 1986; Depner, Wethington & Ingersoll-Dayton 1984; House & Kahn 1985; House, Umberson & Landis 1988; Kahn 1994; Pearlin 1985, 1989; Sarason, Sarason & Pierce 1990; Tardy 1985; Thoits 1982, 1995a; Turner 1983; Turner & Marino 1994; Vaux 1988) continue to indicate that the field is characterized by "a bewildering array of conceptual and operational definitions" (Turner & Marino 1994:195) and "underexplored" and "unanswered questions" (Thoits 1995a:66) which have contributed to a "disappointing lack of consistency in research findings" (Barrera 1986:414). Although associations have been observed among stressors, social support and well-being outcomes, little is still understood about the dynamics or mechanisms linking these components (Thoits 1995a).

A number of reasons have been proposed for this apparent lack of epistemological progress. Kahn (1994:163) has argued that until researchers can "agree on what support consists of, what makes it supportive and how it should be measured . . . the causal mechanisms [linking stress, support and well-being]" cannot be understood. Thoits (1995a:65) has pointed out that despite "considerable theorizing about how social support works to reduce ill health and psychological disturbance, we still lack studies which directly examine presumed intervening mechanisms." Pierce, Sarason and Sarason (1990:178) contend that researchers have generally "failed to consider the personal meanings that individuals attach to supportive experiences."

A careful review of the literature reveals that these criticisms may be related to predominant trends in the sociological investigation of social support processes.

Typically, these studies are informed by the stress-buffering model of social support, a framework based on the hypothesis that "social support operates by protecting people against the pathological effects of stressors" (Cohen 1991:214). It is expected "that individuals experiencing high stress but with good support resources should develop significantly less symptomatology than individuals experiencing high stress but with little social support" (Heller & Swindle 1983:39).

The stress-buffering model specifies the importance of social support as an interaction effect between stress and well-being outcomes but does not give explicit theoretical attention to the mechanisms which drive this process. In addition, the model rests on a number of implicit assumptions which have influenced the design of many social support studies. First, as indicated in the model's expectations, the "stress"

component of the model is conceptualized as a constant. The interaction effects of supportive social relationships are hypothesized for individuals who are experiencing *high* levels of stress. In empirical application, "high levels of stress" tends to be conceptualized and measured in terms of certain types of life events, such as divorce or bereavement. In other words, individuals who experience these events are assumed to be experiencing high levels of stress.

Second, individuals who experience stressful life events are also presumed to *need* a certain amount of social support -- that is "good support resources" rather than "little social support" -- in order to experience positive well-being outcomes. Third, it is usually assumed that the study's conceptualization and operationalization of "social support" accurately identifies the appropriate set of social relationships, "the support network," and/or the social behaviours enacted within these relationships which serve as stress buffers. Finally, it is assumed that individuals who receive sufficient support will subsequently experience *positive* well-being outcomes -- that is "less negative symptomotology than individuals with little social support."

While these assumptions may hold true for the experiences of many individuals, recent research findings have suggested that not all individuals define certain life events as "highly stressful" (e.g., Thoits 1995a; Veevers 1991; Wheaton 1990) or feel the need for the support of others to cope with stressful life events (e.g., Conn & Peterson 1989; Folkman et al. 1986; Wills 1983). Other findings indicate that some conceptual and operational definitions of "social support" may not accurately identify the relationships or resources which constitute an individual's "support network" (e.g., Haines & Hurlbert

1992; Henderson 1993; Lehman, Ellard & Wortman 1986; Ratcliff & Bogdan 1988; Rook 1992; Wellman & Wortley 1990). In some cases social supports which are consequential may be excluded, while in other instances non-consequential resources may be included. Finally, a growing body of research on social support attempts that fail (e.g., Harris 1992; Lehman & Hemphill 1990; Ratcliff & Bogdan 1988; Rook 1992; Schuster & Butler 1989; Wellman & Wortley 1990) indicates that the outcomes of the stress-buffering process — typically assessed in terms of physical and mental health indicators — may not always be positive.

These findings, which question the universality of the assumptions which underlie the stress-buffering model of social support, combined with the general criticisms of the field which were offered above, indicate that sociological investigations of social support phenomena could benefit from more explicit attention to issues of "meaning" and "process." This emphasis suggests taking a more social psychological approach to the study of social support. A number of insights from social psychological research on help-seeking in particular may be especially illuminating. The theoretical and empirical focus which help-seeking models place on the decisions that individuals make when dealing with potentially stressful life events allows for variation in individual experience and places direct attention on the mechanisms which drive the help-seeking process. Fisher et al. (1988:269) concur that "social psychological research on help-seeking and work on social support should have great potential for cross-fertilization, since both deal with assistance for distressed individuals." However, to date, the limited overlap in the two literatures indicates that few attempts at integration have been made.

Therefore, the purpose of this dissertation is to develop and conduct a preliminary test of a model which does combine the two fields. To achieve these goals, aspects of more traditional sociological approaches to studying social support will be integrated with insights from social psychological work on help-seeking to form a framework which places analytical focus on support-seeking in response to life events. Then, data collected in conjunction with a 1996-1997 community services survey conducted in Western Canada will be used to examine the degree to which individuals experience different outcomes at key points in the support-seeking process and explore some of the factors which may account for this variability. The ultimate aim of this project is to make a modest contribution towards illuminating some of the aspects of social support processes which remain elusive. Improving understandings of social support processes has important implications not only for sociologists and other social scientists but also for human service providers who are responsible for developing, delivering and evaluating support services for their clientele. As Thoits (1995a:65) indicates, "until supportive processes and intervening mechanisms are better understood, the goal of designing effective interventions for people coping with specific stressors or attempting healthbehavior changes will elude us."

The presentation of this dissertation research is organized as follows. Chapter 2 critically examines aspects of the literature which are important for understanding current sociological trends in the study of social support processes and developing an integrated model of support-seeking. This chapter begins with an examination of early epidemiological influences on the sociological investigation of social support and the

theoretical, conceptual and methodological approaches which characterize sociological studies. This section is followed by a discussion of a number of social psychological insights pertaining to help-seeking which seem to address some of the apparent gaps in the sociological literature. In Chapter 3, elements of both literatures are integrated into a model of support-seeking in response to life events which includes four components: (1) the definition of a life event as stressful; (2) the identification of the need for support to cope with the life event; (3) the selection of supports from possible support resources (i.e., the support-seeking "strategy") and (4) the evaluation of the support-seeking attempt. Because the support-seeking model conceptualizes these four components as variables, the chapter concludes with a discussion of some of the factors which may help to explain their variability.

Details of the research design utilized to test the support-seeking model are outlined in Chapter 4, including descriptions of the data collection procedures, the sample, measures and data analysis techniques. The results of the tests for each model component are reported in Chapter 5. Chapter 6 discusses the limitations of the project and the implications of the findings before offering some conclusions and suggestions for future research.

#### **CHAPTER 2**

# THE STUDY OF SOCIAL SUPPORT PROCESSES: A CRITICAL LITERATURE REVIEW

#### Early Epidemiological Influences

Although sociological examinations of the importance of social relationships for health and well-being can be traced back to Durkheim's *Suicide*, current sociological interest in social support processes is frequently linked to the mid 1970s and the seminal work of three epidemiologists - John Cassel, Gerald Caplan and Sidney Cobb (Vaux 1988:5). Cassel (1974, 1976) was interested in understanding the links between problematic urban conditions, such as poor housing, crowding and the disruption of neighbourhoods and increased incidence of physical and psychological disorders including tuberculosis, infant mortality and psychosis. He argued that stressful environmental conditions lead to the disruption of significant social ties and that such social disorganization may then result in heightened susceptibility to disease. He consequently advocated the mobilization of "social feedback" or supportive social ties as a more feasible solution for disease intervention than attempting to reduce exposure to environmental stresses.

Caplan (1974), whose interest was in community mental health, also identified the important role that others might play in influencing the outcomes of crises experienced by an individual. He suggested that an individual's "support system" of social relationships *might* protect his or her well-being in the face of everyday demands and situational crises by providing various kinds of assistance. For Caplan, these helping activities included sharing

demanding tasks, encouraging the individual to cope with emotional problems by bolstering his or her psychological resources (such as self-esteem) and providing material assistance, such as money or advice, to help deal with specific stressors.

In a published address to the American Psychosomatic Society, Cobb (1976) took a position similar to that of Caplan and Cassel in identifying the importance of an individual's supportive social relationships for positive effects on his or her health and well-being in the face of stress. However, Cobb (1976:300) was much more specific in his arguments. He offered a more precise conceptual definition of social support by suggesting that it be viewed as the types of "information" which lead an individual to believe that he or she (1) is cared for and loved, (2) is esteemed and valued and (3) "belongs to a network of communication and mutual obligation." He argued that these three classes of "information" functioned to meet important social needs and protect individuals from the adverse consequences of stressors and crises. However, for Cobb, the latter function -- that social support served as a "stress-buffer" - was the most important of the two. After discussing a wide range of studies in which the existence, absence or quality of social relationships seemed implicated in well-being outcomes, he concluded that adequate social support can protect individuals in crisis from a variety of physical and psychological disorders.

Taken together, this epidemiological work formed the foundation of current research on social support processes. It outlined the scope of the topic, suggesting the kinds of social relationships and activities that were involved. Perhaps most importantly, it established the

research issue that has dominated the field ever since — that social support acts to buffer the adverse effects of stress (Vaux 1988:7).

#### Sociological Trends

Since the mid 1970s, a number of theoretical, conceptual and methodological trends have emerged in the sociological investigation of social support and its stress-buffering role.

#### Theoretical Models

Sociologists have proposed two general theoretical frameworks which consider the impact of support on well-being outcomes — the main effects model and the buffering model (Barrera 1986; Cohen 1991, 1992; Cohen & Wills 1985; Vaux 1988). In the main or direct effects model, social support is seen to directly influence health and well-being, irrespective (independent) of stress levels, as a positive consequence of social integration (Cohen 1991:216). For example, Cohen (1991:216-217) argues that individuals who experience a high degree of social integration may receive information or social pressures which facilitate health promoting behaviours. Integrated social networks may also provide material aid and information that can directly affect physical and mental well-being. In addition, the psychological well-being which is a consequence of social integration may also trigger positive physiological change.

Although some social support studies are informed by the main effects model, by far the most dominant paradigm has been the stress-buffering or indirect effects model (Barrera 1986:241; Veiel & Baumann 1992:315). A number of researchers have

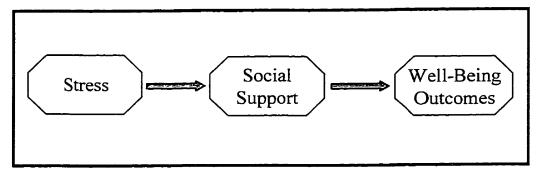


Figure 1: The Stress-Buffering Model of Social Support

provided theoretical overviews of this approach (e.g., Aneshensel, Rutter & Lachenbruch 1991; Cohen 1991, 1992; Cohen & Wills 1985; Ensel & Lin 1991; Heller & Swindle 1983; Pearlin 1989; Pearlin et al. 1981; Turner 1983; Wheaton 1985). In general, the stressbuffering model of social support is concerned with how supportive social relationships help individuals resist the negative effects of stress (Antonucci 1991:264). The hypothesis reflected in the buffering model is that "social support operates by protecting people against the pathological effects of stressors" (Cohen 1991:214). Most studies informed with this model conceptualize and operationalize social support as an intervening variable between stressors and physical or mental health outcomes (Figure 1). As an intervening variable, social support is assumed to have an interaction effect. It is predicted that high levels of stress will produce strain or distress for individuals experiencing low levels of support but not for individuals experiencing high levels of support (Haines, Hurlbert & Zimmer 1991:213). This model also has been described as an approach which integrates social support as an intervening variable into the "stress-illness" model (Lin, Woelfel & Light 1985:247), the "stress-strain" model (Haines, Hurlbert & Zimmer 1991) or the "stressdistress" model (Wheaton 1985).

The stress-buffering model rests on a number of implicit assumptions. First, by defining social support as an interaction effect between stress and well-being outcomes, the "stress" component of the model has been conceptualized as a constant. As indicated by the model's expectations, the interaction effects of supportive social relationships are hypothesized for individuals who are experiencing high levels of stress. Second, individuals who experience stressful life events are also presumed to need a certain amount of social support -- that is "good support resources" rather than "little social support" (Heller & Swindle 1983:39) -- in order to experience positive well-being outcomes. Third, the conceptualization of the "social support" component is based on the assumption that the appropriate set of social relationships, "the support network", and/or the social behaviours enacted within these relationships which serve as stress buffers have been identified. Finally, it is assumed that individuals who receive sufficient support will subsequently experience positive well-being outcomes -- that is "significantly less symptomotology than individuals with little social support" (Heller & Swindle 1983:39). A review of the sociological literature which is informed by the stress-buffering model reveals that these assumptions have been influential in how the model components have been conceptualized and measured in empirical investigations.

### Conceptual and Methodological Approaches

All studies of the stress-buffering role of social support start with the identification of some kind of situation in people's lives which is considered to be stressful. How these situations are typically conceptualized and measured has been influenced by early research which focused on establishing the magnitude of stress associated with different types of life

events (e.g., Holmes & Rahe 1967; Masuda & Holmes 1967). Holmes and Rahe (1967) developed their now classic "social readjustment rating scale" by ranking life events in terms of how much an individual experiencing such an event would be required to make a "significant change in [his or her] ongoing life pattern" in order to adapt or cope (Holmes & Rahe 1967:217). By implication, the more an event required social readjustment, the higher the level of stress associated with that event. Holmes and Rahe (1967) found that the events requiring the most readjustment — in other words, the most stressful for those who experience them — included the death of a spouse, divorce, marital separation, death of a close family member, personal illness or injury and being fired at work. Subsequent research established links between these highly stressful "negative life events" and "physical morbidity, mortality, symptoms of psychological distress and psychiatric disorder" (Thoits 1995a:54). As a result, an individual's experience of one of these negative life events is commonly used as the measure of "high levels of stress" in sociological studies of social support's stress-buffering effects.

One of the most striking features of the social support literature is the considerable diversity in approaches to conceptualizing and measuring the concept of "social support." Researchers tend to inform their studies with one of five conceptual approaches: (1) the social integration/social isolation approach (concerned with the *existence* or *quantity* of social relationships); (2) the social intimacy approach (concerned with the intimate *quality* — i.e., emotional closeness — of social relationships); (3) the social networks approach (concerned with the *structure* of social relationships); (4) the relational or functional content approach (concerned with the *content* of social

relationships -- i.e. the types of behaviours exchanged within them); or (5) the perceptual approach (concerned with the *perceived availability* of social relationships).

The social integration/social isolation approach conceptualizes social support in terms of the social connections that individuals have with others in their social environment. Attention is given to the degree of "social embeddedness" (Barrera 1986:415) or "social integration" (Vaux 1988:8). These social connections, which can include primary and secondary relationships as well as formal and informal group associations, are seen as sources of support (Turner 1983:112). The greater the number of contacts an individual has, the greater his or her social support. Individuals who have few connections are viewed as socially isolated and alienated and consequently lacking support (Barrera 1986:415).

Measurement indicators for this approach are usually in terms of the existence and/or quantity of social relationships. Of particular interest are the type of relationship (e.g., marital, non-kin) and the frequency of contact between individuals (House, Umberson & Landis 1988:302). Social embeddedness measures have included marital status, degree of participation in community organizations and number of contacts with close friends and relatives (Turner 1983:112). Berkman and Syme's (1979) study of the mortality rates of residents of Alameda County is an example of research informed by the social integration/social isolation approach. They found that mortality rates were significantly higher for individuals who were low in social integration, based on a measure that combined marital status, contacts with friends and relatives, participation in formal and informal organizations and church membership.

The conceptual focus of the social intimacy approach is the availability of emotionally close relationships (Vaux 1988:10). This approach is based on the rationale that intimate relationships are the most important sources of support. Consequently, an individual's level of support is seen to be directly related to either the presence or quantity of emotionally close relationships. Measurement indicators for the social intimacy approach emphasize the quality of social relationships. Some studies utilizing this approach have operationalized social support as the presence or absence of a confidante (e.g., Connidis & Davies 1992; Lowenthal & Haven 1968). Other studies have defined social support in terms of the existence or quantity of relationships that the respondent characterizes as emotionally "close" (e.g., Antonucci & Akiyama 1987a; O'Connor & Brown 1984) or in terms of the existence or "happy" quality of a marital relationship (Haines, Hurlbert & Zimmer 1991).

The social networks conceptualization is perhaps the most frequently used approach in sociological investigations of social support processes. This approach is concerned with the structure of an individual's set of social relationships (House, Umberson & Landis 1988:302). These structural properties may include network size (the number of relationships in the network), composition (proportion of family, friends, coworkers, etc. in the network), density (the number of people in the network who know each other), homogeneity (similarity of network members by age, sex, income and other characteristics), tie strength (the degree of emotional closeness in the relationships between an individual and his or her network members), multiplexity (the number of different types of interaction between network members) or reciprocity (the degree to

which resources are exchanged among network members). The social networks approach reflects a rationale that available social ties and network characteristics are indicators of potential and actual social support resources (Barrera 1986:416). For example, it is suggested that more supportive networks are characterized by larger size, stronger and more multiplex ties, greater density, more frequent contact and greater similarity among network members (Walker, Wasserman & Wellman 1993). The work of Lin, Woelfel and Light (1985:249), who maintain that "the degree of access to and use of strong and homophilous ties are indicators of social support," is an illustration of this approach.

Social support studies informed by the social networks approach use the concepts and techniques of social network analysis to collect information about the people (alters) that make up an individual's (ego's) support network. One methodological procedure that is frequently used is known as the name generator-name interpreter sequence (Marsden 1990:443). "Name generator" questions (Burt 1984:296), such as "What are the names of your three best friends?", are asked first to elicit a list of the respondent's network members. Then "name interpreter" questions (Burt 1984:297) are asked to gather additional details about these network members. Name interpreter questions can provide information (1) about the attributes of the alters (e.g., sex, marital status, educational attainment), (2) about the nature of the relationship between ego and each alter (e.g., role relation, frequency of contact, emotional closeness, relationship length or duration) and (3) about the relationships between alters (Marsden 1990:441). Examples of name generator-name interpreter methodology can be found in the studies of the support networks of the elderly conducted by Antonucci and Akiyama (1987a) and Schuster and

Butler (1989). Other studies informed by the social networks approach, such as Morgan's (1989) study of the support networks of widows, or Lin, Woelfel and Light's (1985) study of individuals' responses to stressful life events, do not ask respondents for specific names of network members. Instead respondents are asked to identify the presence or number of relationships in their networks that have specific characteristics.

The relational or functional content approach takes its name from the identification of social support as "one of the important contents" of social relationships (House, Umberson & Landis 1988:302, emphasis in original). This approach is concerned with specific "supportive" interpersonal social behaviours. Its proponents suggest that support is a "resource channelled to and from individuals by the structure of their social environments" (Haines & Hurlbert 1992:255). Emphasis is placed on maintaining conceptual and empirical distinctions between the structure of social relationships (i.e., an individual's social network) and their relational content or function (i.e., supportive transactions between an individual and his or her network members) (Thoits 1982:148).

The methodological strategy of Claude Fischer in his 1982 study of the personal networks of residents of Northern California communities is the exemplar of this approach. Fischer developed and used a series of questions intended to identify network members in terms of the receipt or exchange of specific social behaviours such as help with tasks around the home, talking over personal or work problems, lending money in an emergency and socializing. Individuals who named network members in response to these "exchange" questions were considered to be recipients of support.

Numerous studies of support networks since have used such questions about the exchange of specific types of social behaviours as either name generators (e.g., Henderson 1993; Julien & Markham 1991) or name interpreters (e.g., Antonucci & Akiyama 1987a; Carlson & Robertson 1993). In addition to these structural/functional network studies (which deal with exchanges among specific individual alters), other support studies which examine the receipt of specific social behaviours from network members more generally (e.g., Terry 1991) also reflect operationalizations of the relational content approach.

The central focus of the perceptual approach to conceptualizing social support is an individual's cognitive appraisal of either the availability of support resources or of actual supportive experiences (Barrera 1986:416). Consequently, whether or not an individual identifies a certain social relationship or behaviour as "supportive" or "potentially supportive" depends upon his or her perception of the situation. This more social psychological approach reflects the argument that individuals' "feelings on the perceptual level" are "central to understanding the effects social support" (Hobfoll & Stokes 1988:503). Researchers advocating this perspective (e.g., Pierce, Sarason & Sarason 1990; Wethington & Kessler 1986) argue that perceived aspects of social relationships, in contrast to structural characteristics of social networks, play a more important role in processes by which personal relationships affect health and well-being.

There are two methodological strategies for operationalizing "perceived support." Researchers who share Cohen's (1991:215) view that "perceived social support" refers to "the perception that social relationships will (if necessary) provide resources such as

emotional support or information," have created standardized measures of the perceived availability or perceived adequacy of supportive relationships (e.g., Bloom & Kessler 1994; Procidano & Heller 1983; Wethington & Kessler 1986). This strategy is by far the most common in social psychological studies of "perceived support" conducted by sociologists. Other researchers, who are interested in understanding the kinds of social relationships and/or social behaviours enacted within these relationships that individuals find to be "supportive" typically ask respondents open-ended questions about their supportive experiences. This second strategy is more often employed in social psychological studies by psychologists, such as, for example, Lehman, Ellard and Wortman's (1986) study of the supportive experiences of the bereaved, Dakof and Taylor's (1990) study of cancer patients, and Lehman and Hemphill's (1990) study of people with multiple sclerosis.

In addition to the various conceptual approaches that inform "social support" studies, this literature contains many different classifications of the construct in terms of its forms and/or functions (Albrecht & Adelman 1987; Depner, Wethington & Ingersoll-Dayton 1984; House & Kahn 1985; Tardy 1985; Vaux 1988). It is important to distinguish between support typologies which define characteristics or qualities of forms of "assistance" (e.g., emotional support) and those which define social support in terms of its functions or consequences (e.g., information leading an individual to feel loved and cared for).

A number of these support typologies play central roles in the literature. Most often cited as one of the first typologies of the *functions* of social support is Cobb's

(1976:300) conception of social support as "information belonging to one or more of the following three classes:"

- 1. Information leading the subject to believe that he is cared for and loved.
- 2. Information leading the subject to believe that he is esteemed and valued.
- 3. Information leading the subject to believe that he belongs to a network of communication and mutual obligation.

Another typology of support functions was developed by Cohen and McKay (1984, cited in Cohen 1991:219). Their Interpersonal Support Evaluation List (ISEL) assessed "appraisal support—having people to talk to about problems; self-esteem support—having people who make you feel better about yourself; belonging support—having others to do things with; and tangible support—having people who would provide material aid."

Well-known typologies of *forms* or types of support include House's 1981 fourfold conceptualization of emotional support (esteem, affect, trust, concern, listening),
appraisal support (affirmation, feedback, social comparison), informational support
(advice, suggestion, directives, information) and instrumental support (aid in kind,
money, labour, time, modifying environment) (cited in House & Kahn 1985:101), Kahn's
(1979:85) interpersonal transactions involving one or more of aid, affect or affirmation,
Wills' (1985) esteem support, informational support, instrumental support, social
companionship and motivational support and Lin, Dean and Ensel's (1986) dichotomy of
expressive and instrumental support. In his review of more than a dozen support
typologies, Vaux (1988) points out that there is considerable overlap between the various
support forms and functions. He suggests that most of the proposed definitions fall under
either instrumental functions (i.e., provision of goods and money, information, advice,

guidance and suggestions) or affective functions (i.e., meeting needs for love and affection, esteem and identity, belonging and companionship) (Vaux 1988:21). A focus on instrumental and expressive support is a predominant trend in the literature.

A number of operational strategies have been employed in social support studies to create empirical definitions from these various support typologies. However, two approaches are most commonly used. Many researchers have created standardized scales of items intended to capture the underlying concepts or functions, such as Sarason et al.'s (1983) *Social Support Questionnaire*, Fischer's (1982) *Social Support Network Interview* and Cohen's (1991) ISEL (mentioned above). Others have operationalized their typologies with single indicators such as Dunkel-Schetter, Folkman and Lazarus' (1987:73) operationalization of their typology of (1) information or advice, (2) tangible assistance or aid, and (3) emotional support with the corresponding questions (1) "How much did this person give you information, suggestions and guidance?"; (2) "How much did this person give you tangible assistance?"; and (3) "How much did this person make you feel he or she cared?"

There is considerably less diversity in the ways that well-being outcomes have been conceptualized and measured. Typically these outcomes have been theorized in terms of physical and mental health symptomotology (Cohen 1981, 1982). Some stress-buffering studies have investigated the impact of supportive social relationships on physical health outcomes, operationalizing them with mortality and various morbidity indicators (e.g., Berkman & Syme 1979). However, studies which are concerned with mental health outcomes are more common. In these studies, standardized measures of psychological

distress, such as Radloff's (1977) CES-Depression scale, or diagnoses of psychiatric disorders are typically used as outcome measures.

#### Critique

Over the past two decades, literally thousands of sociological research studies investigating social support's stress buffering role have been conducted (Thoits 1995a:53). However, reviews of this work (e.g., by Antonucci 1990, 1991; Barrera 1986; Depner, Wethington & Ingersoll-Dayton 1984; House & Kahn 1985; House, Umberson & Landis 1988; Kahn 1994; Pearlin 1985, 1989; Sarason, Sarason & Pierce 1990; Tardy 1985; Thoits 1982, 1995a; Turner 1983; Turner & Marino 1994; Vaux 1988) continue to indicate that the field is characterized by "unanswered questions" and "inconsistent" findings (Thoits 1995a:66). Considering the above review, this apparent lack of epistemological progress may be related to the theoretical, methodological and conceptual trends which are currently found in the sociological literature.

First, while the stress-buffering model of social support has concerned itself with theorizing about the nature of the relationships between stress, social support and well-being outcomes, less theoretical or analytical focus has been placed on specifying the mechanisms and factors which link the model components (Thoits 1995a). As a result, research findings have been more likely to report "correlates of social support receipt" (Dunkel-Schetter, Folkman & Lazarus 1987), than emphasize causal processes. However, as Coyne, Ellard and Smith (1990:131) point out, "[s]imple correlations among measures of stress, support and adaptation outcomes . . . tell us little about the circumstances producing these associations." Therefore, in order to gain more comprehensive

understandings of social support phenomena, some researchers have called for stressbuffering studies which directly examine presumed intervening mechanisms (Fisher et al. 1988; Thoits 1995a).

Second, several aspects of the typical conceptual and operational definitions of "stress," "social support" and "well-being" used in social support studies, which have been influenced by the implicit assumptions which underlie the stress-buffering model, appear somewhat problematic. Because the stress-buffering model begins with the identification of an individual's experience of "high levels" of stress, the typical approach has been to operationalize this component with a negative life event such divorce, illness or bereavement, based on the assumption that these events are indeed highly stressful for the individuals who experience them. Ordinarily, the level of stress actually experienced by the respondents is not directly assessed. However, some research has indicated that the stress levels associated with negative life events may not be a constant. For example, in her study of marital dissolution, Veevers (1991) found that some people defined their divorces as "positive strengthening experiences" rather than negative life events. In a more general study of the psychological effects of people's experiences with over 200 different types of life events, Thoits (1995b:78) discovered that "some supposedly negative events seemed to represent substantial relief from prior role strains." Wheaton (1990) also found that life transition events (e.g., divorce, job loss, widowhood) represented a relief from existing stress for some individuals.

Whether or not an individual feels his or her situation is highly stressful does have important implications for understanding support processes. As Fisher et al. (1988:271)

point out, individuals who do not define their situation as problematic are unlikely to become involved in stress-buffering support processes. Therefore, it may be more beneficial to consider certain life events as "potentially stressful" until respondents can explicitly indicate the stress levels of their particular experiences.

An issue related to the predominant empirical focus on negative life events in social support research is that most studies tend to be stressor specific, that is they examine individuals' experiences with one particular life event such as unemployment, illness or bereavement (e.g., Ali & Avison 1997; Bloom & Kessler 1994; Funch & Marshall 1983; Morgan 1989; Schuster & Butler 1989; Vachon & Stylianos 1988). This approach has two important implications for theoretical understandings of stressbuffering support processes. First, it tends to preclude consideration that the amount of stress individuals experience when dealing with any particular life event, and subsequently their needs for support to deal with that event, could be related to the fact that they are experiencing a number of stressful life situations simultaneously. Second, the empirical focus on one stressor at a time has limited attempts to uncover similarities and differences in how people experience life events more generally. Giving greater consideration to the effects of concurrently stressful events and looking for patterns among individuals' experiences with a variety of disparate life events could provide greater insight into social support processes.

One other point that should be mentioned in regard to studies of negative life events concerns the tendency to define life events as "acute changes which require major behavioural readjustments within a relatively short period of time" (Thoits 1995a:54). By

suggesting that behavioural changes in response to life events must be made in a "relatively short period of time," it is implied that life events such as divorce or bereavement may only have a fixed temporal impact on people's lives. This assumption appears to be reflected by methodological strategies which ask respondents to recall life event experiences which have occurred only within the previous year (e.g., Lin Woelfel & Light 1985; Thoits; 1995b; Turner, Wheaton & Lloyd 1995). This approach is likely an attempt to reduce recall bias, although Freedman et al. (1988:41) argue that major life events are "more readily remembered." However, it also tends to preclude the possibility that events which individuals experienced prior to the imposed recall limits may still be affecting their lives, their needs for support and their active support-seeking strategies. Although some researchers (e.g., Turner, Wheaton & Lloyd 1995) have defined divorce, death of a parent or serious illness as life trauma events with potential long term consequences, McLean and Link (1994:18) indicate that the influence of life events which may have occurred prior to the past year in an individual's life (defined as "remote stressors") has not been systematically investigated.

Another assumption which underlies the stress-buffering model of social support is that all individuals experiencing a highly stressful life event *need* a certain amount of support in order to successfully prevent negative consequences to their physical and/or mental health. This assumption precludes the possibility that some individuals may be of the opinion that they do not need the support of others to successfully deal with a particular life event and may feel comfortable resolving the situation on their own.

Mental health researchers (e.g., Conn & Peterson 1989; Folkman et al., 1986; Wills 1983)

have found that in some cases individuals with strong personal coping resources such as self esteem and mastery do not feel the need to seek support.

The wide range of conceptual and operational definitions which surround the construct of "social support" also may have a significant impact on current understandings of social support processes. Tardy (1985:188) points out that the differences between these various approaches often go unnoticed, which can result in misunderstandings and inaccurate generalizations. Ironically, conceptual approaches (and their corresponding methodological strategies) which define "social support" in terms of the existence, quantity, intimate quality, structure or perceived availability of social relationships, or in terms of specific interpersonal exchanges (such as lending money or talking over personal problems) do not identify exactly what it is about these social relationships and/or social behaviours that individuals find to be "supportive." Instead implicit assumptions are being made that certain types of relationships and/or social behaviours are valid and consistent indicators of social support. Such assumptions do not allow that certain social relationships and/or behaviours may be viewed as supportive by one recipient and not by another, or that behaviour that is seen as supportive in one context or at one point in time may not be considered as supportive in another context or at another point in time (Pearlin & McCall 1990:50).

This issue is compounded by the methodological implications of the many definitions of support forms and functions. Because most support typologies have been operationalized with indicators designed to facilitate scale construction and quantitative data analysis, they do not explicitly assess whether or not respondents actually consider

such characteristics of social relationships or behaviours to be "supportive." As Burnett (1991:125) points out, the discrete categories and forced choices offered by such scales "can reveal little of the equivocations and interpretations that accompany their completion." It is possible that the resources may indeed provide support, but they may also be sources of negative feelings, conflict and other types of stress (Vaux 1988:12). Hobfoll and Stokes (1988:503) provide an example: "You may receive a gift from your father-in-law of a large sum of money, but feel he offers it as a way of gaining control. This may cause you to disregard or denigrate his gesture." Some research studies have demonstrated that not all social relationships are perceived to be supportive (Harris 1992; Lehman & Hemphill 1990; Ratcliff & Bogdan 1988; Rook 1992; Schuster & Butler 1989; Wellman & Wortley 1990).

Consequently, part of the inconsistency in previous research findings may be related to the fact that, with few exceptions, most investigators "have failed to consider the personal meanings that individuals attach to supportive experiences" (Pierce, Sarason & Sarason (1990:178). Therefore, it may be advantageous to follow the example of the perceptual approach of some social psychologists (e.g., Dakof & Taylor 1990; Lehman, Ellard & Wortman 1986; Lehman and Hemphill 1990) and consider such social relationships and or behaviours to be "potentially supportive" until an explicit assessment of their supportive nature can be made. Vaux (1992:195) suggests that such support appraisals "[m]ay be the most critical aspect of the support process." Only relationships or behaviours that are perceived to be "supportive" are likely to contribute to positive well-being outcomes.

Another critical issue concerns the identification of an individual's "support network" -- the set of relationships or resources that are utilized when dealing with a stressful life event. The assumptions underlying the stress-buffering model imply that the necessary support resources are being identified. However, there is some evidence to suggest that the conceptual and methodological approaches of some studies may not always accurately identify the composition of this network.

For example, one influential approach to conceptualizing the support network is the Convoy Model of Social Support. First proposed by Kahn (1979) and later elaborated with Antonucci (1980, 1981), "an individual's convoy at any point in time thus consists of the set of persons on whom he or she relies for support" (Kahn 1979:84). Kahn and Antonucci (1981:397) suggest that three different types of relationships may be included in this personal support network. The first group includes spouse, immediate family and close friends. The second group is comprised of other relatives and friends. The final group consists of relationships with distant family members, neighbours, co-workers, supervisors and professionals. However, in operationalizing the convoy, respondents are asked to name individuals who are "close" and "important" to them rather than individuals who provide them with "support." This approach reflects the assumption that emotionally close or "intimate" ties are the most consequential for social support.

The Convoy Model's emphasis on intimate personal relationships is consistent with the predominant focus in the social support literature. The identification of the importance of such relationships, also called strong ties or close and confiding relationships, for social support processes is often linked to the work of Lowenthal and

Haven (1968). Their interest in intimacy as a critical variable was influenced by their studies of the detailed life histories of individuals dealing with widowhood, retirement and mental illness. "[W]e were struck by the fact that the happiest and healthiest among them often seemed to be people who were, or had been, involved in one or more close personal relationship" (Lowenthal & Haven 1968:20). The current research emphasis on intimate ties (e.g., by Brown & Harris 1989; Clark 1983; Connidis & Davies 1992; Lin, Dean & Ensel 1986) also may be a result of findings in earlier studies which established links between intimate relationships and mortality and morbidity outcomes (e.g., Berkman & Syme 1979; Brown & Harris 1978) and/or indicated that few people access formal sources of support (such as mental health professionals) (e.g., Veroff, Kulka & Douvan 1981).

There are two problems with the empirical emphasis on close and confiding relationships as the most consequential for understanding social support processes. First, as with the Convoy Model, an implicit assumption is often made that all intimate ties are supportive. Second, this approach precludes the fact that other social relationships and/or resources could be consequential in terms of support. As some critics have suggested "an exclusive focus on intimate ties or single confidantes seems too restrictive to capture all that is deemed important in social support" (Vaux 1988).

Research findings also indicate that not all intimate relationships are supportive (e.g., Henderson 1993; Lehman, Ellard & Wortman 1986; Ratcliff & Bogdan 1988; Rook 1992; Wellman & Wortley 1990) and that other types of ties or resources are important to support processes (e.g. Granovetter 1973; Haines & Hurlbert 1992; Henderson 1993;

Schuster & Butler 1989; Wellman & Wortley 1990). For example, Wellman and Wortley (1990) found that different types of relationships provided varying amounts and types of support. Henderson (1993) found that only 50% of respondents' intimate relationships were also named as sources of support. Granovetter (1973, 1982) and others (e.g., Friedkin 1982; Lin & Dumin 1986; Weimann 1983) have established the importance of weak ties as conduits of information. These less intimate relationships also have been identified as sources of emotional support (Henderson 1993) and companionship support (Fischer 1982).

Although there has been some work on the relative importance of formal sources of support, particularly in studies of the social support transactions of the elderly (e.g., Chipperfield 1994; Kaufman 1990; Krause 1990; Litwak 1985b; Logan & Spitze 1994) and there is a small literature on support groups (e.g., Bauman, Garvey & Siegel 1992; Levy & Derby 1992; Lieberman & Snowden 1993; Messeri, Silverstein & Litwak 1993; Taylor et al. 1988), professional and/or community-based sources of support are rarely considered as consequential components of support networks. The proliferation of the self-help movement alone provides reason to give greater consideration to the potential importance of support resources outside of an individual's informal network of the close family and friends. Understandings of support processes in the existing literature could be hindered by the fact many social support studies may have overlooked important relationships or resources in the identification of the "support network." It is possible that the process of seeking support in response to a stressful life event may involve activating a complex

system of ties from various components of an individual's overall social network, including ties to informal, professional and community-based support resources.

One final concern related to the accurate identification of the composition of an individual's support network is that even when a variety of support resources are considered (e.g., Beggs, Haines & Hurlbert 1996), they are usually considered individually in a dichotomous fashion (e.g., used versus not used). This empirical focus is typically reinforced with theories of substitutability (e.g., Cantor 1979) or task-specific matching (e.g., Litwak 1985a) which emphasize the importance of only one particular source as of support. For example, Cantor's (1979) hierarchical-compensatory model suggests that only when one resource in not available will individuals turn to an alternate source of support. The task-specific hypothesis suggests that there is an optimum match between the type of situation which requires support and the support resource chosen to manage it (Messeri, Silverstein & Litwak 1993:123).

Approaches which concentrate on support from only one particular source do not typically consider combinations of support resources as consequential to understanding support processes. Pescosolido (1992:1112-1113) points out that a dichotomous examination of the use versus non-use of various support resources does not adequately reflect the realities of available support services. She indicates (p.1113) that "people generally neither make a single choice nor plan a set of choices; they continue to ask advice and seek help from a wide variety of lay, professional and semiprofessional others until the situation is resolved or options are exhausted." In her investigation of help-seeking in response to the diagnosis of a serious illness she shifted focus "to patterns,"

combinations, sets or sequences of a wide variety of lay and professional sources of aid consulted during the illness episode" (Pescosolido 1992:1115). She found that individuals did seek help from distinct combinations of support resources. Perhaps greater understandings of support processes could be gained by making such combinations or "strategy sets" (Pescosolido 1992:1119) the focus of inquiry.

Finally, the stress-buffering model includes the assumption that there is a positive relationship between an individual's amount of support resources and her or her physical and/or mental well-being. This assumption limits consideration of the fact that some health outcomes may not be positive despite the utilization of adequate support resources. Another debate surrounding well-being outcomes is that some studies may have confounded measures of outcome "distress" with measures of "stressful life events" (see Dohrenwend et al. 1993; McLean & Link 1994). Consequently, it may be beneficial to reconceptualize the "outcomes" of the stress-buffering model from physical and mental health symptomotology indicators to a focus perhaps on the level of satisfaction that people experience with the support they receive. This approach would allow that there may be a range of outcomes in the stress-buffering process including the possibility that an individual may sometimes feel satisfied and sometimes dissatisfied with the support provided by the same tie or relationship. While there has been some research investigating detrimental or non-supportive aspects of social relationships (e.g., Antonucci 1990; Harris 1992; Lehman & Hemphill 1990; Ratcliff & Bogdan 1988; Rook 1992), little attention has been given to the issue of the ambivalence of support outcomes.

Taken together, the arguments presented in this critique of the theoretical, conceptual and methodological trends in the sociological study of social support's stress-buffering role identify a need to place more emphasis on issues of "process" and "meaning." This focus would be consistent with a more social psychological approach to the study of social support. Fisher et al. (1988:269) point out that "social psychological research on help-seeking and work on social support should have great potential for cross fertilization, since both deal with assistance for distressed individuals." In fact, an examination of the social psychological help-seeking literature reveals a number of insights which would appear to be particularly useful.

### Social Psychological Insights

## The General Help-Seeking Model

In their investigation of how individuals seek assistance, typically in response to physical or mental illness, social psychologists have given explicit attention to issues of meaning and process by placing conceptual and empirical focus on the decisions that individuals make in the process of seeking help (Fisher et al. 1988; Gross & McMullen 1983). In its most general form (Figure 2), the help-seeking model involves three decision-making stages: (1) definition of the problem, (2) decision to seek help, and (3) help-seeking strategies (Gross & McMullen 1983:50). The first stage entails appraisal of a life situation as one that is problematic and amenable to help. The second stage concerns decisions about whether or not to actively seek out help to deal with the problem and the third stage

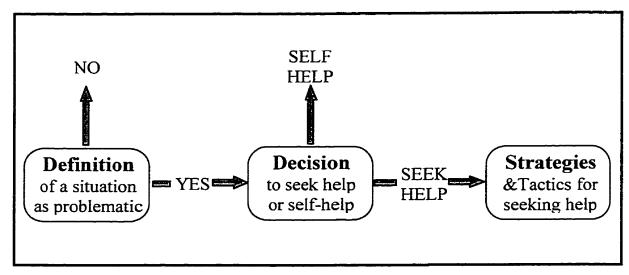


Figure 2: The General Help-Seeking Model Adapted from Gross and McMullen 1983

involves making decisions about the sources from which to seek assistance.

Gross and McMullen (1983:45-46) indicate that the general help-seeking model emerged in the 1980s as a counterpart to research on helping relationships that previously had focused almost exclusively on help providers. "The recipients were virtually ignored, and their utilization of available services was simply taken for granted." Consequently, initial formulations of the help-seeking process were influenced by inverting questions from help provision models to take into account questions that the potential recipients of help might consider: "1. Do I have a problem that help will alleviate?"; 2. "Should I ask for help?"; and 3. "Who is most capable of providing the kind of aid I need?" (Gross & McMullen 1983:47). Each of these questions has been conceptualized as a stage of the general help-seeking model. The model's sequence "indicates that it is first necessary to recognize or infer a problem, then to decide whether or not to seek aid, and only then to engage in activities aimed at solving the problem" (Gross & McMullen 1983:47-48). It is

clear that by focusing on the decisions individuals make during the help-seeking process attention is given both to the personal meanings of the situation and to the mechanisms which drive the process.

Recently, some help-seeking researchers have argued that the assumptions underlying the general help-seeking model may not accurately reflect the complexity of either decision-making or help-seeking processes. Concerns have been expressed that rational-choice explanations may not account for all outcomes of decision-making and that help-seeking may not necessarily be a linear process. In response to this critique, Pescosolido, whose substantive interest is in how individuals seek help in response to physical and mental illness (e.g., Pescosolido 1991, 1992, 1996; Pescosolido, Gardner & Lubell 1998), has developed the Network-Episode Model.

The Network-Episode Model

Building on insights from work on "illness careers" and social networks,

Pescosolido presents her Network Episode Model (NEM) as a "more dynamic

conceptualization" of help-seeking (Pescosolido 1991:161). She suggests that rather than a

series of linear stages, help-seeking is a complex fluid process characterized by key decision

points at which individuals may enter, backtrack or leave the process (Pescosolido

1991:170). She also proposes that the decision-making mechanism which drives the process

should be understood within the context of the social influences an individual experiences

through interaction with members of his or her social network.

Traditionally, decision-making processes have been understood with "theories of rational choice" (Friedman & Hechter 1988). These theoretical formulations are based on

assumptions that individuals make decisions by minimizing the costs and maximizing the benefits of choosing among various options.

We assume that people calculate that cost:benefit ratio of the various alternatives. . . . In making a decision, important considerations involve the perceived benefits of a particular option, the likelihood that it will actually yield the benefits sought, as well as the perceived psychological, and where applicable, financial and effort-related costs of the option. Ultimately, individuals choose the alternative that to them has the most favorable cost:benefit ratio. (Fisher et al. 1988:271-272)

In addition to this utility maximization rationale, rational choice theory is characterized by the concept of purposive action (the idea that all action is intentional) and its commitment to methodological individualism (the doctrine that all social phenomena are, in principle, only explicable in terms of the action of individuals) (Friedman & Hechter, 1988:201). From this perspective, the way to understand much of how people behave towards each other is by seeing them as rational decision makers in a world of scarcity and uncertainty.

Pescosolido (1992:1096) argues that rational choice models of decision making, which are based on the economic psychology of individual cost/benefit analyses, fail to take essential features of social life into account. She suggests a model of decision-making which rests on the fundamental sociological principles of meaning generated through social interaction as the basis of social life and social networks as the context for the interaction through which individuals learn about, come to understand and attempt to handle difficulties.

This more sociological approach to decision-making shifts the focus from individual "choice" to socially constructed patterns of decisions, including consultation with others.

"[A] particular action, choice or decision is embedded in a social process where the network interactions of individuals not only influence preference formation and define the situation but also drive the process of deciding whether something is wrong, whether anything can be done about it, what should be done, and how to evaluate the results" (Pescosolido 1992:1104). This conceptualization allows that individuals may not always make conscious, reasoned choices, they may be coerced by the influences of network members or "muddle through" decision-making processes by "'bounc[ing] around' and 'off' circumstances and others . . . engaging in successive, limited comparisons between alternatives" (Pescosolido, Gardner & Lubell 1998:275).

The NEM places emphasis on the *process* of decision-making. "The initial focus of decision-making is the event that necessitates action; the primary frame for study is the entire episode that encapsulates the actions surrounding the event" (Pescosolido 1992:1105). "[S]trategies' of action ... (i.e., the patterns, combinations or sequences of choices or decisions over the course of the episode), and how they are socially organized become the central phenomena to be explained" (Pescosolido 1992:1105).

In addition to the NEM's emphasis on process and meaning through decision-making, several other aspects of Pescosolido's work appear particularly useful for addressing some of the concerns related to the critique of the stress-buffering model of social support. First, she has conceptualized the resources and relationships that an individual may utilize in response to a stressful life event as a "social support system"

consisting of ties to multi-level and interdependent networks of support resources including family and friends, the community and the health care system (Pescosolido 1996:177). This conceptualization allows that resources beyond strong and intimate ties may be consequential in help-seeking processes. Second, by placing analytical and empirical focus on the "strategy set" (Pescosolido 1992:1119) of decisions an individual makes during the help-seeking process, explicit recognition is given to the fact that particular *combinations* of support resources that individuals access during the help-seeking process may be the most effective for buffering the adverse effects of stress.

## **Towards Integration**

Overall, several aspects of social psychological work on help-seeking, particularly its explicit emphasis on process and meaning and the importance of combinations of many different types of support resources, appear to have great potential to address some of the concerns surrounding the more traditional sociological approach to understanding social support's stress-buffering role. As well, the stress-buffering model's emphasis on outcomes and its applicability in response to a wide variety of life events has the potential to broaden understandings of help-seeking, not only in terms of how people seek help for a variety of stressful life situations (i.e., beyond physical and mental illness) but also in terms of placing more emphasis on evaluating the success or failure of such help-seeking attempts.

Consequently, integrating insights from the two approaches could prove mutually beneficial.

The purpose of this dissertation is to take the first step towards integration by combining insights from both the sociological investigation of social support and social psychological research on help-seeking into a framework which places analytic focus on support-seeking in response to life events and to conduct a preliminary test of the factors which may influence this process. Details of the model development and testing procedures are presented in the next chapter.

### **CHAPTER 3**

#### AN INTEGRATED MODEL OF

#### SUPPORT-SEEKING IN RESPONSE TO LIFE EVENTS

## Conceptualizing the Model

Sociological inquiry is characterized by a number of different approaches to formulating and testing theory (e.g., Glaser & Strauss 1967; Stebbins 1992; Stinchcombe 1968). However, the philosophy underlying Merton's (1968) views on middle range theory seems particularly applicable for building theory about social support processes. Merton (1968:39) argues that "theories of the middle range" represent an intermediate level between common sense understandings of the everyday (e.g., what social theorists would identify as ethnomethodological and phenomenological explanations of social behaviour) and "all inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behavior, social organization and social change" (e.g., what social theorists would identify as "grand theory"). Middle range theories are concerned with "delimited aspects of social phenomena as is indicated by their labels. One speaks of a theory of reference groups, of social mobility, or role conflict." (Merton 1968:39-40). Such theories are used to "guide empirical inquiry" (Merton 1969:39) through the combination of inductive and deductive reasoning.

Building on this philosophical foundation, a model of support-seeking in response to life events combines a number of ideas and insights from more traditional approaches to studying social support's stress-buffering role and social psychological research on helpseeking. The model begins with the premise that certain life experiences are "potentially stressful." These "life experiences" are broadly conceived to include major life events (such as divorce, parenthood, illness), as well as childhood and lifetime traumas, chronic strains and daily hassles (Thoits 1995a; Wheaton 1994; Turner, Wheaton & Lloyd 1995). The assumption that these experiences are "potentially stressful" allows that the level of stress associated with each event is variable. While some individuals may find these events to be highly stressful, others may not. This is an important consideration, because as Fisher et al. (1988:271) point out, individuals who do not define their situation as problematic are unlikely to become involved in stress-buffering social support processes.

Following Pescosolido's (1991, 1992) conceptualization of the Network-Episode Model, support-seeking is viewed as a complex, fluid process characterized by "critical points" (Pescosolido 1971:174) at which individuals may enter, backtrack or leave the process. The first of these critical points is the individual's definition or "recognition" (Pescosolido 1991:175) of the level of stress associated with the particular life experience. The outcomes of such appraisal processes are assumed to be variable and to affect both the initiation and the course of the support-seeking process. It is of interest to note that an analogous concept of "stress appraisal" is included in Cohen's formulation of the stress-buffering model of social support (Cohen 1991:217, 1992:110; Cohen & Wills 1985:313). However, with few exceptions (e.g., Thoits 1995b), empirical studies informed by the stress-buffering model assume that the individuals experiencing these events have indeed appraised them as "highly stressful." The support-seeking model gives more explicit

attention to the possibility that a range of different "meanings" of stress may be associated with such life experiences.

The second critical point in the support-seeking process concerns an individual's identification of the need for support to deal with the situation. Outcomes at this point are also considered to be variable. Some individuals may feel that the support of others is necessary to deal with the situation. Others may define the situation as one where the assistance of others is not required and consequently deal with the situation alone (i.e., through self-help or self "support"). It has been suggested that the appropriate match between the need for support and particular support resources may be the most effective for producing positive health outcomes (Cutrona & Russell 1990). Many studies informed by the stress-buffering model appear based on the assumption that individuals do need support from others in order to successfully reduce the effects of stress. The support-seeking model gives explicit attention to potential differences in individuals' recognition of the need for support.

The third critical point in the process is the "support-seeking strategy" -- another concept adapted from the NEM (Pescosolido 1992). An individual's support-seeking strategy involves the various combinations, patterns and sequences of social ties which are activated in the support-seeking attempt. Two basic assumptions underlie the support-seeking strategy. First, the social relationships which are activated, and/or the social behaviours which are enacted within them, are considered to be "potentially supportive." This notion is consistent with the perceptual approach to conceptualizing "social support" of some social psychologists (e.g., Dakof & Taylor 1990; Lehman, Ellard & Wortman

1986; Lehman and Hemphill 1990) which allows that the personal "meanings" individuals attach to the actions of others determine whether or not such behaviours are viewed as supportive. It is likely that only behaviours which are identified as "supportive" will have positive stress-buffering effects. Second, it is assumed that the relationships activated in the support-seeking strategy represent a "social support system" (Pescosolido 1991:174) of potential ties to a broad range of support resources. Taken together, these two assumptions allow that some of the resources which individuals utilize when dealing with a stressful life experience may not be supportive and that a wide variety of informal, professional and community-based support resources may be consequential for the support-seeking process.

The evaluation of the support-seeking attempt has been conceptualized as the fourth critical point in the support-seeking process. This component is meant to correspond with the well-being outcomes which are expected as a result of social support's stress-buffering effect. As evidenced by the general help-seeking model, such outcomes are not always given explicit theoretical or empirical attention in the help-seeking literature. Rather than follow the conventional approach of the stress-buffering model and define the results of social support processes in terms of "disease" (Cohen 1991:217) or "disorder" (Cohen 1992:110), typically measured with indicators of physical and/or mental health symptomotology, the support-seeking model adapts an idea from Gross and McMullen (1983:50) and conceptualizes process outcomes in terms of an individual's evaluation of how well the support-seeking strategy met his or her needs for support and thus contributed towards resolution of the problem.

This approach to conceptualizing the outcomes of support-seeking processes has been selected for a number of reasons. Overall, it is consistent with the social psychological underpinnings of the support-seeking model which emphasizes personal "meanings." More specifically, it avoids confounding conceptualizations and measures of "outcome stress" or "distress" with conceptualizations and measures of "stressful life events"—a problem that is the focus of some debate in the social support literature (see Dohrenwend et al. 1993; McLean & Link 1994). It also allows that supportive social relationships can have positive benefits for an individual's general sense of well-being even if there are no measurable improvements in physical and mental health symptomotology. Finally, the emphasis on evaluative decisions allows for a range of positive, negative and ambivalent outcomes to the support-seeking process.

The social mechanism which links and influences each of these critical points are the decisions that individuals make when dealing with a potentially stressful life event. The support-seeking model adopts the theoretical approach to decision-making proposed by Pescosolido's NEM (1991, 1992). Decisions are understood as being "embedded in a social process where the network interactions of individuals not only influence preference formation and define the situation but also drive the process of deciding whether something is wrong, whether anything can be done about it, what should be done, and how to evaluate the results" (Pescosolido 1992:1104). This conceptualization allows that individuals may not always make conscious, reasoned choices, they may be coerced by the influences of network members or "muddle through" decision-making processes by "bounc[ing] around'

and 'off' circumstances and others ... engaging in successive, limited comparisons between alternatives" (Pescosolido, Gardner & Lubell 1998:275).

Recognizing that support-seeking is a complex process, it is likely that many factors play important roles in explaining variability in the process. Previous research on help-seeking and social support processes has included consideration of a wide range of explanatory factors. These variables tend to fall into one of four categories — situational factors, intrapersonal factors, interpersonal factors and sociodemographic factors (Pierce, Sarason & Sarason 1990:173). Situational factors refer to aspects of the life event experience and the social setting within which it is located. Intrapersonal factors are defined as "personal coping resources" (Monroe & McQuaid 1994:67), consisting of personality characteristics and other psychosocial resources (e.g., self-esteem). Interpersonal factors refer to "distinctive quantitative (for example, network size) and qualitative features (for example, interpersonal conflict) of both specific relationships and the larger social networks in which supportive behaviour and personal coping efforts take place" (Pierce, Sarason & Sarason 1990:173). Sociodemographic factors include standard social location variables such as age, sex and marital status.

For the initial formulation of a model of support-seeking in response to life events (summarized and presented in Figure 3), the key explanatory variables for the process are identified only in terms of the general classifications. In other words, variables which may be included within these general classes are conceptualized to be potentially consequential. Working towards the delineation of specific factors and their effects will be part of the focus of the empirical examination of the model.

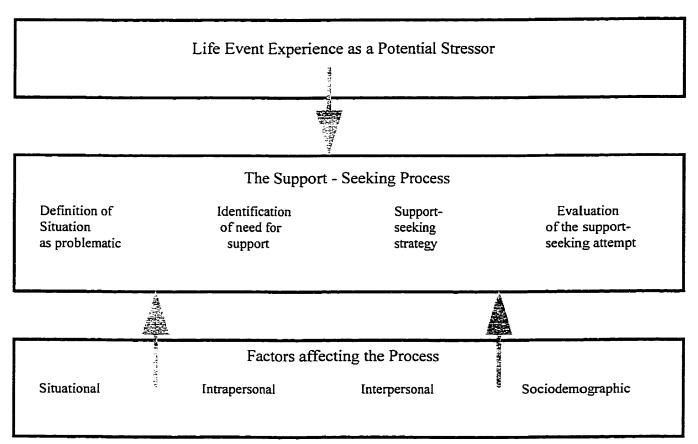


Figure 3: A model of Support-Seeking in Response to Life Events

# A Preliminary Test of the Model

The above conceptualization of a model of support-seeking in response to life events represents an initial formulation. The next step in the model's development is to begin to flesh out this framework through empirical examination. There are a number of strategies which could inform the first investigation. However, because several aspects of the support-seeking process have been developed in response to the critique of the stress-buffering model of social support, these features have been selected as the focus of this

study. More specifically, the goal of this preliminary test of the support-seeking model is first to examine the degree to which individuals experience different outcomes at the four critical points in the process and then to start to explore some of the situational, interpersonal and sociodemographic factors which may account for this variability.

Although this test strategy tends to "artificially freeze" the support-seeking process, Pescosolido (1991:174) points out that such an approach can provide "guides to the basic ideas" of a model. Gross and McMullen (1983) express a similar philosophy in their discussion of the general help-seeking model. They suggest that it is useful to treat each stage as analytically distinct because this strategy provides a "framework for locating points in the process at which . . . factors can critically affect decisions" (Gross & McMullen 1983:49).

An examination of the degree to which individuals may vary in their decisions at the four critical points in the support-seeking process involves a relatively straightforward approach of utilizing measures and analysis techniques that will give explicit empirical attention to these issues. Individuals can be asked directly to appraise the level of stress associated with certain life event experiences and give indications of their perceived need for support to cope with the situation.

To evaluate variations in support-seeking strategies, potential support resources first must be conceptualized to take personal meanings of support into account. Individuals must clearly indicate that certain social relationships and/or the social behaviours enacted within them are identified specifically in terms of "support" (i.e., people you turn to for support)

and not because of some other criteria such as intimacy (i.e., people you feel emotionally close to) or role relationship (i.e., are you married?) which often have been assumed to be proxy indicators of supportive relationships. Second, an individual's support-seeking strategy must be conceptualized to include a "support system" consisting of a broad range of resources from his or her overall social network and their possible combinations. Following Pescosolido (1992, 1996), network ties to three types or levels of potential support resources and their combinations can be taken into account. More generally these resources can be defined as (1) ties to an individual's informal or role-related network (e.g., kin and kith relationships with family, friends, neighbours, co-workers); (2) relationships from an individual's network of professional ties (e.g., doctors, counsellors, ministers) and (3) ties to community-based networks of support resources, including self, peer or mutual aid programs, services, materials or experiences. Attention should also be given to all possible combinations of ties that individuals may activate from their informal, professional and/or community-based networks when seeking support for dealing with their particular life event experiences. Respondents' evaluations of the success or failure of their support-seeking attempts (e.g., in terms of how satisfied, ambivalent or dissatisfied they were with their support-seeking strategy overall) then can be used to consider the possibility that outcomes of social support processes may also be variable.

This preliminary test of the model of support-seeking in response to life events begins with the premise that support-seeking is a complex process, affected by many factors. A comprehensive examination of all possible explanatory factors, including their possible interrelationships is beyond the scope of this study and perhaps is not appropriate

for an initial empirical investigation of the support-seeking model. Therefore, informed by previous research on social support processes and help-seeking, the effects of a select number of factors from each of the four general classifications (summarized below) will be explored. The process of selecting the variables for inclusion was influenced by two considerations: (1) how well the factor addressed some aspect of the critique of the stress-buffering model and (2) how prominent or important the factor appeared to be in previous social support and/or help-seeking research.

#### Situational Factors

Previous research has indicated that various characteristics of the life event experience could affect decisions made at the critical points in the support-seeking process. Four of these aspects have been selected for consideration here -- (1) the type of event, (2) the perceived severity of the stress level associated with the life event, (3) the perceived degree of control individuals feel that they have over the event and (4) the number of other stressful events experienced simultaneously. Cutrona and Russell (1990:324) argue that events which result in the loss of a role relationship with a network member, either permanently due to death, or through the elimination of regular face-to-face interaction (as in being fired or laid off from a job) are often considered to be more stressful than events which disrupt an individual's social network (e.g., illness, financial crisis). Thoits (1995a) suggests that the effect an event has on the network (i.e., role loss versus disruption) may in turn influence the patterns of support-seeking. Because previously available sources of support may no longer be accessible due to the role loss event, support-seeking strategies may involve the utilization of alternate resources. The

level of satisfaction with the support-seeking attempt may also be affected, particularly if the lost source was considered to be an important part of a successful support-seeking strategy.

Once an event as been defined as problematic, decisions about whether or not support is needed, the kinds of support resources to seek out and the evaluation of the support-seeking attempt may be related to the level of stress perceived to be associated with the event (Rickwood & Braithwaite 1994). As the stress level increases, individuals may be more likely to decide they need support, to turn to a broad range of support resources and to be more satisfied with the support-seeking attempt.

Cutrona and Russell (1990:325,329) argue that the degree of control individuals perceive that they have over a life event plays an influential role in support processes. Individuals who define their life experience as one over which they have little control may be more likely to define the event as highly stressful, decide that they need support, utilize a wide range of support resources and be satisfied with their support seeking strategies.

Experiencing a number of stressful life events simultaneously could exacerbate an individual's stress level (Thoits 1995a; Pearlin 1989), making it more likely that he or she will define an additional event as highly stressful, decide they need to seek help as a stress-relieving strategy, and choose a broad range of support resources. Evaluations of the support-seeking strategy for this one event may be mixed due to the influence of remaining stressors.

## Intrapersonal Factors

Mental health researchers have identified personal coping resources as important factors in stress-buffering processes (Monroe & McQuaid 1994:67). Two of these resources have attracted the bulk of attention: (1) self- esteem -- "judgements one makes about one's own self worth" and (2) mastery - "the extent to which people see themselves as in control of the forces that importantly affect their lives" (Pearlin et al. 1981:340; see also Conn & Peterson 1989; Dunkel-Schetter, Folkman & Lazarus 1987; Ensel & Lin 1991; Folkman et al. 1986; Pearlin 1989; Pearlin & Schooler 1978; Thoits 1995a; Turner & Roszell 1994; Wills 1983). Both of these resources have been hypothesized to affect help-seeking decisions (Padgett & Brodsky 1992). However, there is some debate about the exact nature of these relationships. Although there is some agreement that individuals who have lower levels of self-esteem and mastery will define life events as more stressful (Thoits 1995a; Turner & Roszell 1994), the effects of these constructs on decisions about the need to seek support are less clear. Some researchers have found that individuals who decide to seek help are characterized by high levels of self-esteem (Conn & Peterson 1989). Others have suggested that individuals with higher levels of self esteem are less likely to seek support because of the perceived ego-threat associated with the act of admitting the need for support (Wills 1983). There is a similar debate as to whether or not levels of mastery will affect decisions about the needs for support (Folkman et al. 1986). Individuals who feel that they have a great deal of personal control over how to handle life events may view support-seeking as an appropriate action strategy. On the other hand, it could be argued that individuals with a heightened sense of

control could decide they do not need to seek support because they feel more capable of handling the situation on their own. Turner and Roszell (1994:184, 187) indicate that previous research has clearly identified inverse associations between both self esteem and mastery and well-being outcomes. These arguments suggest that individuals who perceive that they have higher levels of self-esteem and mastery will be more satisfied with their support-seeking strategies than individuals who perceive they have lower levels of these personal coping resources.

## Interpersonal Factors

Interpersonal factors include both the social support resources which are perceived to comprise an individual's "support system" and the actual mobilization or utilization of these resources. Three of these factors have be selected for consideration here: (1) the "perceived availability" of social support, (2) the total number of support resources mobilized and (3) the particular patterns or combinations of different types of support resources utilized during the support-seeking attempt. A number of researchers have argued that an individual's perception that social support resources are available if needed is the most consequential interpersonal factor for understanding stress-buffering social support processes (Barrera 1986; Cohen 1991, 1992; Cohen & Wills 1985; Delongis, Folkman & Lazarus 1988; Kessler 1992; Wethington & Kessler 1986; Thoits 1995a).

Cohen (1991) suggests that the perceived availability of social support plays an important role in the problem definition process. "[T]he mere belief that such resources are available may be enough to short circuit stressor appraisal. This argument suggests that perceived support works not because it provides a reasonable approximation of available

resources, but because the *belief* that support is available is what is critical in appraising whether events are stressful" (Cohen 1991:218). Consequently, individuals who perceive that they have adequate support resources available should they need them will define their situations as less problematic than those who do not perceive that adequate support resources are available.

There is some debate about the relationship between the perceived availability of support and decisions about whether or not support is needed (Cohen 1991, 1992; Conn & Peterson 1989; Procidano & Heller 1983; Turner 1983; Wethington & Kessler 1986; Wills 1983). While some researchers have argued that the perception that support is available if needed is enough to influence a decision of self-help (Rickwood & Braithwaite 1994), a more frequently taken position is that the perceived availability of support resources facilitates the decision to actually seek support from these resources. This argument suggests that the perceived availability of support will facilitate the recognition of needs for support. Therefore, individuals who perceive that adequate support resources are available may decide they need support more often than individuals who do not perceive that adequate resources are available.

Thoits (1995a:65) points out that very few studies to date have examined the actual influences of perceived support on individuals' coping strategies. However, previous research has demonstrated that perceived social support is associated with positive well-being outcomes (Thoits 1995a). Therefore, individuals who make their choices among possible support resources with the perception that adequate support was

available may be more satisfied with their support-seeking strategies than individuals who did not feel they had adequate resources available.

For the support-seeking model, the effects of the actual support resources mobilized in the support-seeking strategy come into play at the fourth critical point -evaluating the support-seeking attempt. Some previous studies, informed by the more traditional approach of the stress-buffering model, have found some associations between network size (that is the total number of supportive relationships in the support network) and physical and mental health outcomes (e.g., Berkman & Syme 1979). However, although there has been some research on why support attempts fail, consideration of how an individual's evaluations of his or her support-seeking strategies may be affected by the number and/or specific combinations of support resources which were utilized have rarely (if ever) been explored until now. Nevertheless, two arguments could be made about the nature of an individual's support-seeking strategy and his or her level of satisfaction with how well this strategy matched needs for support and thus contributed to the resolution of the stressful life event situation. It is possible that individuals who utilize a wide range of potentially supportive resources do so because their dissatisfaction or ambivalence with some of the sources initially selected for assistance leads them subsequently to seek out others. On the other hand, it may be possible that the needs for support elicited by a stressful life situation are best met by seeking various types of assistance from various sources.

## Sociodemographic Factors

Sociodemographic factors are typically included in social support and help-seeking research studies (and most other social scientific research) as either explanatory or control variables. The effects of four of these social location variables will be considered here:

(1) age, (2) marital status, (3) family income and (4) gender. The substantial body of literature concerning social support and the elderly has contributed to the identification of age as an influential variable in stress-buffering and help-seeking processes. While the relationship between age and evaluations of support-seeking strategies has received little attention to date, there is some evidence to suggest that younger individuals may define their situations as more stressful, decide they need to seek help and utilize a wider variety of support resources than older individuals (Antonucci & Akiyama 1987a; Neighbors & Jackson 1984; Tijuis, Peters & Foets 1990; Wills 1983).

The effects of social location indicators such as family or household income have been considered in many social support and help-seeking studies. Inclusion of these variables reflects the assumption that socio-economic status affects how individuals experience these processes (Eckenrode 1983; Gross & McMullen 1983; Nadler 1983; Pearlin 1989; Thoits 1995a; Tijuis, Peters & Foets 1990; Turner & Roszell 1994). Several arguments have been proposed based on this assumption. It has been suggested that individuals with lower socio-economic status tend to perceive life events as more stressful than individuals with higher status (Eckenrode 1983; Nadler 1983). However, individuals with higher status tend to decide they need help more often and utilize a wider range of support resources, including professionals (which they are presumed to be able

to pay for) (Tijuis, Peters & Foets 1990). Because the additional informational and financial resources available to higher status individuals allows them to access a wider range of support resources, these individuals may be more satisfied with their support-seeking strategies.

Marital status has been identified as a particularly important variable for social support processes because the spouse is typically considered to be a confidant and consequently the most important source of support (Cohen & Wills 1985; Hess & Soldo 1985; Lowenthal & Haven 1968; Thoits 1995a). Consequently, married individuals may define their situations as less stressful, decide they need the support of others less often, utilize fewer support resources and be more satisfied with their support-seeking attempts than unmarried individuals (Thoits 1995a; Turner & Roszell 1994).

Perhaps the most important explanatory sociodemographic variable which has been identified in previous research on social support and help-seeking is gender. Gender differences in all aspects of these processes seem to be clearly documented. Findings have indicated that women are more likely than men to define their situations as stressful, to decide that they need help to cope with stressful situations and to utilize a broader range of support resources (Antonucci 1990; Antonucci & Akiyama 1987b; Eckenrode 1983; Flaherty & Richman 1989; Kessler, Reuter & Greenley 1979; Nadler 1983; McMullen & Gross 1983; Neighbors & Jackson 1984; Pearlin 1989; Rickwood & Braithwaite 1994; Thoits 1995a; Turner and Roszell 1994). It also has been suggested that socialization into gender specific roles may result in women being more satisfied with the support-seeking experience than men (Turner & Roszell 1994).

It is critical to recognize that gender may play a more complex role in supportseeking processes beyond affecting the outcomes of key decision points. Various
researchers have argued that gender interacts with almost all of the explanatory variables
included for consideration in this initial test of the support-seeking model (e.g., Turner &
Marino 1994; Turner & Roszell 1994; Turner, Wheaton & Lloyd 1995). Therefore, as
part of the exploration of factors which may help to account for variability in the
decisions made at each critical point in the support-seeking process, consideration will be
given to the general experiences of all individuals as well as to the separate experiences
of men and women (where possible) to take all possible gender interaction effects into
account.

#### CHAPTER 4

#### RESEARCH DESIGN

## The "Community" Services Survey (CSS)

The data for the preliminary test of the support-seeking model have been taken from a 1996-1997 community services survey conducted in a Western Canadian Town and its surrounding rural service area (1996 population approximately 13,500). The "Community" Services Survey (CSS) was designed and administered by the author as the facilitator of a Community Strategic Planning Task Force, in consultation and co-operation with representatives from numerous community service organizations, including the Chamber of Commerce, Economic Development Committee, Regional Recreation Board, Arts and Culture Groups, Municipal Government Councils and Administrations, "Community" Planning Commission, Affordable Housing Initiative, Sustainable Communities Initiative, Fire, Ambulance and Police Services, Health Care Professionals, Family and Community Support Services (FCSS), Public and Separate Schools, Local Church and Service Groups and the general public in the "Community" and surrounding rural area. The purpose of the CSS was to collect information about the community residents, their opinions on community issues and their use and satisfaction with various community services in order to (1) update the demographic profile of the community, (2) evaluate existing community services, (3) better understand how and why people use community services, (4) identify important community issues and concerns, (5) help community service organizations

develop short and long range plans and (6) contribute to a community wide process of planning.

The survey was designed to gather information about a broad spectrum of issues pertaining to community services including business, education, health, recreation and social services. The questions which were included in the survey were determined through a comprehensive process which included focus group sessions and interviews with key stakeholders as well as reviews of previous community planning documents, needs assessments and academic research. This process included careful consideration of ethical issues and the guarantee of confidentiality to the respondents. Rather than sample a proportion of the community residents, a census distribution of the survey was selected by the Task Force to ensure that every community household had the opportunity to provide input to the community planning process.

During the week of November 25-29, 1996, questionnaires were delivered to the 5,250 households within the "Community" (2,125 Town households, including all apartments and institutionalized well-elderly and 2,125 Rural households). Each household was asked to select one adult member at random<sup>1</sup> to complete the survey and return it either in the enclosed postage paid envelope or at one of three survey drop-off locations in the community<sup>2</sup>. Although budget constraints precluded the tracking of individual surveys or a follow-up mail-out including reminder notices and/or a second copy of the survey, respondents were encouraged to complete and return their surveys through reminder notices in local newspapers and posters located throughout the community. Completed surveys

were received from 1,287 households by mid February 1997, representing an overall response rate of 24.5%<sup>3</sup>.

Although this response rate is considered low by some standards, similar response rates have been experienced in other recent studies (e.g., 25% for Davey and Norris (1998), 22% for Morgan, Carder and Neal (1997)) (Haines & Henderson 1998:16). In addition, Miller (1991:155) indicates that "response rates to mailout surveys are typically low" particularly for "lengthy questionnaires" such as the CSS. He reports an average response rate of 23.8% (range 18.6% to 27.0%) (Miller 1991:156) in a summary of a number of studies using large-scale surveys with mailout and follow-up strategies similar to the CSS.

The characteristics of the 1287 households closely matched 1996 Canada Census figures<sup>4</sup> (Statistics Canada 1998), although urban households were over-represented (see Table 1). Of the respondents who completed the surveys, 32.0% were male and 68.0% female. The average age was 45.7 years (range 19-88 years, s.d. 13.49 years). Although this gender pattern among respondents was consistent with previous studies conducted in the "Community", comparisons with 1996 Canada Census data indicate that female respondents were over-represented. Such sample selection bias is not unexpected. As Berk (1983:396) points out, the "potential for sample selection bias exists whenever one is working with a non-random subset of some population." He suggests that the internal and external validity of *all* research studies are affected to varying degrees by sample selection bias. However, in most cases the extent of the bias is usually not considered severe enough to totally discount all research findings. The typical strategy employed by researchers when

Table 1: Comparison of CSS Household and Respondent Characteristics to 1996 Canada Census Data

	CSS	1996 Canada Census
Household Characteristics		
persons/household:		
mean	3.1	3.2
gender composition:		
male	50.0%	50.0%
female	50.0%	50.0%
family income:		
median category	\$60,000 to \$69,999	\$60,000 to \$69,999
location of residence:		
urban	69.0%	51.0%
rural	31.0%	49.0%
Respondent Characteristics		
age:		
mean	45.7 years	44.3 years
gender composition:		
male	34.0%	49.6%
female	66.0%	50.4%

dealing with the issue of sample selection bias is to identify, as much as possible, the potential source(s) of the bias, and then be conservative in the kinds of generalizability claims that are made from study results. This same strategy will be followed here, recognizing from the outset that bias may exist due to the over-representation of urban residents and women.

The CSS was organized into thirteen sections. The first section asked respondents for general demographic information and the remaining twelve each dealt with a particular community service issue. The majority of the data used for this test of the support-seeking model have been taken from the section entitled "General Life Experiences and Attitudes." Comments at the beginning of the section outlined the general purpose of the section and reiterated assurances of confidentiality<sup>6</sup>. The information gathered in this section included self-evaluations of physical and mental health and well-being, self-evaluations of self-esteem, coping skills and available social support, details of experiences of potentially stressful life events and utilization patterns of sources of support when dealing with life events. Details of the gender, age and marital status of the person who completed this specific section of the survey were also collected.

# <u>Sample</u>

The empirical test of the support-seeking model used data from the respondents who completed the "General Life Experiences and Attitudes" section and indicated that during their lifetimes they had experienced at least one of the potentially stressful life events included in this section. (N=1000). Of this subgroup of the original 1287 respondents, 31.3% were male and 68.7% were female; 69.2% were town residents and 30.8% were rural residents. The average age was 45.69 years (range 19-88 years, s.d. 12.67 years). There were no statistically significant differences between the individuals who indicated that they had experienced at least one potentially stressful event (N=1000) and those who had not (N=287).

#### Measures

Two subsections of the CSS section on "General Life Experiences and Attitudes" provided most of the information necessary to construct measures for the analyses. In the first of these subsections, respondents were given the following preamble: "People have many ways of thinking about themselves and handling the problems in their lives. Thinking about YOURSELF... indicate how much you agree or disagree with the following statements." Then they were presented with a series of statements with which they could use a four-point scale to strongly agree, agree, disagree or strongly disagree. The statements included indicators of self-esteem, mastery and perceived available social support. The next question presented a number of scenarios about life problems or crises. For each one, the respondents were asked to indicate if they would be more likely to choose to seek assistance, or to deal with the situation on their own.

In the second subsection, respondents were presented with a list of 15 "events that people may experience sometime during their lives" and asked to indicate whether or not they had experienced any of these events<sup>7</sup>. The respondents could identify as many events as applied to them or specify another event in the space provided. For each event identified, the respondents were asked to indicate: (1) when this event happened to them (e.g., 1987, 1996); (2) how stressful they found this event to be on a scale of 1 (not stressful at all) to 10 (extremely stressful); if they felt that they needed the help and support of others to deal or cope with this situation (yes, no) and (4) if they felt that this issue was still affecting their every day lives (yes, no). Then the respondents were asked to select and specify ONE event from those which they had experienced during their lifetimes where they felt that the help or

support of others was needed to deal with the situation. The next series of questions asked for details about that ONE event, including (1) the factors that "influenced how stressful" they found the situation to be (respondents were presented with a number of specified factors or could indicate additional factors in the space provided), (2) where they turned for "help and support when dealing with this situation" (respondents were presented with 26 specified support resources or could indicate additional support resources in the space provided) and (3) how satisfied they were with the "help or support" they received from each "source of support" (very satisfied, satisfied, sometimes satisfied/sometimes dissatisfied, dissatisfied, very dissatisfied).

Measures for the test of the support-seeking model were created from these data as follows:

Potentially Stressful Life Events.

Potentially stressful life events were operationalized with the 15 listed events in the CSS. All of these events were personal events (i.e., events that happen to the respondents personally), rather than "network events" (i.e., events that happen to loved ones in their social networks) (Thoits 1995a:55). The events selected for inclusion were influenced by the "social stress indicators" list compiled by Turner, Wheaton and Lloyd (1995:120-122) and the events which characterize "dimensions of stress" discussed by Cutrona and Russell (1990:327)<sup>8</sup>. These events were: the death of spouse or partner, death of a parent, death of a child, death of a sibling, death of a close friend, divorce, fired from a job, laid off from a job, serious accident or injury, serious physical illness, serious mental illness, marital separation, financial crisis, serious problem with youth at home and victim of a crime.

Critical Points in the Support-Seeking Process

- 1. Definition of the Situation as Problematic. This variable was operationalized in terms of the level of stress that individuals perceived to be associated with their various life experiences. The data were taken from the responses to the question: "Please indicate how stressful you found this event to be on a scale of 1 (not stressful at all) to 10 (extremely stressful." Higher scores were considered to be indications that the respondents perceived their situations to be problematic in terms of stress.
- 2. Identification of the Need for Support. A respondent's perceived need for support was measured with his or her response to the following statement: "Please indicate if you felt you needed the help and support of others to deal or cope with this situation?"

  Respondents could indicate "yes" or "no." Responses of "yes" were considered to be an identification of the need for support.
- 3. The Support-Seeking Strategy. Respondents' indications of the potential "sources of support" which they turned to when dealing with their ONE life event situation were used to construct different measures of the characteristics of the support-seeking strategy in terms of (1) the composition of the "support system" -- (i.e., the specific kinds of ties or relationships activated in the support-seeking attempt) and (2) the particular combination of these support resources utilized in the support-seeking attempt. The 26 potential sources of support that were listed in the CSS were considered individually as interpersonal relationships or ties which could be activated from respondents' informal, professional and/or community-based networks. Following Fisher et al. (1988:288), resources in

informal networks were defined to include family and friends and other ties typically identified by the role relationship between the respondents and their network members such as co-workers and neighbours. Resources in professional networks included individuals who are recognized by society as professionals through licensing and the prescription of minimum qualifications (e.g., ordination for ministers and priests, education for teachers and counsellors). Support resources in community-based networks are those provided by community service organizations, government support services or through representatives of virtual communities of assistance. These resources, which may include self, peer or mutual aid programs, services, materials or experiences, are designed or intended to promote individuals' coping skills and physical and mental well-being. The 26 support resources included in the CSS were categorized as follows:

- Informal (Role Related) Support Resources or Ties to Informal Networks: spouse/partner/significant other, mother, father, children, siblings, close friends, co-workers, neighbours, acquaintances.
- Professional Support Resources or Ties to Professional Networks:

  doctor, nurse, home care worker, lawyer, psychiatrist, family counsellor or therapist, social worker, minister, lawyer, mediator.
- Community-Based Support Resources or Ties to Community-Based Networks: support group, life skills or coping courses, self-help books or videos or TV programs, food bank, help or crisis lines, social services, church, God or prayer.

For some analyses, the analytical focus was on each separate support resource or tie (e.g., spouse, lawyer, prayer). In others, the focus was on the type of network tie represented by the support resource (i.e., to the informal network, professional network or community-based network). For the latter type of analysis, individuals who indicated that they had

sought out at least ONE resource from the group of resources representing ties to either the informal, professional or community-based network were considered to have activated a tie in that respective network.

Support-seeking strategies were conceptualized and measured in two ways for different analyses. In some cases the total number of resources which respondents indicated they had turned to for help and support when dealing with their ONE event was used as a measure of the extensiveness of the support-seeking strategy. Higher numbers of resources were considered to indicate more extensive support-seeking strategies. In other instances the support-seeking strategy was conceptualized and measured in terms of Pescosolido's (1992) "strategy set." This approach involved consideration of all possible combinations of the three different networks where support resources may have been utilized. There were seven possible "strategy sets" related to the respondents' patterns of activated network ties: (1) utilization of the informal network alone; (2) utilization of the professional network alone; (3) utilization of the community-based network alone; (4) utilization of the informal network and the professional network; (5) utilization of the informal network and the community-based network; (6) utilization of the professional network and the communitybased network; and (7) utilization of all three networks. More complex strategy sets are those which involve ties to more of the three networks.

4. Evaluations of Support-Seeking Strategies. This concept was measured in a number of ways for different analyses. In some cases, evaluations of support-seeking strategies were measured with scores taken from the five-point evaluations of the satisfaction levels of the support or help provided by each separate resource which the

respondents indicated they turned to when dealing with their ONE event. Higher scores represent higher levels of dissatisfaction with the support received. Middle range scores represent indications that the respondents were sometimes satisfied and sometimes dissatisfied with the support they received, rather than the more standard interpretation of Likert middle range scores as neutral, neither satisfied nor dissatisfied. For some analyses, a mean satisfaction score was calculated by adding the scores from each resource sought out and dividing by the total number of resources. In other cases the mean satisfaction scores were recoded into two categories: (1) satisfied (mean satisfaction scores less than 2.50); (2) ambivalent and dissatisfied (mean satisfaction scores 2.50 and greater).

Potential Explanatory Factors: Situational Factors.

Type of Event. Following Thoits' (1995a) distinction between life events which result in the loss of role relationships with network members (Role Loss Events) and events which have the potential to disrupt individuals' social networks (Network Disruption Events), the type of event was measured as follows:

Events which result in the loss of role relationships with network members:

death of spouse or partner, death of a parent, death of a child, death of a sibling,
death of a close friend; divorce, fired from a job, laid off from a job.

Events which disrupt an individual's social network: serious accident or injury, serious physical illness, serious mental illness, marital separation, financial crisis, serious problem with youth at home, victim of a crime.

Perceived "stress level" of the event. The respondents self-reports of the stress levels of their life event experiences, ranging in value from 1 (not stressful at all) to 10 (extremely stressful), were used to construct this measure. Higher values indicate more

stressful events. For some analyses, these self-evaluations of stress levels were recoded into categories representing "low" (1 to 3), "moderate" (4 to 7) and "high" (8 to 10) levels of stress.

Controllability of the event. This aspect of the event was measured by examining whether or nor respondents indicated that one of the reasons why they found their ONE experience to be stressful was a "lack of control over the situation." A response of yes indicated that the event was one over which the respondents felt they had little control.

Other stressful events experienced simultaneously. This measure was constructed by examining whether or not respondents indicated that one of the reasons why they found their ONE experience to be stressful was "other stressful events happening in your life at the same time." A response of yes indicated that the experience of dealing with their ONE event was influenced by other stressful events happening simultaneously in their lives.

Potential Explanatory Factors: Intrapersonal Factors

Self-esteem. Self-esteem was measured with a summated score representing responses to 4 items selected from Rosenberg's (1965) now classic self-esteem scale (reproduced in Pearlin et al. 1981). This scale has been widely used in stress process studies (Lin & Ensel 1989:390). These four items were: (1) "On the whole, I am satisfied with myself." (2) "I take a positive attitude towards myself." (3) "I wish I could have more respect for myself." and (4) I am able to do things as well as most other people."

Respondents were asked to strongly agree, agree, disagree or strongly disagree with each statement and the responses were scored on a four-point scale. Higher values indicate a

higher sense of self-esteem. Principal axis factor analysis was used to confirm the dimensionality of these items (inter-item correlations .35 to .69, Cronbach's alpha = .78).

Mastery. Mastery was measured with a summated score representing responses to 3 items selected from a scale developed by Pearlin and Schooler (1978). Indicators from this scale are also frequently used in stress process studies (e.g., Ali & Avison, 1997; Folkman et al. 1986). These three items were: (1) "I often feel helpless in dealing with the problems of life." (2) "There is really no way I can solve some of the problems I have." and (3) "I have little control over the things that happen to me." Respondents were asked to strongly agree, agree, disagree or strongly disagree with each statement and the responses were scored on a four-point scale. Higher values indicate a higher sense of mastery. Principal axis factor analysis was used to confirm the dimensionality of these items (inter-item correlations .37 to .44, Cronbach's alpha = .66).

Potential Explanatory Factors: Interpersonal Factors.

Perceived Availability of Social Support. Perceived availability of social support was measured with a summated score representing responses to 4 items influenced by the work of Procidano and Heller (1983) and Wethington and Kessler (1986). Similar indicators have been used in other social support and stress process studies (e.g., Bloom & Kessler 1994; Eckenrode 1983). These four items were: (1) "Thinking about everyone I know, I have enough people to help me if I have a problem." (2) "I know someone who could give me help if I needed it." (3) "I can rely on the people I know for support." and (4) "These days I really don't know who I can count on for help." Respondents were asked to strongly agree, agree, disagree or strongly disagree with each statement and the

responses were scored on a four-point scale. Higher values indicate a greater perception that adequate support resources are available. Principal axis factor analysis was used to confirm the dimensionality of these items (inter-item correlations .45 to .57, Cronbach's alpha = .80).

Total Support Resources Utilized. This factor was measured by calculating the total number of all resources which respondents indicated they had turned to for help and support when dealing with their ONE event. Higher numbers of resources were considered to indicate more extensive support-seeking strategies.

Support-Seeking Strategy Set. A respondent's strategy set was measured in terms of his or her combination of informal, professional and/or community-based support resources utilized in the support-seeking attempt. There were seven possible combinations or patterns of these activated network ties: (1) utilization of the informal network alone; (2) utilization of the professional network alone; (3) utilization of the community-based network alone; (4) utilization of the informal network and the professional network; (5) utilization of the informal network and the community-based network; (6) utilization of the professional network and the community-based network; and (7) utilization of all three networks.

Potential Explanatory Factors: Sociodemographic Factors.

Age. The measure of age used in all analyses was the respondent's age at the time they experienced the event. This measure was calculated for each event by subtracting the length of time since the event had occurred (in years) from the respondents' self-reports of age in years as of December 31, 1996.

Household income level. Level of household income was measured on a scale of 1 to 12 based on the respondents' indication of the category that best represented their households' total annual income (before taxes). Higher values indicate a higher level of household income<sup>9</sup>.

- 3. Marital Status. Original responses for marital status (i.e., single, married or equivalent, divorced/separated, widowed) were recoded into a dummy variable: married or equivalent (1) and unmarried or equivalent (0).
  - 4. Gender. Gender of the respondent was dummy coded: female (1) and male (0).

#### Testing Procedures

The test of the model of support-seeking in response to life events involved two phases. The first phase examined the extent to which the outcomes at the four critical decision points in the process varied. The second phase explored the extent to which the selected factors could account for the observed variabilities in phase one.

To facilitate these analyses, the original CSS data were organized into two different data sets. The first data set consisted of information about 2,338 life event situations which the 1000 respondents indicated that they had experienced during their lifetimes. This data set was used to examine issues relating to the first two critical points in the support-seeking process: the definition of the situation as problematic and the identification of the need for support. In some instances, it was necessary to take the cross-sectional nature of the CSS data into account. A number of the proposed factors which may affect decisions at the various critical points in the support-seeking model have causal implications in terms of

time order (e.g., self-esteem, marital status). Therefore, a smaller subset of this first data set, consisting only of the respondents' "recent" life event experiences (i.e., events which were experienced by the respondents during the 12 month period immediately preceding their completion of the CSS) was used for analyses which explored the effects of these variables.

The second data set consisted of the further details about 666 of the listed events which were provided by 666 CSS respondents who selected them as ONE experience where they needed the help or support of others. This data set was used to examine issues relating to the other two critical points in the support-seeking process: the support-seeking strategy and the evaluation of the support-seeking attempt. Again, there were some instances where a smaller subset of this data, consisting only of the "recent" life event experiences (i.e., events which were experienced in the 12 month period immediately preceding the completion of the survey) was used.

Where possible, the analyses in phase two were conducted for all respondents and then separately for men and women to take all possible gender interaction effects into account. The gender models were included when the total number of cases for each gender was approximately 100 or larger. This choice was based on the rationale that using statistical techniques to estimate coefficients with samples smaller than 100 is "risky" (Long 1997:54) because assumptions which underlie the use of parametric tests are violated.

## Data Analysis Techniques

A number of descriptive and inferential statistical techniques were used in the tests of the support-seeking model. Univariate descriptive techniques were used to examine the

degree of variability in respondents' decisions at the four critical points in the supportseeking process in phase one of the analyses. Then, depending on how these decision
outcomes had been measured (i.e., their *level* of measurement), one of three different
multivariate estimation procedures was used in phase two to explore some of the factors
which could account for the variability in the respondents' decisions at each critical point.

Where the dependent variable was measured at the interval-ratio level (i.e., continuous dependent variables), OLS regression was used. This technique utilizes the linear relationship between variables to analyze the effects of independent variables on the variability of a dependent variable (Pedhazur 1982). Independent variables can be continuous or categorical (i.e., measured at the nominal or ordinal level). Unstandardized regression coefficients for continuous independent variables are interpreted as the amount of predicted change (i.e., increase or decrease in value) in the dependent variable for a one unit increase in the independent variable, controlling for any other independent variables in the analysis. For discrete independent variables, dummy variables are created (Hardy 1993). This technique allows comparisons of the differences between the mean predicted values of the dependent variable for categories of the original variable included in the analysis and an omitted reference category (e.g., differences in the mean stress level for individuals who are married and equivalent, compared to individuals who are unmarried or equivalent), controlling for any other independent variables in the analysis. Comparisons of standardized regression coefficients allow for assessments of the most important predictors.

Where the dependent variable was measured at the nominal level (i.e., categorical dependent variables), logistic regression techniques were used. Logistic regression is most typically employed for dependent variables which are dichotomous (i.e., have two categories). The binomial distribution of this type of dependent variable violates assumptions underlying OLS regression. Consequently, logistic regression is a technique which transforms values of the dependent variable to allow predictions, not about increases or decreases in the value of the dependent variable (as in OLS regression), but about the probability of belonging in one category of the dependent variable versus the other. This transformation involves creating a "logit dependent variable" -- that is a dependent variable that is the natural log of the odds of membership in one category versus the other (Menard 1995:v). Independent variables can be continuous or categorical. Unstandardized logistic regression coefficients for continuous independent variables are interpreted as the effects of a one unit increase in the independent variable on the log odds of membership in the category of the dependent variable included in the analysis versus an omitted reference category, controlling for any other independent variables in the analysis. The unstandardized logistic regression coefficients for categorical independent variables (also known as dummy variables) are interpreted as the effect of one category of the independent variable versus an omitted reference category on the log odds of membership in the category of the dependent variable included in the analysis versus an omitted reference category, controlling for any other independent variables in the analysis. These coefficients, typically called "additive effects" or "additive estimations" (Demaris 1992:19) are difficult to interpret. However, logistic

regression parameter estimates are much more readily interpreted as multiplicative coefficients created by exponentiating, or taking the antilog, of the unstandardized coefficients (Demaris 1992:23). This transformation allows interpretation of the parameters in terms of odds ratios — that is the effects on the odds of membership in one category of the dependent variable versus the other. Coefficient values greater than 1.00 indicate an increase in the odds of being in the included category versus the reference category as values of the independent variable increase. Values less than 1.00 indicate a decrease in the odds of being in the included category versus the reference category. Values of 1.00 indicate equal odds of being in either category. Percentage differences are sometimes used in the interpretation of odds ratio coefficients. For example, a coefficient of 1.17 can be interpreted as 17% more likely to belong in the included category than the reference category.

In the case where the dependent variable had more than two categories, polytomous or multinomial logistic regression techniques were used (Demaris 1992:61; Menard 1995:80). This technique involves selecting one category of the dependent variable as a reference category. Then the probability of membership in the other categories is compared to the probability of membership in the reference category using a series of paired contrasts, one for each of the included categories with the reference category. Odds ratio coefficients again provide the clearest interpretations of effects.

All parameters were estimated with SPSS Regression and Logistic Regression procedures. Level of significance for all inferential tests was  $\alpha = .05$ .

An issue of importance in any analysis of effects is multicollinearity, the extent to which independent variables are intercorrelated. As Pedhazur (1982:232) points out, "correlations among independent variables may lead to difficulties in the estimation of regression statistics." High intercorrelations may mean that the information provided by some variables is redundant and consequently may have "extremely adverse effects on the standard errors of the regression coefficients and hence on their tests of significance" (Pedhazur 1982:235). Although there is some debate about what constitutes "high" multicollinearity, intercorrelations as close to zero as possible are ideal. The zero order correlations among the independent variables for the two data sets used to test the support-seeking model will be taken into account and evaluated in terms of how they may influence the results presented in the next chapter.

#### CHAPTER 5

#### RESULTS

The 1,000 respondents who indicated that they had experienced at least one of the CSS listed events during their lifetimes provided details about 2,338 of these life events (range 1-8, mean 2.34 events) (Tables 2-4). The most frequently experienced events were the death of a parent (by 42.6%), serious accidents or injuries (by 26.1%), serious physical illnesses (by 23.9%), death of a close friend (by 21.8%) and financial crisis (by 21.0%). Overall, respondents reported that 14.8% of these events were experienced in the past year, 31.5% within the past 2 to 5 years, 25.7% within the past 6 to 10 years and 28.0% more than 10 years ago. Further details about 666 of these listed events were provided by CSS respondents who selected them as ONE experience where they needed the help or support of others<sup>10</sup>.

## Phase I Analyses: An Examination of the Variability of Critical Point Outcomes

## 1. Definition of the Situation as Problematic

From the accounts of the CSS respondents about their experiences with the 15 listed events, it is clear that the stress levels perceived to be associated with these situations can indeed vary from person to person. Of all events experienced, death of a child (for 93.6%), serious mental illness (for 93.2%) and death of a spouse or partner (for 88.7%) were perceived to have the highest stress levels. However, not all of these events, which are

Table 2: Life Event Experiences of Respondents (N=1000) and Rankings of Mean Stress Levels,
Percentages of Respondents' Need for Help to Cope with the Event and Percentages of
Events Still Affecting the Respondents' Lives

Event	%	(N)	Stress Level mean [rank]	Help to Cope? % yes [rank]	Still Affecting Life? % yes [rank]
1. Death of a parent	42.6%	(426)	7.45 [11]	34.5% [11]	28.2% [11]
<ol><li>Serious accident</li></ol>					
or injury	26.1%	(261)	7.56 [10]	52.1% [7]	36.4% [7]
<ol><li>Serious physical</li></ol>					
illness	23.9%	(239)	8.14 [6]	73.4% [2]	52.7% [3]
<ol><li>Death of a close</li></ol>					
friend	21.8%	(218)	6.92 [12]	27.2% [14]	21.2% [14]
<ol><li>Financial crisis</li></ol>	21.0%	(210)	8.12 [7]	51.9% [8]	48.5% [4]
6. Laid off from a					
job	17.3%	(173)	5.97 [15]	26.6% [15]	24.3% [13]
7. Divorce	16.0%	(160)	6.84 [13]	46.5% [9]	28.9% [10]
<ol><li>Marital Separation</li></ol>	15.6%	(156)	8.22 [5]	61.3% [6]	38.1% [6]
<ol><li>Victim of a Crime</li></ol>	11.2%	(112)	6.83 [14]	39.3% [10]	25.9% [12]
<ol><li>Serious Problem</li></ol>					
with youth at home	9.6%	(96)	8.42 [4]	63.2% [5]	46.3% [5]
<ol> <li>Death of a sibling</li> </ol>	8.5%	(85)	8.09 [8]	29.8% [13]	32.1% [9]
<ol><li>Death of a spouse</li></ol>					
or partner	6.0%	(60)	9.02 [3]	72.4% [3]	53.4% [2]
<ol><li>Death of a child</li></ol>	5.1%	(51)	9.36 [1]	64.0% [4]	36.0% [8]
<ol><li>Serious mental</li></ol>					
illness	5.0%	(50)	9.04 [2]	92.0% [1]	58.0% [1]
15. Fired from a job	4.1%	(41)	7.68 [9]	32.5% [12]	15.0% [15]
TOTAL EVENTS	2,33	8	7.59	47.0%	34.9%

Table 3: Descriptive Statistics for Role Loss Events (N=1214 Events)

Event	% (N)	Years since experienced	Perceived stressfulness	Needed help to cope?	Still affecting your life?
Death of a parent	42.6% (426)	< 2 : 9.4% 2-5 : 31.4% 6-10: 22.5% >10 : 36.7%	low: 10.4% mod: 30.8% high: 58.8% mean: 7.45	yes: 34.5% no : 65.5%	yes: 28.2% no: 71.8%
Death of a close friend	21.8% (218)	< 2:21.6% 2-5:35.3% 6-10:22.0% >10:21.1%	low: 12.1% mod: 43.2% high: 56.8% mean: 6.92	yes: 27.2% no : 72.8%	yes: 21.2% no: 78.8%
Laid off from a job	17.3% (173)	< 2:18.3% 2-5:45.7% 6-10:18.3% >10:17.7%	low: 28.0% mod: 33.0% high: 39.0% mean: 5.97	yes: 26.6% no : 73.4%	yes: 24.3% no: 75.7%
Divorce	16.0% (160)	< 2:10.6% 2-5:23.2% 6-10:20.5% >10:45.7%	low: 22.9% mod: 21.4% high: 50.7% mean: 6.84	yes: 46.5% no : 53.5%	yes: 28.9% no: 71.7%
Death of a sibling	8.5% (85)	< 2:10.0% 2-5:22.5% 6-10:18.7% >10:48.8%	low: 5.1% mod: 24.4% high: 70.5% mean: 8.09	yes: 29.8% no : 70.2%	yes: 32.1% no: 67.9%
Death of spouse or partner	6.0% (60)	< 2 : 5.8% 2-5 : 32.7% 6-10: 26.9% >10 : 34.6%	low: 5.7% mod: 5.6% high: 88.7% mean: 9.02	yes: 72.4% no : 27.6%	yes: 53.4% no: 46.6%
Death of a child	5.1% (51)	< 2 : 2.0% 2-5 : 20.4% 6-10: 18.4% >10 : 59.2%	low: 2.1% mod: 4.3% high: 93.6% mean: 9.36	yes: 64.0% no : 36.0%	yes: 36.0% no: 64.0%
Fired from a job	4.1% (41)	< 2 : 7.5% 2-5 : 40.0% 6-10: 20.0% >10 : 32.5%	low: 7.9% mod: 34.2% high: 57.9% mean: 7.68	yes: 32.5% no : 67.5%	yes: 15.0% no: 85.0%
TOTAL	1214 events				

Table 4: Descriptive Statistics for Network Disruption Events (N=1124 Events)

Event	% (N)	Years since experienced	Perceived stressfulness	Needed help to cope?	Still affecting your life?
Serious accident or injury	26.1% (261)	< 2 : 9.8% 2-5 : 31.0% 6-10: 27.0% >10 : 32.2%	low: 9.4% mod: 29.3% high: 61.3% mean: 7.56	yes: 52.1% no : 47.9%	yes: 36.4% no: 63.6%
Serious physical illness	23.9% (239)	< 2 : 20.5% 2-5 : 32.9% 6-10: 22.7% >10 : 24.4%	low: 5.4% mod: 20.2% high: 74.4% mean: 8.14	yes: 73.4% no : 26.6%	yes: 52.7% no: 47.3%
Financial crisis	21.0% (210)	< 2:36.8% 2-5:34.6% 6-10:13.2% >10:15.4%	low: 3.8% mod: 25.9% high: 70.3% mean: 8.12	yes: 51.9% no : 48.1%	yes: 48.5% no: 51.5%
Marital separation	15.6% (156)	< 2:10.5% 2-5:34.2% 6-10:25.0% >10:30.3%	low: 4.3% mod: 24.1% high: 75.9% mean: 8.22	yes: 61.3% no : 38.7%	yes: 38.1% no: 61.9%
Victim of a crime	11.2% (112)	< 2:12.7% 2-5:36.4% 6-10:20.0% >10:30.9%	low: 19.8% mod: 33.7% high: 46.5% mean: 6.83	yes: 39.3% no : 60.7%	yes: 25.9% no: 74.1%
Serious problem with youth at home	n 9.6% (96)	< 2 : 28.6% 2-5 : 41.7% 6-10: 20.9% >10 : 8.8%	low: 2.3% mod: 18.4% high: 79.3% mean: 8.42	yes: 63.2% no : 36.8%	yes: 46.3% no: 53.7%
Serious mental illness	5.0% (50)	< 2:19.1% 2-5:38.3% 6-10:23.5% >10:19.1%	low: 0.0% mod: 6.8% high: 93.2% mean: 9.04	yes: 92.0% no: 8.0%	yes: 58.0% no: 42.0%
TOTAL	1124 events				

typically defined as "negative life events" (Thoits 1995a) were considered to be highly stressful. The overall mean perceived stress level associated with these events was 7.59 (near the top of the "moderate" range) and 34.9% of all events were characterized by low or moderate levels of stress. For almost half of the individuals who experienced a divorce and 61.0% of those who indicated they were laid off from a job, the experience was characterized as minimally or moderately stressful. Except for respondents who had experienced a serious mental illness, a proportion of the respondents who had experienced every other event characterized the stress level of the event as "low," including 28.0% of those who were laid off from a job, 22.9% of those who experienced a divorce, 19.8% of those who were victims of crimes and 12.1% of those who experienced the death of a close friend.

# 2. Identification of the Need for Support

It is of great interest to note that the CSS respondents felt that they did not need the help or support of others to deal with the majority of these life event experiences. Overall, only 47.0% of the events were defined as situations where the help or support of others was needed. Serious mental illness (for 92.0%), serious physical illness (for 73.4%) and death of a spouse or partner (for 72.4%) were the events named most often as needing support. Only 26.6% of those who experienced being laid off from work, 27.2% of those who experienced the death of a close friend and 29.8% of those who experienced the death of a sibling indicated that support or help from others was needed to cope with the situation. From these findings it is clear that the need for support is neither automatic nor universal for individuals who are dealing with life event situations.

## 3. The Support-Seeking Strategy

Details of the ties activated in their support-seeking strategies (i.e., the sources of potential support which were utilized) were provided by the 666 respondents who selected ONE experience where they felt the help or support of others was needed (see Tables 5 and 6). Of the 26 sources of potential support listed in the CSS, representing ties to the respondents' informal, professional and community-based networks, respondents indicated that they activated a total of 3,467 ties (range 1-14, mean 5.21 ties) in their support-seeking strategies. Ties with close friends (by 64.7%), spouse, partner or significant other (by 64%), doctors (by 38.9%) mothers (by 35.9%), neighbours (by 35.9%) and God or prayer (by 31.7%) were most often activated. Almost all of the respondents (92.3%) indicated that they had activated ties in their informal networks as part of their support-seeking strategies, 60.2% utilized at least one tie in their professional networks and 48.3% identified the use of a community-based source of support.

It would also appear that the respondents' support-seeking strategies were characterized by the activation of specific combinations of ties to their informal, community-based and professional networks. Of the seven possible support-seeking strategies involving either the exclusive use of ties in informal, professional and community-based networks or the combinations of ties in these networks (Table 7), four were used most frequently by the CSS respondents. The most common strategy, used by 36.8% of the CSS respondents consisted of activating ties in all three networks. Strategies involving informal ties only were utilized by 25.0% of the respondents, 22.8% utilized a combination of professional and informal ties and 11.7% utilized a strategy involving the

Table 5: Utilization of Potential Support Resources and Outcome Evaluations (N=666)

		Outcome Evaluations					
Resource	% (N)	very satisfied	satisfied	ambivalent <sup>1</sup>	dissatisfied	very dissatisfied	<i>mean</i> i
Friends	64.7% (431)	52.7%	33.6%	9.5%	3.0%	1.2%	1.66
Spouse	64.0% (426)	51.6%	27.2%	14.1%	3.8%	3.3%	1.80
Doctor	38.9% (259)	44.4%	29.3%	12.7%	8.9%	4.4%	2.00
Mother	35.9% (239)	50.6%	26.4%	16.7%	2.9%	3.4%	1.82
Neighbours	35.9% (239)	33.8%	36.1%	19.5%	3.8%	6.8%	2.13
God /prayer	31.7% (211)	69.7%	21.3%	7.1%	1.4%	0.5%	1.42
Siblings	31.1% (207)	46.8%	31.9%	14.0%	3.4%	3.9%	1.86
Coworkers	24.8% (165)	38.2%	30.9%	21.8%	6.1%	3.0%	2.05
Father	23.6% (157)	40.1%	28.0%	21.7%	5.7%	4.5%	2.06
Child	23.4% (156)	57.7%	26.3%	13.5%	2.5%	0.0%	1.61
Church	18.8% (125)	56.8%	26.4%	12.0%	1.6%	3.2%	1.68
Minister	17.4% (116)	50.9%	36.7%	15.5%	1.7%	5.2%	1.84
Counsellor	16.8% (112)	42.0%	28.5%	16.1%	3.6%	9.8%	2.11
Selfhelp books	15.6% (104)	33.7%	38.5%	25.0%	1.9%	1.0%	1.98
Lawyer	15.5% (103)	27.2%	37.9%	17.4%	7.8%	9.7%	2.35
Acquaintances	12.9% ( 86)	36.0%	30.2%	25.6%	4.7%	3.5%	2.09
Nurse	11.1% ( 74)	50.0%	32.3%	6.8%	4.1%	6.8%	1.85
Lifeskills courses	8.6% ( 57)	47.7%	31.6%	15.8%	1.7%	3.5%	1.82
Support group	8.0% (53)	39.6%	39.6%	11.4%	7.5%	1.9%	1.92
Psychiatrist	5.4% ( 36)	25.0%	30.6%	19.4%	13.9%	11.1%	2.56
Social worker	4.8% ( 32)	37.4%	18.8%	25.0%	6.3%	12.5%	2.38
Social services	3.9% ( 26)	26.9%	15.4%	30.8%	7.7%	19.2%	2.77
Home care	3.8% (25)	32.0%	52.0%	8.0%	4.0%	4.0%	1.96
Mediator	2.0% (13)	15.4%	30.7%	38.5%	0.0%	15.4%	2.70
Helpline	1.4% (9)	22.2%	11.1%	55.6%	0.0%	11.1%	2.67
Foodbank	0.9% (6)	33.3%	50.0%	16.7%	0.0%	0.0%	1.83

ambivalent = sometimes satisfied, sometimes dissatisfied

Table 6: Utilization of Informal, Professional and Community-Based Ties (N=666)

Type of Ties		%	(N)	Nun	nber of Ties <sup>1</sup>	Range/Mean
Informal	yes	92.3% 7.7%	(615)		17.4% 25.2%	range: 1-8
	no	7.776	(51)	2: 3: 4: >5:	25.2% 26.8% 14.5% 16.5%	mean: 2.76
Professional	yes no	60.2% 39.8%	(401) (265)	l: 2: 3: 4:	46.6% 28.9% 14.7% 7.0%	range: 1-5 mean: 1.16
Community-Based	yes no	48.3% 51.7%	(322) (344)	>5: 1: 2:	2.8% 49.4% 27.6%	range: 1-6
				3: 4: >5:	15.8% 5.6% 1.6%	mean: 0.86

<sup>&</sup>lt;sup>1</sup> Percentages based on Ns for "yes"

Table 7: Support Seeking Strategies (N=639 events)

Strategy	%	(N)
1. Informal ties only	25.0%	(160)
2. Professional ties only	1.7%	(11)
3. Community-based ties only	0.6%	(4)
4. Informal and professional ties	22.8%	(146)
5. Informal and community-based ties	11.7%	(74)
6. Professional and community-based ties	1.4%	(9)
7. Informal, professional and community- based ties	36.8%	(235)

combination of informal and community-based ties. Few respondents utilized strategies involving professional ties only, community-based ties only or the combination of professional and community based-ties.

It is clear from these findings that informal relationships with immediate family and close friends are not the only ties of consequence in support-seeking processes.

Although members of the informal network are indeed relevant, other professional and community-based ties are also important. Many respondents did appear to have a "support system" consisting of ties to various components or "subnetworks" of their overall social network.

## 4. Evaluations of the Support-Seeking Attempt

The evaluations of the support which the CSS respondents received from the various ties activated in their support-seeking strategies (see Table 5) provides evidence which suggests that individuals vary in the level of satisfaction associated with their support-seeking attempts. Although overall most respondents were generally satisfied or very satisfied with the help or support received from the various potential sources of support, a proportion of respondents utilizing each of the listed sources were either ambivalent or dissatisfied. For example, 21.2% of the respondents who turned to their spouses for support indicated that they were either ambivalent, dissatisfied or very dissatisfied with support they received from their mates. Professional and community-based resources tended to have higher proportions of ambivalent and dissatisfied assessments. Respondents were most ambivalent or dissatisfied with assistance from psychiatrists, social workers, social services, mediators and helplines. Support received

from acquaintances, self-help books and other materials, fathers, coworkers and neighbours were also more likely to be evaluated as ambivalent (by 21.7% to 25.6%). It is of interest to note that God / prayer, a support resource rarely considered in academic studies of social support processes, was identified as the most satisfactory support resource with 69.7% of the respondents who turned to this spiritual resource indicating they were very satisfied with the support received.

In sum, the results of the Phase I analyses indicate that the outcomes at each critical decision point in the support-seeking process are indeed variable. Phase II analyses then explored some of the factors which may help to account for this variability.

## Phase II Analyses: Accounting for the Variability in Critical Point Outcomes

As mentioned previously, two data sets were used to facilitate analyses exploring the effects of the selected situational, intrapersonal, interpersonal and sociodemographic factors on the outcomes at critical decision point in the support-seeking process. The first data set (consisting of information about 2,338 events) was used to investigate factors affecting decision outcomes concerning the definition of the situation as problematic and the identification of the need for support to deal with the situation. The second data set (consisting of details about 666 events) was used primarily to explore factors affecting decision outcomes for support-seeking strategies and evaluations of the support-seeking attempts. Descriptive statistics for these two data sets are reported in Appendix I and correlation matrices can be found in Appendix II.

## 1. Factors Affecting the Definition of the Situation as Problematic

The factors selected as possible explanatory variables for different decision outcomes surrounding the stress levels associated with the various life events experienced by the respondents were: the type of event (role loss events versus network disruption events), the controllability of the event, the experience of simultaneous stressful life events, self-esteem, mastery, perceived availability of social support, marital status, annual household income and age at event. Except for the type of event and the age at event, these variables have time order implications. Therefore, while the effects of the type of event and respondents' age at event were examined for "all events" (i.e., events which could have occurred at anytime during the respondents' lives), the effects of the remaining variables were examined in a "recent events" model which only considered events which the respondents had experienced within a year of the administration of the CSS. There were sufficient cases to conduct separate analyses for men, women and all respondents for both the "all events" and "recent events" models. The results of these tests are presented in Tables 8 and 9.

Various aspects of the situational context were influential for understanding differences in the stress levels associated with the various life event experiences. CSS respondents who experienced role loss events found them to be significantly more stressful than events which had the potential to disrupt the respondents' social networks. Events over which the respondents felt that they did not have control were also perceived to be significantly more stressful than controllable events. These findings were the same across all three analyses (i.e., for all respondents and for the separate models for men and

Table 8: Regression Estimates for Critical Point Decision Outcomes: Stress Levels of Life Events for All Respondents, Women and Men (Data Set = 2,338 Events)

	All Respondents			Women	Men		
Variable	b	Beta (S.E.)	b	Beta (S.E.)	b	Beta (S.E.)	
All Events Model							
Type of event (role loss)	.598**	** .132 (.093)	.395*	** .093 (.105)	1.015*	** .205 (.184)	
Age at event	-:011**	058 (.004)	008	045 (.004)	009	045 (.007)	
Intercept		7.72		7.95		6.89	
$R^2$		.022		.011		.045	
Adjusted R <sup>2</sup>		.022		.010		.042	
N		2,338		1,639		699	
Recent Events Model							
Type of event (role loss)	.844**	* .192 (.235)	.580*	.136 (.278)	1.410**	* .320 (.425)	
Self-esteem	061	064 (.069)	106	118 (.076)	.305*	.270 (.155)	
Mastery	I <i>5</i> 7*	149 (.071)	120	120 (.079)	320*	284 (.154)	
Perceived availability							
of social support	.108	.109 (.066)	.137	, ,	066	061 (.142)	
Marital status (married)	195	040 (.274)	165	037 (.320)	538	089 (.581)	
Household income	022	028 (.046)	.042	.570 (.055)	195*	236 (.084)	
Age at event	014	074 (.010)	008	045 (.004)	008	037 (.020)	
Intercept		8.87		8.66		8.03	
$R^2$		.089		.060		.247	
Adjusted R <sup>2</sup>		.070		.035		.186	
N		345		251		94	

Note: b = unstandardized coefficients, Beta = standardized coefficients, S.E. = standard error \*p<.05, \*\*p<.01, \*\*\*p<.001

Table 9: Regression Estimates for Critical Point Decision Outcomes: Stress Levels of Life Events for All Respondents, Women and Men (Data Set = 666 Events)

	All Respondents		Women			Men	
Variable	ь	Beta (S.E.)	b	Beta	(S.E.)	b	Beta (S.E.)
Type of event (role loss) Lack of control	.150	.041 (.138)	.267	.076	(.154)	198	480 (.305)
over event (yes) Other simultaneous	1.026***	.270 (.145)	.993***	.272	(.164)	1.077*	** .262 (.305)
stressful events (yes)	.458**	.146 (.119)	.459**	.127	(.160)	.393	.087 (.334)
Age at event	.004	.024 (.006)	.004	.029	(.006)	.003	.017 (.013)
ntercept		7.43		7.47			7.37
₹²		.092		.095			.084
Adjusted R <sup>2</sup>		.087		.088			.063
٧ -		666		490			176

Note: b = unstandardized coefficients, Beta = standardized coefficients, S.E. = standard error p < .05, \*\*p < .01, \*\*\*p < .001

women). Experiencing other stressful events simultaneously also had a significant effect on the stress level associated with the life event experiences, particularly for women. Respondents who reported experiencing other stressful life events concurrently with the one event they were describing, found that one event to be significantly more stressful than respondents who were not experiencing simultaneous stressful events.

Intrapersonal factors were also important for understanding variations in stress levels associated with the various life events. Mastery was found to have a significant effect, especially for men. CSS respondents who had higher levels of mastery tended to find their events to be less stressful than respondents with lower levels of mastery. A significant effect of self-esteem was also observed for the men included in this analysis.

Men with higher levels of self-esteem tended to define their life events as more stressful than men with lower levels of self-esteem.

Household income also had a significant effect for men. Men with higher levels of annual household income tended to find their events less stressful than men with lower levels of annual household income. Age (at the time the event was experienced) also had a significant effect, with older respondents tending to define their events as less stressful than younger respondents.

## 2. Factors Affecting the Identification of the Need For Support

The factors selected as possible explanatory variables for different decision outcomes surrounding the respondents' identification of the need for support to cope or deal with their various life event experiences were: the type of event (role loss events versus network disruption events), the perceived stress level associated with the event, self-esteem, mastery, perceived availability of social support, marital status, annual household income and age at event. The effects of the type of event, perceived stress level of the event and respondents' age at event were examined with an "all events" model. There were sufficient cases to conduct separate analyses for men, women and all respondents for both the "all events" and "recent events" models. The results of these tests are presented in Table 10.

Situational factors were also important for determining whether or not respondents felt that they needed the help and support of others to deal with their life event experiences. CSS respondents who experienced role loss events were significantly

Table 10: Logistic Regression Estimates for Critical Point Decision Outcomes: Identification of Need for Support, [Yes (1) No (0)] for All Respondents, Women and Men (Data Set = 2,338 Events)

	All	Respondents		Women		Men
Variable	additive effects	odds ratio (S.E.)	additive effects	odds ratio (S.E.)	additive effects	odds ratio (S.E.)
All Events Model						
Type of event (role loss) Perceived stress level	.855***	2.350 (.026)	.888**	* 2.429 (.111)	.814**	* 2.257 (.178)
of event Age at event	.441*** .009	1.555 (.093) 1.001 (.004)	.442*** 008	* 1.556 (.032) .999 (.005)	.401*** .012	* 1.493 (.178) 1.012 (.007)
Constant -2 Log Likelihood	d	4.001		-3.794		-4.53
(constant only) -2 Log Likelihood		3233.01		2267.08		892.59
(model) Model Chi-Square Pseudo R <sup>2</sup> N		2721.54 511.46***( <i>df1</i> .158 2,338	3)	1929.79 337.29***( <i>df</i> 3 .149 1,639	)	753.59 139.00***( <i>df</i> 3) .156 669
Recent Events Model						
Type of event (role loss) Perceived stress level	1.019***	* 2.771 (.256)	.865**	2.375 (.307)	1.966**	** 7.141 (.602)
of event	.365***	1.440 (.067)	.392**	* 1.480 (.080)	.198	1.218 (.147)
Self-esteem	008	.992 (.013)	.026	1.026 (.082)	176	.838 (.196)
Mastery Perceived availability	126	.881 (.078)	091	.913 (.087)	245	.782 (.204)
of social support	.058	1.062 (.072)	.071	1.074 (.080)	012	.988 (.185)
Marital status (married) Household income	860**	.423 (.299)	988**	,	699	.497 (.712) .877 (.121)
Age at event	.013 .008	1.014 (.051) 1.001 (.011)	.049 .014	1.050 (.060) 1.014 (.013)	131 015	.986 (.024)
Constant -2 Log Likelihood	-3	2.738		-4.125		4.009
(constant only) -2 Log Likelihood	4	478.24		347.29		127.58
(model)	:	397.42		294.08		88.49
Model Chi-Square		80.83***(df8)		53.20***( <i>df</i> 8)		39.09***( <i>df</i> 8)
Pseudo R <sup>2</sup>		.169		.153		.306
N		345		251		94

Note: additive effects = unstandardized logistic regression coefficients, S.E. = standard error \*\*p<.01, \*\*\*p<.001

more likely to identify a need for support than respondents experiencing network disruption events. A need for support also was more likely to be identified for events which were perceived to be more stressful rather than for events which were perceived to be less stressful.

Marital status also had a significant effect on decisions about whether or not support was needed to deal with the life event experience, particularly for women. CSS respondents who were married (or equivalent) were significantly less likely to identify a need for support than individuals who were not married (or equivalent).

# 3. Factors Affecting the Support-Seeking Strategy

For analyses of the factors affecting outcomes at this critical decision point, the support-seeking strategy was operationalized in two ways - first in terms of the total number of support resources utilized and second in terms of the specific combinations of ties which were activated from the respondents' informal, professional and/or community-based networks. For the analysis of the support-seeking strategy in terms of the total number of support resources utilized, the type of event (role loss events versus network disruption events), the perceived stress level associated with the event, the controllability of the event, the experience of simultaneous stressful events, self-esteem, mastery, perceived availability of social support, marital status, annual household income and age at event were considered as possible explanatory factors. The effects of the type of event, perceived stress level of the event and respondents' age at event were examined with an "all events" model. The effects of the remaining variables were tested in a "recent events" model. There were sufficient cases to conduct separate analyses for men, women

and all respondents for the "all events" model. However, the number of cases for men was not sufficiently large to conduct viable analyses for men and women in the "recent events" model. Consequently, gender was added as a dummy variable to the "recent events" model for all respondents. The results of these tests are presented in Table 11.

Situational factors again played important roles in explaining some of the differences in decisions made at this critical point in the support-seeking process. Men who experienced role loss events sought out significantly fewer support resources than men who experienced network disruption events. The perceived stress level associated with the event had a significant effect, particularly for women. CSS respondents who perceived their events to be more stressful sought out more support resources than respondents who perceived their events to be less stressful. The same pattern of results was noted for the effects of the controllability of the events. CSS respondents (and particularly women) who perceived that they did not have control over their life event experiences tended to seek out more sources of support than respondents who felt that their events were controllable. Respondents who indicated simultaneous stressful experiences also sought out more support resources than respondents who did not have such concurrent experiences.

Two other significant effects were noted. CSS respondents with higher senses of mastery tended to activate fewer potentially supportive ties than individuals with lower senses of this intrapersonal factor. Age at event was an explanatory factor for women.

Older women tended to seek out more support resources than younger women.

Table 11: Regression Estimates for Critical Point Decision Outcomes: Support-Seeking Strategies - Total Resources Utilized for All Respondents, Women and Men (Data Set = 666 Events)

	All	Respondents		Women		Men
Variable	b	Beta (S.E.)	b	Beta (S.E.)	ь	Beta (S.E.)
All Events Model						
Type of event (role loss) Perceived stress level	149	217 (.217)	.175	.031 (.255)	-1.265***	258 (.382)
of event Lack of control	.263***	.172 (.061)	.272***	* .169 (.075)	.143	.118 (.096)
over event (yes) Other simultaneous	.692***	.118 (.237)	.700*	.117 (.282)	.692	.127 (.389)
stressful events (yes)	1.154**	.196 (.230)		* .193 (.264)	.796 <b>*</b>	.176 (.426) 075 (.015)
Age at event	.014	.059 (.009)	.028*	.111 (.011)	014	073 (.013)
Intercept		1.54		1.12		3.46
R <sup>2</sup>		.113		.112		.155
Adjusted R <sup>2</sup>		.105		.102		.127
N		615		460		155
Recent Events Model						
Type of event (role loss) Perceived stress level	.634	.103 (.564)				
of event	042	026 (.144)				
Lack of control						
over event (yes) Other simultaneous	.572	.092 (.587)				
stressful events (yes)		.261 (.575)				
Self-esteem	.005	.003 (.154)				
Mastery Perceived availability		.230 (.161)				
of social support	.201	.140 (.147)				
,		175 (.664)				
Household income	.012	.011 (.103)				
Age at event	.041	.148 (.026)				
gender (female)	.742	.100 (.660)				
Intercept		3.92				
$R^2$		.207				
Adjusted R <sup>2</sup>		.129				
N		345				

Note: b = unstandardized coefficients, Beta = standardized coefficients, S.E. = standard error \*p<.05, \*\*p<.01, \*\*\*p<.001

For the analysis of the support-seeking strategy in terms of the specific combinations of ties activated from respondents' informal, professional and/or community-based network, only the particular combinations which were used by more than 100 CSS respondents (as identified in Phase I above) were considered as values of the dependent variable — the support-seeking strategy set. Therefore, there were four possible strategy sets: (1) use of informal ties only, (2) use of informal and professional ties, (3) use of informal and community-based ties and (4) use of informal, professional and community-based ties. For the polytomous logistic regression analyses, the use of informal ties only was considered as the reference category for the three pairs of contrasts. There were not enough cases to examine separate models for men and women, or to examine the effects of variables with time order implications. Consequently, gender was added as a dummy variable to each pair of contrasts. The results of these analyses are presented in Table 12.

The type of event and the perceived stress level of the event were significant factors in distinguishing between CSS respondents who had utilized a support-seeking strategy involving the combination of informal and professional ties and respondents who had activated informal ties only. Individuals who had experienced network disruption events and events which were characterized by higher levels of stress were more likely to use both informal and professional ties than informal ties alone.

For the contrast of the strategies involving informal and community-based ties with strategies involving informal ties alone, only one factor was found to be significant.

Table 12: Polytomous Logistic Regression Estimates for Critical Point Decision Outcomes: Support-Seeking Strategies - Strategy Sets for All Respondents (Data Set = 666 Events)

	Informal & l vs Infor	;		& Community vs formal	Informal, Professional & Community vs Informal		
Variable	additive effects	odds ratios S.E.	additive effects	odds ratios S.E.	additive odds effects ratios S.E.		
Type of event (role loss)	-1.459***	0.23 (.255)	771	0.92 (.310)	743*** 0.48 (.231)		
Perceived "stress level" of event	.168*	1.18 (.070)	02 <i>6</i>	0.97 (.074)	.152* 1.16 (067)		
Perceived lack of control over event (yes)	297	0.74 (270)	180	0.80 (.318)	.664* 1.90 (.255)		
Other simultaneous stressful events (yes)	.310	1.14 (.290)	.654*	1.92 (.314)	.784** 2.19 (.250)		
Age at event	.018	1.02 (.011)	015	0.98 (.014)	.042*** 1.04 (.010)		
Gender (female)	.127	1.14 (.268)	.577	1.78 (.336)	.966*** 2.62 (.266)		
N	:	306	234		395		
Constant	-1.	.47		55	-3.51		
-2 Log Likelihood (constant only) -2 Log Likelihood	42	3.56	2	292.03	533.26		
(model)  Model Chi-Square		6.94 .62***(df 6)		81.27 0.76 ( <i>df</i> 6)	457.02 76.24***( <i>df</i> 6)		
Pseudo R <sup>2</sup>	.11	I		04	.14		

Note: additive effects = unstandardized logistic regression coefficients, S.E. = standard error p<.05, p<.01, p<.01

CSS respondents who utilized the combination of ties were more likely to have experienced other events simultaneously than respondents who utilized informal ties alone.

All of the factors considered as possible explanations for distinguishing between support-seeking strategies utilizing resources from informal, professional and community-based networks and strategies utilizing the informal network alone were significant. CSS respondents who activated ties in all three networks were more likely to experience network disruption events, perceive their events to be characterized by higher levels of stress, feel that their events were not controllable and have experienced other stressful events simultaneously than respondents who utilized their informal networks alone. In addition, women and older respondents were more likely to utilize this more complex support-seeking strategy set than men and younger respondents.

# 4. Factors Affecting the Evaluation of the Support-Seeking Attempt

Two types of analyses also were conducted to explore some of the factors which might account for the CSS respondents' differing evaluations of their support-seeking attempts. In the first analysis, the respondent's evaluation of the level of satisfaction associated with his or her support-seeking strategy was operationalized as a continuous variable consisting of the mean level of satisfaction across all resources utilized. This measure of the respondents' mean satisfaction level was calculated by summing the satisfaction evaluations for each activated source of support and dividing by the total number of support resources utilized. Higher values of the dependent variable indicated greater mean levels of dissatisfaction. Explanatory variables considered for this analysis

included: the type of event (role loss events versus network disruption events), the perceived stress level associated with the event, the controllability of the event, the experience of simultaneous stressful events, self-esteem, mastery, perceived availability of social support, the total support resources utilized, the four support-seeking strategy sets (1. informal ties only, 2. informal & professional ties, 3. informal & communitybased ties and 4. informal, professional & community-based ties), marital status, annual household income and age at event were considered as possible explanatory factors. The effects of all of the situational factors, the total support resources utilized, the different support-seeking strategy sets and respondents' age at event were examined with an "all events" model. The effects of the remaining variables were tested in a "recent events" model. There were sufficient cases to conduct separate analyses for men, women and all respondents for the "all events" model. However, the number of cases for men was not sufficiently large to conduct viable analyses for men and women in the "recent events" model. Consequently, gender was added as a dummy variable to the "recent events" model for all respondents. The results of these tests are presented in Tables 13 and 14.

Of the situational factors, the controllability of the events and the simultaneous experience of stressful events had significant effects. CSS respondents who had experienced other stressful events simultaneously tended to be more dissatisfied with their support-seeking attempt than respondents who had not experienced other concurrent stressful events. CSS respondents (and particularly women) who experienced events over which they felt they had little control also tended to be more dissatisfied with their support-seeking strategies than respondents who experienced controllable events.

Table 13: Regression Estimates for Critical Point Decision Outcomes: Evaluation of Support-Seeking Attempt - Satisfaction Level for All Respondents, Women and Men. All Events Model (Data Set = 666 Events)

	All Respondents		Women		Men	
Variable	b	Beta (S.E.)	ь	Beta (S.E.)	b	Beta (S.E.)
Type of event (role loss) Perceived stress level	064	039 (.067)	118	073 (.077)	.093	.055 (.149)
of event	209	066 (.019)	010	021 (.022)	060	143 (.034)
Lack of control over event (yes)	.218**	.127 (.072)	.243**	.143 (.084)	.113	.065 (.140)
Other simultaneous stressful events (yes)	.251***	.146 (.070)	.207**	.124 (.079)	.370*	.191 (.153)
Total support resources utilized	.035*	.122 (.016)	.032	.111 (.017)	.072	.205 (.038)
Support-seeking strategies informal ties only		oo ootooowi)	(=afamar		(refere	nce category)
informal & professional		ce category)074 (.099)	058	nce category)030 (.117)	309	166 (.188)
informal & community informal, professional		153 (.115)		117 (.133)		225 (.238)
& community	223*	132 (.109)	162	099 (.123)	335	169 (.240)
Age at event	014**	105 (.003)	006*	.086 (.003)	009	129 (.006)
Intercept		2.23		1.98		2.53
$R^2$		.083		.080		.155
Adjusted R <sup>2</sup>		.070		.062		.103
N		615		460		155

Note: b = unstandardized coefficients, Beta = standardized coefficients, S.E. = standard error \*p < .05, \*\*p < .01, \*\*\*p < .001

Almost all of the interpersonal factors considered in this analyses had significant effects on the mean satisfaction level associated with the support-seeking attempt. CSS respondents who perceived that they had adequate support resources available tended to be more satisfied with their support-seeking attempts than respondents who did not perceive that such resources were available. Respondents who utilized support-seeking strategies involving the combinations of ties from informal and community-based

Table 14: Regression Estimates for Critical Point Decision Outcomes: Evaluation of Support-Seeking Attempt - Satisfaction level for All Respondents. Recent Events Model (Data Set = 666 Events)

Variable	ь	Beta	S.E.	
Type of event (role loss)	219	129	(.149)	
Perceived "stress level"				
of event	007	015	(.038)	
Perceived lack of control				
over event (yes)	.111	.066	(.157)	
Other simultaneous				
stressful events (yes)	.074	.045	(.156)	
Self-esteem	004	010	(.040)	
Mastery	000	000	(.043)	
Perceived availability				
of social support	169***	432	(.039)	
Total support resources utilized	.432	.154	(.030)	
Support-seeking strategies				
informal ties only	•	nce categ	o <b>r</b> y)	
informal & professional ties	.147	.075	(.099)	
informal & community-based informal, professional &	018	006	(.300)	
community-based ties	.029	.018	(.228)	
Marital status (married)	163	088	(.228)	
Annual household income	.043	.147	(.027)	
Age at event	012	161	(.027)	
Gender (female)	057	028	(.176)	
Gender (remaie)	057	020	(.170)	
Intercept		4.54		
$R^2$		.317		
Adjusted R <sup>2</sup>		.220		
N		122		

Note: b = unstandardized coefficients, Beta = standardized coefficients, S.E. = standard error \*p < .05, \*\*p < .01, \*\*\*p < .001

networks and from informal, professional and community-based networks were more satisfied with their support-seeking attempts than respondents who activated ties from their informal networks alone. It is of interest to note that respondents who turned to more potentially supportive resources tended to be significantly less satisfied with their support-seeking attempts than respondents who activated fewer ties.

Of the sociodemographic factors considered in this analysis, only age at event was found to be significant. Older CSS respondents (and particularly women) tended to be significantly more satisfied with their support-seeking attempts than younger respondents.

In the second analysis of factors affecting the evaluations of support-seeking attempts, the degree of satisfaction with the support-seeking strategy was operationalized as a dichotomous dependent variable. Respondents whose mean satisfaction scores were less than 2.5 were considered to be satisfied with their support-seeking attempt.

Respondents whose mean satisfaction scores ranged between 2.5 and 5.0 were considered to be ambivalent or dissatisfied with their support-seeking attempts <sup>11</sup>. The same explanatory variables were considered as in the above first analysis of evaluations of the support-seeking attempt: the type of event (role loss events versus network disruption events), the perceived stress level associated with the event, the controllability of the event, the experience of simultaneous stressful events, self-esteem, mastery, perceived availability of social support, the total support resources utilized, the four support-seeking strategy sets (1. informal ties only, 2. informal & professional ties, 3. informal & community-based ties and 4. informal, professional & community-based ties), marital status, annual household income and age at event were considered as possible explanatory

factors. The effects of all of the situational factors, the total support resources utilized, the different support-seeking strategy sets and respondents' age at event were examined with an "all events" model. The effects of the remaining variables were tested in a "recent events" model. There were sufficient cases to conduct separate analyses for men, women and all respondents for the "all events" model. However, the number of cases for men was not sufficiently large to conduct viable analyses for men and women in the "recent events" model. Consequently, gender was added as a dummy variable to the "recent events" model for all respondents. The results of these tests are presented in Tables 15 and 16.

The findings from this second analysis of outcomes at this critical point in the support-seeking process are similar to the results from the first analysis above. Situational factors were again found to have significant explanatory effects. CSS respondents who experienced events characterized with higher levels of stress were more likely to be satisfied with their support-seeking strategies than individuals who defined their events as less stressful. CSS respondents (and particularly women) who experienced uncontrollable events were more likely to be ambivalent or dissatisfied with their support-seeking strategies than respondents who experienced events over which they felt they did have control. The same pattern of results was observed for respondents who had experienced other stressful events concurrently.

CSS respondents who perceived that they had adequate support resources available were more likely to be satisfied with their support-seeking attempts than respondents who did not perceive that such resources were available. Respondents who

Table 15: Logistic Regression Estimates for Critical Point Decision Outcomes: Evaluations of Support-Seeking Attempts as Satisfactory (0) vs Ambivalent/Dissatisfactory (1) for All Respondents, Women and Men. All Events Model (Data Set = 666 Events)

	All Respondents		Women		Men	
Variable	additive effects	odds ratio (S.E.)	additive effects	odds ratio (S.E.)	additive effects	odds ratio (S.E.)
Type of event (role loss) Perceived stress level	290	.748 (.026)	329	.720 (.250)	129	.879 (.424)
of event	126*	.882 (.058)	114	.892 (.074)	138	.871 (.096)
Lack of control over event (yes) Other simultaneous	.844***	2.325 (.244)	1.143***	* 3.137 (.319)	.304	1.355 (.410)
stressful events (yes) Total support resources	.576**	1.778 (.212)	.623**	1.960 (.250)	.354	1.424 (.424)
utilized	.063	1.065 (.047)	.0058	1.060 (.054)	.144	1.154 (.105)
Support-seeking strategie			, ,			
informal ties only informal & professional	(referen	.603 (.304)	(referen	.625 (.371)	(reference)	ce category) .524 (.554)
	-1.272**		-1.422*		851	.421 (.739)
& community	644*	.525 (.333)	690	.502 (.392)	460	.631 (.684)
Age at event	023*	.977 (.010)	023	.977 (.012)	027	.974 (.017)
Constant 2 Log Likelihood		.208		223		752
(constant only) 2 Log Likelihood		664.66	•	481.70	I	81.11
(model)		618.10		438.54	i	69.81
Model Chi-Square		46.54***(df9)		43.16***( <i>df</i> 9)		11.30 ( <i>df</i> 9)
Pseudo R <sup>2</sup>		.070		.090		.062
V		615		460		155

Note: additive effects = unstandardized logistic regression coefficients, S.E. = standard error \*p<.05, \*\*p<.01, \*\*\*p<.001

Table 16: Logistic Regression Estimates for Critical Point Decision Outcomes: Evaluations of Support-Seeking Attempts as Satisfactory (0) vs Ambivalent/Dissatisfactory (1) for All Respondents. Recent Events Model (Data Set = 666 Events)

Variable	additive effects	odds ratio	S.E.
Type of event (role loss)	986	.373	(.643)
Perceived "stress level"			
of event	291*	.747	(.150)
Perceived lack of control			
over event (yes)	.977	2.656	(.625)
Other simultaneous			
stressful events (yes)	.606	1.834	(.623)
Self-esteem	051	.950	(.156)
Mastery	028	.972	(.161)
Perceived availability			
of social support	410**	.664	(.145)
Total support resources utilized	.027	1.023	(.116)
Support-seeking strategies			
informal ties only	(refere	ence categ	gory)
informal & professional ties	.495	1.640	(.916)
informal & community-based	-1.794	.166	(1.379)
informal, professional &			
community-based ties	332	.717	(.825)
Marital status (married)	544	.581	(.674)
Annual household income	.060	1.062	(.099)
Age at event	052	.949	(.035)
Gender (female)	563	.570	(.638)
Constant		9.701	
-2 Log Likelihood			
(constant only)		138.30	
-2 Log Likelihood			
(model)		102.53	
Model Chi-Square		35.77*	**( <i>df</i> 15)
Pseudo R <sup>2</sup>		.259	,
N		122	

Note: additive effects = unstandardized logistic regression coefficients, S.E. = standard error p < .05, \*\*p < .01, \*\*\*p < .001

utilized support-seeking strategies involving the combinations of ties from informal and community-based and from informal, professional and community-based networks also were more likely to be satisfied with their support-seeking strategies than respondents who activated ties from their informal networks alone.

Age at event was also found to be significant. Older respondents were more likely to be satisfied with their support-seeking attempts than younger respondents.

Summary

Overall, a number of the selected situational, intrapersonal, interpersonal and sociodemographic factors included in these exploratory analyses did account for some of the variability in decision outcomes at the four critical points in the support-seeking process. An overview of these factors appears in Figure 4. The implications of all of the findings will be included in the discussion which follows in the next chapter.

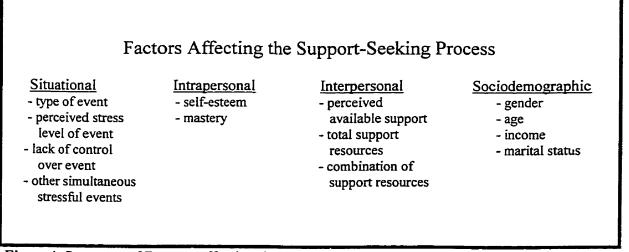


Figure 4: Summary of Factors Affecting the Support-Seeking Process

## **CHAPTER 6**

## DISCUSSION AND CONCLUSIONS

## Study Limitations

To set the context for the discussion which follows, it is important to recognize that, like most research studies, this investigation has its limitations. Four issues are of particular importance: (1) sample selection bias, (2) respondent recall bias, (3) the cross-sectional nature of the design and (4) limitations in some data analyses.

It was noted earlier that although the household characteristics of the CSS respondents closely matched 1996 Canada Census data, women and urban residents were over-represented among the respondents who actually completed the surveys. This sample selection bias must be recognized as a potential influence on both the internal and external validity of this study's findings (Berk 1983:386). However, it should be remembered that the data used to test the support-seeking model represented only a small proportion of the information provided by respondents in response to the questions on the "Community" Services Survey. The overall CSS data set includes more than 800 variables representing residents' views on a wide variety of community service issues including business, health, education, recreational, transportation and community infrastructure. Given the author's familiarity with the entire data set, there did not appear to be any special bias in how respondents completed the section of the survey on "General Life Experiences and Attitudes" from which the data for this study were taken. It may be that individuals who were more civic-minded were the ones who completed the

surveys, rather than individuals who had experienced particular life events or supportseeking experiences. Therefore, although the findings of this study may be more representative of the women and urban residents than the men and rural residents of the "Community," this bias does not totally discount the results.

The second limitation which must be taken into account is respondent recall bias. This issue concerns the degree to which respondents can accurately recall events from their pasts and is not uncommon in studies based on respondents' retrospective selfreports (Metts, Sprecher & Cupach 1991). Metts, Sprecher and Cupach (1991:163) point out that retrospective self-reports are necessarily subjective reconstructions which can vary in their accuracy and objectivity. However, they also indicate that retrospective data are appropriate for research questions concerning the "meanings that people ascribe to their own and others' behaviors" and when researchers are interested in "participants' attitudes, emotions and perceptions of relationship qualities" (Metts, Sprecher & Cupach 1991, emphasis in original). The use of retrospective self-reports in this study was consistent with these goals. In addition, Metts, Sprecher and Cupach (1991:168) suggest that respondent recall bias may be more serious in instances where respondents are asked to recount experiences from the distant past or things that are not very salient. While some CSS respondents did recall events that had happened to them many years ago, their retrospective bias may be reduced by the fact that all were providing details of arguably very salient major life experiences. Other researchers (e.g., Freedman et al. 1988) have agreed that details surrounding major life events are more readily remembered.

A third limitation of this study is that a cross-sectional design was used to examine aspects of a longitudinal process. Caution must be exercised in interpreting temporal or causal associations from cross-sectional designs. Although Metts, Sprecher and Cupach (1991:165) have argued that a "retrospective" research design, such as the one employed here, where information is collected from individuals on a single occasion about earlier events, does generate a form of "longitudinal data," careful attention was given to the scope of issues which could be examined in this study. Each critical point in the support-seeking process was treated as analytically distinct. Analyses of explanatory factors focused on direct effects only and, where variables had time order implications, were limited to recent events models.

Three aspects of the data analyses must also be taken into account when considering the limitations of this study. In some cases analyses were based on Ns of approximately 100. It was pointed out earlier that parameter estimates based on such small numbers may be biased (e.g., by Long 1997) as large N is an assumption underlying the utilization of parametric statistical techniques. Therefore, more caution must be taken when interpreting the results of these small N analyses.

Second, although a careful examination of the intercorrelations among the explanatory variables (see Appendix II) revealed that the multicollinearity was not a problem in most cases, there were a few instances where two explanatory (i.e., independent) variables were moderately correlated. This intercorrelation was particularly noted for the relationships between self-esteem, mastery and perceived available social support (e.g., r = .502, .583, .590 in the recent events model of Data Set = 2,338 events).

Therefore, analyses involving these variables may be affected to some degree by this intercorrelation, although estimates of parameters using independent variables which share approximately 25% to 36% of their variance are not typically considered to be extremely problematic.

One final aspect of the data analyses which may be considered a limitation by some analysts concerns the amount of variance in the dependent variables explained with the various regression and logistic regression analyses. Although these values for R<sup>2</sup> and Pseudo R<sup>2</sup> may be considered low by some standards, they are not inconsistent with those found in other published studies in the field. Perhaps more importantly, in almost all cases, F tests of these values did indicate that the combinations of independent variables in the various equations were explaining statistically significant proportions of the variance in the dependent variables.

## Discussion

Taking the above limitations into account, this investigation did yield some interesting results. Perhaps the most important finding was the empirical evidence from the Phase I analyses of the variability in decision outcomes at the four critical points in the support-seeking process. First, not all of the CSS respondents defined their life event experiences as "highly stressful." Like Thoits (1995b) observed in her examination of people's experiences with over 200 different life events, the levels of stress associated with any one particular event did vary from person to person. Second, not all respondents felt that they needed the help or support of others to deal with their life event situations.

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Third, respondents did utilize support-seeking strategies which involved a wide range of potentially supportive resources from informal, professional and community-based networks. Their evaluations of the support received from these various sources indicated that resources beyond an individual's intimate ties in his or her informal network of family and friends were indeed consequential for support-seeking processes. Of particular interest was the respondents' identification of the importance of spiritual sources of support as part of their support-seeking strategies — God and prayer (for 31.7%), church (for 23.4%) and minister (for 17.4%) — resources that are typically not included in academic research studies of social support processes<sup>12</sup>.

Another community-based support resource that rarely has been considered in previous studies but was found to be useful for 15.6% of the CSS respondents was self-help material such as books, videos or television programs. It is important to realize that these kinds of resources represent important indirect, rather than face-to-face, links to the support of others in more general "communities" at large. In other words, "self-help" does not literally mean that individuals must figure out on their own how to help themselves. Self-help resources are *proxies* for supportive relationships with professional or lay advisors in virtual communities of assistance. The importance of such virtual communities may be even more important in the future. Popular press reports have indicated that cyber-support facilitated by internet technology is becoming an increasing social phenomenon.

There was also evidence that various combinations of support resources are consequential for support-seeking processes. Like Pescosolido's (1992) study of help-

seeking in response to the diagnosis of a serious illness, this investigation found that the CSS respondents were more likely to use some combinations of ties to their informal, professional and/or community-based networks than others. The most frequently utilized strategy involved activating ties in all three networks (by 36.8% of the respondents). While one quarter of the respondents utilized support-seeking strategies which involved the activation of ties in their informal networks only, few respondents activated ties in community-based or professional networks alone.

Fourth, CSS respondents did demonstrate variability in the levels of satisfaction associated with the support received from specific support resources as well as with their support-seeking strategies more generally. It was of interest to note that 21.0% of the CSS respondents who turned to their spouses for support indicated that they were dissatisfied or ambivalent with the support received from their mates, the support resource often considered in social support research studies to be the most important.

Taken together, the various decision outcomes at each of the four critical points in the support-seeking process emphasize the importance of giving serious attention to the implications of the assumptions underlying the stress-buffering model of social support. Previous research studies informed by this model, and consequently current understandings of social support processes, may be affected by the following: (1) that certain life events which were implicitly assumed to be highly stressful were not, (2) that some of the individuals who experienced certain life events did not feel the need for support to deal with the situations, (3) that consequential sources of support were overlooked in the identification of an individual's support network and/or resources

implicitly assumed to be supportive were not appraised as supportive by some individuals and (4) that positive well-being outcomes of social support processes may have been affected by ambivalence or dissatisfaction with the support received from some social relationships.

In addition to the findings in Phase I of this study, the Phase II explorations of the selected situational, intrapersonal, interpersonal and sociodemographic factors indicated that many of these factors had significant effects on the respondents' decisions at the different critical points in the support-seeking process. The discussion which follows incorporates all of the findings from both phases of this study into the overall context of the support-seeking model and represents the next step in further elaborating a more general theoretical framework of support-seeking in response to life events.

When individuals experience certain life events, it would appear that these experiences are "potentially stressful." The levels of stress associated with any one specific life event can vary from person to person. To begin to understand how individuals seek support to deal with these situations, consideration must be given to a complex decision-making process which involves an initial assessment of the situation as problematic and a further identification of the need for support to handle this problem.

Various aspects of the situational context are influential in how these decisions are made. Events which result in the loss of network members, through death or divorce, tend to be identified as more stressful than events which have the potential to disrupt an individual's social network, such as illness or injury. Events which are perceived by individuals as being outside of their personal control also appear to be more stressful than events which

are viewed as controllable. If individuals are experiencing other stressful experiences in their lives, additional events experienced also tend to be highly stressful.

Other factors which may contribute to the identification of a life event situation as problematic include personal coping resources such as mastery. Individuals who perceive that they have little personal control over life's circumstances also may be more likely to define life events as stressful, particularly if they feel that their life event experience is also beyond their control. In addition, younger individuals may find their events to be more stressful than older individuals.

Decisions about the need for support to cope or deal with any particular life event experience are also influenced by aspects of the situational context. Individuals are more likely to decide that support is needed when they experience role loss events or events which are perceived to be more stressful than when they experience network disruption events or events which are defined as less stressful. Marital status also appears to influence decisions about the need for support. Compared to individuals who are not married (or equivalent), individuals who are married, and particularly married women, may be less likely to feel they need the help and support of others to deal with a stressful life situation, perhaps because of a perception that the support of the spouse would be available if required.

At the critical point in the support-seeking process where individuals begin to enact their support-seeking strategies, it is clear that a wide range of resources are considered to be potentially supportive. These resources included members of an individual's informal network (i.e., family, friends, neighbours), professionals such as

doctors, lawyers and counsellors as well as community-based sources such as support groups and social services. Support-seeking strategies can be characterized by the number of potentially supportive resources which are activated and by the particular combinations of ties to informal, professional and/or community-based networks which are utilized.

Decisions concerning which resources to seek out and in what combination appear to be influenced by a number of factors. Individuals who experience role loss events, events over which they perceive they have little control or events which they experience concurrently with other stressful life events are more likely to seek out more sources of support than individuals who experience network disruption events, events which are perceived to be controllable and events which are not experienced at a time of concurrent stressors. More resources also may be sought out in response to events which are characterized by higher levels of stress than for events characterized by lower levels of stress.

Situational factors also appear to influence decisions about individuals' use of particular strategy sets or combinations of support resources. Individuals who experience role loss events, events which are characterized by higher levels of stress, events over which they feel they have little control or events which occur simultaneously with other stressful life situations are more likely to activate ties in informal, professional and community-based networks rather than utilize resources from their informal networks alone. Women and older individuals also are more likely to utilize a strategy set involving the combination of resources from the three networks than younger individuals and men.

Individuals vary in how satisfied they are with various sources of support and strategy sets. They are sometimes satisfied, sometimes dissatisfied and sometimes ambivalent with support received from the various sources which they sought out as part of their support-seeking attempts. Situational factors also appear to affect evaluations at this critical point in the support-seeking process. Individuals who experience events over which they have little control or events which occur simultaneously with other stressful events tend to be more dissatisfied with their support-seeking attempts than individuals who feel they have control over their life event experiences or who do not have other stressful events to contend with in their lives.

Interpersonal factors appear to be particularly relevant for the evaluations made at this point. Individuals who perceive that adequate support resources are available to them if required are more likely to be satisfied with their support-seeking attempt than individuals who do not perceive that they have adequate support resources available. Individuals who seek out more potentially supportive resources tend to be less satisfied with their support-seeking attempts than individuals who utilized fewer resources. However, individuals who utilize a combination of resources, particularly support-seeking strategies involving (1) informal and community-based resources and (2) informal, professional and community-based resources tend to be more satisfied with their support-seeking attempts than individuals who utilize their informal networks alone. It may be that individuals move on to additional sources of support because they are dissatisfied with resources utilized earlier in their attempts to seek support or perhaps it is the specific combination of resources which individuals find to be most satisfactory.

# **Future Directions**

This dissertation research project represents a modest, initial investigation into support-seeking processes. Future research can take any number of directions. One possibility is to follow Merton's (1968) suggestions about middle range theory and continue to build and test a theory of support-seeking in response to life events by using the preliminary theoretical framework explicated from the findings of this study to generate testable propositions or hypotheses to be further examined in a subsequent study. Another would be to supplement this more quantitative approach with the richness of detail that can be obtained about individuals' life event experiences through more qualitative face-to-face semi-structured interviews.

Regardless of the exact design of future research into support-seeking processes, there are a number of issues that require careful consideration. One of the serious limitations of this study was the use of a cross-sectional, albeit retrospective, design. To fully understand support-seeking processes it will be necessary to utilize longitudinal panel designs. Where this study's focus of analysis was limited to the decisions made at the four critical points in the process and the factors which directly affect the variability of these outcomes, future research utilizing longitudinal designs will be able to give more serious attention to the possible indirect effects and feedback loops which most certainly characterize support-seeking processes.

Future research could also give explicit attention to the fact that individuals may have various structural and/or attitudinal barriers which affect support-seeking processes.

Help-seeking researchers have already observed that people who need help do not always

seek it, even when support resources are readily available (e.g., Conn & Peterson 1989; Eckenrode, 1983; Nadler 1983). Structural barriers to seeking support could include lack of financial resources, lack of knowledge about available support or problems with accessing various support resources. For example, individuals who find the financial cost of seeking support from certain support resources to be prohibitive, such as the cost of long distance phone calls to contact family members or fees charged for professional support services, may be more likely to decide that they do not need support from these resources (Nadler 1983). Individuals faced with financial barriers who do decide that they need support may be limited in the resources they can access in their support-seeking strategies which subsequently may affect their level of satisfaction with their support seeking-attempts. Similar decisions could result if individuals lack knowledge about available support resources or if access to support services (e.g., hours of operation, waiting lists, transportation) is problematic (Henderson 1996).

Attitudinal barriers may also influence the support-seeking process (Conn & Peterson 1989; Dunkel-Schetter, Folkman & Lazarus 1987; Eckenrode, 1983). Conn and Peterson (1989:347) suggest that people who decide to seek support "may be psychologically predisposed to do so." In other words, individuals may have a preferred tendency to deal with problems on their own or to seek help. Therefore, individuals who are predisposed to seek help to deal with problems may decide that they need support more often, utilize a wider variety of resources and have more positive evaluations of their support-seeking strategies than individuals who are predisposed to handling situations on their own.

Another attitudinal barrier to seeking support may be the fear of embarrassment. As Shapiro (1983:145-146) points out "[pleople will avoid situations in which they anticipate being embarrassed." Dunkel-Schetter, Folkman and Lazarus (1987) found that people who indicated "discomfort with help" were less likely to seek out and receive help from others. Therefore, individuals who anticipate that support-seeking will lead to embarrassment may decide they do not need support to deal with a stressful life situation. Even if needs for support are identified, fear of embarrassment may limit the types of resources sought out. For example, Shapiro (1983) argues that individuals who fear embarrassment are more likely to seek help from support resources where there are limited opportunities for future face-to-face contact. Therefore, these individuals may be more likely to seek support from community-based or professional sources rather than family or friends. Because fear of embarrassment may limit the support resources utilized when dealing with stressful life events, individuals who have this attitudinal barrier to seeking-support may be more dissatisfied or ambivalent with their support-seeking attempts.

Another issue which may be consequential for understanding variations in support-seeking strategies that was not included in this study concerns different *types* of support (e.g., emotional support, instrumental aid, information support). It has been suggested that individuals' evaluations of the types of support required to deal with a particular life situation will influence the selection of resources which are utilized in the support-seeking attempt (Cohen 1992; Cutrona & Russell 1990). In other words, there may be an optimal match between the types of support which individuals perceive they

require in order to cope with life events and the ties activated in their support-seeking strategies. The degree to which the match is "optimal" also may be consequential for evaluations of the success or failure of support-seeking attempts.

Building from the idea of the match between the type of support required and the support source utilized, Jacobson (1986) has suggested that there is an optimal match between the types of support required and the sequencing or timing of support-seeking. He contends that individuals may need one kind of support to cope with the early stages of a stressful life experience and another kind later in the coping process. Besides providing insights as to where individuals may be most likely to turn first for support, this idea of timing or sequencing also may be useful for gaining understandings of the reasons why some individuals have more extensive support-seeking strategies in terms of the number and/or specific combination of support resources activated in response to a stressful life event. This idea is particularly persuasive given the findings of this investigation which indicated that individuals who sought out more support resources were more dissatisfied with their support-seeking attempts than individuals who activated a particular combination of resources. Future studies could explicitly examine whether or not individuals utilize additional support resources over time because they are dissatisfied with the support they receive from resources sought out initially or if particular sequences or combinations of resources are the most satisfactory support-seeking strategies.

Recognizing that support-seeking is a complex process, it is likely that there are many explanatory variables (in addition to the factors considered in this study) that are consequential for understanding support-seeking processes. For example, future studies

could examine the importance of other situational factors such as the desirability of the stressor (i.e., events typically considered to be positive, like parenthood or a promotion, versus events typically considered to be negative, such as illness or bereavement), the severity of the stressor (e.g., life threatening versus daily hassle), the duration of the stressor (e.g., chronic versus acute) or the relationship of the stressor to the respondent (e.g., personal events versus network events) (Cutrona & Russell 1990; Thoits 1995a). Other sociodemographic factors such as education, ethnicity and occupational status have also been included in many previous social support studies.

Although a wide range of possible support resources was considered in this study, one type of resource was not given explicit attention. A number of researchers have identified the importance of experiential similarity as consequential in terms of decisions to seek support (e.g., Suitor, Pillemer & Keeton 1995; Taylor et al. 1988; Thoits 1995a). Thoits (1995a:67, emphasis in original) points out that people seeking support may feel that the most effective support-givers may be "similar others - that is, individuals who themselves have successfully faced the same stressful circumstances." Future research could include consideration of this type of potential support resource.

There is one other set of factors which needs to be given greater attention in future research on support-seeking processes -- various aspects of individuals' social networks (e.g., size, range, density, composition, tie characteristics). These factors are particularly important given that the theory of decision-making which underlies the support-seeking model is based on Pescosolido's (1992; see also Pescosolido, Gardner & Lubell 1998)

argument that the structures and functions of individuals' social networks influence the decisions that are made during the support-seeking process.

## Conclusions

The development of this research project was directly influenced by following facts. For over 20 years, sociologists have been increasingly interested in understanding how supportive social relationships protect people from the negative consequences of stressful life experiences. They have conducted literally thousands of empirical studies investigating social support's stress-buffering role. However, published reviews of this work, including the most recent, have been consistent in their conclusions that clear understandings of social support processes remain elusive (e.g., Antonucci 1990, 1991; Barrera 1986; Depner, Wethington & Ingersoll-Dayton 1984; House & Kahn 1985; House, Umberson & Landis 1988; Kahn 1994; Pearlin 1985, 1989; Sarason, Sarason & Pierce 1990; Tardy 1985; Thoits 1982, 1995a; Turner 1983; Turner & Marino 1994; Vaux 1988). Considering the volume of research that has been conducted, these observations were puzzling. Why wasn't more understood about the relationships between stress, social support and well-being?

A critical literature review conducted in response to this question revealed that dominant trends in the sociological study of social support tended to place less emphasis on the issues of process and meaning that characterized social psychological investigations of help-seeking. Although few previous attempts at integration had been made, combining insights from the two fields by placing an analytical focus on support-

seeking in response to life events and adopting a more social psychological approach seemed to be a promising direction for furthering understandings of social support processes more generally.

Even with their limitations, the results of this study do seem to have important implications for social scientists and human service providers and policy makers.

For social support researchers, it is important to realize that individuals may vary (1) in the level of stress they perceive to be associated with particular life events, (2) in their identification of the need for support to deal or cope with stressful life events (3) in the types and/or combinations of resources utilized when dealing with the event and (4) in the level of satisfaction associated with the support provided by various social relationships and/or the social behaviours enacted within them. The support-seeking model's identification of decision-making as the explicit mechanism which drives the process provides one way of examining possible "missing links" (Kahn 1994:163) in the stress-buffering model.

For researchers interested in how individuals seek help in response to physical and/or mental illness, the support-seeking model provides a more general framework within which to investigate how individuals seek assistance for various kinds of life events. The support-seeking model also places more emphasis on the outcomes or consequences of seeking assistance (i.e., in terms of the evaluations of the support seeking attempts) than is usually found in help-seeking studies.

The findings from this study also have implications for human service providers and policy makers responsible for the design, delivery and evaluation of support services.

First, it is clear that the vast majority of individuals must at some point in their lives deal with potentially stressful situations. Over 95.0% of the CSS respondents indicated that they had experienced at least one of the 15 listed events during their lifetimes and there are certainly many other events with the same potential to cause distress. Understanding that individuals' stress levels, their needs for support, their support-seeking strategies and their level of satisfaction with support-seeking attempts may vary when dealing with these life events is essential for developing effective support programs, policies and services. It cannot be assumed that individuals experiencing the same situational context (i.e., divorce, illness, victim of a crime) will require the same support services. Clients can be asked explicitly to assess the level of stress they feel is associated with their particular situations. As well, assumptions should not be made that personal relationships with family and friends (i.e., ties in the informal network) are consistent sources of support. Asking clients specifically to give support appraisals of various social relationships could contribute to more effective provision of service. For example, hospital screening for transplant surgery typically involves asking potential patients whether or not they have a "support system" in place to help them post-surgery. It may be beneficial to further inquire as to whether or not patients always finds that system to be "supportive." Patients who answer "no", may benefit more from extra home care services than patients who answer "yes."

Another important realization for human service providers is that individuals do access professional and community-based supports as part of their support-seeking strategies and that specific combinations of informal, professional and community-based

supports may be the best way for respondents to deal with their life event situations.

However, the fact that individuals appear to be more ambivalent and dissatisfied with the support provided by professional and community-based support services should be an issue of concern. Gaining insights into the reasons for this finding could contribute to the development of more effective and efficient support services.

The overall aim of this research project was to improve sociological understandings of social support processes. Although the findings raised new questions even as others were just beginning to be answered, the social psychological insights which underlie the support-seeking model appear to provide the necessary ingredient for ultimately achieving this goal. Although the model is in its infancy, the first step has been taken on the journey to discovering more about the complex processes linking stress, social support and well-being.

#### **ENDNOTES**

1. The selection instructions for completing the survey were as follows:

This survey should be completed by ONE ADULT MEMBER of your household. Because we need a random selection of males and females, if you have more than one adult in your household, please have *the adult whose birthday is closest to today's date* complete the questionnaire. You are welcome to include input from other family members, except where indicated.

- 2. The CSS introductory instructions indicated that completed surveys could be dropped off in specially marked, secured bins at a major local grocery store and a local pharmacy (which also contained a local postal outlet), or deposited in a specially marked mail slot at the local Family and Community Support Services Office. Some respondents also dropped off completed surveys at the Town Office, which is adjacent to the FCSS Office. It is of interest to note that approximately 50% of the completed surveys were returned via the drop-off locations.
- 3. This response rate is over double the 11% return rate achieved in a 1990 community needs assessment survey which was also distributed to all households within the same geographical area. This figure has been taken from:
  - "Community" Needs Assessment For Municipal Departments of Family and Community Support Services, and Parks and Recreation. Final Report. 1990. Carcajou Research Limited. Edmonton, Alberta.
- 4. PCensus Software facilitated the compilation of 1996 Canada Census Data for the geographical area which directly corresponded to the distribution area of the CSS.
- 5. Gender distributions are similar to the following research study which was conducted previously in the "Community":
  - "Community" Network Study, Phase 1. 1993. Principal Investigator, Dr. V.A. Haines, University of Calgary, Alberta.

Residence location patterns are similar to:

"Community" Needs Assessment For Municipal Departments of Family and Community Support Services, and Parks and Recreation. Final Report. 1990. Carcajou Research Limited. Edmonton, Alberta.

6. Introductory comments for the CSS section entitled "General Life Experiences and Attitudes" were as follows:

This section asks for some information about your general life experiences and attitudes. This information is essential for understanding how and why people use various community services and for designing the best possible support services.

Although these questions may seem personal, we are only interested in combining your answers with the responses of other community residents to discover similarities in attitudes and experiences. Your individual answers will be totally anonymous and confidential.

To ensure your personal privacy, please complete this section without the assistance of other members of your household.

7. The exact instructions to respondents were as follows:

Below is a list of events that people may experience sometime during their lives. Please indicate whether or not YOU have experienced any of these events. Check as many as apply or specify another event. For each of your events please indicate:

- when this event happened to you (e.g., 1987, 1996)
- how stressful you found this event to be on a scale of 1 (not stressful at all) to 10 (extremely stressful)
- if you felt you needed the help and support of others to deal or cope with this event please ✓ Yes
- if you feel this issue is still affecting your everyday life please ✓ Yes
- 8. Dr. Augustine Brannigan suggested the inclusion of "serious problem with youth at home."
- 9. Like many other self-administered surveys, the CSS question about household income had a higher non-response rate than for other types of demographic questions. Analyses not presented here indicated a significant difference in average household income for Town residents and Rural residents. Therefore, where household income was not reported, the residence location of the respondents was determined and the corresponding mean income category was used as an estimate of household income.

10. The 666 life events selected by the respondents as ONE event where the help or support of others was needed were as follows:

Event	%	N
Death of a parent	19.5%	130
Serious physical illness	15.1%	101
Serious accident or injury	9.5%	63
Financial crisis	7.7%	51
Marital separation	7.2%	48
Divorce	6.9%	46
Serious problem with youth at home	5.4%	36
Laid off from a job	5.3%	35
Death of spouse/partner	5.0%	33
Death of a close friend	4.1%	27
Victim of a crime	3.8%	25
Death of a child	3.2%	22
Death of a sibling	3.2%	22
Serious mental illness	2.6%	17
Fired from a job	1.5%	10

- 11. There were not enough cases to have separate categories for ambivalent and dissatisfied for this analysis.
- 12. There was nothing about the community where the CSS respondents live to indicate that they are more religious than general populations.

### REFERENCES

- Albrecht, Terrance L. and Mara B. Adelman. 1987. "Measurement Issues in the Study of Support." Pp. 64-79 in *Communicating Social Support*, edited by T.L. Albrecht and M.B. Adelman. Newbury Park, California: Sage Publicatoins.
- Ali, Jennifer and William R. Avison. 1997. "Employment Transitions and Psychological Distress: The Contrasting Experiences of Single and Married Mothers." *Journal of Health and Social Behavior* 38:345-362.
- Aneshensel, Carol S., Carolyn M. Rutter and Peter A. Lachenbruch. 1991. "Social Structure, Stress and Mental Health: Competing Conceptual and Analytic Models." *American Sociological Review* 56:166-178.
- Antonucci, Toni C. 1990. "Social Supports and Social Relationships." Pp. 205-226 in *Handbook of Aging and the Social Sciences* Third Edition, edited by R.H. Binstock and L.K. George. San Diego, California: Harcourt Brace Jovanovich.
- Antonucci, Toni C. 1991. "Attachment, Social Support, and Coping With Negative Life Events in Mature Adulthood." Pp. 261-276 in *Life-Span Developmental Psychology: Perspectives on Stress and Coping*, edited by E.M. Cummings, A.L. Greene and K.H. Karraker. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Antonucci, Toni C. and Hiroko Akiyama. 1987a. "Social Networks in Adult Life: A Preliminary Examination of the Convoy Model." *Journal of Gerontology* 42(5):519-527.
- Antonucci, Toni C. and Hiroko Akiyama. 1987b. "An Examination of Sex Differences in Social Support Among Older Men and Women." Sex Roles 17(11/12):737-749.
- Barrera, Manuel. 1986. "Distinctions Between Social Support Concepts, Measures, and Models." *American Journal of Community Psychology* 14(4):413-445.
- Bauman, Laurie J., Robert Garvey, and Karolynn Seigel. 1992. "Factors Associated with Cancer Patients' Participation in Support Groups." *Journal of Psychosocial Oncology* 10(3):1-20.
- Beggs, John J., Valerie A. Haines, and Jeanne S. Hurlbert. 1996. "Situational Contingencies Surrounding the Receipt of Informal Support." *Social Forces* 75(1):201-222.
- Berk, Richard A. 1983. "An Introduction to Sample Selection Bias in Sociological Data." American Sociological Review 48:386-398.

- Berkman, Lisa F. and S. Leonard Syme. 1979. "Social networks, host resistance and mortality: A nine-year follow-up study of Alameda County Residents." *American Journal of Epidemiology* 109:186-204.
- Bloom, Joan R. and Larry Kessler. 1994. "Emotional Support Following Cancer: A Test of the Stigma and Activity Hypotheses." *Journal of Health and Social Behavior* 35:118-133.
- Brown, George W. and Tirril O. Harris. 1978. The Social Origins of Depression: A Study of Psychiatric Disorder in Women. New York: Free Press.
- Brown, George W. and Tirril O. Harris. 1989. *Life Events and Illness*. New York: The Guilford Press.
- Burnett, Rosalie. 1991. "Accounts and Narratives." Pp. 121-140 in *Studying Interpersonal Interaction*, edited by B.M. Montgomery and S. Duck. New York: The Guilford Press.
- Burt, Ronald S. 1984. "Network Items and the General Social Survey." *Social Networks* 6:293-339.
- Caplan, Gerald. 1974. Support Systems and Community Health: Lectures on Concept Development. New York: Behavioral Publications.
- Cantor, Marjory H. 1979. "Neighbors and Friends: An Overlooked Resource in the Informal Support System." Research on Aging 1:434-463.
- Carleson, Keith W. and Sharon E. Robertson. 1993. "Husbands and Wives of Dementia Patients: Burden and Social Support." *The Canadian Journal of Rehabilitation* 6(1):163-173.
- Cassel, John. 1974. "Psychosocial Processes and 'Stress': Theoretical Formulations." International Journal of Health Services 4:471-482.
- Cassel, John. 1976. "The Contribution of the Social Environment to Host Resistance." American Journal of Epidemiology 104:107-123.
- Chappell, Neena L. 1990. "Aging and Social Care." Pp. 438-454 in *Handbook of Aging and the Social Sciences*, Third Edition, edited by R.H. Binstock and L.K. George. San Diego: Academic Press.
- Chipperfield, Judith G. 1994. "The Support Source Mix: A Comparison of Elderly Men and Women from Two Decades." Canadian Journal on Aging 13(4):434-453.

- Clark, Margaret S. 1983. "Some Implications of Close Social Bonds for Help-Seeking." Pp. 205-229 in *New Directions in Helping: Volume Two Help-Seeking*, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Cobb, Sidney. 1976. "Social Support as a Moderator of Life Stress." *Psychosomatic Medicine* 38:300-314.
- Cohen, Sheldon. 1991. "Social Supports and Physical Health: Symptoms, Health Behaviours and Infectious Disease." Pp. 213-234 in *Life-Span Developmental Psychology: Perspectives on Stress and Coping*, edited by E.M. Cummings, A.L. Greene and K.H. Karraker. Hillside, N.J.:Lawrence Erlbaum Associates.
- Cohen, Sheldon. 1992. "Stress, Social Support and Disorder." Pp. 109-124 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Cohen, Sheldon and Thomas A. Wills. 1985. "Stress, Social Support and the Buffering Hypothesis." *Psychological Bulletin* 98(2):310-357.
- Conn, Michael K. and Christopher Peterson. 1989. "Social Support: Seek and Ye Shall Find." *Journal of Social and Personal Relationships* 6:345-358.
- Coyne, James C., John H. Ellard and David A.F. Smith. 1990. "Social Support, Interdependence, and the Dilemmas of Helping." Pp. 129-149 in *Social Support:*An Interactional View, edited by B.R. Sarason, I.G. Sarason and G.R. Pierce. New York: John Wiley & Sons.
- Cutrona, Carolyn E. and Daniel W. Russell. 1990. "Type of Social Support and Specific Stress: Towards a Theory of Optimal Matching." Pp. 319-366 in *Social Support:*An Interactional View, edited by B.R. Sarason, I.G. Sarason and G.R. Pierce. New York: John Wiley & Sons.
- Dakof, Gayle A. and Shelley E. Taylor. 1990. "Victims' Perceptions: What Is Helpful From Whom." *Journal of Personality and Social Psychology* 58(1):80-89.
- Davey, A. and Norris J.E. 1998. "Social Networks and Exchange Norms Across the Adult Life-Span." Canadian Journal on Aging 17:212-233.
- Delongis, Anita, Susan Folkman and Richard S. Lazarus. 1988. "The Impact of Daily Stress on Health and Mood: Psychological and Social Resources as Mediators." *Journal of Personality and Social Psychology* 54(3):486-495.

- Demaris, Alfred. 1992. Logit Modeling: Practical Applications. Newbury Park C.A.: Sage Publications.
- Depner, Charlene E., Elaine Wethington and Berit Ingersoll-Dayton. 1984. "Social Support: Methodological Issues in Design and Measurement." *Journal of Social Issues* 40(4):37-54.
- Dohrenwend, Bruce P., Karen G. Raphael, Sharon Swartz, Ann Stueve and Andrew Skodol. 1993. "The Structured Event Probe and Narrative Rating Method for Measuring Stressful Life Events." Pp. 174-199 in *Handbook of Stress: Theoretical and Clinical Aspects*, edited by L. Goldberger and S. Breznitz. New York: The Free Press.
- Dunkel-Schetter, Christine, Susan Folkman and Richard S. Lazarus. 1987. "Correlates of Social Support Receipt." *Journal of Personality and Social Psychology* 45(4):71-80.
- Eckenrode, John. 1983. "The Mobilization of Social Support: Some Individual Constraints." *American Journal of Community Psychology* 11(5):509-528
- Ensel, Walter M. and Nan Lin. 1991. "The Life Stress Paradigm and Psychological Distress." *Journal of Health and Social Behavior* 32:321-341.
- Fischer, Claude S. 1982. To Dwell Among Friends: Personal Networks in Town and City. Chicago: University of Chicago Press.
- Fisher, Jeffrey D., Barry A. Goff, Arie Nadler and Jack M. Chinsky. 1988. "Social Psychological Influences on Help Seeking and Support from Peers." Pp. 267-304 in *Marshalling Social Support: Formats, Processes and Effects*, edited by B.H. Gottlieb. Newbury Park, C.A.:Sage.
- Flaherty, Joseph and Judith Richman. 1989. "Gender Differences in the Perception and Utilization of Social Support: Theoretical Perspectives and an Empirical Test." Social Science and Medicine 28(12):1221-1228.
- Folkman, Susan, Richard S. Lazarus, Rand J. Gruen and Anita DeLongis. 1986. "Appraisal, Coping, Health Status and Psychological Symptoms." *Journal of Personality and Social Psychology*. 50(3):833-843.
- Freedman, Deborah, Arland Thornton, Donald Camburn, Duane Alwin and Linda Young-Demarco. 1988. "The Life History Calendar: A Technique for Collecting Retrospective Data." Sociological Methodology 18:37-68.

- Friedkin, Noah H. 1982. "Information Flow Through Strong and Weak Ties in Intraorganizational Social Networks." *Social Networks* 3:273-285.
- Friedman, Debra and Michael Hechter. 1988. "The Contribution of Rational Choice Theory to Macrosociological Research." *Sociological Theory* 6: 201-218.
- Funch, Donna P. and James Marshall. 1983. "The Role of Stress, Social Support and Age in Survival from Breast Cancer." *Journal of Psychosomatic Research* 27(1):77-83.
- Glaser, Barney G and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory*. Chicago: Aldine.
- Gottlieb, Benjamin H. 1988. "Marshaling Social Support: The State of the Art in Research and Practice." Pp. 11-51 in Marshalling Social Support: Formats, Processes and Effects, edited by B.H. Gottlieb. Newbury Park, C.A.: Sage.
- Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78:1360-80.
- Granovetter, Mark. 1982. "The Strength of Weak Ties: A Network Theory Revisited." Pp. 105-130 in *Social Structure and Network Analysis*, edited by P.V. Marsden and N. Lin. Beverly Hills: Sage Publications.
- Gross, Alan E. and Peg A. McMullen. 1983. "Models of the Help-Seeking Process." Pp. 45-70 in *New Directions in Helping: Volume Two Help-Seeking*, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Haines, Valerie A. and Linda J. Henderson 1998. "Targeting Social Support: Network Boundaries, Interpersonal Ties and The Support Transactions of Older Adults." Unpublished Manuscript. University of Calgary.
- Haines, Valerie A. and Jeanne S. Hurlbert. 1992. "Network Range and Health." *Journal of Health and Social Behavior* 33:254-266.
- Haines, Valerie A., Jeanne S. Hurlbert and Catherine Zimmer. 1991. "Occupational Stress, Social Support and the Buffer Hypothesis." Work and Occupations 18(2):212-235.
- Hardy, Melissa A. 1993. Regression with Dummy Variables. Newbury Park C.A.: Sage Publications.

- Harris, Tirril O. 1992. "Some Reflections on the Process of Social Support and Nature of Unsupportive Behaviours". Pp. 171-190 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Heller, Kenneth and Ralph W. Swindle. 1983. "Social Networks, Perceived Social Support, and Coping with Stress." Pp. 87-103 in *Preventative Psychology: Theory Research and Practice*, edited by R.D Felner, L.A. Jason, J.N. Moritsuga and S.S. Farber. New York: Pergamon Press.
- Henderson, Linda J. 1993. Targeting Social Support: An Assessment of the Convoy Model of Social Support. Unpublished Masters' Thesis, University of Calgary.
- Henderson, Linda J. 1994. "Characteristics of the Informal Support Networks of Older Adults: An(other) Assessment of the Convoy Model of Social Support."
  Unpublished manuscript, University of Calgary.
- Henderson, Linda J. 1996. "Services for Children, Youth and Families Survey: Data Analysis Report," March 1996. Prepared for the Calgary Rockyview Office of the Commissioner of Services for Children, Calgary, Alberta.
- Hess, Beth B. and Beth J. Soldo. 1985. "Husband and Wife Networks." Pp. 67-92 in Social Support Networks and the Care of the Elderly, edited by W.J. Sauer and R.T. Coward. New York: Springer Publishing Company.
- Hobfoll, Stevan E. and Joseph P. Stokes. 1988. "The Processes and Mechanics of Social Support." Pp. 497-517 in *Handbook of Personal Relationships: Theory. Research and Interventions*, edited by S. Duck. New York: John Wiley & Sons.
- Holmes, Thomas H. and Richard R. Rahe. 1967. "The Social Readjustment Rating Scale." *Journal of Psychosomatic Research* 11:213-218.
- House, James S. and Robert L. Kahn. 1985. "Measures and Concepts of Social Support." Pp. 83-108 in *Social Support and Health*, edited by S. Cohen and S.L. Syme. Orlando: Harcourt Brace Jovanovich.
- House, J.S., D. Umberson, and K.R. Landis. 1988. "Structures and Processes of Social Support." *Annual Review of Sociology* 14:293-318.
- Julien, Danielle and Howard J. Markham. 1991. "Social Support and Social Networks as Determinants of Individual and Marital Outcomes." *Journal of Social and Personal Relationships*. 8:549-568.

- Kahn, Robert L. 1979. "Aging and Social Support." Pp.77-91 in *Aging From Birth to Death: Interdisciplinary Perspectives*, edited by M.W. Riley. Boulder, Colorado: Westview Press, Inc.
- Kahn, Robert L. 1994. "Social Support: Content, Causes and Consequences." Pp.163-186 in *Aging and Quality of Life*, edited by R.P. Abeles, H.C. Gift and M.C. Ory. New York: Springer Publishing.
- Kahn, Robert L. and Toni C. Antonucci. 1980. "Convoys over the Life Course: Attachments, Roles and Social Support." *Life Span Development and Behavior* 3:253-286.
- Kahn, Robert L. and Toni C. Antonucci. 1981. "Convoys of Social Support: A Life Course Approach." Pp.383-405 in *Aging: Social Change*, edited by S.B. Kiesler, J.N. Morgan and V.K. Oppenheimer. New York: Academic Press, Inc.
- Kaufman, Allan V. 1990. "Social Network Assessment: A Critical Component in Case Management for Functionally Impaired Older Persons." *International Journal of Aging and Human Development* 30(1):63-75.
- Kessler, Ronald C. 1992. "Perceived Support and Adjustment to Stress: Methodological Considerations." Pp. 259-271 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Kessler, Ronald C., James A Reuter and James R. Greenley. (1979). "Sex Differences in the Use of Outpatient Facilities." *Social Forces* 58(2):557-571.
- Krause, Neal. 1990. "Perceived Health Problems. Formal/Informal Support, and Life Satisfaction Among Older Adults." *Journal of Gerontology: Social Sciences* 45(5):S193-205.
- Lehman, Darrin R., John H. Ellard and Camille B. Wortman. 1986. "Social Support for the Bereaved: Recipients' and Providers' Perspectives on What is Helpful."

  Journal of Consulting and Clinical Psychology 54(4):438-445.
- Lehman, Darrin R. and Kenneth J. Hemphill. 1990 "Recipients' Perceptions of Support Attempts and Attributions for Support Attempts that Fail." *Journal of Social and Personal Relationships* 7:563-574.
- Levy, Leon H. and Joyce F. Derby. 1992. "Bereavement Support Groups: Who Joins; Who Does Not; and Why." *American Journal of Community Psychology* 20(5):649-662.

- Lieberman, Morton A. and Lonnie R. Snowden. 1993. "Problems in Assessing Prevalence and Membership Characteristics of Self-help Group Participants." Journal of Applied Behavioral Science 29(2):166-180.
- Lin, Nan, Alfred Dean, and Walter M. Ensel (eds.). 1986. Social Support, Life Events and Depression. Orlando: Harcourt Brace Jovanovich.
- Lin, Nan and Mary Dumin. 1986. "Access to Occupations Through Social Ties." Social Networks 8:365-385.
- Lin, Nan, Mary W. Woelfel and Stephen C. Light. 1985. "The Buffering Effect of Social Support Subsequent to an Important Life Event." *Journal of Health and Social Behavior* 26:247-263.
- Litwak, Eugene. 1985a. Helping the Elderly. New York: The Guildford Press.
- Litwak, Eugene. 1985b. "Complementary Roles for Formal and Informal Support Groups: A study of Nursing Homes and Mortality Rates." *Journal of Applied Behavioral Sciences* 21(4):407-425.
- Logan, John R. and Glenna Spitze. 1994. "Informal Support and the Use of Formal Services by Older Americans." *Journal of Gerontology: Social Sciences* 49(1):S25-S34.
- Long, J. Scott. 1997. Regression Models for Categorical and Limited Dependent Variables. Thousand Oaks, CA: Sage Publications, Inc.
- Lowenthal, Marjorie Fiske and Clayton Haven. 1968. "Interaction and Adaptation: Intimacy as a Critical Variable." *American Sociological Review* 54:382-399.
- Marsden, Peter V. 1990. "Network Data and Measurement." *Annual Review of Sociology* 16:435-463.
- Masuda, Minoru and Thomas H. Holmes. 1967. "Magnitude Estimates of Social Readjustments." *Journal of Psychosomatic Research* 11:219-225.
- McLean, Diane E. and Bruce G. Link. 1994. "Unraveling Complexity: Strategies to Refine Concepts, Measures, and Research Designs in the Study of Life Events and Mental Health." Pp. 15-42 in Stress and Mental Health: Contemporary Issues and Prospects for the Future, edited by W.R. Avison and I.H. Gotlib. New York: Plenum Press.

- McMullen, Peg A. and Alan E. Gross, 1983. "Sex Differences, Sex Roles and Health-Related Help-Seeking." Pp. 233-263 in *New Directions in Helping: Volume Two Help-Seeking*, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Menard, Scott. 1995. Applied Logistic Regression. Newbury Park C.A.: Sage Publications.
- Merton, Robert K. 1968. Social Theory and Social Structure. New York: The Free Press.
- Messeri, Peter, Merril Silverstein and Eugene Litwak. 1993. "Choosing Optimal Support Groups: A Review and Reformulation." *Journal of Health and Social Behavior* 34:122-137.
- Metts, Sandra, Susan Sprecher and William R. Cupach. 1991. "Retrospective Self-Reports." Pp. 162-178 in *Studying Interpersonal Interaction*, edited by B.M. Montgomery and S. Duck. New York: The Guilford Press.
- Miller, Delbert C. 1991. Handbook of Research Design and Social Measurement (Fifth Edition). Newbury Park, California: Sage Publications.
- Monroe, Scott M. and John R. McQuaid. 1994. "Measuring Life Stress and Assessing Its Impact on Mental Health." Pp. 43-73 in Stress and Mental Health: Contemporary Issues and Prospects for the Future, edited by W.R. Avison and I.H. Gotlib. New York: Plenum Press.
- Morgan, David L. 1989. "Adjusting to Widowhood: Do Social Networks Really Make It Easier?" *The Gerontologist* 29(1):101-107.
- Morgan D.L., M.B. Neal and P. Carder. 1997. "The Stability of Core and Peripheral Networks Over Time." Social Networks 19:9-25.
- Nadler, Arie. 1983. "Personal Characteristics and Help-Seeking." Pp. 303-340 in *New Directions in Helping: Volume Two Help-Seeking*, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Neighbors, Harold W. and James S. Jackson. 1984. "The Use of Informal and Formal Help: Four Patterns of Illness Behavior in the Black Community." *American Journal of Community Psychology* 12(6):629-644.
- O'Conner, Pat and George W. Brown. 1984. "Supportive Relationships: Fact or Fancy?" Journal of Social and Personal Relationships 1:159-175.

- Padgett, Deborah K. and Beth Brodsky. 1992. "Psychosocial factors Influencing Non-Urgent Use of the Emergency Room: A review of the Literature and Recommendations for Research and Improved Service Delivery." Social Science and Medicine 9:1189-1197.
- Pearlin, Leonard I. 1985. "Social Structure and Processes of Social Support." Pp. 43-60 in *Social Support and Health*, edited by S. Cohen and S.L. Syme. Orlando: Harcourt Brace Jovanovich.
- Pearlin, Leonard I. 1989. "The Sociological Study of Stress." *Journal of Health and Social Behavior* 30:241-256.
- Pearlin, Leonard I. and Mary E. McCall. 1990. "Occupational Stress and Social Support: A Description of Microprocesses." Pp. 39-60 in *Stress between Work and Family*, edited by J. Eckenrode and S. Gore. New York: Plenum Publishing.
- Pearlin, Leonard I., Elizabeth G. Menaghan, Morton A. Lieberman and Joseph T. Mullen. 1981. "The Stress Process." *Journal of Health and Social Behavior* 22:337-356.
- Pearlin, Leonard I. and Carmi Schooler. 1978. "The Structure of Coping." *Journal of Health and Social Behavior* 19:2-21.
- Pedhazur, Elazar J. 1982. Multiple Regression in Behavioral Research: Explanation and Prediction Second Edition. Fort Worth: Holt, Rinehart & Winston, Inc.
- Pescosolido, Bernice A. 1991. "Illness Careers and Network Ties: A Conceptual Model of Utilization and Compliance." *Advances in Medical Sociology* 2:161-184.
- Pescosolido, Bernice A. 1992. "Beyond Rational Choice: The Social Dynamics of How People Seek Help." American Journal of Sociology 97(4):1096-1138.
- Pescosolido, Bernice A. 1996. "Bringing the 'Community' into Utilization Models: How Social Networks Link Individuals to Changing Systems of Care." Research in the Sociology of Health Care 13A:171-197.
- Pescosolido, Bernice A., Carol Brooks Gardner and Keri M. Lubell. 1998. "How People Get into Medical Health Services: Stories of Choice, Coercion, and 'Muddling Through' from 'First Timers'." Social Science and Medicine 46(2):275-286.
- Pierce, Gregory, Barbara R. Sarason and Irwin G. Sarason. 1990. "Integrating Social Support Perspectives: Working Models, Personal Relationships, and Situational Factors." Pp. 173-215 in *Personal Relationships and Social Support*, edited by S. Duck with R.C. Silver. London: Sage Publications.

- Procidano, Mary E. and Kenneth Heller. 1983. "Measures of Perceived Social Support From Friends and from Family: Three Validation Studies." *American Journal of Community Psychology* 11(1):1-24.
- Radloff, L. S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1:385-265.
- Ratcliff, Kathryn Strother and Janet Bogdan. 1988. "Unemployed Women: When 'Social Support' is Not Supportive." *Social Problems* 35(1):54-63.
- Rickwood, D.J. and A. Braithwaite. 1994. "Social-Psychological Factors Affecting Help-Seeking for Emotional Problems." *Social Science and Medicine* 39(4):563-572.
- Rook, Karen S. 1992. "Detrimental Aspects of Social Relationships: Taking Stock of an Emerging Literature." Pp. 157-169 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Rosenberg, Morris. 1965. Society and the Adolescent Self-Image. Princeton N.J.: Princeton University Press.
- Sarason, I.G., H.M. Lavine, R.B. Basham and B.R. Sarason. 1983. "Assessing Social Support: The Social Support Questionnaire." *Journal of Personality and Social Psychology* 44:127-139.
- Sarason, Barbara R., Irwin G. Sarason and Gregory R. Pierce. 1990. "Traditional Views of Social Support and Their Impact on Assessment." Pp. 9-25 in *Social Support:*An Interactional View, edited by B.R. Sarason, I.G. Sarason and G.R. Pierce. New York: John Wiley & Sons.
- Schuster, Tonya L. and Edgar W. Butler. 1989. "Bereavement, Social Networks, Social Support and Mental Health." Pp. 55-68 in *Older Bereaved Spouses*, edited by D.A. Lund. New York: Hemisphere Publishing Corporation.
- Shapiro E. Gary. 1983. "Embarrassment and Help-Seeking." Pp. 143-163 in New Directions in Helping: Volume Two Help-Seeking, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Statistics Canada. 1998. Canada Census 1996. [machine readable data file: accessed by PCensus] Available: Tetrad Computer Applications Inc. Vancouver. 1987-1996.
- Stebbins, Robert A. 1992. "Concatenated exploration: notes on a neglected type of longitudinal research." *Ouality and Quantity* 26:435-442.

- Stinchcombe, Arthur L. 1968. Constructing Social Theories. New York: Harcourt Brace Jovanovich.
- Suitor, J. Jill, Karl Pillemer and Shirley Keeton. 1995. "When Experience Counts: The Effects of Experiential and Structural Similarity on Patterns of Support and Interpersonal Stress." Social Forces 73:1573-1588.
- Tardy, Charles H. 1985. "Social Support Measurement." *American Journal of Community Psychology* 13(2):1985.
- Taylor, Shelley E., Roberta L. Falke, Rebecca M. Mazel and Bruce L. Hillsberg. 1988. "Sources of Satisfaction and Dissatisfaction Among Members of Cancer Support Groups." Pp. 187-208 in *Marshalling Social Support: Formats, Processes and Effects*, edited by B.H. Gottlieb. Newbury Park, California: Sage Publications.
- Terry, Deborah J. 1991. "Stress, Coping and Adaptation to New Parenthood." *Journal of Social and Personal Relationships* 8:527-547.
- Thoits, Peggy A. 1982. "Conceptual, Methodological, and Theoretical Problems in Studying Social Support as a Buffer Against Life Stress." *Journal of Health and Social Behavior* 23:145-159.
- Thoits, Peggy A. 1995a. "Stress, Coping and Social Support Processes: Where Are We? What Next?" *Journal of Health and Social Behavior* (extra issue):53-79.
- Thoits, Peggy A. 1995b. "Identity-Relevant Events and Psychological Symptoms: A Cautionary Tale." *Journal of Health and Social Behavior* 36:(72-82).
- Tijhuis, M.A.R., L. Peters and M. Foets. 1990. "An Orientation Towards Help-Seeking for Emotional Problems." *Social Science and Medicine* 9:989-995.
- Turner, R. Jay. 1983. "Direct, Indirect, and Moderating Effects of Social Support on Psychological Distress and Associated Conditions." Pp. 105-155 in *Psychosocial Stress: Trends in Theory and Research*, edited by H.B. Kaplan. New York: Academic Press, Inc.
- Turner, R. Jay and Franco Marino. 1994. "Social Support and Social Structure: A Descriptive Epidemiology." *Journal of Health and Social Behavior* 35:193-212.
- Turner, R. Jay and Patricia Roszell. 1994. "Psychosocial Resources and The Stress Process." Pp. 179- in *Stress and Mental Health: Contemporary Issues and Prospects for the Future*, edited by W.R. Avison and I.H. Gotlib. New York: Plenum Press.

- Turner, R. Jay, Blair Wheaton and Donald A. Lloyd. 1995. "The Epidemiology of Social Stress." *American Sociological Review* 60:104-125.
- Vachon, Mary L.S. and Stanley K. Stylianos. 1988. "The Role of Social Support in Bereavement." *Journal of Social Issues* 44(3):175-190.
- Vaux, Alan. 1988. Social Support: Theory, Research, and Intervention. New York: Praeger Press.
- Vaux, Alan. 1992. "Assessment of Social Support." Pp. 193-216 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Veevers, Jean E. 1991. "Traumas versus Strens: A Paradigm of Positive versus Negative Divorce Outcomes." *Journal of Divorce and Remarriage* 15(1/2):99-126.
- Veiel, Hans O.F. and Urs Baumann. 1992. "Comments on Concepts and Methods." Pp. 313-319 in *The Meaning and Measurement of Social Support*, edited by H.O.F. Veiel and U. Baumann. New York: Hemisphere Publishing.
- Veroff, Joseph, Richard A. Kulka and Elizabeth Douvan. 1981. Mental Health in America: Patterns of Help-Seeking from 1957 to 1976. New York: Basic Books, Inc.
- Walker, Michael E., Stanley Wasserman and Barry Wellman. 1993. "Statistical Models for Social Support Networks." *Sociological Methods and Research* 22(1):71-98.
- Weimann, Gabriel. 1983. "The Strength of Weak Conversational Ties in the Flow of Information and Influence." *Social Networks* 5:245-267.
- Wellman, Barry and Scot Wortley. 1990. "Different Strokes from Different Folks: Community Ties and Social Support." *American Journal of Sociology* 96(3):558-588.
- Wethington, Elaine and Ronald C. Kessler. 1986. "Perceived Support, Received Support, and Adjustment to Stressful Life Events." *Journal of Health and Social Behavior* 27:78-89.
- Wheaton, Blair. 1985. "Models for the Stress-Buffering Functions of Coping Resources." Journal of Health and Social Behavior 26:352-365.
- Wheaton, Blair. 1990. "Life Transitions, Role Histories, and Mental Health." *American Sociological Review* 55:209-223.

- Wheaton, Blair. 1994. "Sampling the Stress Universe." Pp. 77-114 in Stress and Mental Health: Contemporary Issues and Prospects for the Future, edited by W.R. Avison and I.H. Gotlib. New York: Plenum Press.
- Wills, Thomas Ashby. 1983. "Social Comparison in Coping and Help-Seeking." Pp. 109-141 in *New Directions in Helping: Volume Two Help-Seeking*, edited by B.M. Depaulo, A. Nadler and J.D. Fisher. New York: Academic Press.
- Wills, Thomas A. 1985. "Supportive Functions of Interpersonal Relationships." Pp. 61-82 in *Social Support and Health*, edited by S. Cohen and S.L. Syme. Orlando: Harcourt Brace Jovanovich.

# **APPENDIX I:**

Descriptive Statistics for Variables Included in the Tests of the Support-Seeking Model

Appendix I: Descriptive Statistics for Variables Included in the Tests of the Support-Seeking Model

Variables	N=2,338 events	N=666 events			
Gender	male (0): 29.9% (N=699) female (1): 70.1% (N=1639)	male (0): 26.4% (N=176) female (1): 73.6% (N=490)			
Age at event	mean: 37.46 years s.d.: 11.87 years range: 10 - 87 years	mean: 38.53 years s.d.: 12.16 years range: 13 - 81 years			
Marital status	single or equivalent (0): 25.0% (N=584) married or equivalent (1): 75.0% (N=1754)	single or equivalent (0): 22.5% (N=150) married or equivalent (1): 77.5% (N=516)			
Annual household income level	mean: 5.48 s.d.: 2.79 range: 1 (under \$20,000/yr) - 12 (over \$150,000/yr)	mean: 5.72 s.d.: 2.88 range: 1 (under \$20,000/yr)- 12 (over \$150,000/yr)			
Self-esteem	mean: 13.07 s.d.: 2.27 range: 4.0 (low) - 16.0 (high)	mean: 13.21 s.d.: 2.20 range: 4.0 (low) - 16.0 (high)			
Mastery	mean: 9.79 s.d.: 1.86 range: 3.0 (low) - 12.0 (high)	mean: 9.98 s.d.: 2.20 range: 3.0 (low) - 12.0 (high)			
Predisposition to seek support	mean: 5.96 s.d.: 1.46 range: 4.0 (most unlikely to seek support) - 8.0 (most likely to seek support)	mean: 6.08 s.d.: 1.46 range: 4.0 (most unlikely to seek support) - 8.0 (most likely to seek support)			
Type of event	disruption (0): 51.9% (N=1214) role loss (1): 48.1% (N=1124)	disruption (0): 51.2% (N=341) role loss (1): 48.8% (N=325)			

Appendix I continued: Descriptive Statistics for Variables Included in the Tests of the Support-Seeking Model

Variables	N=2,338 events	N=666 events
Perceived "stress level" of event	mean: 7.59 s.d.: 2.26 range: 1 (not stressful at all) 10 (extremely stressf	
Perceived lack of control over event		no (0): 37.5% (N=250) yes (1): 62.5% (N=416)
Other simultaneous stressful events		no (0): 65.3% (N=435) yes (1): 34.7% (N=231)
Perceived availability of social support	mean: 13.62 s.d.: 2.26 range: 4.0 (perception that available support is very inadequate) - 16.0 (perception that available support is very adequate)	mean: 13.76 s.d.: 2.18 range: 4.0 (perception that available support is very inadequate) - 16.0 (perception that available support is very adequate)
Total support resources utilized		mean: 5.21 ties s.d: 2.77 ties range: 1-14 ties
Satisfaction with support-seeking strategy		mean: 1.94 s.d: 0.802 range: 1.00 (very satisfied with support-seeking strategy) - 5.00 (very dissatisfied with support-seeking strategy)
	di	satisfied (0): 80.5% (N=537) issatisfied/ambivalent (1): 19.5% (N=129)

# APPENDIX II:

Correlation Matrices for Variables Included in the Tests of the Support-Seeking Model

### Correlation Matrices for Data Set = 2,338 Events

#### All Events Models (N=2,338 events)

	$X_1$	$X_2$	X <sub>3</sub>	$X_4$	$X_5$
$X_{i}$	1.000				
$X_2$	.136	1.000			
$X_3$	.228	.402	1.000		
$X_4$	071	068	032	1.000	
$X_5$	.032	.170	.176	096	1,000

 $X_1$  = type of event (role loss)  $X_4$  = age at event  $X_2$  = perceived stress level of event  $X_5$  = gender (female)  $X_3$  = need for support (yes)

### Recent Events Models (N=345)

	$X_{t}$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$	$X_8$	$X_9$	$X_{10}$
$X_1$	1.000									
$X_2$	.227	1.000								
$X_3$	.275	.368	1.000							
$X_4$	167	107	024	1.000						
$X_5$	.089	.205	.099	075	1.000					
$X_6$	132	133	118	.085	153	1.000				
$X_7$	157	180	177	.063	090	.590	1.000			
$X_8$	110	036	036	.094	043	.583	.502	1.000		
X9	.005	068	181	062	159	.115	.107	.002	1.000	
$X_{10}$	098	103	129	044	092	.287	.303	.178	.378	1.000

 $X_1$  = type of event (role loss)  $X_6$  = self-esteem  $X_2$  = perceived stress level of event  $X_7$  = mastery

 $X_3$  = need for support (yes)  $X_8$  = perceived availability of social support

 $X_4$  = age at event  $X_9$  = marital status (married)  $X_5$  = gender (female)  $X_{10}$  = annual household income

### **Correlation Matrices for Data Set = 666 Events**

#### All Events Models (N=615 events)

	$\mathbf{X}_{t}$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$	$X_8$	X9	$X_{10}$	$X_{11}$	$X_{12}$
X,	1.000											
	303	1.000										
_	150	.278	1.000									
$X^{t}$	070	.166	.142	1.000								
$X_5$	065	.237	.192	.237	1.000							
$X_6$	198	.043	054	048	086	1.000						
$X_7$	.081	088	047	.033	093	206	1.000					
$X_8$	056	.149	.175	.146	043	439	291	1.000				
$X_9$	062	810.	.158	.176	.107	006	096	.040	1.000			
$X_{10}$	076	014	.159	.132	.050	016	084	.134	.803	1.000		
$X_{11}$	024	029	102	110	.022	.019	128	.136	128	119	1.000	
$X_{12}$	027	.080	.075	.104	.225	081	.030	.167	019	055	108	1.000

 $X_1$  = type of event (role loss)

 $X_2$  = perceived stress level of event

 $X_3$  = lack of control over event (yes)

 $X_4$  = other simultaneous stressful events (yes)

 $X_5$  = total support resources utilized

 $X_6$  = informal & professional ties (yes)

 $X_7 = informal \& community ties (yes)$ 

 $X_8$  = informal, professional & community ties (yes)

 $X_9$  = mean satisfaction with support-seeking attempt

 $X_{10}$  = dissatisfied/ambivalent with attempt (yes)

 $X_{11}$  = age at event

 $X_{12}$  = gender (female)

#### Recent Events Models (N=122)

```
X_i
               X_2
                       X_3
                                X_4
                                        X_5
                                                X_6
                                                        X_7
                                                                X_8
                                                                       X9
                                                                               X_{i0}
                                                                                       X_{II}
                                                                                                 X_{12}
                                                                                                          X_{13}
     1.000
X_{i}
     -.013
             1.000
X_2
                     1.000
X_3
     -.288
              .181
X_4
     -.082
              .087
                      .034
                             1.000
                      .079
                              .270
X_5
      .068
              .054
                                     1.000
X_6
     -.072
              .058
                     -.058
                            -.203
                                            1.000
                                     -.145
X_7
      .070
             -.179
                     -.199
                             .160
                                     -.136
                                            -.163
                                                    1.000
                                                    -.304
X_8
      .071
              .031
                      .148
                             .168
                                     .564
                                             -.555
                                                            1.000
     -.187
X_{9}
              .054
                      .237
                             .195
                                      .157
                                             -.007
                                                    -.047
                                                              180.
                                                                    1.000
    -.230
             -.066
                      .260
                             .172
                                     .000
                                             .040
                                                     -.037
                                                            -.028
                                                                     .791
                                                                            1.000
     .037
             .010
                     -.151
                            -.297
                                             .271
                                                     -.270
                                                                             -.149
                                                                                    1.000
X_{11}
                                     .047
                                                             .032
                                                                    -.176
                                                                             -.077
                                                                                     -.139
                                                                                             1.000
      .068
              .081
                      .066
                            -.047
                                     .100
                                            -.206
                                                     .004
                                                             .110
                                                                     .008
X_{12}
                                                                                              -.094
                                                                                                       1.000
                                                                                     -.014
      .118
            -.122
                     -.230
                            -.113
                                    -.094
                                             .026
                                                     .074
                                                             -.095
                                                                    -.223
                                                                             -.195
X_{13}
     .164 -.133
                                                     .041
                                                            -.256
                                                                   -.223
                                                                            -.161
                                                                                     -.089
                                                                                              -.024
                                                                                                        .482
                     -.178 -.212
                                    -.257
                                             .169
                                                                                                        .460
                                    .006
                                                     .080
                                                                   -.459
                                                                            -.378
                                                                                     .016
                                                                                               .015
X<sub>15</sub> .136 -.128
                     -.231 -.153
                                             .030
                                                            -.051
X_{16} -.102 -.126
                     -.118 -.229 -.281
                                             .104
                                                    -.094
                                                            -.139 -.094
                                                                            -.037
                                                                                     .120
                                                                                              -.072
                                                                                                        .036
                    -.081 -1.81 -.121
                                             .095
                                                    -.045
                                                            -.130
                                                                     .044
                                                                            -.007
                                                                                     -.027
                                                                                               .131
                                                                                                         .224
X_{17} .120 -.178
                  X_{14}
                          X_{15}
                                            X_{17}
                                   X_{16}
         X_{14}
                 1.000
         X_{15}
                  .450
                          1.000
         X_{16}
                  .165
                          -.038
                                   1.000
         X_{17}
                  .328
                           .093
                                    .238
                                             1.000
```

```
X_1 = type of event (role loss)
                                                    X_{10} = dissatisfied/ambivalent with attempt (yes)
X_2 = perceived stress level of event
                                                    X_{11} = age at event
X_3 = lack of control over event (yes)
                                                    X_{12} = gender (female)
X_4 = other simultaneous stressful events (yes)
                                                    X_{13} = self-esteem
X_5 = total support resources utilized
                                                    X_{i4} = mastery
X_6 = informal & professional ties (yes)
                                                    X_{15} = perceived availability of social support
X_7 = informal \& community ties (yes)
                                                    X_{16} = marital status (married)
X_8 = informal, professional & community ties (yes)
                                                    X_{17} = annual household income
X_9 = mean satisfaction with support-seeking attempt
```