SOCIAL SUPPORT, PERSONALITY, AND INDEPENDENT LIVING IN THE ELDERLY

by

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ABSTRACT

Social support and personality characteristics have been found to be associated with independence in older persons. Further, the subjective evaluation of one's social network as supportive or otherwise is a critical predictor, and this could be influenced by such personality dimensions as neuroticism and extraversion. The purpose of the present study, therefore, was to examine the relationship of both objective and subjective dimensions of support, and personality characteristics, to independent living in the elderly. Independent living was here defined by the amount of formal service being received by Long Term Care (L.T.C.) clients: three groups were compared.

Subjects were 64 females and 11 males, all over the age of 60, and residing in the Greater Vancouver area. Twenty-five were residents of one of two intermediate care facilities, and of the remaining 50 community-dwelling subjects, the majority (94%) lived alone. All subjects were receiving L.T.C. service and had been assessed at the IC I level of care.

The subjects were interviewed in their place of residence and a set of questionnaires was completed. Social support was measured by an abbreviated version of Sarason et al.'s (1983) Social Support Questionnaire (SSQ), supplemented by an author-designed, 7-question objective support measure. Personality was measured by the Eysenck Personality Inventory (EPI).
Analyses of variance (ANOVA) yielded a significant relationship between independent living and both objective and subjective dimensions of social support, with the latter association being substantially stronger. Group comparisons showed the high service group (i.e. the least independent) to be unique. Further ANOVAs also demonstrated a significant negative relationship between neuroticism and independent living, and a significant positive relationship between extraversion and independent living. The stronger association was observed for neuroticism as opposed to extraversion. A partial correlation demonstrated a significant negative relationship between social support and neuroticism. As a secondary interest, a regression analysis showed a significant relationship between self-concept and self-esteem, and both dimensions of social support.

Further interesting observations, particularly those relating to the presence of a "confidant", are discussed on a descriptive level. Practical applications and policy implications of the findings are addressed, as well as directions for future research.
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# TABLE OF CONTENTS

Approval ........................................................................ ii
Abstract ......................................................................... iii
Acknowledgments ........................................................... v
List of Tables ................................................................. viii
A. Introduction ............................................................... 1
   I. The Area of Study ..................................................... 2
      Myth and Reality ......................................................... 3
      Theoretical Framework ............................................... 5
      Statement of the Research Focus ................................. 7
   II. Dependence and Independence ................................. 10
      Different Types of Dependency ..................................... 10
      Dependency and Autonomy ......................................... 12
      Interdependence ......................................................... 13
      Related Concepts ....................................................... 14
      Theoretical Integration ............................................... 16
   III. Social Support ....................................................... 18
      Theoretical Background .............................................. 19
      Definition and Types of Support ................................. 21
      Subjective/Objective Dimensions of Support ................. 26
      Formal/Informal Social Support .................................... 29
      Summary ................................................................. 42
   IV. Personality ............................................................. 45
      Theoretical Background .............................................. 47
      Stress and Coping ...................................................... 51
      Personality Traits ..................................................... 60
Summary ................................................................. 66

V. The Research Hypotheses ........................................... 69

B. The Empirical Investigation ....................................... 71

VI. Method ........................................................................ 72

Subjects ........................................................................ 72
Procedure ........................................................................ 73
Measurement ................................................................... 76
Statistical Analysis ......................................................... 85

VII. Results ...................................................................... 87

Subject Characteristics ................................................. 87
Analyses of Variance ...................................................... 88
Correlational and Partial Correlational Analyses .............. 92

C. Discussion ................................................................... 98

Overview of Findings .................................................... 99
Descriptive Dimensions .................................................. 103
Generalizability ............................................................. 110
Practical Applications ..................................................... 112
Policy Implications ........................................................ 116
Directions for Future Research ........................................ 119

References ....................................................................... 123

D. Appendix A: The Questionnaire Package ...................... 132

E. Appendix B: The Original S.S.Q. ................................. 150
<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>3</td>
<td>89</td>
</tr>
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<td>4</td>
<td>90</td>
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<td>9</td>
<td>93</td>
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<tr>
<td>10</td>
<td>95</td>
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<td>11</td>
<td>95</td>
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PART A

INTRODUCTION
CHAPTER I
THE AREA OF STUDY

The 65 and older age group is Canada's fastest-growing population segment (Statistics Canada, 1979), a result of the combined forces of declining fertility and declining mortality. The increasing numbers of older persons in relation to younger wage earners is causing concern as the needs of the aged place strain on the economy, social services, and, in particular, on the health care system. Consequently, attention is being focused on efforts to find alternatives to costly government services and to encourage independence in the elderly. Structures and services need to be developed which will promote well-being and an optimal level of functioning in the elderly, and thereby reduce the dependency of this group on the rest of society.

Apart from practical and economic concerns, the preservation of independence for the aged is a desirable goal for humanitarian reasons, and is of the utmost importance to the elderly themselves. As Quinn (1984) has pointed out "the striving to prolong independence and to maintain a lifestyle they are accustomed to is, for most elderly persons, a heartfelt desire of lasting importance" (p. 216). Conversely, the loss of independence, or the threat of it, is a primary source of dissatisfaction with life for older people (Clark & Anderson, 1967).
Myth and Reality

Any efforts to promote greater independence in older people will be affected by the attitudes of service professionals, academics, and the general public towards the subject of aging. Negative expectations concerning the performance and behaviour of older people can inhibit their functioning at full capacity. People tend to live up to their own and others' expectations; low expectations can lead to low performance (Quinn, 1984).

Much of the gerontological literature in the past has focused on the negative aspects of aging. In particular, it has reinforced the stereotype of old age as characterized by multiple losses and increased passivity and dependency (Stueve, 1982). The "deficit-oriented" view of the elderly has recently been challenged (Corin, 1982; Stueve, 1982). More attention is being paid to the other side of the picture: that older people have much to offer and, like people of other ages, need the opportunity to feel that they are part of, and contributing to, society.

Old age is not synonymous with disease, nor does it imply total dependency. An overemphasis on the negative aspects of aging can portray an inaccurate picture of all older people as being in need of extensive services, while, in fact, significant disability is experienced by only a minority of the elderly.
Neugarten (1983) emphasizes the need to distinguish "competent" from "frail" older persons, a distinction that is based not on age, but on health and social characteristics. For some older people, failing physical and/or mental health, coupled with the loss of supportive relationships (e.g., widowhood) can lead to increasing needs for assistance. These are individuals who need special supportive, health, and social services. However, these "frail" old people represent only a small proportion (approximately 15%-20%) of the population aged 60 and over. The majority of the "over 60's" (80%-85%) comprise "the competent:" vigorous, active, and independent. The proportion of frail persons rises in older subgroups but even among 85 year olds a sizeable number have no major disabilities (Neugarten, 1983).

Competent older people seek meaningful ways to use their time. They represent a pool of expertise and talent, much of which is underutilized. The widespread concern with this issue was evident at a meeting of the Organization of the World Assembly on Aging held in Vienna during August, 1982. The Assembly proposed that society recognize older people as a continuing resource and see their experience, insight, and energy as important to the well-being of their families and the wider community; and further, that efforts be made to find new roles and meaningful activities for elderly persons (Quinn, 1984).
While concern has been expressed for the situation of all older people, it is also recognized that wide individual variation exists in patterns of aging. An attempt to understand these differences requires a theoretical framework.

**Theoretical Framework**

The theoretical framework within which the present thesis is developed recognizes that behaviour which is reflective of dependence/independence and competence/frailty is a product of the interaction between an individual and his/her environment.

Everyday observation suggests that there are some individuals who appear to not only survive, but also to grow under a given set of circumstances while there are others who cannot cope and who deteriorate psychologically and physically. Similarly, investigators concerned with social and psychological adjustment to changes in later life have shown that some persons face old age with vigour and optimism while others experience feelings of deprivation and debilitation (Conner, Powers, & Bultena, 1979). One of the most consistent findings to emerge from the field of gerontology is that people grow old in very different ways, whether we refer to biological, psychological, or social processes (Neugarten, 1983).

To the extent that changes in the environment strain an individual's resources, then the individual is considered to be under stress. A certain amount of stress is experienced by all
older people as they attempt to adapt to changing physical, mental, social, and economic conditions, but how do we account for the variety of ways in which different people deal with these challenges?

The interactionist approach, which is adopted in this paper, recognizes that any behaviour is influenced by aspects of both the individual and his/her environment. But, more importantly, it recognizes that while the environment contains situational strains, or stress, impinging on the individual, it also provides supports. A person is similarly represented by strengths and weaknesses, both biological and psychological. Under a given set of circumstances, any behaviour results from the interaction of environmental stress and supports, on the one hand, and personal resources and liabilities, on the other.

An example of this interactionist perspective is provided by Pearlin and Schooler (1978). In their discussion of coping mechanisms, or behaviours employed to eliminate or reduce psychological stress, the authors made a further distinction between social resources, psychological resources, and specific coping responses. Resources refer not to what people do, but to what is available to them in developing their coping repertoire. Social resources include economic conditions and the interpersonal networks which are a potential source of support. Psychological resources are personality characteristics that people draw upon to help them withstand threats posed by events and objects in the environment. Psychological resources,
residing within the self, represent some of the things that people are, while coping responses represent some of the things that people do, their concrete efforts to deal with life's strains.

Statement of the Research Focus

Although a good deal has been heard recently, from various sources, about the value of promoting independence in the elderly, it is not always clear what this means. For example, there is a danger that the so-called "striving for independence" of older people may be used by government policymakers as a justification for withholding certain services. However, independence will be enhanced if specific supportive services are provided when necessary (Munnichs, 1976). Withholding these services could contribute to mental and physical deterioration which, in turn, could increase, rather than decrease, costs to society. Munnichs (1976) proposes that necessary instrumental aid should be provided in concert with efforts to encourage personal autonomy (see Chapter II for a further discussion).

The idea of older people being involved in interdependent rather than dependent relationships is proposed by Munnichs (1976) as a less negative and more appropriate portrayal of the actual social situation of most people (see Chapter II). Older persons want to consider themselves capable of taking care of themselves (Quinn, 1984); at the same time they want to be
assured that others are close enough to provide support if necessary. In other words, they do not want to be dependent but they want someone to depend upon. Having someone to depend on, while avoiding excessive dependency, is the basis for well-being and personal autonomy at any stage in the life course, but is particularly salient in old age when one's personal resources may gradually, or suddenly, diminish (Quinn, 1984).

It has already been pointed out that great individual variation is apparent in patterns of aging and in ability to deal effectively with life's exigencies. Furthermore, from an interactionist perspective it is recognized that both environmental and personal liabilities and resources, together, will affect behaviour in any given situation.

The present thesis focuses attention on the relationship of social resources (social support) and psychological resources (personality characteristics) to independence in the elderly. Previous research has shown that supportive social relations can contribute to both instrumental independence (e.g. by necessitating less government service) and emotional independence (e.g. by maintaining self-esteem) (Quinn, 1984). The possibility that the effectiveness of one's potential support system may be modified by personality characteristics is suggested by some recent investigations (Costa & McCrae, 1980).

The foregoing issues will be explored in the next three chapters which will constitute a review of the pertinent
literature. It should be pointed out, however, that this literature does not form a cohesive body of research material at the present time. Gerontology, as an area of study, is starting to receive considerable attention (largely for the reasons stated at the outset of this paper) but is still generally in the early stages of theoretical development. Gerontology is both a multidisciplinary and an applied field, and therefore the literature reflects these different orientations and interests. The present thesis, in particular, draws from the disciplines of psychology and sociology, and the relationship of their findings to the broadly-defined health care and social service needs of the elderly. Independence, social support, and personality characteristics, are all recognized as important concepts in relation to aging. However, they have rarely been systematically studied at the same time, in the same group of older people, as will be attempted here. Bearing in mind the heterogeneous nature of the body of literature to be reviewed, the purpose of this brief survey will be to provide a contextual background for the empirical investigation which follows in Part B.
CHAPTER II
DEPENDENCE AND INDEPENDENCE

The promotion of independence in the elderly has been generally recognized as a desirable goal, but exactly what is meant by "independence," and its conceptual opposite "dependence," is often unclear.

"Dependency" is a frequently used concept in gerontological studies. The association of "old age and dependency" is often seen as inevitable (Munnichs, 1976) and the measure "elderly dependency ratio" embodies this assumption. However, as has already been pointed out, dependency is not necessarily a characteristic of old age; it depends largely on one's definition of the concept. Of the various meanings which have been attributed to "dependency," most have in common a negative evaluation.

Different Types of Dependency

The complexity of the multidimensional concept of "dependency" is apparent from the number of types which have been identified (e.g., physical, mental, social, economic). Munnichs (1976) classified the various types of dependency into three broad groupings: practical helplessness, social powerlessness, and psychological need.
Practical helplessness necessitates attention and care by others. This is the physical dependency which is frequently a major focus in the gerontological literature. From this perspective, dependency may be seen as the inability of an individual to carry out for him/herself the activities necessary to maintain a "normative standard" of everyday living or lack of ability for self-care due to "abnormality." "Normative standards" and "abnormality" are defined by the social context in which the individual lives, or by professional standards. The use of such terms implies a value judgement, to some degree.

Powerlessness in a social/personal relationship is a type of dependency which is characterized by an unequal or non-reciprocal relationship where one receives "help" without giving. Clark (1969) refers to this as "dependency of non-reciprocal role." Exchange theory (Blau, 1964) defines "the power" of an individual as inversely related to his/her dependency. Dependency here relates to a position which forces those of "lower status" to be dependent on those of "higher status" for their well-being (Feldman-Summers, 1974). On the other hand, the dependent person, by invoking the norm of social responsibility, may be able to use the fact of his/her dependency to affect outcomes. In this case "powerlessness may be powerful" (an idea not new to psychiatry) (Munnichs, 1976).

A psychological need to be looked after, controlled, or nurtured may also be a referent of dependency. This meaning is used by Nechis (cited by Munnichs, 1976) in describing the
chronic schizophrenic as "hospital dependent." Clark (1969) would call this "neurotic dependency."

A further distinction can be made between instrumental and emotional dependency, which, as will be seen later, is closely related to the difference between instrumental and emotional social support. However, before discussing this distinction, it is necessary to introduce the concept of autonomy.

Dependency and Autonomy

Munnichs (1976) suggests that supportive instrumental services should be provided for older people when necessary while, at the same time, attempts are being made to reinforce "individual independence" or, what he prefers to call, "autonomy" of the personality. Autonomy, in its most general psychological sense, refers to the maintenance of integrity of the self; it is based on well-developed self-control and a sense of self-esteem (Munnichs, 1976). This concept is central to a discussion of the difference between instrumental and emotional dependency.

An individual can become instrumentally more dependent (e.g. by getting a pension instead of wages, or by receiving some other service) but this need not affect his/her self-integrity. On the other hand, emotional changes connected with events such as the death of a spouse, relocation, or institutionalization represent forms of crisis-dependency which may also have further
psychological implications. In the case of the death of a partner, for instance, the older person, deprived of the intimacy associated with the "attachment figure" (Bowlby, 1969; Hartup & Lempers, 1973) or the "confidant" (Lowenthal and Haven, 1968), may now have no one who directly maintains his/her level of self-esteem which, in turn, means that his/her self-integrity may be affected. In this way, autonomy can give way to dependency (Munnichs, 1976).

**Interdependence**

Munnichs (1976) suggests that most relationships are not dependent, but interdependent, with the limits of interactions between people being set by generally accepted norms. A relationship is characterized as dependent only if an individual has no resources, and is receiving without giving; this is evaluated negatively in our society. The author points out, for instance, that inability to maintain self-care, *per se*, is not equivalent to dependency. Only in a relationship where the individual has no power at all in the interaction, and is considered an object of care by those in his/her environment, will dependency occur. From this point of view, it is easy to see how dependency could be encouraged in an institutional setting.

Although dependency and autonomy are conceptually opposite, in reality they occur at the same time as different aspects of
the same personality (Munnichs, 1976). It is impossible to imagine an exclusively autonomous personality because every human being always has a connection to a social situation upon which s/he is more or less dependent. Simmel (1964) emphasizing a similar point, proposed that the issues of freedom and independence be viewed in terms of the capacity to choose on whom and/or on what to depend.

Although old people value independence highly, it is recognized that no individual is, or would even choose to be, completely independent. It has been suggested that in relation to old age, especially, dependence-independence may not be an appropriate dichotomy. Somewhere between the two extremes lies "interdependence" and this concept more accurately reflects the concrete social situation in which people find themselves (Munnichs, 1976).

Related Concepts

Various other theoretical concepts, related to independence, occur frequently in the social gerontological literature, but these concepts are not always clearly defined. The major ones are successful aging and subjective well-being.
Successful Aging

A growing interest in efforts to explain "successful aging" has been evident in recent years. This interest has been prompted largely by two important factors: a rapidly aging population; and attempts on the part of governments to curb public spending. So far, there is no clearcut agreement on what is meant by successful aging. The concept has been associated with, among other things, continuing adaptation to the various conditions of one's life (Havinghurst, 1967); the development of coping skills to deal with stressful life events (Lieberman & Tobin, 1983; Fleishman, 1984); and adjustment, as opposed to maladjustment, in old age (Conner et al., 1979).

Subjective Well-being

Much research has focused on attempts to understand successful aging through identifying the determinants of "subjective well-being" in later life. In a comprehensive review of literature on the topic spanning thirty years, Larson (1978) proposed that a multiplicity of measures of such concepts as morale, happiness, and life satisfaction could justifiably be grouped within one general construct since evidence suggests that they "share a core of something that can be called subjective well-being" (p. 110).

In recent years, subjective well-being has frequently been the dependent variable of choice in a large number of studies, although caution has been advised in the use of this criterion.
in research due to the global nature of the concept (George & Bearon, 1980).

"Personal adjustment" is also usually measured on a scale of subjective well-being (e.g. Duckitt, 1983; Quinn, 1983), and these two terms are used interchangeably.

Theoretical Integration

Obviously, there is considerable overlap in such terms as successful aging, well-being, adjustment, and so on, and this can lead to confusion. However, there is also a common thread linking these concepts to each other and to the concept of independence. For example, in general, the literature suggests that "successful aging" comprises adaptation to the changes inherent in the process of growing older, as well as some end state of behavioural competence and a sense of subjective well-being. These aspects of successful aging are closely related to instrumental and psychological independence in older people.

The maintenance of independence is important to self-esteem (Quinn, 1984) and the loss, or threatened loss, of independence ranks as a major source of dissatisfaction with life for older people (Clark & Anderson, 1967). As self-esteem and life satisfaction have both been subsumed under the general heading of "subjective well-being" (Larson, 1978), it is to be expected that increased independence will be associated with a greater
sense of well-being in the elderly. Similarly, autonomy is associated with effective coping behaviour in older people and has important implications for health and well-being (Lieberman & Tobin, 1983; Kobasa, 1979).

To avoid ambiguity, in this paper attention will focus specifically on the concept of independence but with the understanding that much of the research referred to above is relevant to our discussion.
CHAPTER III
SOCIAL SUPPORT

The climate of economic restraint in Canada, and elsewhere in recent years, has provided the impetus for a growing body of research concerning social support. With diminishing public funds, interest has been stimulated in informal support systems as a possibly inexpensive alternative to formal services. Extensive reviews of the partnership between professional and non-professional support systems have been described (Cohen & Adler, 1984). Attempts are being made to find the optimum relationship between public programs, private programs, and the self-help that comes from older persons and their families. At the same time, a growing controversy surrounds the question of whether the former trend towards increased government responsibility should be reversed (Neugarten, 1983). It has been proposed that public policy must strike a careful balance between the roles of government and the family in order to maximize the well-being of impaired older people (Arling & McAuley, 1981).

Much of the earlier interest in social support emerged from research focusing on the relationship between stressful life events and the onset of physical and/or mental illness. Several investigators hypothesized that the individual's social support system helps to moderate or "buffer" the effects of life events on his/her psychological state (Antonovksy, 1974; Cobb, 1976).
More recent studies show that supportive social relations can: (a) reduce the consequences of stressful life events; and (b) contribute to psychological well-being irrespective of the level of stress (Rook, 1984; Thoits, 1982). Mounting evidence suggests that social support can facilitate functional ability and independence in older persons and may also contribute significantly to health and well-being (Berkman, 1983).

Investigators are now turning their attention to the more complex issues involved in the study of social support systems. For example, subjective dimensions of support have consistently been shown to be more strongly related to life satisfaction in the elderly than objective dimensions, and the need to differentiate between these two dimensions is now recognized (Conner et al., 1979; Ward, Sherman & LaGory, 1984). Other researchers focus on the possibility of conflict in relationships and emphasize the need to carefully assess the qualitative aspects of social support systems (Quinn, 1983; Rook, 1984). These issues, as well as the aforementioned relationship between the informal and formal support systems, will be the focus of discussion in the present chapter.

Theoretical Background

Several conflicting theoretical approaches are evident in researchers' attempts to understand interpersonal relationships in old age. In the most prominent controversy, activity theory
Havinghurst, & Tobin, 1964) suggested that social integration is essential to the adjustment process in later life, and that social activity has a positive effect on life satisfaction. Alternatively, disengagement theory (Cumming & Henry, 1961) proposed that optimal aging is characterized by a mutual withdrawal by the individual and society, marked by a decreasing level of activity with age. These apparent inconsistencies in the literature may be due to inadequate conceptions of social integration (Liang, Dvorkin, Kahana, & Mazian, 1980). This point will be enlarged upon later.

Social exchange theorists (Thibaut & Kelley, 1959) argue that we choose our social ties on the basis of their capacity to provide rewards relative to costs, and as a function of the alternatives available. Obviously many constraints limit the choice of those with whom one interacts.

Wentowski (1981) suggests that a complex exchange system, or reciprocity, which is essential to the preservation of self-esteem in the elderly, underlies the functioning of a support network. "Balanced reciprocity" refers to exchanges in which the equivalent of the "object" received is returned within a finite period of time. These exchanges may be of two types: immediate exchanges which are appropriate between individuals who wish to keep their obligations to a minimum, and deferred exchanges which are practiced by those who trust each other and are willing to assume a greater obligation. When balanced exchanges have gone on for some time to the satisfaction of both
sides, a deep sense of obligation develops, extending beyond the ability to repay. "Generalized reciprocity" occurs when assistance given is not necessarily expected to be returned in exact proportion, if at all; this is often the norm among close kin and may sometimes develop with non-kin. The assumption is that relationships will balance themselves over the very long term. Some people "buy into" a system of generalized exchange as, for instance, when parents give children money to "get started."

Support in old age varies, but participation in balanced exchanges over long periods of time is a major means of guaranteeing security in the later years. People who wish to maintain their position in the network strive to keep their exchanges as balanced as possible, at least until extreme old age; when older persons can no longer reciprocate they will send token returns as a way of maintaining the appearance of reciprocity and thus preserving their pride and self-esteem.

**Definition and Types of Support**

Social support is a multidimensional concept which has proved difficult to operationalize. The literature reflects some confusion between the terms "social support" and "social network." Berkman (1983), however, points out that they are two different concepts: social networks may be viewed as the web of social relationships that surround a person, and the
characteristics of these ties; social support may be viewed as the emotional, instrumental, or financial aid that is obtained from social networks. Accordingly, a network may or may not be supportive (Berkman, 1983).

In a comprehensive review, Thoits (1982) reports on conceptual and methodological problems in studying social support. Previous research is criticized on the basis of imprecise conceptual definitions, failure to address the issue of multidimensionality, and failure to develop valid and reliable indicators of the concept. Thoits proposes a more appropriate model for the study of social support: Social support is defined as "the degree to which a person's basic social needs are gratified through interaction with others" (p. 147). Basic social needs include affection, esteem or approval, belonging, identity, and security. In an analysis that is reminiscent of Munnichs's (1976) recognition of instrumental and emotional dependency, Thoits suggests that these needs may be met by either the provision of socioemotional aid (e.g. affection, sympathy, understanding, acceptance, and esteem from significant others) or the provision of instrumental aid (e.g. advice, information, help with family or work responsibilities, and financial aid). Instrumental help may have socioemotional overtones; practical help from others assures the individual that s/he is cared about.

The social support system is defined as "that subset of persons in the individual's total social network upon whom
he/she relies for socioemotional aid, instrumental aid, or both" (p. 148). One can measure the structural properties of the social support system using standard network indicators (size, accessibility, etc.) as well as the functional properties of the system, such as the perceived amount, and adequacy, of socioemotional and instrumental aid received from various support system members. Thoits points out that these definitions explicitly direct attention to various types, sources, and degrees of support received from significant others, and to the structural properties of support systems.

As can be seen from the foregoing, various distinctions have been made between different types and dimensions of support. These include instrumental/expressive and objective/subjective, and also primary/secondary and formal/informal. The instrumental/expressive and primary/secondary distinctions will be addressed briefly. This will be followed by a more detailed discussion of the objective/subjective and formal/informal dimensions of support, since these distinctions are central to the present investigation.

*Instrumental vs. expressive support*

The instrumental support system is geared to the fulfillment of tasks, while the socioemotional or expressive system is geared to the satisfaction of individual needs and the maintenance of solidarity (Dean & Lin, 1977). Any relationship may be a source of both types of interaction but, on the whole,
the instrumental system is more characteristic of formal services, whereas informal interaction is likely to be characterized by the expressive system (Chappell, Strain, & Blandford, 1986).

It is the expressive system which is emphasized by Cobb (1976) who views social support as comprised of classes of information leading the person to believe that s/he is cared for and loved; that s/he is esteemed and valued; and that s/he belongs to a network of communication and mutual obligation. Cobb distinguishes these classes of information from goods and services. The latter do not in themselves constitute support and may foster dependency, whereas the former tend to encourage independent behaviour.

*Primary vs. secondary support*

Primary and secondary sources of support have also been distinguished. Some researchers propose that the family is most likely to constitute the primary group (Dean & Lin, 1977) but others would include friends and neighbours as well (Pilisuk & Parks, 1983; Lopata, 1978). On the other hand, it is erroneous to assume that kin are necessarily part of one's primary network since "numerous individuals have no love for their immediate family members" (Babchuk, 1978, p. 150).

An individual is surrounded by concentric circles of network members to whom he or she is related by the giving and/or receiving of social support (Kahn & Antonucci, 1981). These
relationships, especially those on the periphery, will vary throughout the life-course. The inner circle will probably be more stable over time, consisting of people who are perceived to be important support givers. They are likely to be close friends or family members but their closeness is determined by the supportive quality of their relationship to the individual and not by the role or familial relation.

Different approaches to studying the complex issue of social relations lead to a variety of findings. For example, O'Brien and Wagner (1980) found that in response to hypothetical questions, older persons overwhelmingly asserted that they would first turn to family for assistance. However, when the actual patterns of the same population were studied it was found that family and friends shared equally in the provision of assistance.

Nevertheless, Cantor (1979) found that among the current cohorts of elderly, kin are clearly considered the primary source of help regardless of the task. Friends, neighbours, and formal organizations become important in the provision of services only when family, especially children, are not available, and with respect to well-defined tasks. The "principle of substitution" proposed by Shanas (1979) also emphasizes the primacy of filial support but suggests that older people will substitute close relationships with more remote kin when children are unavailable. The childless elderly are more likely to use help from non-kin supports, substituting formal
supports for those conventionally provided by offspring.

Subjective/Objective Dimensions of Support

Before undertaking a detailed discussion of informal and formal social support systems, the issue of objective/quantitative versus subjective/qualitative dimensions of social support should be addressed and some pertinent studies reviewed. Although some of these studies used "well-being" as the dependent variable, the findings are relevant to the present discussion of independence in the elderly since, as we have previously pointed out, a close relationship exists between these two concepts.

Earlier studies attesting to the continuing inter-generational contact among family members did not inform us about the quality of interaction or the varying needs of older people. Recently researchers have emphasized the need to study not only the objective measures of support, such as social contact and services, but also the subjective dimensions which contribute to the quality of care (Liang et al., 1980). Objective measures, such as the number of ties and frequency of interaction, are relatively unimportant to life satisfaction (Conner et al., 1979), whereas subjective measures are more strongly related (Ward et al., 1984).

Attempts to describe the qualitative dimensions of interactions between elderly persons and their social networks
have been evident in several recent studies (Quinn, 1983; Coe, Wolinsky, Miller, & Prendergast, 1984). Rundall and Evashwick (1982) developed a typology of relationships which includes information about both the level of one's interaction with the network, and one's satisfaction with the level of interaction. The typology includes four categories: engaged, abandoned, trapped, and disengaged. Elderly persons in these groups differed in their use of health and social services (see below).

Coe et al. (1984) extended this model to include discontented and alienated categories. They also distinguished between complementary relationships, characterized by the same type of voluntary relationship with both networks and the desired frequency of participation, and compensatory relationships in which the frequency of participation in one network substituted for lack of participation in the other. The authors found that those with a complementary relationship with family and neighbour networks scored somewhat higher on most variables than those with compensatory relationships, but this difference was not significant. They suggest, therefore, that either type of relationship can function to provide support for elderly individuals. However, being out (or partially out) of a social support network had important consequences. Older persons "abandoned" by both family and neighbour networks reported the poorest perceived health, the poorest mental health, the most limitation of activity, and a much greater use of physician and hospital services. Similarly, Shanan and Weihl (1976) found that
elderly people who perceive themselves as having been forced out of work and/or family ties, are more likely to become passive in their style of adjustment, and to exhibit dependent behaviour.

Individual preferences and habitual patterns of social interaction differ considerably. Some people feel content with a relative paucity of social exchanges, whereas others desire and maintain an active and varied social life with equally positive results. However, there is substantial agreement in the literature that the variable most critically related to subjective well-being in the elderly is the presence of a warm, intimate dyadic bond, the presence of a "confidant" (Lowenthal & Haven, 1968; Liang et al., 1980). Having another to turn to for help or to disclose personal problems may enhance subjective well-being directly, and may also facilitate coping with stress (Rook, 1984).

Although there is increasing awareness of the importance of the subjective dimension in understanding social integration and well-being in the elderly, this dimension is not easy to measure. An individual's subjective perception of his/her integration may be defined as his/her own assessment of whether s/he is socially isolated or lonely and whether s/he is content with his/her social relationships (Liang et al., 1980). People may surround themselves with many friends and still label themselves as feeling lonely. Alternatively, even if only one close friend is available, individuals may perceive their situation as more than adequate for their needs. The important
factors seem to be the degree of intimacy inherent in their relationships, and whether or not their interpersonal interactions are satisfying and sufficient according to their subjective evaluation.

Sufficiency of support was studied by Ward et al. (1984) who found, like others, that the subjective quality of social relationships was more important to well-being than objective quantity. Whether the older persons had enough social ties in an objective sense (i.e. an average amount) seemed less important than whether they perceived they had enough. The authors noted that children played an active role in the support network yet access and interaction with children were found to have little relation to subjective well-being. Ward et al. concluded that "whether children are nearby and seen regularly is less important than whether they are seen enough, and whether interaction with children has the quality desired by the individual" (1984, p.100). These findings reflect the ambivalence of many parent-child relationships in old age (see below for further discussion).

Formal/Informal Social Support

Formal social support services include those of physicians and other professionals, many of whom operate under the auspices of various government agencies. Informal support services are provided by family, friends, neighbours, and clubs or
Contrary to popular belief, only about 20% of the care provided to aging members of society comes from the formal care system, the rest comes from family and friends (Chappell et al., 1986). Given the often-stated goal of trying to maintain older people in the community rather than in institutions, the role of these informal caregivers assumes considerable significance. The intersection of the informal support system of family and friends, and formal health and social services, in the provision of care to the elderly is an issue that has been the focus of much discussion in recent years.

Gourash (1978), reviewing the partnership between professional and non-professional support systems, identifies the following ways in which informal social networks affect help-seeking behaviour: (a) by buffering the experience of stress which obviates the need for formal assistance; (b) by providing material and affective support that can also delay the need for formal service; (c) by influencing individuals as to when and where to seek formal services; and (d) by transmitting values, attitudes, and norms that facilitate or discourage the use of formal help.

Despite earlier predictions by some that the availability of formal care could lead to a "shirking of responsibilities" by family members (Biaggi, 1980; Schmidt, 1981), it appears that non-family sources of care supplement rather than displace
family caregiving (Arling & McAuley, 1981). Family members, on the whole, make every effort to look after their aging relatives, and tend to turn to the formal system only as a last resort. The plight of these informal caregivers, many of whom are elderly themselves and in danger of becoming overburdened, is now becoming the focus of some concern to researchers (Chappell et al., 1986).

The Informal Social Support System

The Family. The role of the family in caring for its elderly members has been the subject of much debate in the literature in recent decades. Social norms stressing independence between parents and adult children have led to questions regarding the extent to which older persons in North America are isolated from kinship networks. However, the accumulated evidence documents the strength of intergenerational ties, the continuity of responsible filial behaviour, and the frequency of contacts between generations (Shanas, 1979; Troll & Bengston, 1979). Reports describe the predominance of families rather than professionals in the provision of health and social services, the strenuous family efforts to avoid institutional placement of the old, and the central role played by families in caring for the non-institutionalized impaired elderly (Brody, 1981). Research indicates that older people prefer to live near but not with their children; they desire to remain in their own homes, to retain their independence and to avoid impinging on their childrens' freedom (Harris & Cole, 1980). Although the extended
family with multiple generations living in the same house is rare today (and always was rare), studies show clearly that family ties across the life-course, both emotionally and behaviourally, are strong.

A hierarchy of caregivers appears to exist within the family. With serious incapacity among non-institutionalized elderly who are bedfast and house-bound, the spouse is the most frequent provider of services (Johnson, 1983) and the presence of a spouse is a major factor in preventing institutionalization (Palmore, 1976). Among widows or widowers, the child is the one who provides support while siblings and others are relatively inactive (Lopata, 1978), but among the childless unmarried, other relatives assume at least perfunctory care (Johnson & Catalano, 1981). These findings support the "principle of substitution" (Shanas, 1979) which implies that family members are available in serial order so that if one individual cannot respond, another will step in.

Various studies have made it clear that in the context of caregiving to the elderly, the word "family" means the women in the family, usually elderly wives or middle-aged daughters, or to a lesser extent, daughters-in-law (Lang & Brody, 1983). The caregiving unit is frequently a dyad comprised of the donor and the recipient of support. The caregiver in this situation, one individual providing a large portion of the care to a seriously impaired relative, is subject to a great deal of stress and runs the risk of becoming overburdened. This is especially true of
elderly wives who may have health problems of their own. There is a need for more understanding of dyadic family relationships in old age, and the variation in their support capacities. It is also necessary to find ways, including sex-role flexibility, of distributing filial responsibility more evenly among family members (Johnson, 1983).

Filial Responsibility. In recent years, changing demographic, social, and economic trends have led to increased interest in the subject of filial responsibility. Typically emphasizing duty, protection, and care, the concept of filial responsibility is an attitude of personal obligation towards the maintenance of parental well-being (Seelbach, 1984). In contemporary society, parents have a legal responsibility to provide for their children but the reverse is not true; adult children are not legally bound to do anything for their parents (Fox, 1972; Hueber, cited in Seelbach, 1984). However, there does exist a cultural expectation that families should do as much as possible for their older parents before receiving formal help from outside sources. This situation may present potential difficulties with respect to filial responsibility and the relationship between formal and informal support. The obligations of adults to aged parents are rooted in social, emotional, and moral values, and thus it is not always clear what parents expect or how much children should be prepared to give (Seelbach, 1984). Feelings of filial responsibility may be reduced by certain social trends such as changes in women's
roles, the emergence of variant family forms, and alternative lifestyles. Increasing numbers of divorced, separated, widowed, and remarried middle-aged children create situations in which family relationships may become ambiguous, or may be maintained with less sense of obligation (Seelbach, 1984). In today's society, where three and four generation families are not uncommon, determining which generation should have priority in the allocation of finite family resources and energy is a central issue. This is the kind of dilemma faced by Brody's (1981) "woman in the middle" who is middle-aged, and "sandwiched" between two generations, each needing care.

When deteriorating physical and/or mental health necessitate increasing levels of care for aging parents, intergenerational relationships become even more complex. Older people see their children as their primary and preferred source of help in virtually all situations (Cantor, 1979). However, adult children sometimes find it difficult or are uncertain about the way to respond and to provide support while meeting responsibilities in their own immediate families. Parents may fail to comprehend their children's resistance to what they, as parents, perceive to be real and legitimate demands, while children ineffectively clarify their own reluctance to respond to their parents' expectations (Seelbach, 1984). The filial support system is not always adequate to meet the needs of the elderly. Adult children may be physically, economically, or emotionally unable to provide long-term care to older parents. In some cases the
amount of help required is so great that it is disruptive to
normal family functioning; some take on filial responsibilities
to the detriment of other individual and family responsibilities
(Walter, 1982).

Cicirelli (1981) describes the phenomenon of "filial
anxiety" which results from children's anticipating the
potential necessity of providing help to elderly parents. The
notion of "filial anxiety" suggests that degrees of personal
strain and negative feelings are not uncommon among the
elderly's offspring. Although frustration may be associated with
the press of competing obligations, the most typical strains are
often not due to secondary problems with spouse, children, or
job, but involve a sense of physical and emotional fatigue along
with persistent feelings of being unable to satisfy the parent
no matter what one does (Cicirelli, 1981; Silverstone & Hyman,
1976). This response has clear implications for family
therapists and service providers as they strive to strengthen
the informal support system (Seelbach, 1984). This point will be
enlarged upon later.

Summarizing the preceding discussion of the family, the
research literature suggests that the family plays an active
role in the care of the elderly, but support can be vulnerable
to strain, especially if the disability is severe and prolonged.
Family relationships, particularly those between parent and
child, are sometimes problematic in old age carrying the
potential for unwanted dependency and conflict (Ward et al.,

35
Current norms do not allow older people to make demands on the young except in matters of illness or dire necessity (Lowenthal & Robinson, 1976). Help-seeking has been found to decline consistently with age and it is possible that the aged, with values of self-reliance, may be reluctant to burden a limited number of family members with many requests for assistance, or may not want to appear incapable of coping with their problems (Gourash, 1978). On the other hand, adult children frequently place too much emphasis on strategies of helping in which they attempt to provide whatever the elderly parent requests or needs; such a tendency may lead to learned helplessness and premature dependence (Cicirelli, 1981). Functional relationships are, in part, determined by the ability of children to view their parents as individuals who desire affection and caring while recognizing the necessity of individuality and independence (Quinn, 1984).

**Friends and Neighbours.** Friends and neighbours are an important source of support to supplement, and at times replace, that offered by families. Some people have reported longtime friendships which have been maintained into old age. Others have reported a decrease in friendships primarily because friends have died or moved away, and the difficulty that old people have in making new friends. Older people in good health are more likely to visit with friends, but with declining mobility and limited transportation these visits may be curtailed. Men and women show different patterns of friendship; for instance,
widowhood restricts friendships for men, while women tend to develop more intimate relationships with female friends (Lowenthal & Robinson, 1976).

It has been suggested that for people of all ages interaction with friends is valued more highly than interaction with relatives because of the voluntary nature of friendship (Adams, 1967). However, others have reported that relations with kin and those with friends are usually managed separately and are not really competitive. Relations with children are based on emotional ties and those with friends on reciprocity. In both contexts considerable mutual aid is evident (Johnson, 1971). Although relatives are turned to first in the case of a health crisis, friends and neighbours are often helpful in relieving relatives of care.

Johnson and Catalano (1981) report that friends are a viable source of support in meeting the needs of sociability, but are less likely than kin to increase their support involvement to include instrumental functions with the onset of impairment. Kin ties are generally assumed to contain the affective, human element associated with expressive support, but these relationships are also characterized by aspects of obligation. Although friends may become involved in the type of emotional interaction which makes them seem "just like family," this is not necessarily an expected component of such relationships (Chappell et al., 1986). Wentowski (1981) found that regular exchange was particularly important in defining responsibility.
of non-kin for each other. Because of their proximity, neighbours are especially responsive in situations involving daily observation such as checking on a sick person. They may even assume responsibilities usually assigned to kin, especially if kin are unreliable or unsympathetic. Friendship networks, then, may serve a complementary function to kinship networks, and may even help to strengthen the latter by relieving some of the burden of caretaking kin. These findings are consistent with those of Coe et al. (1984), reported above, on the value of either complementary or compensatory interactions with kin and friend support networks.

Chappell et al. (1986) have argued that as well as the family/non-family distinction which is always addressed, there is justification for making a further distinction between peer and intergenerational relations in the social support literature. There are several reasons why elderly peers (e.g. friends, siblings, cousins) might constitute a different category than intergenerational relations. Older people share many experiences with others in their age cohort. They have lived through the same historical period with its wars, Depression and so on. Many elderly individuals share the same role exits, for instance from parenting, work and marriage, as children leave home and as retirement and widowhood become realities (Blau, 1973). They also share other circumstances such as adjustment to declining health and even to impending death, subjects which they may be reluctant to discuss with younger
family members. Age peers, then, have common interests based on similar generational experiences in a rapidly changing society. The significance of friendship and peer interaction in old age is not well understood and is an area of research requiring more attention (Chappell et al., 1986).

**Summary.** A large body of research indicates that the majority of elderly people have the basic ingredients for informal social support. However, for some, adequate support is not available. For example, not all people marry and/or have children. The incapacitated, childless unmarrieds represent a particularly high-risk group (Johnson & Catalano, 1981). Furthermore, changes in one's supportive network may occur over time; elderly people are likely to have to contend with widowhood and a gradual diminishing of their peer group as friends and siblings die. While the effectiveness of even one confidant in affording support has been demonstrated, the person with only a solitary confidant is highly vulnerable to disruption in that relationship, whether from accident or change. This is frequently the situation for older, childless married couples with a long history of intimacy and interdependence. These people, as a group, have the most limited pool of potential supporters (Johnson & Catalano, 1981).

Finally, although empirical research has clearly dispelled the myth of abandonment of the elderly, Cicirelli (1981) cautions against embracing the "countermyth" that adult children automatically can and will provide adequate and effective help
to their dependent elderly parents.

The Formal Social Support System

Formal support services are provided by government, private, and voluntary service agencies and the professionals and paraprofessionals who work for them. They include physician and hospital services and long term care institutions as well as a range of health care and social programs. In a discussion of the formal system, the emphasis is usually on "care" rather than "support", reflecting the likelihood that formal services will be provided to those with more serious physical and mental health problems.

It has been previously noted that supportive health care and social services are especially required for "the frail" elderly and their families (Neugarten, 1983). The availability of formal help can assist the informal support system in meeting the needs of these frail older people, particularly if needs are severe and long-term, by alleviating the burden of care. By assuming more of the instrumental tasks, social services and programs may enhance the likelihood that adult children, or other informal caregivers, will be able to meet the affective and social needs that elderly people deem to be important (Quinn, 1984).

As well as the more comprehensive types of care, there is a need for part-time and respite care, counselling and group services, and ongoing education. In a study by Archbold (1981), those functioning as caregivers to impaired older family members
identified the following priority needs: (a) help with physical care; (b) periodic relief from caregiving duties; (c) information about parents' limitations and ways to manage common problems; (d) help to track down and evaluate services; (e) economic support for services; and (f) groups in which to discuss problems encountered in the caregiving situation (e.g. self-help groups, therapy groups). Many families receiving home help still feel burdened. There is a need to explore the questions of which families can be helped, to what degree, and by what kind of services (Hirschfeld, 1983).

In a comprehensive discussion of the topic, Chappell et al. (1986) question the adequacy of the formal care system, as it is presently organized, in meeting the needs of an aging population. The authors note the dominance of the medical model in the health care systems of both Canada and the United States, with emphasis on the services of physicians and hospital and long term care settings. In particular, the present health care system has been criticized for its failure to address the needs of the chronically ill elderly or to develop programs which will allow more flexible relationships between informal and formal caregivers over a long period of time (Chappell et al., 1986). The significance of a chronic disease depends largely on the extent to which it limits an individual's ability to function: this may be influenced by not only medical, but also social, economic, and environmental factors. Chappell et al. (1986) point out that although long term care has both social and
medical components, the emphasis in the current system has been on the latter component. The authors note the prevalence of arguments in favour of the establishment of more community social services which would fill a gap currently existing in a continuum of services. They also point out the difficulty of systematically evaluating both the need for, and the efficacy of, such programs. However, while research is lacking in the area, there is general consensus that the current provision of community social services is inadequate. Where data exist, they point to the potential benefit of such programs to an elderly population.

Chappell et al. (1986) suggest that a health care system more appropriate to an aging society would still provide some institutional services, but would be based on a broad definition of health and would also make adequate provision for non-institutional chronic care. They suggest that a reorganization integrating the formal and informal care systems would better meet the needs of an aging population. This approach to service delivery has also been proposed by other gerontological researchers (e.g. Arling & McAuley, 1981, Brody, 1981).

**Summary**

Older people, like people of other ages, vary in their social and health care needs. Most older people cope alone, or with minimal help from family and friends. Others receive a
mixture of formal and informal services in their homes, and still others require total care in an institution. A large proportion (80%) of the care needed by the elderly is currently provided by family and friends, with the rest coming from formal services. The important role of the informal support system in providing care to the elderly is now widely recognized, but questions are being asked as to whether too much is being expected of these informal caregivers. It has been pointed out that if these relatives and friends become overburdened, they may themselves then be in need of care.

At the Twelfth International Congress of Gerontology held in Hamburg in 1981, participants in a symposium on care for the caregivers of the elderly were in agreement on the following issues: (1) there is a need to re-organize health care systems and their financing so that families coping with physical and mental decline can receive support before a breaking point is reached, (this includes answering the needs and wishes of individual old people, without families, who are managing marginally and supported by neighbours, volunteers, and friends); and (2) there is a need for a wide range of innovative services and the development of programs specifically designed to alleviate the family impact of caring for a severely impaired relative (Hirschfeld, 1983).

In sum, adequate health care and social services need to be made available to those elderly people who require them. Support services are also needed for the informal caregivers who provide
a large proportion of the care to frail older relatives and friends. However, although some physical, economic, social, and psychological declines may be expected among the elderly population, we must not lose sight of the fact that the large majority of the "over-65's" fall into "the competent" category (Neugarten, 1983). Seelbach (1984) suggests that "The central or immediate task for family members and for professionals is the avoidance of a tendency towards premature or unnecessary dependencies in later years" (p. 92).

Supportive social relations have important implications for both instrumental and emotional independence in older people. Instrumental independence may be encouraged directly through the provision of informal care, which reduces the need for government service; or indirectly, by contributing to general health and well-being (Berkman, 1983). Psychological independence, or autonomy, is also enhanced by supportive social relationships which promote self-esteem and a positive self-concept in the elderly. The availability of adequate social resources (as well as personal resources) is significantly related to effective coping responses in older people (George, 1985). These issues will be explored in the next chapter.
CHAPTER IV
PERSONALITY

It will be recalled from Chapter I that in the present investigation of independent living in the elderly, an interactionist perspective has been adopted which proposes that behaviour in a given situation will result from the interaction of social and personal resources and liabilities. In the previous chapter the relationship of social resources (social support) to independent living was examined. Attention will now focus on psychological factors, or personality characteristics.

People age in very different ways and use a variety of approaches to deal with the challenges of life which they encounter. Studies suggest that personality characteristics may play an important part in explaining these differences (Costa & McCrae, 1983; Kobasa, 1979). Personality is a construct which has received little attention in the gerontological literature. Research in this area, besides being limited, has generally yielded inconsistent and sometimes confusing findings (Lieberman & Tobin, 1983). In part, this may reflect a lack of consensus on the meaning of the construct: diverse approaches to the definition of personality by various authors are reviewed by Staub (1980).

Where personality has been investigated in relation to aging, it is usually within one of two main branches of inquiry: life-span development, or the "stress" model. Life-span
psychology is concerned with questions of continuity and change. Although no consistent results have been forthcoming from this body of literature, recent longitudinal studies have provided evidence for the enduring nature of personality characteristics throughout life (Costa & McCrae, 1980). Other researchers have attempted to discover personality traits that mitigate the negative consequences of stress. In general, efforts to link personality dimensions to stress adaptation have produced mixed results and have met with limited success (Lieberman & Tobin, 1983).

Despite the fact that the role of personality characteristics in explaining behaviour in the elderly is not well understood, the construct is usually not ignored. Frequently, personality dimensions are seen as intervening variables, particularly in the stress adaptation literature. Stress, and its potential harmful effects on people, has been the focus of a great deal of research in recent decades, but, stress cannot be understood without some consideration of the characteristics of individuals under stress. Costa and McCrae (1983) have suggested that personality traits influence the stressful events people encounter, the perception of them as stressful, the choice of coping mechanisms, and the outcomes of psychological distress and satisfaction.

A number of investigators have been interested in "coping" as an important mediator in the stress-illness process. An understanding of coping strategies is relevant to any study of
physical and psychological independence in the elderly, who are especially vulnerable to the negative consequences of increased environmental stress as well as diminished psychological and social resources. Other issues which are related to independence and general well-being in older people are those concerned with the concepts of mastery, control, and self-image, as well as the relationship of specific personality traits to behaviour. A brief review of the theoretical underpinnings and major contributions in these various areas of interest will be undertaken in the present chapter.

Theoretical Background

Several psychological approaches to personality theory, including the psychodynamic approach, the psychosocial or role approaches, and the developmental approaches have been extended to explain some of the phenomena of old age. Two well-known, and apparently contradictory, theoretical perspectives, activity theory and disengagement theory (which have already been considered in relation to social integration), focus on the relationship between social activity levels and well-being in later life. Activity theory (Neugarten et al., 1961) implies that, except for inevitable changes in biology and in health, older people have the same psychological and social needs as middle-aged people. The older person who ages optimally is the person who stays actively engaged in a variety of social roles and who manages to resist the shrinkage of his/her social world.
S/he maintains the activities of middle-age for as long as possible, and then finds substitutes for those activities s/he is forced to relinquish. Disengagement theory (Cumming & Henry, 1961), on the other hand, proposes an inevitable process of mutual withdrawal between the aging individual and his/her social world which is regarded as both functional for society and satisfying for the individual. It is suggested that the individual's withdrawal has intrinsic or developmental qualities, as well as responsive ones, being accompanied by increased preoccupation with the self and decreased emotional investment in the environment.

These two, very general, approaches may both be considered valid. One can understand human development throughout the life-span as a continuous process of getting engaged in new, and simultaneously disengaged from previous, social commitments. However, neither activity theory nor disengagement theory provides an adequate framework within which to explain the psychological and social phenomena of old age; individual differences in personality have been seen as crucial dimensions in predicting relationships between levels of social role activity and satisfaction (Neugarten, 1965; Thomae, 1980).

At the height of the activity/disengagement controversy twenty years ago, two studies on personality differences in the aged made significant contributions: one by Neugarten et al. (1964), and one by Reichard, Livson, and Peterson (1962). The Neugarten et al. (1964) study of 59 elderly subjects, rated on
45 personality variables, yielded four personality types: the integrated, the defended, the passive-dependent, and the unintegrated. Reichard et al. (1962), on the basis of 115 personality ratings, described five personality patterns: the mature, the rocking-chair, the armoured, the angry, and the self-haters. While these studies emphasized important individual differences in personality in later life rather than viewing "the aged" in a global way, they suffered from some methodological limitations.

In a more recent study, Gaber (1983) attempted to identify and statistically validate personality types, using a well-standardized, objective measure of personality. He described four groups: the normal, the introverted, the perturbed, and the mature-integrated. Comparison of his results with those of the two earlier studies are somewhat difficult because of the nature of the latter's personality criteria, but at a descriptive level some similarities can be seen. Gaber particularly noted that there was general agreement as to the existence of a small sub-group of older individuals, living within the community, who suffer from major psychological deficits. The ability to identify and assist such a group may have important implications in terms of service delivery.

A developmental orientation is reflected in investigations that focus on personality and adaptation. Although there has been some limited success in relating particular personality styles to successful adaptation in the latter stages of life,
few generalizations can be made from these studies (Lieberman & Tobin, 1983).

Many prominent social psychological approaches to adjustment in later life, rather than concentrating on personality traits directly, have emphasized social activity and role loss. In general, studies report that long-term negative effects following such events as retirement or widowhood have tended to be relatively small, or even absent. These studies suggest that the role theory approach to decremented life changes, which are typically associated with aging, may be of limited usefulness (Duckitt, 1983). An alternative framework is the broader stress model which has emerged from the work of Holmes and Rahe (1967). Such an approach focuses on the readjustment and coping strains resulting from multiple life changes occurring in close temporal sequence. For example, Palmore et al. (1979) reported that while individual role losses had relatively little effect on the well-being of older people, the recent occurrence of multiple life events had a far stronger and cumulative impact on adaptation. Others point out, however, that simple assumptions concerning connections between the intensity and timing of life events and psychic or somatic disorders is misleading, especially since many individuals do not suffer major damage following a confrontation with critical life events (Ahhammer & Braukmann, 1983; Kobasa, 1979). Attention has now turned to efforts to describe intervening factors which may mitigate the potentially harmful effects of stressful experiences. These
factors include coping mechanisms, which in turn are influenced by social and psychological, or personality, dimensions.

**Stress and Coping**

An interactionist, or process-centered, approach to the study of stress and coping in aging is evident in the recent work of a number of researchers (Lazarus, 1981; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Lieberman & Tobin, 1983). Earlier research documenting an association between life events and psychological distress has been criticized on the basis of both implicit assumptions and methodological shortcomings (Lazarus, 1981; Pearlin & Schooler, 1978). A major problem with this approach is the exclusive emphasis on change and the failure to consider mediating processes such as the personal significance of an event and the varying coping resources and practices of people facing it (Lazarus, 1981).

Coping is a process occurring in an individual who brings commitments and concerns into a given situation (Lazarus, 1981). It comprises behaviours, both overt and covert, that are employed to reduce or eliminate psychological distress or stressful conditions. The choice of coping mechanisms can moderate the degree to which psychological distress results from social stress (Fleishman, 1984).

Research in this area has addressed three issues: (1) the development of a typology of coping behaviours; (2) an
examination of the impact of coping on psychological distress; (3) an investigation of factors affecting the use of different coping behaviours. Like social support, coping is not a unidimensional phenomenon; it includes a number of different types of behaviour. For example, Folkman and Lazarus (1980) differentiate problem-focused from emotion-focused coping. The former refers to acts taken to remove or mitigate the source of stress (e.g. negotiating a compromise, changing jobs), whereas the latter refers to attempts to reduce psychological distress (e.g. looking on the bright side, turning one's mind away from the problem). This differentiation is analogous to the instrumental/emotional distinction which was identified earlier in relation to dependency (Munnichs, 1976) and social support (Thoits, 1983).

Pearlin and Schooler (1978) classified coping behaviours into three categories: responses that change the situation; responses that alter the meaning or appraisal of the stress; and responses intended to control distressful feelings. The first category corresponds to problem-focused coping, while the second and third categories suggest an emotional focus. Others have proposed similar typologies (e.g. Billings & Moos, 1981) but a consensus on a clear-cut typology of coping remains to be achieved.

Different types of coping may differ in their antecedents and consequents and differ in their efficacy for reducing distress. Factors that have been thought to influence the choice
of coping behaviours include: aspects of the stress-producing situation (e.g. work, health, family); sociodemographic variables (gender, age, education, income); and personality characteristics. In general, studies show that there are virtually no age-specific differences in coping strategies and there is only a moderate stability of coping patterns across stressful situations and over time.

The choice of coping response may be influenced by whether an event is seen as controllable or uncontrollable, and whether the situational context is interpersonal or impersonal. (People may have different perceptions of their ability to control the social and the non-social environments).

According to Pearlin et al. (1981), coping is not a set of general dispositions that is aroused regardless of the problems people face. Rather, it is specific behaviours that vary with the substance of peoples' problems and with the social roles, or context, in which the problems emerge. In other words, situational factors appear to be more influential than personality factors in shaping the particulars of the coping process.

The relationship of certain personality characteristics (mastery, denial, self-esteem) to the use of coping behaviours in stressful life situations was studied by Fleishman (1984). He found that the effect of personality variables in coping behaviour was specific; each personality characteristic
influenced some behaviours and not others. For example, mastery affected problem-focused coping only in the areas of work and finance, while the influence of this characteristic on instrumental acts in marriage and parenthood was weak. Fleishman concluded that, contrary to what might be expected, people cannot be categorized as, for example, active, masterful copers, or passive deniers. This conclusion is consistent with that of Pearlin et al. (1981) and also that of Folkman and Lazarus (1980) who found that most people used a combination of problem-focused and emotion-focused coping, in varying proportions, over several stressful episodes. From an interactionist perspective, coping, like all behaviour, is seen as a product of both personal and situational influences.

The limitations as well as the efficacy of coping strategies have been noted (Pearlin et al., 1981). For example, individual coping seems to be quite ineffective regarding problems with formal organizations, e.g., their authority and reward systems. Coping is most effective in dealing with problems involving face-to-face relations such as those encountered in the family. This particular finding has important implications for older persons in institutional settings.

The concepts of mastery, control, and self-image are important to many of the process-centred approaches to stress, coping and adaptation in later life (Lazarus, 1981; Pearlin et al., 1981; Lieberman & Tobin, 1983). These concepts will be explored briefly since they are relevant to the present study.
Mastery and control

Reid et al. (1977) demonstrated the significance of perceived control to adjustment and well-being in the elderly, especially in those areas that they evaluated as most important. A distinction is made between the locus of control for a particular event (does the person cause or anticipate the event?) and the locus of control for handling the event (does the person accept responsibility for coping with the event?). Another differentiation is made between actual locus of control (can the person control events in his/her life?), and perceived locus of control (does the person feel that s/he has control of life's events?). As perceptions of lack of personal control (i.e. perceptions of external control) become increasingly global and stable, such psychological deficits as depression and helplessness are likely to become general and chronic (Abramson, Seligman & Teasdale, 1978).

It has been pointed out by Lazarus (1981) that one's beliefs about control will affect ways in which stressful encounters are appraised in respect to well-being and will also affect ways of coping. He distinguishes "efficacy expectations" from "outcome expectations:" the former involves beliefs about one's own behaviour (one can perform the act of coping effectively); the latter refers to beliefs about the environment (that it will be responsive to one's efforts). Psychological stress will ensue if the person believes a given course of action will produce a desired outcome, but nevertheless doubts his/her capabilities to
act effectively. Similarly, stress occurs even when the person is confident about what has to be done but doubts that the environment will respond favourably. The coping strategy will reflect such appraisals; it will be shaped by both the nature of the situation and by beliefs about personal control (Lazarus, 1981).

A feeling of personal power, or the ability to influence one's environment, and self-determination are characteristics of the competent older person (Kuypers & Bengston, 1984). A pessimistic, hopeless, or helpless perception yields to inaction and dependency, or the negative consequences of perceived external control described by Abramson et al. (1978).

Lieberman and Tobin (1983), investigating adaptation to stress among four groups of older people facing institutional placement, attempted to develop a predictive model which would account for individual differences in reaction to a common, highly stressful event. They found that the most potent management strategy was the creation, in the aged person, of a view that s/he had mastery and control over his or her life and over the impending crisis. The greater the perceived mastery and control, the less likely were depressive reactions after relocation, which in turn affected long-term outcomes. This procedure resembles Lazarus's (1966) "secondary appraisal," and implies a certain degree of myth-making (a point that will be taken up in the following section). This myth-making tendency is also referred to by Corin (1982) who found that the older
person's belief in being in control was an adaptive coping strategy.

*Self-image*

Successful adaptation may be defined in various ways, including either enhanced competence, or the maintenance of homeostasis. It is the latter definition which is used by Lieberman and Tobin (1983) in measuring adaptive outcome in their relocation stress studies. In a proposal closely related to Munnich's (1976) discussion of autonomy (see p. 12), the authors suggest that the task of the older person under severe stress is to maintain a sense of self-continuity, integrity, and identity, a task upon which psychological survival depends. It is towards this conservation of self that the psychological work and coping efforts of individuals are directed. For many older people under extreme stress (e.g. institutional placement), the self is severely challenged because the opportunities for maintaining a constant and coherent self, which are ultimately dependent upon input from the external world, are radically altered. Under these circumstances, the elderly utilize strategies to maintain a sense of selfhood, strategies representing myths of control and self-constancy and a blurring of the boundaries between the past and the present. According to Lieberman and Tobin, a sense of mastery and control over crises, and the sense of an enduring and affirming self, based on a re-creation of one's personal story (e.g. reminiscing), are all adaptive. They note, however, that beyond a certain level, a
distortion of current interactions to support a persistent self-identity increases, rather than minimizes, the risk associated with stress. Lieberman and Tobin found that those elderly who were able to support consistent self-images remained intact in the face of radical environmental change, whereas those who could not find meaningful ways of maintaining their self-image showed significant deterioration. This appears to be a crucial issue for the aged. If they are unable to maintain a sense of self, which is a necessary condition for coping adequately with aging, older people may have to turn to processes of constructing fantasies about the self. This process in turn diminishes their ability to mobilize resources necessary for the task of making the numerous adaptations confronting them.

A Life-stage Perspective on Coping and Adaptation

According to Lieberman (1975), the characteristics or processes shown by many investigators to predict adaptation at earlier life stages are not the same as those which predict adaptation in old age. He suggests, therefore, that processes for adequate coping with crises may be life-stage specific. For example, contrary to most studies of stress adaptation in the young, not ego strength and impulse control but, rather, the maintenance of a coherent and consistent self-image were significant predictors of adaptation in the elderly. Also, in the area of personality characteristics, aggressive, narcissistic, and demanding traits were associated with
adaptation, while those individuals displaying passive acceptance were the least well adapted.

These findings, based on studies of older individuals' adaptation to institutional placement, suggest some questions. One wonders if the particular personality traits mentioned would be adaptive in an older person facing any crisis, or are they specifically associated with survival in an institutional setting where the individual tends to become more anonymous? Would the same behaviour be adaptive, for instance, in a person dealing with severe stress (e.g. a leg amputation) living at home or with a family? It will be recalled from the coping literature that many personal strategies for coping were less efficacious in an impersonal, organizational setting, but were more reliable in interpersonal situations. If usual coping responses are ineffective, personality characteristics,¹ such as aggressiveness, may become a primary predictor of adaptation to stress. Possibly these usually negatively evaluated behaviours are related to mastery, or the belief that one has control over one's life. It may be easier to maintain a consistent self-image if, for example, aggressiveness is equated with mastery which contributes to a positive self-concept and is, in turn, predictive of adaptation.

The foregoing discussion raises a further important point in relation to the stress and coping issue, namely, the difficulty

¹ See Chapter I for a discussion of the difference between "coping responses" and "personality characteristics."
of evaluating the effectiveness of coping responses. This difficulty is emphasized by George (1985) who notes the necessity of considering various factors: the severity of the stress; the availability of personal and social resources; whether immediate or long-term consequences should be considered; and whether the effect should be related only to the well-being of the individual or, also, to those in her/his social environment. For instance, George points to the individual who preserves his/her self-esteem by making life miserable for others, and asks whether such self-protective, but interpersonally destructive strategies, represent effective or ineffective coping. These are thorny questions with no clear-cut and empirically-supported answers at present, but which suggest important areas for further research.

Personality Traits

In the coping literature, personality traits are not the central issue but, rather, are seen as one of the personal resources which will interact with situational features to produce specific coping responses; these in turn may mediate the experience of psychological stress. Other investigators have focused attention more directly on the significance of personality characteristics in predicting behaviour (Costa & McCrae, 1980; Kobasa, 1979).
Kobasa (1979) studied personality as a conditioner of the effects of stressful life events and illness onset in a group of businessmen. She found that, by comparison with high stress/high illness executives, high stress/low illness executives have more "hardiness." The latter group are distinguished by their sense of commitment to (or lack of alienation from) self, and the activities of their lives; their sense of control (as opposed to powerlessness); and their sense of challenge (as opposed to threat) towards life. Kobasa singled out a strong sense of commitment to self as being particularly critical in staying healthy under stress. The self-committed individual has a clear sense of his/her values, goals, and capabilities, and a belief in their importance. Kobasa's conclusion bears some similarity to that of Lieberman and Tobin (1983) who found, in their study of older people, that the maintenance of an "enduring and affirming self" was a critical predictor of adaptation under stressful conditions.

Neuroticism and Extraversion

The longitudinal studies of Costa and his associates (Costa & McCrae, 1980; 1983; Costa, McCrae, & Norris, 1981) have contributed substantially to our understanding of personality and aging. Since this body of work, focusing specifically on the dimensions of neuroticism and extraversion, is very relevant to the present study, it will be discussed in some depth.
Contrary to earlier theories of adult development which suggested changes in some aspects of personality (e.g. Erickson, 1950), Costa and McCrae, and others, have found personality traits to be relatively enduring into old age. Popular stereotypes frequently portray the elderly as cranky, withdrawn or depressed. Yet longitudinal studies show only a very small change in activity level and no evidence for changes in sociability and emotional stability across the life-span. Images of individuals who are withdrawn and hostile are likely based on those in institutions who suffer from dementia or organic brain syndrome. Among individuals in good neurological health, aging does not have a predictable effect on personality disposition (Costa & McCrae, 1980). Costa and McCrae have found a high level of retest stability for a range of personality traits for intervals of from eight to thirty years. For example, an individual who was extraverted in youth is likely to be extraverted in old age, and an older person who is closed to experience was probably closed as a young adult.

Interest in the quality of life has resulted in numerous efforts by researchers to measure and identify the correlates of happiness or subjective well-being. This body of literature was reviewed by Costa and McCrae (1980), who found that the bulk of studies of the personality correlates of happiness could be summarized by saying that the more extraverted and more adjusted people are happier. The authors propose that one set of traits (components of extraversion) influences positive affect or
satisfaction, whereas a different set of traits (components of neuroticism) influences negative affect or dissatisfaction. These conclusions are similar to those of Bradburn (1969) who developed the Bradburn Affect Scales. Of special interest in that work is the finding that when positive and negative affects were individually measured, the items formed two independent clusters. Bradburn's (1969) Positive Affect Scale (PAS) and Negative Affect Scale (NAS) were not opposite (negatively correlated) but independent, virtually uncorrelated. Yet both positive and negative affects were associated with overall estimates of happiness. The conclusion that positive and negative affects are independent predictors of global happiness has been supported by several other investigators (Lowenthal, Thurber, & Chiriboga, 1975; Andrews & Withey, 1976).

In developing their model of individual differences in levels of happiness (and the corresponding measurement instrument, the NEO Inventory), Costa and McCrae (1980) broke down the characteristics listed under the heading of psychological and social adjustment into two discrete groups: Extraversion and Neuroticism. Extraversion (E) includes sociability, warmth, involvement with people, social participation, and activity. Neuroticism (N) includes ego strength, guilt proneness, anxiety, psychosomatic concerns, and worry. Extraverted traits contribute to one's positive enjoyment or satisfaction of life although they do not generally reduce the unpleasantness of adverse circumstances. Neurotic traits
predispose one to suffer more acutely from one's misfortunes but they do not necessarily diminish one's joys or pleasures. The two components E and N are subjectively "balanced" by the individual to arrive at a net sense of subjective well-being.

Low N introverts and high N extraverts may have similar levels of life satisfaction or happiness, but they achieve this result in utterly different ways. The former are seldom depressed but just as seldom elated. The latter are prone to both extremes and reach "average" satisfaction only because there is as much satisfaction as dissatisfaction in their lives (Costa & McCrae, 1980, p. 676).

The two groups may be comparable but many differences also exist between individuals who show similar levels of subjective well-being.

The finding that neuroticism is highly stable has implications for research in the field of stress and coping. For example, an individual manifesting signs of anxiety, depression or hostility probably has a past history of these symptoms and will continue to show them in future years. In most research on stress in humans, the outcome is usually some subjective state of the individual such as subjective well-being, morale, or various indicators of mental health; however, all these criteria are also related to the personality disposition of neuroticism. "At any given time, the person high in neuroticism is more
likely to report being unhappy, lonely, frustrated, or
distressed, regardless of the presence or absence of objectively

Clinicians working with the elderly may also receive
distorted impressions. Older persons high in neuroticism may
complain that they feel depressed, lonely and isolated, and may
attribute these feelings to neglect by their children; and on
the basis of many such cases the clinician may believe that
older people really are neglected. It is possible that such
clinical impressions are biased by the disproportionate number
of distressed elderly that they see, but also, the alienation
which the clients report may not be the result of neglect but,
rather, a manifestation of long-term neuroticism. Possibly, if
their children spent more time with them, these individuals
might complain just as strenuously that the children were
interfering in their lives (Costa & McCrae, 1983).

Efforts to understand the determinants of well-being in the
elderly have identified social interaction as being a
significant dimension. However, as previously noted, many
researchers have concluded that quantitative variables are poor
predictors of well-being, and that it is the qualitative aspects
of interpersonal exchanges that will lead to a broader
understanding of the process of adjustment to aging. One of the
interpretations of the association of extraversion and
neuroticism with well-being is pertinent to this issue.
"Extraverts characteristically show warm, expressive
interactions, while the personal relations of individuals high in neuroticism are often characterized by hostility or self-consciousness" (Costa et al., 1981, p. 83).

Costa et al. (1981) suggest that neuroticism and extraversion have many behavioural correlates and one or the other of these personality dimensions may be the "third variable" which accounts substantially for correlations between well-being and such variables as perceived health, activity level, or the use of a confidant. For example, perceived health is the variable most highly correlated with psychological well-being (Larson, 1978). Research has shown that perceived health is a function of both objective health status and neuroticism (Blazer & Houpt, 1979). "Adjusted extraverts are likely to be cheerful even when sick and neurotic introverts will find a new source of unhappiness when health is no longer a problem" (Costa et al., 1981, p. 84). Costa et al. suggest that studies investigating the various correlates of psychological well-being and independence should take steps to control for personality dispositions by, for example, administering standard measures of neuroticism and extraversion.

Summary

On the whole, personality has not been the focus of much attention in the gerontological literature. Studies of age and personality have produced a variety of findings and few
generalizations can be made (Lieberman & Tobin, 1983). For example, attempts to relate specific personality types or styles to adjustment to aging have met with limited success.

In the large body of literature concerned with adaptation to stress, personality is seen as one of several factors which affect coping responses, which, in turn, can moderate the potentially negative effect of stressful experiences. In particular, the dimensions of mastery, control, and self-image, which have important implications for independence and well-being in the elderly, have been given attention in the "coping" studies. Depending upon the orientation of the researcher and the measures used, personality may assume a more or less important role in these studies, which generally adopt an interactionist or process-centered approach. Overall, attempts to link specific personality dimensions to stress adaptation have failed to achieve a consensus.

One of the few lines of inquiry focusing more directly on the relationship between personality characteristics and behaviour in the elderly, is being pursued by Costa and McCrae (1980; 1983). In a series of longitudinal studies, these authors have found evidence for the enduring nature of personality traits throughout the life span. In particular, the personality dimensions of neuroticism and extraversion may have important implications for other areas of research such as those concerned with stress and coping, or with social relationships, in the elderly. Furthermore, by extension, one might expect to find a
significant relationship between these personality dimensions and the ability of older people to live independently.
CHAPTER V

THE RESEARCH HYPOTHESES

The foregoing review of the literature supports the proposition that both social support and personality characteristics will be associated with independence in older persons. In particular, it is suggested that the subjective evaluation of one's social network as supportive or otherwise is a critical predictor, and that this could be strongly influenced by personality factors, specifically neuroticism, and to a lesser extent, extraversion.

The purpose of the present study, therefore, was to examine the relationship of both objective and subjective measures of social support, and personality characteristics, to independent living in the elderly. Independent living, the dependent variable, was here defined by the amount of formal service being received by Long Term Care clients (i.e. the most independent clients receive the least amount of service).

This correlational study was designed to examine relationships in an effort to further conceptual understanding. No attempt was made to draw causal inferences.

The following specific hypotheses were tested:
1. There will be a positive relationship between objective social support and independent living.
2. There will be a positive relationship between subjective
social support and independent living.

3. There will be a negative relationship between neuroticism and independent living.

4. There will be a positive relationship between extraversion and independent living.

A secondary interest in this study involved the relationship between self-esteem and social support, and between self-concept and social support. Social support, particularly the qualitative dimension of support, has been hypothesized to contribute to self-esteem and positive self-concept in older people (Quinn, 1983).
PART B

THE EMPIRICAL INVESTIGATION
CHAPTER VI

METHOD

Subjects

There were 75 subjects: 64 females and 11 males, all over the age of 60 (mean=79.9), and residing within the Greater Vancouver area. Twenty-five were residents of one of two intermediate care facilities, Haro Park Centre and Youville Residence. Of the remaining 50 community-dwelling subjects, the majority (94%) lived alone in various types of accommodation: house (18%); apartment (40%); bachelor suite in senior's building (32%); basement suite of relative (4%).

Subjects were either not currently married (96%) or, in a very few cases (4%), living apart from their spouses (e.g. subject had an institutionalized spouse). Of the non-married group, 72% were widowed, 14% were divorced or separated, and 14% had never married.

In this sample 33% of the subjects had no children, compared to approximately 20% in the same-aged general population. The high proportion can be explained by the fact that this is a sample of people receiving government service, and having no children may be a contributing factor to the need for such service.

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'Three subjects shared a dwelling with a relative who was absent all day and who provided little or no care.
Procedure

All subjects were clients of the Vancouver or the North Shore Health Departments who had been assessed under the Long Term Care Program (L.T.C.). All persons who are eligible for Long Term Care service have been assessed by a Health Department worker using a standard procedure. The following health areas are covered: mobility, activities of daily living (ADL), physical condition (disease, hearing or sight impairment, frailty), incontinence, and mental functioning. On the basis of these criteria a level of care is assigned: personal care (PC); intermediate care (IC) levels I, II, and III; and extended care (EC). All subjects in the present study were at the IC 1 level of care.

The Vancouver Health Department is divided into seven units, each serving a different area of the city. Because of the necessity of working in cooperation with L.T.C. staff, it was decided to draw subjects from only four separate health units: East, Mid-Main, and Robson units in Vancouver, and the North Shore unit.

From computerized records of homemaker services, a list of approximately 210 clients receiving either low home support hours (8 hours or less per month) or high home support hours (24-46 hours per month), and living alone, was generated. These lists were submitted to the responsible L.T.C. case managers for approval. The names of those persons who were considered
unsuitable candidates for the study were removed.

Individuals were considered unsuitable candidates on the basis of physical conditions such as severe speech or hearing impairment, or, more commonly, mental problems. The latter included confusion, depression, or antisocial behaviour of a severity that would render the person unable or unwilling to be interviewed.

Clients paying a high fee (very few) were also excluded. There is no fee for individuals receiving the Guaranteed Income Supplement (GIS). After a certain level of income, fees are assessed on a sliding scale. Selecting subjects with similar income helped to control socio-economic factors in the study. From the remaining client pool (approximately 169), 50 subjects were randomly selected (by taking every third name), 25 in each of the low and high service categories.

The 25 institutionalized subjects were randomly selected (as above) from a list of all those residents in the two institutions, assessed at level IC I, who had been admitted during the previous year. As with the community-dwelling people, residents considered by the nursing supervisor to be unsuitable (for the same reasons as cited above) were excluded; this was about 10% of the possible subjects.

Of those people who were eventually contacted by the researcher with a request to participate in the study, there were only eight refusals. Reasons for refusal were usually
stated in terms of health, e.g. "I'm not feeling up to it at present." However, a further check with L.T.C. staff indicated that a number of these people had psychological problems (e.g. depression, alcohol abuse).

The profile of those who did not participate in the study, either by their own choice or that of L.T.C. staff, showed individuals with physical impairment (speech, hearing) or psychological impairment (confusion, depression, antisocial behaviour). Since these people, by the nature of their problems, required considerable assistance, the exclusion of such individuals from the study had the most influence on the medium and high service groups by reducing the size of the available sampling pool. This was especially true of the community-dwelling, medium group, since they had to be contacted by telephone, rather than in person, which proved to be an added difficulty.

Data were collected by means of a structured interview. Subjects living in the community were contacted by telephone and, if they agreed to participate in the study, an appointment was made for an interview in their home within the next few days. Institutionalized subjects were approached in person, and upon agreement to participate, were interviewed immediately. All subjects signed an "informed consent" form after the purpose of the study and the procedures to be used had been fully explained.²

²In a few cases, where subjects were hesitant, this form was
For each subject, a set of questionnaires was completed which yielded demographic data and measures of social support and personality characteristics. Although the questionnaires could have been self-administered, it was felt that for this group of older persons, many of whom were limited by such conditions as poor eyesight, arthritis, paralysis, etc., a personal interview would be more appropriate. The interviewer, therefore, recorded the answers to all questions. Since the questions called for straightforward answers (yes/no or a number), this procedure resulted in a minimum of bias. The length of time required for the interview varied, but averaged about an hour and a quarter. All interviews were conducted by the principal investigator; no research assistants were used.

**Measurement**

**Dependent Variable**

*Independent Living*. Subjects were assigned to one of three groups depending upon the amount and type of agency service received. Clients assessed under L.T.C. are eligible for either: (a) home support service; (b) institutional service. At each assessed level of care a maximum number of home support hours per month is allowed; for level IC I this number is 46 hours.

The subjects in the present study, all assessed at level IC I, were divided into three groups: (1) those receiving eight

2(cont'd) signed after the interview was completed.
hours or less of home support service per month (low group); (2) those receiving 24-46 hours of home support service per month (medium group); (3) those admitted to an intermediate care facility during the previous year (high group). These three groups defined the variable "independent living." It was originally planned that the medium group would consist of subjects receiving maximum home support service (e.g. 40-46 hours per month) but there were not enough clients in this category to draw a sample who were able and willing to be interviewed. Consequently this group was expanded to cover 24-46 hours, which provided a larger subject pool.

As pointed out earlier, independence is a multidimensional concept which has been interpreted in a variety of ways, and no consistent approach to the definition and measurement of the concept is evident in the literature. Due to its multidimensional nature, "independence" has to be defined within the context of the specific inquiry being undertaken. In the present study "independent living" refers to instrumental independence (i.e. independence from government service), rather than to psychological or other aspects of independence discussed in the introductory section.

Independent Variables

Social Support. Although the social support literature is extensive, this multidimensional concept has presented a difficult task for instrumentation. Most researchers in the
field of social support and aging have developed their own questionnaires, incorporating concepts from the literature that relate to the particular focus of their study. This practice has resulted in a great diversity of measures of social support matched by a diversity of conceptualizations concerning its ingredients (Coe et al., 1984; Ward et al., 1984; Rundall & Evashwick, 1982; Liang et al., 1980). Although reliable and valid scales are still lacking, several efforts have been made to identify critical dimensions of social networks and social support (which have been distinguished from each other conceptually) and some consensus is beginning to emerge (Mitchell & Trickett, 1980; Thoits, 1982; Berkman, 1983; Quinn, 1983).

Studies typically use either an objective/quantitative, or a subjective/qualitative measure of social support, or, quite often, measures containing both types of items. Objective measures of support deal with observable, countable dimensions such as numbers of relatives/friends, and frequency of contact. Subjective measures, on the other hand, require evaluation of the quality of their social relationships by the subjects themselves.

In the present study the aim was to measure, separately, both objective and subjective dimensions of non-agency social support, so that comparisons could be made.
A modified version of The Social Support Questionnaire (SSQ) (Sarason, Levine, Basham & Sarason, 1983) was used. Sarason et al. developed this instrument in response to what they saw as the lack of a reliable, general, and convenient index of social support. The SSQ yields scores for (a) perceived number of social supports, and (b) satisfaction with social support that is available.

Although the SSQ was developed and tested with college students, it appeared to have general applicability. Good reliability and validity ratings were reported (Sarason et al., 1983). Furthermore, it was one of the few available questionnaires specifically covering the subjective dimension of support, which was considered important. For these reasons, the SSQ was selected for the present study. However, after several trials with elderly subjects, it was found that some changes would make the instrument more appropriate for use with this age group.3 The original questionnaire containing 27 items was too long and the wording of some of the questions was more appropriate for a younger sample. For example:

4. Whom do you feel would help you if you were married and had just separated from your spouse?

2. Whom could you really count on to help you if a person whom you thought was a good friend insulted you and told you that he/she didn't want to see you again?

Since all the questions in the SSQ covered qualitative aspects

3See Appendix A for the revised SSQ and Appendix B for the original SSQ.
of social support, there was considerable overlap in the questions. For example questions 8 and 17 from SSQ:

8. Whom can you really count on to distract you from your worries when you feel under stress?
17. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

are close to question 23:

23. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

Questions 8 and 17 were therefore omitted from the list of questions used in the present study, whereas question 23 was included.

Similarly, question 11 in SSQ:

11. With whom can you be totally yourself?

is adequately covered by either 14 or 19:

14. Whom can you count on to listen openly and uncritically to your innermost feelings?
19. Who accepts you totally, including both your worst and your best points?

The latter two questions were included in the revised SSQ; question 11 was omitted.

Another modification related to the second part of each question in the SSQ, in which subjects are asked to rate their satisfaction with support. Research shows that older people tend to rate themselves as "satisfied" or "very satisfied" virtually all of the time; there is little variation in response to
satisfaction questions. For this reason, it was decided that asking subjects to rate the perceived adequacy of their support would be more appropriate.

The revised SSQ, used in the present study, consisted of 13 items, each of which asked a question requiring a two-part answer. The items asked the subjects to (a) list the people to whom they could turn and on whom they could rely in a given set of circumstances, and (b) indicate how adequate they considered these social supports. People were identified by both their relationship to the subject and by initials. A maximum number of nine persons per question could be listed. The number \( N \) score for each item was the number of support persons listed. The social support available to deal with a given problem was rated on a scale ranging from "very adequate" to "very inadequate," yielding an adequacy \( A \) score for each item that ranged between 1 and 6. Following the procedure used by Sarason et al. (1983), the overall \( N \) and \( A \) scores were obtained by dividing the sum of \( N \) and \( A \) scores for all items by 13.

The revised SSQ was considered suitable for the present study and had some appealing properties: (1) it was brief and straightforward, both important considerations with older people; (2) it covered the issues that have been identified as pertinent in the literature i.e. the qualitative nature of relationships (warmth, sharing, understanding), including the availability of a confidant, and the subjectively perceived adequacy of the relationship.
Although the SSQ had objective and subjective components, it was mainly concerned with qualitative rather than quantitative aspects of social support. To cover the latter component more adequately, the SSQ was supplemented by seven objective questions relating to the numbers of informal supporters (family and friends) in an individual's social network, and frequency of contact in person or by phone. Scores for the seven questions were summed, yielding a maximum possible score of 47. This measure of objective support was called "informal support" (Insup).

**Personality.** Personality was measured by the standardized Eysenck Personality Inventory (EPI) (Eysenck & Eysenck, 1963) which is a well-known and widely used test. The instrument of choice would have been the NEO Inventory (Costa & McCrae, 1980) which was developed and tested specifically for use with older people, but it was in the process of being copyrighted and was, consequently, unavailable. The EPI, however, like the NEO, assesses extraversion-introversion and neuroticism. Similarities between the two scales, especially on neuroticism measures, were noted by Costa and McCrae (1980). The EPI was, therefore, considered suitable for the present study.

The test consists of 24 items for each of the two variables, plus nine items on a lie scale, yielding a total of three scores. A yes-no response format was used. This test reports good reliability (.80-.97) and validity (.67-.74) ratings with

---

*See Appendix A for a copy of the questionnaire.*

---

82
British and American populations (see Dye, 1982). It is a short, easily administered test that had been previously used successfully with older populations (Dye, 1982).

**Self-concept and Self-esteem.** Self-concept and self-esteem were measured by the Duke Semantic Differential Technique (Back & Guptill, 1966). Self-concept is defined as the individual's perception and description of him/herself as an object. Self-esteem is the discrepancy between the actual self and the ideal self. The instrument consists of a seven-item set of bi-polar adjectives on which subjects were asked to rate themselves on a scale from 1 to 7. The subject responded to the same set of adjectives for each of three referents: how I appear to others; what I would like to be; and, what I really am. Scores were summed across items. Discrepancy scores between actual and ideal ratings were used as indicators of self-esteem. Therefore, a low score indicated high self-esteem.

This test is reported to have good reliability and validity (Breytspraak & George, 1982). Reliability scores ranged from .76 to .84 (Breytspraak & George, 1982). Evidence of construct validity has been provided by George (1975); convergent validity by George (1975) and Back (1971); and predictive validity by Back and Guptill (1966). In addition, the instrument has been used successfully with older persons (Breytspraak & George, 1982).
Control Variables

Health. Health has consistently been found to be related to well-being in the elderly and is frequently the most powerful predictor (Larson, 1978). However, in most studies this variable has been measured by self-rating. In the few cases where objective health assessments have been made, the relationship to well-being is less significant (Larson, 1978).

In the present study an objective measure of health status was obtained using Health Department assessments. All the subjects for this study were selected from the IC I group, thus providing a gross matching of all subjects on health as a control.

Socioeconomic Status (SES). SES has also been frequently shown to be related to well-being in the elderly. Since elderly people are usually very reluctant to discuss financial matters, SES is often measured in terms of occupation and education (e.g. Rook, 1984), which was also done here. Further, by eliminating from the study any L.T.C. clients who were paying a high fee for service, it was ensured that all subjects had somewhat similar income levels.

Since all subjects were retired or widowed, their former occupation, or that of their husband, was used. This was measured on a nine-point scale (Hollingshead, 1975).^ Education was also measured on a nine-point scale, and both it and

^See Appendix A for copies of all measurement instruments.
occupation were used as control variables for SES.

Health and SES are the variables most often controlled in the well-being literature; others such as age, sex, and race have been omitted in the present study, since they have not shown any consistent independent relation to well-being in the elderly (Larson, 1978). These findings regarding well-being are relevant to the present study since, as was previously pointed out, well-being and independence are related.

Statistical Analysis

A series of analyses of variance (ANOVA) were conducted to compare the three groups (independent living) on selected measures of social support and personality characteristics. Post-hoc comparisons were made using the Bonferroni technique which controls for the experimentwise error rate for multiple comparisons (Howell, 1982, p. 277).

In addition, correlational and partial correlational analyses were conducted to investigate interrelationships among the three components of social support (Insup, SSQN, and SSQA), and between the social support components and neuroticism.6

Finally, the relationships between each of the social support variables and both self-esteem and self-concept were

---

6A relationship between neuroticism and the individual's subjective evaluation of his/her social support system is proposed by Costa and McCrae (1983).
investigated through a series of partial correlations. Separate multiple correlations were also performed for self-esteem and self-concept, using the three social support scores as predictor variables.

All analyses were conducted using revised BMDP Statistical Software Programs (University of California, 1983).
CHAPTER VII

RESULTS

Subject Characteristics

Summary statistics for demographic variables are presented in Table 1. Because of the unbalanced ratio of males (11) to females (64) in this study, no analyses of sex differences were attempted.

One-way analyses of variance (ANOVA) were computed for age and the two variables comprising SES (occupation and education). As expected, no significant differences among the three groups were found on these variables. The mean age for all groups was 79.9. The overall mean score for occupation was 4.8 and for education 5.4. (See Appendix A for explanation of scoring on these variables).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>SD</td>
<td>mean</td>
<td>SD</td>
</tr>
<tr>
<td>Age</td>
<td>78.8</td>
<td>6.6</td>
<td>79.0</td>
<td>9.3</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupation</td>
<td>4.9</td>
<td>1.9</td>
<td>4.6</td>
<td>1.8</td>
</tr>
<tr>
<td>education</td>
<td>5.5</td>
<td>1.9</td>
<td>5.3</td>
<td>2.0</td>
</tr>
<tr>
<td>n</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>
Analyses of Variance

Social Support

Measures of social support included informal support (Insup), SSQ-number (SSQN), and SSQ-adequacy (SSQA). As can be seen in Table 2, the group means differed on the three social support variables. For the low, medium, and high groups, respectively, the means were: Insup: 23.4, 21.1, and 14.0; SSQN: 3.2, 2.5, and 1.3; SSQA: 5.4, 4.0, and 2.9. A multivariate analysis of variance (MANOVA) yielded a significant overall main effect ($F(6,140)=7.80$, $p<.001$).

As summarized in Table 3, subsequent univariate analyses of variance indicated that both objective and subjective dimensions of support were significantly related to independent living.

Table 2
Summary Statistics for Dependent Variables, by Level of Independence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>SD</td>
<td>mean</td>
<td>SD</td>
</tr>
<tr>
<td>social support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insup</td>
<td>23.4</td>
<td>7.9</td>
<td>21.1</td>
<td>7.8</td>
</tr>
<tr>
<td>SSQN</td>
<td>3.2</td>
<td>1.5</td>
<td>2.5</td>
<td>1.8</td>
</tr>
<tr>
<td>SSQA</td>
<td>5.4</td>
<td>0.7</td>
<td>4.0</td>
<td>1.6</td>
</tr>
<tr>
<td>personality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuroticism</td>
<td>10.4</td>
<td>6.1</td>
<td>12.3</td>
<td>5.7</td>
</tr>
<tr>
<td>extraversion</td>
<td>10.2</td>
<td>4.2</td>
<td>9.7</td>
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</tr>
<tr>
<td>n</td>
<td>25</td>
<td></td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
Table 3

Analysis of Variance: Social Support

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>MS</th>
<th>DF</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insup</td>
<td>1209.92</td>
<td>604.96</td>
<td>2,72</td>
<td>9.82</td>
<td>.0003</td>
</tr>
<tr>
<td>SSQN</td>
<td>46.43</td>
<td>23.21</td>
<td>2,72</td>
<td>10.15</td>
<td>.0003</td>
</tr>
<tr>
<td>SSQA</td>
<td>76.52</td>
<td>38.26</td>
<td>2,72</td>
<td>22.61</td>
<td>.0003</td>
</tr>
</tbody>
</table>

Although the low, medium, and high service groups differed significantly on the objective measures, Insup (F(2,72) = 9.82, p<.001) and SSQN (F(2,72) = 10.15, p<.001), the magnitude of the test score for SSQA (F(2,72) = 22.61, p<.001) supports the proposition that the subjective component of social support bears the strongest relationship to independent living.

Post-hoc comparisons were calculated for all pairs of means (see Table 4). The most significant differences (p<.001) were observed between the low and high groups on each of the support variables. In all cases, the medium and high groups also differed (Insup and SSQA, p<.01; SSQN, p<.05), but only on measures of SSQA were significant differences observed between each pair of means for all three groups.

The objective social support measures were further subdivided to assess the relative importance of family and friends. The results of four one-way ANOVAs are presented in Table 5. A different pattern was observed for the two dimensions.
### Table 4

#### Post-hoc Comparisons: Social Support

<table>
<thead>
<tr>
<th>Source</th>
<th>Means</th>
<th>DF</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Insup</td>
<td>23.44</td>
<td>14.00</td>
<td>72</td>
<td>4.25</td>
</tr>
<tr>
<td>low/high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>med/high</td>
<td>21.12</td>
<td>14.00</td>
<td>72</td>
<td>3.21</td>
</tr>
<tr>
<td>SSQN</td>
<td>3.22</td>
<td>1.30</td>
<td>72</td>
<td>2.47</td>
</tr>
<tr>
<td>low/high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>med/high</td>
<td>2.45</td>
<td>1.30</td>
<td>72</td>
<td>2.69</td>
</tr>
<tr>
<td>SSQA</td>
<td>5.34</td>
<td>2.87</td>
<td>72</td>
<td>3.05</td>
</tr>
<tr>
<td>low/high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>med/high</td>
<td>4.00</td>
<td>2.87</td>
<td>72</td>
<td>6.72</td>
</tr>
</tbody>
</table>

'p < .05

1p < .05

2p < .01

3p < .001

---

### Table 5

#### Analysis of Variance: Family and Friends

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>MS</th>
<th>DF</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>family</td>
<td>530.91</td>
<td>265.42</td>
<td>72</td>
<td>4.54</td>
<td>.0139</td>
</tr>
<tr>
<td>friend</td>
<td>141.31</td>
<td>70.65</td>
<td>72</td>
<td>8.54</td>
<td>.0005</td>
</tr>
<tr>
<td>SSQN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>family</td>
<td>28.20</td>
<td>14.10</td>
<td>72</td>
<td>8.09</td>
<td>.0007</td>
</tr>
<tr>
<td>friend</td>
<td>5.51</td>
<td>2.76</td>
<td>72</td>
<td>2.59</td>
<td>.0818</td>
</tr>
</tbody>
</table>

'p < .05

1p < .05

3p < .001

---

Insup and SSQN. For Insup there was a significant difference in both family (F(2,72)=4.54, p<.05) and friend (F(2,72)=8.54, p<.001) support, with friends appearing to play a more important
role in relation to independent living. This finding did not hold in the case of SSQN, for which a significant score was obtained for family $F(2,72)=8.09$, $p<.001$) but not for friends.

Post-hoc comparisons further elaborated the dissimilar pattern of results for Insup and SSQN. For Insup (friends), variation was observed between the low and high groups ($p<.001$) and also between the low and medium groups ($p<.05$). For Insup (family), only the low and high groups differed ($p<.05$). For SSQN, where only family relationships appeared to be important, the low group differed significantly from both the high group ($p<.001$) and the medium group ($p<.05$).

**Personality**

One-way analyses of variance for the two personality variables are presented in Table 6. As predicted, neuroticism was significantly related to independent living ($F(2,72)=5.55$, $p<.01$). Post-hoc comparisons showed that only the low and high groups differed significantly from each other ($p<.01$).

A significant score was also obtained for extraversion ($F(2,72)=3.37$, $p<.05$) although the association was not as strong as that observed for neuroticism. Again, the major difference was between the low and high groups ($p<.05$).
Table 6

Analysis of Variance: Personality

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>MS</th>
<th>DF</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>neuroticism</td>
<td>344.83</td>
<td>172.41</td>
<td>2</td>
<td>5.55</td>
<td>.00572</td>
</tr>
<tr>
<td>extraversion</td>
<td>90.56</td>
<td>45.28</td>
<td>2</td>
<td>3.37</td>
<td>.03991</td>
</tr>
</tbody>
</table>

$p < .05$

$p < .01$

Correlational and Partial Correlational Analyses

Interrelationships among the principal dependent variables were investigated by correlational techniques. Since the objective and subjective dimensions of support are thought to be separate domains, there was interest in studying the relationships among the three social support variables. The association of social support and neuroticism was also of interest in the present study. A summary of intercorrelations is presented in Table 7.

Social Support Variables

As can be seen in Table 7, there is a substantial relationship among the three social support variables: Insup, SSQN, and SSQA. Partial correlations for each pair of variables, while partialling out the effect of the third variable, are presented in Table 8. When Insup was partialled out, a very strong relationship was still observed between SSQA and SSQN.
Table 7

Intercorrelations of Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>SSQN</th>
<th>SSQA</th>
<th>Insup</th>
<th>Selfcon</th>
<th>Selfest</th>
<th>Neur</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSQA</td>
<td>.819</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insup</td>
<td>.528</td>
<td>.536</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selfcon</td>
<td>.483</td>
<td>.415</td>
<td>.317</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selfest</td>
<td>-.448</td>
<td>-.454</td>
<td>-.283</td>
<td>-.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neur</td>
<td>-.495</td>
<td>-.552</td>
<td>-.202</td>
<td>-.489</td>
<td>.574</td>
<td></td>
</tr>
<tr>
<td>Extro</td>
<td>.291</td>
<td>.246</td>
<td>.226</td>
<td>.384</td>
<td>.319</td>
<td>-.290</td>
</tr>
</tbody>
</table>

(R = .748, p < .001). The direct relationship between Insup and SSQN (r = .183, p < .05) and between Insup and SSQA (r = .213, p < .05), though apparent, was less striking.

Social Support and Neuroticism

Correlations between neuroticism and the individual social support measures, partialling out the effects of the other two support variables, are presented in Table 9. A direct negative

Table 8

Partial Correlations Among Social Support Variables

<table>
<thead>
<tr>
<th>Social support variables partialled out: *</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSQA</td>
<td></td>
<td></td>
<td>.2131</td>
</tr>
<tr>
<td>SSQA</td>
<td></td>
<td>.7483</td>
<td></td>
</tr>
<tr>
<td>SSQN</td>
<td></td>
<td></td>
<td>.1831</td>
</tr>
</tbody>
</table>

*Social support variables are:
1. SSQN
2. Insup
3. SSQA

1p < .05
3p < .001
relationship was observed between SSQA and neuroticism (-.319, p<.01) but the relationships between neuroticism and both Insup and SSQN were very small.

**Self-concept, Self-esteem, and Social Support**

As the literature on aging frequently stresses the importance of self-concept and/or self-esteem, it was of interest to briefly investigate these concepts in the present study. Specifically, the relationship between self-concept/self-esteem and social support was examined through partial correlational analyses and multiple regression analysis. Self-concept is defined as one's view of oneself as object, whereas self-esteem is the discrepancy between actual and ideal self. In the latter case, a low score indicates high self-esteem.

---

**Table 9**

<table>
<thead>
<tr>
<th>Social support variables partialled out:</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSQN</td>
<td>.153¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSQA</td>
<td>-.118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-.319²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹p < .05  
²p < .01

+ Social support variables are:  
1. SSQN/SSQA  
2. Insup/SSQA  
3. Insup/SSQN
As may be seen from the correlational matrix presented in Table 7, substantial relationships were observed between self-concept, self-esteem, and the support variables, particularly the two SSQ measures. These relationships were in the expected direction: positive for self-concept and negative for self-esteem. However, as shown in Table 10, the magnitude of these relationships was greatly reduced when partial correlations were calculated for self-concept, self-esteem and each of the support variables in turn, while partialling out the effect of the other two support variables. The largest observed partial correlation was between self-concept and SSQN (r = .223, p < .05). A regression analysis, with self-concept and self-esteem as dependent variables and the three social support measures as independent variables, is presented in Table 11. Taken together, the social support variables were significantly related to both

<table>
<thead>
<tr>
<th>Table 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial Correlations: Self-Concept and Self-Esteem with Social Support</td>
</tr>
<tr>
<td>Social support variables partialled out:</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Insup</td>
</tr>
<tr>
<td>Self-concept</td>
</tr>
<tr>
<td>self-esteem</td>
</tr>
</tbody>
</table>

'Social support variables are:
1. SSQN/SSQA
2. Insup/SSQA
3. Insup/SSQN

'p < .05
Multiple Regression Analysis: Self-Concept, Self-Esteem, and Social Support

<table>
<thead>
<tr>
<th>variable</th>
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<th>multiple correlation</th>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-concept</td>
<td>.2393</td>
<td>.4891</td>
<td>7.44</td>
<td>.0002³</td>
</tr>
<tr>
<td>self-esteem</td>
<td>.2240</td>
<td>.4733</td>
<td>6.83</td>
<td>.0004³</td>
</tr>
</tbody>
</table>

³p < .001

self-concept (F(3,71)=7.44, p<.001) and self-esteem (F(3,71)=6.83, p<.001).

Summary

The three social support variables showed an overall significant relationship to independent living. However, the strongest relationship was observed for SSQA where the F score (22.61) was more than twice as large as that observed for either of the other two variables, Insup (9.82) and SSQA (10.15).

Analyses of the two personality measures, neuroticism and extraversion, yielded a significant main effect for both variables, with neuroticism bearing the stronger relationship to independent living.

Intercorrelations among the principal dependent variables were examined through partial correlational techniques. A strong positive relationship was observed between SSQN and SSQA and a
negative relationship between SSQA and neuroticism.

Finally, a significant relationship was found between self-esteem and self-concept, on the one hand, and the three social support variables, on the other.

Overall, the most significant association was observed between the subjective measure of social support (SSQA) and independent living. However, strong relationships were also apparent between independent living and each of the other two support variables, and between independent living and the personality variables, especially neuroticism.
PART C

DISCUSSION
Overview of Findings

Strong support was found for each of the major hypotheses. The proposed relationships were observed between independent living and both the social support and the personality variables. These findings will be discussed in turn.

As expected, the subjective dimension of social support bore a very strong relationship to independent living. In fact, this association was one of the more outstanding findings of the present study. These results are consistent with those of a number of other researchers who have emphasized the importance of an individual's subjective evaluation of his/her social support system (e.g. Quinn, 1983; Ward et al., 1984).

Many of these same authors have found the objective dimension of social support to be relatively unimportant in their investigations. However, in the present study, objective measures were significantly related to independent living, although the strength of this relationship was less than that observed for the subjective dimension.

These differing findings may, in part, be explained by the fact that many of the other studies used subjective well-being (a subjective measure) as the dependent variable, while in the present study the dependent variable, independent living, was a more objective measure based on amount of formal service received. Objective support can help one to live independently
in the community with a minimum of government service, while it might not contribute much to one's subjective sense of general well-being. Subjective support, or socioemotional aid, on the other hand, does significantly affect well-being but also, as the present study shows, has important implications for instrumental independence.

Group comparisons on objective measures of support (Insup, SSQN) showed the medium group to be more similar to the low group, while the high group was unique. This finding was not surprising since the latter group consisted of institutionalized subjects, whereas subjects in the other two groups lived in the community. On measures of subjective support (SSQA), the three groups were more clearly differentiated from one another.

When the contribution of family and friends was assessed separately on objective support measures (Insup, SSQN), different patterns were observed for the two variables. On Insup, both family and friend support were significantly related to independent living, but the role of friends appeared to be more important. In the case of SSQN, however, only the family relationship was important.

These findings may be related to the fact that although, on one level, Insup and SSQN were both objective measures of social support, they differed in important ways. Insup was concerned with such quantitative measures as number of persons making up an individual's support network, and frequency of contact with
those persons. SSQN, on the other hand, measured a more qualitative aspect of social support.

The present findings, in part, support the frequently cited conclusion that for most older persons, family, when available, are the preferred source of emotional support (Cantor, 1979). However, the role of friends is less clear. This issue will be raised later.

The predicted significant relationships were observed between the personality dimensions and independent living, with neuroticism showing the stronger association. The important role of personality characteristics, particularly neuroticism, in helping to explain the behaviour of older people has been documented by a number of researchers (e.g. Costa & McCrae, 1980; 1983). The present findings are consistent with those conclusions. In the present study, living independently was associated with low neuroticism and fairly high extraversion scores. Institutionalized subjects (the high service group) had the highest scores on neuroticism.

Interrelationships among the independent variables were examined and findings were in the expected direction. A very strong relationship was observed between the two SSQ measures, while the association of either of these measures with Insup, although statistically significant, was quite modest. Again, the difference between the quantitative (Insup) and qualitative (SSQN, SSQA) components of support was demonstrated. The
subject's perceived adequacy of support was strongly associated with the number of supporters available in specified, emotion-focused situations. However, perceived adequacy of support bore less relationship to the actual number of persons in an individual's support network, and to frequency of contact with those people.

A moderate negative association was found between subjective social support (SSQA) and neuroticism but the relationship between neuroticism and the other two support variables was small. It makes intuitive sense that a personality characteristic such as neuroticism is more likely to be associated with a subjective, as opposed to an objective, measure of support. Findings in the present study supported the proposition of Costa and McCrae (1983) that persons low in neuroticism are more likely to consider their social support adequate than those whose neuroticism score is higher.

Self-concept and self-esteem are important concepts in the gerontological literature and therefore, as a secondary interest, they were briefly examined here. A relationship was observed between the two dimensions and the combined social support measures. Overall, these data support the contention of other researchers (e.g. Quinn, 1983) that social support is related to self-esteem and a positive self-concept in the elderly. Specifically, it appears that the availability of emotional support, such as having a confidant, is positively associated with self-concept in this sample of older people.
Descriptive Dimensions

Some interesting trends were apparent in the present study, which warrant discussion on a descriptive level. Of the 13 questions on the SSQ, most elicited essentially the same response. Those who were named as supporters in one situation tended to be named in all situations, and similar levels of adequacy were expressed. For instance, those who could be depended upon to help out in an emergency were also those who could be counted on to care about the person no matter what happened to him/her. However, there were three questions which evoked quite different responses. In answer to the question "who helps you to feel that you truly have something positive to contribute to others?", a large number of respondents answered "no one." This was invariably followed by the remark "because I don't have [anything to contribute]." Twenty-eight per cent of the low service group, 48% of the medium service group, and 68% of the high service group felt that they had nothing positive to contribute to others. This was true even for a number of people who felt that they were generally well supported. Feeling "useless" was a source of unhappiness, and even shame, to many respondents, especially those who had previously held positions of responsibility.

The role of a "confidant" (Lowenthal & Haven, 1968), which was described earlier, is related to the question "whom can you count on to listen openly and uncritically to your innermost
feelings?" The presence of a confidant is reported to be a crucial dimension of social support with implications for independence and well-being (Lowenthal & Haven, 1968; Liang et al., 1980). In the present study, only two subjects (8%) in the low group as opposed to seven (28%) and eight (32%) in the medium and high groups, respectively, reported having no confidant. The total number of individuals listed as confidants also differed in the three groups: 50, 42, and 22 for the low, medium, and high groups, respectively. The number of 42 for the medium group is somewhat misleading since 16 of those supporters were named by two subjects. Among the total number of confidants listed (up to nine per subject), friends were named 56 times, daughters 21 times, and sons 12 times. Among the other relatives identified occasionally were sisters, brothers, in-laws, grandchildren, nephews, nieces, and cousins. These more distant relatives usually assumed a more active role for those people who had no children (33% of the sample), a finding which supports the "principle of substitution" (Shanas, 1979).

The importance of friends and daughters may be seen in comparisons of the three groups. Daughters were listed as confidants 14 times in the low group, compared to five and two times for the medium and high groups, respectively. These data suggest that a close relationship with a daughter may be an important factor in maintaining independent living. It has been shown elsewhere (e.g. Brody, 1981) that daughters are the main providers of care to older people and are more likely than other
relatives (except wives) to provide personal care, if needed. In the present study, there was a strong negative relationship between a daughter with whom one was close and the amount of government service received.

A further observation on interaction with children should be noted. Although one-third of the total sample had no children, group comparisons are interesting: 20% and 28% of the low and medium groups, respectively, had no children, but half (52%) of the subjects in the high group had no children. Of all those who had children, 64% reported not seeing their children as often as they would like. This feeling was expressed by 55% and 58% of the low and high groups, respectively, and 78% of the medium group. These findings indicate that although subjects in the high group had fewer children, those in the medium group were the least satisfied with interaction with their children.

The number of friends available as confidants also varied with the different levels of independent living. The low and medium service groups each listed 24 friends as confidants whereas the high service group listed only eight friends. Again, the number for the medium group is somewhat distorted by the two subjects who identified 13 friends between them. Nevertheless, those people living in the community had three times as many close friends as those residing in an institution.

It is not clear whether those elderly people who were institutionalized had fewer friends to begin with, or whether
they had lost touch with their friends after moving to the institution. This latter situation was mentioned by a number of the respondents in the L.T.C. facilities. Many former friends are apparently reluctant to visit a care facility, partly because of difficulties with transportation, but probably more importantly, because of psychological factors. An older person who is managing, sometimes marginally, in the community does not wish to be reminded of what may be awaiting him/her in the near future. Also, some of those living in a care facility, expressing a sense of shame at their condition, did not wish their friends to see them. These findings have important implications for institutional administrators and staff, which will be discussed below.

Friends obviously played an important role, particularly that of confidant, in the lives of those people who were living the most independently in the community. These relationships were frequently maintained by telephone as advanced age and disabilities made visiting difficult. The present findings about the importance of friends appear to be somewhat inconsistent with some other studies where family, when available, are the preferred source of aid in most instances, but especially in providing emotional support (e.g. Cantor, 1979). Friends have been thought to play a more instrumental role, and only if family are not available. Many of the respondents in the present study were without children altogether, or had none in the area. But those with the fewest children, the institutionalized group,
also had the least number of friends. Friends played the most significant role in relation to the most independent group, those who had more family available. Many of these people, however, reported feeling more comfortable confiding in friends or peers than in their children, even if they were close to the latter. In many cases they felt that children were "busy with their own lives;" working, raising families, or possibly adjusting to divorce and/or re-marriage. These older parents did not want to worry their children by discussing their own problems, feeling that children had enough problems of their own to contend with. These findings support the proposition of Chappel et al. (1986) that an older person's peers (friends, siblings, etc.) perform an important function in a support system, which may be quite different from that of inter-generational relationships. As the authors point out, this is an issue requiring further investigation.

One of the most striking and interesting observations in the present study was the existence of an attitude that will be referred to here as "self-reliance." This attitude was demonstrated in answer to the question "whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?" Many of the respondents answered "no one" to this question, but it also generated many comments. There was a strong feeling among these elderly people that they should either try to avoid getting "down" or, if that was impossible, they should deal with the situation themselves by "getting
busy." Suggested remedies included making cookies, watching T.V., reading, going for a walk, or "just crawling into a hole." Many denied ever feeling down-in-the-dumps. Others felt that if they did feel that way, nobody wanted to hear about their problems and they should look after themselves. This self-reliant attitude particularly distinguished the most independent subjects, those in the low service group. Although, in this group, nine people answered "no one" in response to this question, 16 people (64%) stated that they preferred to deal with such a situation themselves, and not let anybody know that they were feeling down. In the medium and high groups, 11 and 15 people, respectively, answered "no one" in response to this question, but only four people (16%) in each of these groups indicated that this was by their own choice, while the others found the lack of support inadequate for their needs. Most of the self-reliant people indicated that, for them, this had been a life-long attitude towards dealing with negative feelings: one doesn't allow oneself to dwell on them.

It may be that this attitude is indicative of certain personality characteristics. For instance, "self-reliance" may be incompatible with neuroticism. It will be recalled that the three groups differed significantly on neuroticism scores, with the most independent subjects exhibiting the lowest scores.

As a final observation on this topic, it is interesting to note that all those displaying a self-reliant attitude had at least one confidant, so presumably they could have counted on
someone to help them feel better if they had chosen to call upon that person. Many others who answered "no one" to this question, but rated the situation as inadequate, had no confidant. It appears to be necessary to have a basic minimum of potential supporters available before one can choose to deal independently with one's psychological difficulties. The element of choice, or control, may be crucial here.

This discussion of "self-reliance" is related to Munnichs (1976) conceptualization of autonomy, or psychological independence (See Chapter II). It will be recalled that autonomy refers to the maintenance of the integrity of the self which, in turn, is based on a sense of self-control and self-esteem. Self-esteem is enhanced through intimate relationships (e.g. a confidant); lack of such interactions may result in lowered self-esteem and a consequent threat to self-integrity. In the present study, self-reliance was exhibited most often by those people in the low service group i.e. the most (instrumentally) independent. It appears, then, that a relationship exists between psychological and instrumental independence, and that both may be enhanced by supportive interpersonal relationships. These remain speculations only, since in the present investigation neither "self-reliance" nor "autonomy" were operationalized and measured. However, some interesting directions for future research are suggested.
Generalizability

Some limitations to the generalizability of the findings in the present study must be mentioned.

The study design could have benefited from a larger sample size. Finding appropriate subjects, particularly in the higher service groups, was difficult since, in many cases, the problems which made them eligible for service precluded their participation in the study. Also, having more male respondents in the study would have allowed gender comparisons which may have proved significant. However, many older men live with their wives, and the present study focused on those persons living alone or in an institution. One further point is that the sample consisted of urban dwelling older people in the Lower Mainland of B.C. It is not known if differences would be found in a rural population, or in other geographic locations.

A common problem in many areas of gerontological research is the lack of valid and reliable measurement instruments which are suitable for use with older populations. Following a search of the available resources, the questionnaires used in the present study were selected as being the most appropriate for the purpose. Nevertheless, as the interviews proceeded, some limitations became apparent in their use with elderly subjects. Although the questionnaires were designed as self-report measures (which in themselves present some inherent problems), it was necessary for the interviewer to complete the forms. This
may have increased the tendency for subjects to make a socially acceptable response. This tendency was monitored, to some extent, in the EPI by the inclusion of a lie scale. A further problem was that respondents tended to tire easily; a shorter interview would be more suitable in the future. Although some of the questionnaires (e.g. EPI) had been used successfully with older people, they were more suitable to a younger population. There is a need to develop and test measurement instruments that are specifically designed for use with older and impaired populations. At present such instruments are scarce.

The sample in the present study, all L.T.C. clients receiving at least minimal service, differed from the total population of older people in some other respects, apart from health problems. For instance, in this sample, 33% of the respondents had no children, compared to about 20% in the general population of the same age. However, it was the group receiving government service which was of interest here, and it is to this population that findings can meaningfully be generalized.

The dependent variable, independent living, was based on the amount of L.T.C. service received. Independent living, in this case, referred to instrumental independence from government aid. It is recognized that there are many other types of independence, including psychological independence, or autonomy. However, the measurement of these dimensions was outside the scope of the present investigation.
With these limitations in mind, the present study makes a contribution to further understanding of the relationship between social support and personality characteristics, on the one hand, and independence vis-a-vis government services, on the other.

**Practical Applications**

Although no causal inferences can be drawn from the present correlational study, the data, together with the reported findings and recommendations of other researchers, suggest some areas of practical application which warrant discussion. For example, in the earlier review of the literature, a number of problems were identified which have implications for service delivery. These include variation in availability of support, the possibility of informal caregivers becoming overburdened, and conflicting intergenerational relations.

It would be helpful for agencies and professionals planning interventions, to bear in mind the differential needs of the elderly. An accurate and realistic assessment of the individual and his/her social situation is an important preliminary to effective service delivery. As Chappell et al. (1986) point out, services for those in need should be flexible enough to meet the changing needs of the client, not only in relation to his/her health status, but also in relation to the changing social network and its ability to provide care.
Research has shown that the majority of older people have a viable network of informal supporters. However, the minority of individuals who do not have adequate support are likely to have unmet social and emotional needs which require attention from formal service agencies. Further, where support is being provided by family and friends, the quality of that support may not be uniformly adequate. Problems faced by informal caregivers need to be addressed by health care and social service agencies, and professionals, if they wish to strengthen the informal support system so that it may continue to provide important services to older relatives and friends.

There is widespread agreement regarding the need for more community social services (Chappell et al., 1986). The emphasis would be on a range of services, provided by a variety of workers and encompassing different types of programs. As well as the more traditional medically oriented services, and more part time and respite care, there is a need for counselling and group services and ongoing education.

For example, the conflicting needs and emotions of adult children and their elderly parents could be addressed through counselling and group interventions. Differences of opinion on the importance of various types of help could be explored, and the viewpoints of each generation more accurately understood and appreciated. Adult children could be helped to resolve the conflicts and issues of earlier years that may influence their reactions to parents, to gain a more mature perspective, and to
learn more effective ways of maintaining and enhancing the independence of their aging parents (Troll, Atchley, and Miller, 1979).

Adult children often need help to deal with confusion and conflicting emotions surrounding filial responsibilities when it becomes necessary to provide care to an ailing parent. Counselling and self-help groups can provide outlets in which strains and feelings can be shared, and creative and useful solutions generated (Seelbach, 1984; Quinn, 1983).

Similar programs can be adapted to the needs of all those informal caregivers who are feeling overburdened by their responsibilities. Older wives providing care to a disabled spouse are a group particularly at risk. Many of these women, who have been referred to as "hidden victims," need help and support as much as their husbands (Crossman, London, & Barrie, 1981). As well as periodic relief from caregiving duties, and practical assistance, they need a place to voice ambivalent, especially negative, feelings and gain useful information and emotional support.

In institutional settings, more attention could focus on the unmet psycho-social needs of residents, many of whom have no close relatives and/or friends. While most care facilities have some kind of recreational programs, these usually do not go far enough in addressing the emotional needs of residents. Efforts are needed to encourage the continuation of former
relationships, especially those with friends, as well as trying to promote new ones. It must be remembered, however, that old people do not make new friends easily. Furthermore, they may be reluctant to form new attachments to people who may die in the near future, thus creating more losses to cope with. These are complex problems, but the emotional needs of the institutionalized elderly must be adequately addressed since this issue has important implications for self-esteem, general well-being, and physical and mental health in this elderly population.

Ongoing education centred on the broader issues of aging and caregiving could be offered by various community organizations. Further, there is a need for appropriate staff training at all levels, including information about families. Through educational programs, also, implications of filial responsibility could be discussed, with emphasis on preventive aspects of filial relationships, rather than just a response to crisis and acute need. For instance, children and parents could be encouraged to develop ways of growing and learning to meet personal and family needs, before, as well as during, periods of decline and dependence (Seelbach, 1984). Various continuing education programs could also contribute to understanding about the process of normative aging, thereby helping to dispel many of the negative myths about the elderly. By promoting a more positive attitude towards the subject of aging, the goals of older people, to maintain their independence and to be valued
and contributing members of society, could be furthered.

Despite the emphasis on medical care today, a broad variety of health and social services does exist for older persons. However, the types of counselling and educational services just described (the more socially-oriented programs) are notably lacking at the present time. Existing services and resources need to be used more effectively and gaps in service provision need to be addressed in order to more adequately provide for the total, broadly defined, health care requirements of an aging society.

Policy Implications

The issues which were raised in the earlier discussion of formal and informal social support systems have clear implications for social policy. An interfacing between the formal and informal care systems, whereby the formal system facilitates and supports the informal system, is considered to be of paramount importance (Chappell et al., 1986).

Several authors have called for policies that make caregiving a joint public and family responsibility (Arling & McAuley, 1984; Hirchfeld, 1983; Brody, 1981). Hirchfeld (1983) argues that many governments seek to justify reductions in personal social services by making "overextravagant claims" about the capacity of the family to be responsible for its older members. She points out that it is necessary to be realistic
about the role of the family in relation to the care of its elderly; not all families are capable of providing care, and not all elderly people have families available. Families should be encouraged and assisted in caregiving, but any attempt to shift total responsibility for long-term care to the family in order to reduce public expenditures may be destructive of family bonds and may ultimately increase costs to society (Arling & McAuley, 1984).

A stated goal of public policy (e.g., Province of B.C. Long-Term Care Program) is to retain the impaired elderly person in the community for as long as possible. Research has shown that continued and unameliorated stress can be a significant factor in the decision to institutionalize (Maschiocchi, Thomas, & Moeller, 1983). The choice is rarely to "dump" older family members into institutions prematurely; it is usually a last resort after all family resources are exhausted (Brody, 1981). Such delays may be detrimental to the older person and exacerbate family problems.

Policies designed to encourage family caregiving should take into account that formal services, including nursing homes, are necessary for many impaired elderly. Chappell et al. (1986) emphasize the importance of appropriate community support if more old people are to be maintained outside of an institution. In this regard, a lesson may be learned from the field of mental health where many mental patients were returned to a community ill-equipped to handle them. Chappell et al. warn that, for the
elderly, "deinstitutionalization cannot be allowed to become a cheap cost-cutting mechanism without the implementation of adequate community supports" (p. 156).

According to Wentowski (1981), the anthropological literature on aging suggests that the need for reciprocation may be a near cultural universal for maintaining a strong sense of self-worth among the elderly. She suggests that in programs aimed at aiding the elderly, some built-in form of reciprocation would enhance user acceptance. It has also been pointed out that service-provision policies should not reflect a deficit-oriented view of the elderly. For example, Corin (1982) states that "any policy whose true aim is to reinforce the autonomy of the elderly must begin with an understanding of the positive mechanisms at work within the world of the senior citizen and must aim to reinforce these mechanisms" (p. 7).

As well as providing adequate supports for the frail elderly and their informal caregivers, the needs of the majority of competent elderly should also be addressed. Most older persons, whatever their condition, place great value on maintaining independence. Policies and programs are needed which will enable older people to achieve, be useful, and have confidence in successfully confronting life's tasks (Quinn, Hughston, & Hubler, 1983).
Directions for Future Research

Some progress has been made in recent years in trying to develop reliable and valid measurements of social support, but attention is still needed in this area. While there appears to be general consensus on the importance of the subjective/qualitative dimension of support, agreement on how to adequately measure this dimension is still lacking.

Changing demographic trends and alternate family forms and roles may be expected to place a strain on family relationships. Important social factors, especially the large-scale entry of women into the work force, coupled with the increasing numbers of old people, raise inevitable questions about the ability of family members to provide quality care to aging relatives. Researchers need to focus attention on questions of who will provide what type of care, under what circumstances, to older family members.

Possibly as family members, particularly daughters, become busier, older people may turn more to age peers for support, especially as a "confidant." People in the same age group share similar concerns and experiences, but more importantly, they have time to talk and to listen, which younger people frequently do not have in today's fast-paced world. As Chappell et al. (1986) have pointed out, the differential roles of age peers and intergenerational relations in an individual's support system is not well understood and is an area requiring further research.
A number of researchers have called for a more family-oriented social policy so that those who are caring for older relatives and friends can find needed support services. It has been suggested that more socially-oriented community programs such as counselling, group, and educational services are necessary. However, the difficulty of evaluating the need for, and effectiveness of such programs has been pointed out (Chappell et al., 1986). Again, this is an area which needs research attention in order to discover how individuals and families can best be helped, and by what types of services. Further, any attempts to re-structure existing services to more appropriately serve the needs of an aging society would have to incorporate accountability in terms of both services and costs.

Continuing developments in the field of stress and coping research hold promise for greater insight into adaptation in old age, with important implications for independence and general well-being in the elderly. While there is a growing body of literature describing the role of coping responses in mitigating the potentially harmful effects of stressful experiences, little attention has focused specifically on the coping mechanisms of older people. Generally, in studies where age was one of a number of variables examined, no age differences were found in the use of coping methods (e.g. McCrae, 1980). Two lines of research, however, those of Lieberman and Tobin (1983), and George (1985), studying older individuals in more detail and over time, point to some interesting observations.
Lieberman and Tobin (1983) found that the use of a myth-making tendency, to maintain a feeling of control, and hence self-identity, was a common coping mechanism in old age. Such a tendency has been referred to rather vaguely by other authors (Corin, 1982; Chappell et al., 1986) and was sometimes apparent in the present study. However, much more information is needed about when and how this strategy is utilized by older people, and to what effect.

George (1985) has made a promising start, in a series of longitudinal studies, on unravelling some of the intricacies of stress and coping dimensions in the elderly. She emphasizes the importance of personal and social resources in relation to coping. Social resources, for instance, can buffer the individual against stress and can also moderate the effects of stress. George's studies indicate that for older people, stresses are neither more frequent nor more severe, than those experienced by younger people. Nor are older people generally less effective copers than their younger counterparts. However, a major aspect of coping with stress in later life is that resources tend to dissipate with old age: physical health and stamina decline; finances are likely to decrease; and the supportive social network shrinks as peers are lost through death or ill-health. George (1985) notes that "the most unique challenge with regards to coping in later life is that one must cope at a time when valuable social and personal resources are declining" (p. 106). Nevertheless, it appears that while a few
people are beaten down by the challenges of life, the large majority of older people are coping adequately, or better. George suggests that future research on coping in the elderly should pay attention to the way socialization prepares individuals to resolve problems and handle transitions. She also suggests that the strength of social norms should not be underestimated in helping people to adjust to even such severe stresses as widowhood or serious illness. It is both challenging and difficult to study stress and coping in real-life situations, but it is an important area of study which should continue to generate significant new knowledge (George, 1985). Evidence suggests that human beings are very adaptable. As people live increasingly longer lives, more information is needed about the ways in which individuals continue to adapt and cope with the demands of old age.
REFERENCES


PART D

APPENDIX A: THE QUESTIONNAIRE PACKAGE
The Questionnaire Package

This package was given to all subjects. It contained the following: (1) Participant's Information Document; (2) Informed Consent form; (3) an author-designed Information Sheet; (4) The Duke Semantic Differential Technique measure of self-concept and self-esteem (Back & Guptill, 1966); (5) a revised version of the Social Support Questionnaire (Sarason et al., 1983).

Due to copyright reservations, the Eysenck Personality Inventory (Eysenck & Eysenck, 1964) is not included here.
The purpose of this study is to investigate some of the things that contribute to independent living in older persons. It is hoped that the information obtained from this study will lead to a greater understanding of the needs of older people and will also be helpful to community agencies in planning appropriate services, and in using resources most effectively.

Participation will involve completing a set of questionnaires. I will bring these to your home and assist you in completing them, if necessary. It will probably take about an hour to complete the questionnaires, but you may take as much time as you need. The questionnaires will measure: the amount and adequacy of social support; personality traits; self-concept; and socio-economic status.

All your responses will be kept strictly confidential and no one, other than myself, will have access to your answers.

I will phone to make an appointment for my visit, and discuss any questions you may have. When I visit you, I will ask you to sign a consent form before completing the questionnaires.

If you are willing to participate and/or have any further questions concerning this study, please contact me at 937-0095 or leave a message at 291-3354 (Psychology Department, S.F.U.)

Thankyou,
The university, and those conducting this project, subscribe to the ethical conduct of research and to the protection at all times of the interest, comfort, and safety of participants. This form, and the information it contains, are given to you to ensure your full understanding of the procedures involved. Your signature on this form does not take away any rights you may have, rather, it indicates that you have received all the information necessary to give an informed consent to your taking part.

Having been asked by Audrey Davis of the Psychology Department of Simon Fraser University to participate in a research project, I have read the procedures specified in the document entitled "Participants' Information Document", and hereby affirm that:

(1) I understand the procedures to be used in this study.

(2) I understand that my participation in this project is completely voluntary and that I may withdraw my participation at any time.

(3) I understand that my responses to the materials in this study will be kept strictly confidential. I also understand that on all records I will be identified by a code number only, and that no one except Audrey Davis will have access to the master list matching names and code numbers.

(4) I understand that I may register any complaint I might have about the study with the chief researcher named above or with Dr. E.M. Coles, Associate Professor, Department of Psychology (291-3742), or Dr. T.W. Calvert, Vice-President, Research and
Information Systems (291-4370), Simon Fraser University.

(5) I understand that results of this study, on completion, will be available to me on request to Audrey Davis.

(6) I agree to participate by completing a series of questionnaires as described in the document stipulated above.

DATE

NAME

ADDRESS

SIGNATURE

SIGNATURE OF WITNESS
INFORMATION SHEET

1. Age ____

2. Sex  M ____  F ____

3. Marital status  M ____  W ____  S ____  Other ____

4. Living accommodation: ___________

5. Composition of household:
   Do you live alone? Yes ____  No ____
   Who else lives in same household? ______

6. Family structure and associational solidarity
   How many children have you had or adopted? ____
   How many are presently living? ____
   Have you raised any/other children? ____

(a) Where lives

   How many of your children live:
   with you ____ (6)
   same building ____ (5)
   within walking distance ____ (4)
   within city limits ____ (3)
   in the lower mainland ____ (2)
   outside lower mainland ____ (1)

(b) Frequency of seeing

   How often do you see any of your adult children?
   every day ____ (5)
   every week ____ (4)
   every month ____ (3)
   several times a year ____ (2)
   once a year or less ____ (1)

(c) Frequency of talking on phone

   every day ____ (5)
   every week ____ (4)
   every month ____ (3)
   several times a year ____ (2)
   once a year or less ____ (1)
(d) In general do you see your adult child/children as often as you would like to?

as often as would like to
some as often, others not as often not as often, would like to see more too often

7. Other relatives and friends

Do you have any living (list)? How many?

brothers or sisters ________}
grandchildren ________} (1-7)
other relatives ________} (1-7)
close friends ________

Frequency of seeing

brothers or sisters ________}
grandchildren ________} (1-5)
other relatives ________} (1-5)
close friends ________

Socioeconomic Status

Occupation (prior to retirement)

self __________________________
husband ______________________

Education

college 5 or more years
4
3
2
1

high school 4
3
2
1

elementary 8
7
5 & 6
3 & 4
1 & 2

none
**Scoring for Information Sheet**

**Question 6:** Total number of children living. (0 - 7)

- 1   (1)
- 2   (2)
- 3   (3)
- 4-5 (4)
- 6-7 (5)
- 8-10 (6)
- 11+ (7)

**Question 6.**

(a) count highest score for any child (1-6)
(b) highest score for frequency of seeing any child (1-5)
(c) highest score for phone contact with any child (1-5)

**Question 7.**

(a) combined score for siblings, grandchildren, other relatives (0-7) (scored as in 6 above)
(b) total number of friends (scored as above) (0-7)
(c) frequency of seeing siblings, etc. (1-5)
(d) frequency of seeing close friends (1-5)

All scores were summed for a possible total of 47 points.
Scoring for SES

Education
5 or more years of college (9)
3 or 4 years of college (8)
1 or 2 years of college (7)
3 or 4 years of high school (6)
1 or 2 years of high school (5)
7 or 8 years of schooling (4)
5 or 6 years of schooling (3)
3 or 4 years of schooling (2)
1 or 2 years of schooling (1)
None (0)

Occupation
Score:
(9) Higher executives, proprietors of large businesses, and major professionals.
(8) Administrators, lesser professionals, proprietors of medium-sized businesses.
(7) Smaller business owners, farm owners, managers, minor professionals.
(6) Technicians, semiprofessionals, small business owners.
(5) Clerical and sales workers, small farm and business owners.
(4) Smaller business owners, skilled manual workers, craftsmen, and tenant farmers.
(3) Machine operators and semiskilled workers.
(2) Unskilled workers.
(1) Farm labourers, mental service workers.

NOTE: See Index of Social Status (Hollingshead, 1965; 1971; 1975) for further details, such as occupational titles.
DUKE SEMANTIC DIFFERENTIAL TECHNIQUE

Instructions

This list contains opposite words like "inactive-busy" and a scale from 1 to 7. For this scale 1 means very inactive and 7 means very busy. Please circle the number along the scale that shows where you think you appear to others (would like to be, really am). For example, if you think you appear somewhat busy to others, circle 4, and so on.

How I Appear To Others

1. Inactive - Busy
   1 2 3 4 5 6 7

2. Not free to do things - Free to do things
   1 2 3 4 5 6 7

3. Useless - Useful
   1 2 3 4 5 6 7

4. Look to the future - Look to the past
   1 2 3 4 5 6 7

5. Ineffective - Effective
   1 2 3 4 5 6 7

6. Satisfied with life - Dissatisfied with life
   1 2 3 4 5 6 7

7. Disregarded - Respected
   1 2 3 4 5 6 7
What I Would Like To Be

1. Inactive - Busy
   1 2 3 4 5 6 7

2. Not free to do things - Free to do things
   1 2 3 4 5 6 7

3. Useless - Useful
   1 2 3 4 5 6 7

4. Look to the future - Look to the past
   1 2 3 4 5 6 7

5. Ineffective - Effective
   1 2 3 4 5 6 7

6. Satisfied with life - Dissatisfied with life
   1 2 3 4 5 6 7

7. Disregarded - Respected
   1 2 3 4 5 6 7

What I Really Am

1. Inactive - Busy
   1 2 3 4 5 6 7

2. Not free to do things - Free to do things
   1 2 3 4 5 6 7

3. Useless - Useful
   1 2 3 4 5 6 7

4. Look to the future - Look to the past
   1 2 3 4 5 6 7
5. Ineffective - Effective
   1 2 3 4 5 6 7

6. Satisfied with life - Dissatisfied with life
   1 2 3 4 5 6 7

7. Disregarded - Respected
   1 2 3 4 5 6 7
SOCIAL SUPPORT QUESTIONNAIRE

INSTRUCTIONS

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials and their relationship to you. Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how adequate you find the overall support that you have.

If you have no support for a question, check the words "No one", but still rate the level of adequacy. Do not list more than nine persons per question.

Please answer all questions as best you can. All your responses will be kept confidential.

1. Whom can you really count on to listen when you need to talk?

   No one

   1)  4)  7)
   2)  5)  8)
   3)  6)  9)

   How adequate?

   6-very adequate  5-fairly adequate  4-barely adequate
   3-a little inadequate  2-fairly inadequate  1-very inadequate
2. Whose lives do you feel that you are an important part of?

No one

1)  4)  7)
2)  5)  8)
3)  6)  9)

How adequate?

6-very adequate  5-fairly adequate  4-barely adequate
3-a little inadequate  2-fairly inadequate  1-very inadequate

3. Whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?

No one

1)  4)  7)
2)  5)  8)
3)  6)  9)

How adequate?

6-very adequate  5-fairly adequate  4-barely adequate
3-a little inadequate  2-fairly inadequate  1-very inadequate

4. Whom can you talk with frankly, without having to watch what you say?

No one

1)  4)  7)
2)  5)  8)
3)  6)  9)

How adequate?

6-very adequate  5-fairly adequate  4-barely adequate
3-a little inadequate  2-fairly inadequate  1-very inadequate
5. Who helps you feel that you truly have something positive to contribute to others?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?

6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

6. Whom can you really count on to be dependable when you need help?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?

6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

7. Whom can you count on to listen openly and uncritically to your innermost feelings?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?

6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate
8. Whom do you feel would help if a family member very close to you died?

No one
1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

9. Who accepts you totally, including both your worst and your best points?

No one
1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

10. Whom can you really count on to care about you, regardless of what is happening to you?

No one
1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate
11. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

12. Whom do you feel truly loves you deeply?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate

13. Whom can you really count on to support you in major decisions you make?

No one

1) 4) 7)
2) 5) 8)
3) 6) 9)

How adequate?
6-very adequate 5-fairly adequate 4-barely adequate
3-a little inadequate 2-fairly inadequate 1-very inadequate
PART E

APPENDIX B: THE ORIGINAL S.S.Q.
INSTRUCTIONS:

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials and their relationship to you (see example). Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have no support for a question, check the words "No one," but still rate your level of satisfaction. Do not list more than nine persons per question.

Please answer all questions as best you can. All your responses will be kept confidential.

EXAMPLE

Ex) Who do you know whom you can trust with information that could get you in trouble?

No one 1) T.N. (brother) 4) T.N. (father) 7) 2) L.M. (friend) 5) L.M. (employer) 8) 3) R.S. (friend) 6) 9)

How satisfied?

6-very satisfied 5-fairly satisfied 4-a little satisfied 3-a little dissatisfied 2-fairly dissatisfied 1-very dissatisfied
1. Whom can you really count on to listen to you when you need to talk?

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2. Whom could you really count on to help you if a person whom you thought was a good friend insulted you and told you that he/she didn't want to see you again?

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3. Whose lives do you feel that you are an important part of?

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4. Whom do you feel would help you if you were married and had just separated from your spouse?

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5. Whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?

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6. Whom can you talk with frankly, without having to watch what you say?
   No one  1)  4)  7)
   2)  5)  8)
   3)  6)  9)

   How satisfied?
   6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

7. Who helps you feel that you truly have something positive to contribute to others?
   No one  1)  4)  7)
   2)  5)  8)
   3)  6)  9)

   How satisfied?
   6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

8. Whom can you really count on to distract you from your worries when you feel under stress?
   No one  1)  4)  7)
   2)  5)  8)
   3)  6)  9)

   How satisfied?
   6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

9. Whom can you really count on to be dependable when you need help?
   No one  1)  4)  7)
   2)  5)  8)
   3)  6)  9)

   How satisfied?
   6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

10. Whom could you really count on to help you out if you had just been fired from your job or expelled from school?
    No one  1)  4)  7)
    2)  5)  8)
    3)  6)  9)

    How satisfied?
    6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied
11. With whom can you totally be yourself?

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12. Whom do you feel really appreciates you as a person?

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13. Whom can you really count on to give you useful suggestions that help you to avoid making mistakes?

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14. Whom can you count on to listen openly and uncritically to your innermost feelings?

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15. Who will comfort you when you need it by holding you in their arms?

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16. Whom do you feel would help if a good friend of yours had been in a car accident and was hospitalized in serious condition?

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17. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

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18. Whom do you feel would help if a family member very close to you died?

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</tr>
</tbody>
</table>

19. Who accepts you totally, including both your worst and your best points?

<table>
<thead>
<tr>
<th>No one</th>
<th>1)</th>
<th>4)</th>
<th>7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2)</td>
<td>5)</td>
<td>8)</td>
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</tr>
<tr>
<td>3)</td>
<td>6)</td>
<td>9)</td>
<td></td>
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</tbody>
</table>

How satisfied?

<table>
<thead>
<tr>
<th>6-very</th>
<th>5-fairly</th>
<th>4-a little</th>
<th>3-a little</th>
<th>2-fairly</th>
<th>1-very</th>
</tr>
</thead>
<tbody>
<tr>
<td>satisfied</td>
<td>satisfied</td>
<td>satisfied</td>
<td>dissatisfied</td>
<td>dissatisfied</td>
<td>dissatisfied</td>
</tr>
</tbody>
</table>

20. Whom can you really count on to care about you, regardless of what is happening to you?

<table>
<thead>
<tr>
<th>No one</th>
<th>1)</th>
<th>4)</th>
<th>7)</th>
</tr>
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<tbody>
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<td>dissatisfied</td>
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<td>dissatisfied</td>
</tr>
</tbody>
</table>
21. Whom can you really count on to listen to you when you are very angry at someone else?

No one 1)  4)  7)
           2)  5)  8)
           3)  6)  9)

How satisfied?

6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

22. Whom can you really count on to tell you, in a thoughtful manner, when you need to improve in some way?

No one 1)  4)  7)
           2)  5)  8)
           3)  6)  9)

How satisfied?

6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

23. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

No one 1)  4)  7)
           2)  5)  8)
           3)  6)  9)

How satisfied?

6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

24. Whom do you feel truly loves you deeply?

No one 1)  4)  7)
           2)  5)  8)
           3)  6)  9)

How satisfied?

6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied

25. Whom can you count on to console you when you are very upset?

No one 1)  4)  7)
           2)  5)  8)
           3)  6)  9)

How satisfied?

6-very satisfied  5-fairly satisfied  4-a little satisfied  3-a little dissatisfied  2-fairly dissatisfied  1-very dissatisfied
26. **Whom can you really count on to support you in major decisions you make?**

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**How satisfied?**

<table>
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<th>5-fairly satisfied</th>
<th>4-a little satisfied</th>
<th>3-a little satisfied</th>
<th>2-fairly dissatisfied</th>
<th>1-very dissatisfied</th>
</tr>
</thead>
</table>

27. **Whom can you really count on to help you feel better when you are very irritable, ready to get angry at almost anything?**

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<thead>
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<th>1)</th>
<th>2)</th>
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<th>4)</th>
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