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Adapting to Life Changes:
The Roles of Personal and Situational
Resources in Adjusting to Long-Term Care

by

Gail Matheson Cox

B.A. University of Winnipeg, 1990

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
University of Windsor
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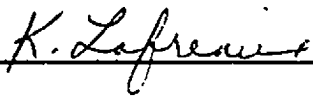



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Abstract

Although popular stereotypes and some theoretical perspectives (i.e., role theory, loss of personal control) would suggest that old age is a time of lowered psychological well-being, the empirical evidence indicates that the elderly adapt well to life changes, and in some instances, better than younger people. Continuity theory is used as a framework for studying adaptation to life changes and coping in the elderly by integrating personality, the self-concept, and coping mechanisms. Specifically, the roles of personal resources (neuroticism, attitude to aging, and social comparison) and situational resources (social support) were examined. Participants were 33 elderly residents of long-term care facilities, displaying no signs of cognitive impairment and having no history of mental illness. Results indicate that neuroticism and intrapersonal resources are significant predictors of adaptation to long-term care; social support did not contribute significantly. The findings are discussed in terms of continuity theory, and implications for social service programs are considered.

Acknowledgements

Age-Old Truths

We are the old folks that you see,
Who fast to life have clung,
And like us, you will sometime be,
For once we too were young.

We now are in life's aftermath,
And by the Grace of God
Your feet will travel o'er the path
Our weary feet have trod.

The things we should remember
Slip by us, just like time,
Our flame is now an ember
And our efforts not in rhyme.

'Tis not our fault that we are slow and
linger in between.
This earthly life we lived to know
And the life we've never seen,
So treat us kindly as you pass
And as your days unfold
Remember, time is going fast
And you too are growing old.
-Given to me by a participant

I would like to thank the members of my committee for their tremendous support. My chairperson, Dr. Michael Kral, prevented many a stress breakdown and gave me confidence in who I am, and who I can be. Prof. Kathryn Lafreniere provided statistical and emotional support (and the two go hand in hand). Dr. Kaye Fawdry offered support and another perspective on the applications of this research. I would also like to thank the staff and residents of the two Homes for the Aged that were kind enough to allow me to conduct my research at their facility. Finally, I would like to thank my husband, Shaughn Cox, for remaining my husband, my family, and my colleagues who offered support and understanding.

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CHAPTER I
INTRODUCTION

Aging and Loss

In our North American culture, the aging process is generally considered to be a period of increasing loss. These losses may include the disruption of social contact (e.g., death of spouse and/or friends), the loss of social roles (e.g., retirement) and loss of physical capacity (e.g., illness, need for long-term care). As well, most seniors have relatively low incomes, and many report difficulty in accessing transportation (Perlman, 1988). Finally, old age is seen as a time when we are apt to lose our social power and become increasingly dependent upon others. These cumulative losses often result in the older person becoming dependent on family for assistance (e.g., financial, physical, and emotional). For many, the only option is dependence upon health care professionals.

Considered together, one would expect these losses to undermine the psychological well-being of older individuals. In other words, older people ought to feel increasingly lonely and depressed as they age. Not surprisingly, this is the view of aging held by the general public. In a 1981 survey, 65% of respondents aged 18-64 said they thought loneliness was a very serious problem for most people over 65 (National Council on Aging, 1981).

There are several theoretical perspectives which would

predict the onset of undesirable psychosocial outcomes and a general reduction in well-being due to age-related losses. Below, I will consider role theory and the effects of loss of personal control as they pertain to life changes.

Role Theory

Role theory suggests that self-evaluations tend to decline in later life as people lose important social roles. Our society has even had a psychiatric diagnosis for the depression caused by role loss associated with age: involuntional melancholia (or involuntional depression). This diagnosis has typically been given at the time of the loss of the parenting role and at the time of the role loss associated with retirement (Gallagher, 1980).

In contrast, early and middle adulthood is characterized by self-conceptions which become increasingly positive as people acquire new social roles (Gallagher, 1980). As the young adult matures, she or he will take on the roles of spouse, parent, and wage-earner, etc. Thus, according to role theory, psychosocial adjustment is believed to be a direct consequence of the process by which we acquire and lose social roles. Role acquisition is assumed to be a relatively positive process, role transition

elicits stress, while role loss undermines the sense of self. Thus, role theory would lead to the prediction that the losses associated with old age would result in increasingly negative self-conceptions and other indicators of poor psychosocial adjustment.

Loss of Personal Control

Social psychologists and gerontologists are becoming increasingly aware that a sense of control is an important determinant of the aged individual's physical and psychological well-being (Moore & Schultz, 1987). That is, evidence suggests that a lack of control undermines one's sense of well-being. Perceptions of control over the social environment (e.g., control over frequency of contact) may be especially significant to the older individual. Age-related events such as retirement, decreasing physical ability, and the loss of friends and relatives to death can reduce the older person's sense of personal control (Lowenthal & Robinson, 1976). In a study of older adults in nursing homes, Langer and Rodin (1976) found that increased choice and personal responsibility, even in small matters such as the selection of a plant to care for, improved social participation and general well-being.

Aging and Psychosocial Outcomes

Perspectives such as role theory and the effects of loss of control would lead one to expect that old age and the changes that accompany aging will be detrimental to psychological well-being. Despite the challenges of the objective circumstances of the elderly, as well as current stereotypes and ageism, there is considerable research suggesting that the elderly are well adjusted, and in some cases, better off than younger people in terms of psychosocial adjustment. For example, Gove, Ortega, and Briggs-Style (1989) reported that as persons age, their self-concepts contain more positive attributes, fewer negative attributes, and become better integrated than the self-concepts of younger persons. Age was also found to be associated with a positive self-evaluation, as indicated by reported life satisfaction and high self-esteem.

The low incidence of loneliness among the elderly, despite the marked loss of social contact, is striking. Perlman, Harrison, and Bond (1985) reported that the results from 12 studies show that senior citizens are not an especially lonely group. The age trend that emerged suggested that loneliness is highest in young adulthood and

generally declines over the life cycle. Perlman (1988) and Revenson (1986) state that self-reports of loneliness are highest among adolescents, and decrease with age.

Shanas, Townsend, Weddrburn, Friis, Milhoj, & Stehouwer (1968) conducted a cross-cultural study of old people in Denmark, Great Britain, and the United States. In the U.S. sample, 70% of those over 65 reported that they "never" or "rarely" felt lonely; 21% were "sometimes" lonely, whereas only 9% responded that they "often" felt lonely. In contrast, Parlee (1979) found that 79% of respondents under the age of 18 said they were "sometimes" or "often" lonely. Shultz and Moore (1988) examined differences in the loneliness experienced by high school students, college undergraduates, and retirees. The results indicated that the greatest loneliness was among high school students, while loneliness was lowest among retirees. As well, high-school students experienced greater depression, anxiety, self-consciousness, lower self-esteem, and lower life satisfaction than did retirees.

Coping and Adaptation in Later Life

The studies describing the positive psychosocial adjustment of the elderly suggests that most elderly

individuals are quite good at adapting in the face of adversity. Simply put, the question which arises is that of understanding how the elderly are able to successfully adapt to life changes in the face of such adversity as ageism and age-related losses.

Below, I will consider some of the factors which may facilitate adjustment. Specifically, continuity theory offers a framework for studying adaptation and coping in the elderly by integrating personality, the self-concept, and coping mechanisms. Also, the roles of internal resources (i.e., attitudes to aging, social comparison) versus external resources (i.e., social support) will be considered as they relate to continuity theory.

Continuity Theory

Atchley (1982) presents a perspective which helps make clear how, given objective deleterious circumstances (i.e., ageism, role loss, increasing financial and physical dependence), most older people are able to maintain a positive self-image and high self-esteem, and ultimately, successfully adapt to life changes. Atchley (1982, 1989) proposed a general theory of adaptation to aging in which he suggests that aging individuals attempt to maintain a sense

of continuity in the face of change. A central premise of continuity theory is that middle-aged and older adults aim to maintain existing internal and external structures when making adaptive choices. This is accomplished by the use of continuity, which can be understood as applying familiar strategies in familiar arenas of life.

Continuity is described as a subjective perception that changes are linked to and fit with an individual's personal history (Atchley, 1989). Continuity can be characterized as either internal or external. Internal continuity is defined by the individual in relation to a remembered inner structure, such as temperament, affect, experiences, preferences, dispositions, and skills (Atchely, 1989). Internal continuity is a healthy capacity to see inner change as connected to the individual's past and to see the individual's past as sustaining and supporting and justifying the new self (Lieberman & Tobin, 1983). External continuity is defined in terms of a remembered structure of physical and social environments, relationships, and activities. Perceptions of external continuity result from being in familiar environments, practising familiar skills, and interacting with familiar people (Atchley, 1989).

How do these mechanisms work in the face of changing roles and circumstances? Atchley (1982, 1989) states that from middle age on, evidence points to a large amount of continuity or stability in the global aspects of self and identity (e.g., Kaufman, 1987; Lieberman & Tobin, 1983; McCrae & Costa, 1982). The global assessments and attributions the individual makes about herself or himself persist despite substantial changes in the details of everyday life. Atchley (1989) argues that by the time an individual reaches middle age, there is a huge backlog of experience indicating what the individual is like and should be like in a wide variety of roles and situations. This argument is consistent with research examining stability in personality, which will be reviewed later.

Internal Continuity

Atchley (1989) asserts that internal continuity occurs primarily in the relatively abstract self-attributions that form the core of identity. This continuity is not sameness, he claims, but rather is characterized by very gradual evolutions in which new directions are closely linked to and elaborated upon the already existing identity. New information usually can be absorbed relatively easily within

the context of the present identity.

Although continuity theory would view internal continuity as a prerequisite for mental health, the theory outlines circumstances in which internal continuity can be maladaptive. For example, internal continuity is maladaptive when it is a long-standing negative identity which is being affirmed. Internal continuity can also be maladaptive if some important (i.e., highly valued) aspect of the self has changed. As a result, old ideas about that aspect of the self will no longer lead to accurate expectations. Expectations for one's own performance may now be impossible to fulfill, which would lead to low self-esteem. In such a case, continuity of unrealistic expectations is maladaptive (Atchley, 1989).

External continuity

Continuity theory suggests that external continuity allows the elderly individual to minimize the negative effects of aging on physical and cognitive ability by maintaining stable environments (Atchley, 1989). Practice maintains functioning and minimizes decline in cognitive skills (Botwinick, 1984) and physical capacity (Buskirk, 1985). On the other hand, new environments call for new

skills and can make the aging individual aware of a drop in ability. This may be one of the reasons elderly people resist changing households or communities. The same strategy is used with relationships. The company of familiar people offers security and predictability. Consistent interpersonal history allows for affirmation of identity.

This type of loss of control over the environment (i.e., changing residence) can pose serious problems for maintaining one's self-image. For example, when people enter into long-term care, they are dependent upon the staff, not only for their physical needs, but also for their sense of self. They find themselves among people who do not know their pasts, which results in staff responding to the individual as they appear and behave at this time, not as the individual may conceptualize his- or herself based on past experiences.

Personality Stability and Continuity Theory

A central premise of continuity theory is that an individual's personality is relatively stable. New information is assimilated into the existing sense of self. As such, evidence of a stable personality would not only be

consistent with continuity theory, but would also lend support to the theory. There is a substantial body of research which provides evidence of the stability of personality in adulthood. McCrae and Costa (1990), in a large scale review of the literature on adulthood and personality, present strong evidence in support of the stability of personality factors. For example, Siegler, George and Okun (1979) found very few cross-sectional age differences in neuroticism, extraversion, and conscientiousness, which are commonly and extensively studied personality traits, and are three of the "big five" traits found in personality research (McCrae & Costa, 1990). Costa and McCrae (1977) found 10-year stability coefficients of .69 for Neuroticism and .84 for Extraversion.

The "big five" personality traits are conscientiousness, agreeableness, openness, extraversion and neuroticism. Conscientiousness is characterized by being hard-working, ambitious, and persevering. Agreeableness refers to the degree to which a person is trusting and generous, and overall good-natured. Openness describes an individual who is imaginative, creative, original and liberal. An individual high in extraversion would be

affectionate, talkative, and fun-loving. Characteristics of neuroticism include being temperamental, self-pitying, self-conscious, vulnerable, emotional, and a worrier (Costa & McCrae, 1991). Those low in neuroticism overall demonstrate long-term emotional stability. As such, when referring to low levels of neuroticism, the term long-term emotional support will be used.

Costa and McCrae (1988b) conducted a 6-year longitudinal study of 983 men and women ranging in age from 21-96. In addition to self-reports, some analyses on spouse ratings of 167 men and women were conducted. They found very little consistent evidence of maturational effects in personality scores. This study was also the basis for an examination of the stability of individual differences in personality and provided evidence for the stability of personality traits (i.e., neuroticism, extraversion and openness) in men and in women, in early and late adulthood.

Costa, Gatz, Neugarten, Salthouse, and Siegler (1991) also synthesized a large body of evidence for the stability of personality traits. In a large scale, longitudinal study, it was found that age had no effect on neuroticism, extraversion, and openness to experience, regardless of sex

or race (Costa, McCrae, Zonderman, Barbano, Lebowits, & Larson, 1986). Furthermore, there also appears to be evidence of higher stability in personality in studies in which subjects are initially over age 30 (Costa & McCrae, 1991). Finn (1986) for example, found substantially higher retest correlations for subjects initially aged 43-53 than for those initially 17-25.

Personality and Coping

Continuity theory is strengthened by evidence indicating that personality traits are stable throughout adulthood. This evidence becomes even more significant when the relationship between personality and coping is explored.

Traditionally, it has been assumed that personality and coping styles go hand in hand (McCrae & Costa, 1986). For example, Vaillant (1977) views coping or defensive strategies as enduring aspects of the individual. Haan (1977) defines personality in terms of coping.

McCrae and Costa (1986) conducted two studies to examine the influence of personality on coping responses, the perceived effectiveness of coping mechanisms, and the effects of coping and personality on well-being. Both studies inquired about a wide range of potential stressors

(i.e., losses, threats, or challenges), and measured three personality dimensions, including neuroticism. They found that neuroticism and neurotic coping styles were negatively related to well-being. Furthermore, most of the associations of personality with coping mechanisms were found even when the measurement of personality preceded, and thus could not have been influenced by, the specific stressors and coping efforts subsequently assessed.

McCrae and Costa (1986) believe that personality may be causally responsible for at least some of the association between coping and well-being. They argue that coping efforts might mediate the way by which the effects of personality on well-being are explained. That is, individuals who are high in neuroticism are unhappy because they cope poorly.

Types of Resources: Intrapersonal versus Interpersonal

There is reason to believe that certain coping efforts are useful for solving specific problems, and that studies ought to focus on the specific problems for which a coping behaviour may be most useful. For example, Hobfoll and Lieberman (1987) suggest that no single resource will be

beneficial for all events because resources need to be congruent with the situation and the individual's needs. Resource effectiveness is situationally dependent, and therefore more varied resources should lead to better coping abilities.

In terms of personal resources, studies examining the traits relating to the individual's perceived sense of control have found that people who feel in control believe they will overcome current failures, whereas people who feel helpless are overwhelmed when faced with life stressors (Abramson, Seligman, & Teasdale, 1978). Also, in studies examining reactions to crisis, women high in self-esteem were found to have an enduring sense of their own worth. This positive self-evaluation was not easily diminished by current events, and it led to stress resistance (Hobfoll & London, 1986). High self-esteem is immediately and continuously available to individuals who possess it and is resistant to events perceived as outside the individual's control (Hobfoll & Lieberman, 1987).

Social resources, especially social support, help an individual resist stress. The direct effect argument states that social support promotes a sense of well-being at any

stress level. The buffering effect argument states that social support acts to reduce harmful effects of stressors, but has no effect on well-being during low-stress periods. There is evidence for both arguments (Wilcox, 1981).

In contrast, the ecological congruence model (Hobfoll & Lieberman, 1987) suggests that social support aids initial adjustment, because this is when stress is highest, and friends and family are most willing and able to respond. As time passes, supporters must return to their own concerns. Thus, conflicting findings regarding the buffering versus direct effects may be the result of studies in which adjustment measures have been taken at more recent or less recent times in relation to the stressful event.

For the purposes of this research, attitudes to aging, social comparison, and social support will be considered as coping resources. Attitudes to aging and social comparison are conceptualized as intrapersonal resources, as they represent resources the individual has personal access to, independent of the presence of others. Social support is conceptualized as an interpersonal resource, as it is dependent on interactions with others.

Attitude To Aging

The attitude one holds towards aging in terms of beliefs, fears, and expectations for aging may have implications for adaptation to the life changes associated with aging. For example, Bassili & Reil (1981) found that the old hold fewer negative views of old age than younger age groups. Connidis (1989) argued that the personal rejection of the negative view of aging and the label "old" is consistent with the higher levels of well-being reported by the elderly despite poor objective conditions. In contrast, Furstenburg (1989) reports that people who describe themselves as "old" tend to exhibit less life satisfaction, lower morale, and lower measures of psychological health such as self-esteem, self-confidence, and locus of control.

It is possible that one's attitudes concerning aging act as a generalized expectancy about aging. That is, one's attitudes to aging may act as a means of preparing the individual for growing old. Connidis (1989) associated the degree to which the older adults' expectations about aging were met with how positively they viewed "being their age." Those elderly whose expectations have been met or exceeded hold a more positive view of their age than do those elderly

whose expectations have not been met.

Kullai and Ramamurti (1988) offer evidence to suggest that negative attitudes to aging act to undermine psychological well-being. They found a high correlation between negative attitudes towards old age and maladjustment, and concluded that those who hold negative attitudes towards old age do not accept the characteristics of old age.

One's expectations about aging may also be expressed in terms of fears regarding aging, and may have implications for successful aging. The fear of upcoming events and transitions (such as aging, or entry into long-term care) may be associated with a poor sense of well-being in the present (Pyszczynski, Holt, & Greenburg, 1987). In fact, elderly adults who have positive attitudes toward the future report higher satisfaction with current life (Lehr, 1967). The question which arises is whether fear of the consequences of personal aging is related to current well-being among older persons (Klemmack & Roff, 1984).

Klemmack and Roff (1984) measured fear of aging, family income, level of education, perceived health status, and race as possible predictors of subjective well-being.

However, of all these variables, fear was most closely tied conceptually with well-being.

One's attitude to aging may manifest itself in the specific case of expectations, fears, and beliefs about entry into long-term care. Biedenharn and Normoyle (1991) found that those elderly who expressed the greatest fear of entering a care facility also rated standards of care and quality of resident life as poor. Negative perceptions and attitudes about resident care and quality of life have been implicated in delays in seeking long-term care services and poorer adaptation after admittance. Biedenharn and Normoyle (1991) argue that research concerning adjustment to long-term care would benefit from specifying not only elders' attitudes regarding the care facility, but also from a range of outcomes resulting from these cognitions.

Social Comparison

A second factor which may be involved in the adaptation of the elderly to life changes is the process of social comparison. It has long been recognized that individuals evaluate their current lives in large part by comparisons to their own past experiences and to those of other people

(Pettigrew, 1967). Atchley (1982) argues that continuity of self, which has been previously argued to assist in adaptation, can be maintained by using what he terms to be "relative appreciation." Through this process, an older person may acknowledge that aging has reduced the amount of heavy work that he or she can do, but at the same time recognize that compared to others his or her age, the decrement has been insignificant. Relative appreciation is consistent with the motivation for and the behaviours associated with social comparison. To the extent that relative appreciation reflects an attempt at maintaining internal continuity, and thus is an adaptive coping strategy, so too is social comparison a mechanism which is used in the face of threatening circumstances to maintain self-esteem and self-worth.

Gerontologists have invoked the concept of social comparison to help understand the psychological well-being of older adults (Peplau, Bickson, Rook & Goodchilds, 1982). Social comparison with others may be a strategy for continuing to see oneself as being "not old" (Furstenburg, 1989). In one study, people who perceived themselves as better off than their age peers, in terms of needing help,

group participation, interaction with siblings, and health, were more likely to retain a middle-aged self-concept (Furstenburg, 1989).

Social comparison is often used by people who find themselves in stressful situations as a means of maintaining mental health (Taylor & Lobel, 1989). Specifically, there is a strong preference for certain groups under threat to evaluate the self against less fortunate others (downward evaluations).

DeVellis, Holt, Renner, Blalock, Blanchard, Cook, Klotz, Mikow and Harring (1990) examined the relationships among symptom severity, symptom exacerbation, negative affect, and social comparison processes among a sample of rheumatoid arthritis patients. Three different types of social comparison measures all revealed a preponderance of downward comparisons when experiencing severe or worsening arthritis symptoms. The findings suggested that chronic health problems can threaten self-worth, and that such a threat motivates downward comparison.

The above findings are consistent with the research of Affleck, Tennen, Pfeiffer, and Fifeild (1988). Individuals with rheumatoid arthritis completed questionnaires comparing

their disease activity, functional status, and adjustment to that of the average person with this illness. More of the participants made spontaneous downward social comparisons rather than upward comparisons when describing their illness. Controlling for demographic characteristics, patients' actual disease activity, and the accuracy of the conclusions they drew about their comparative health status, those who compared their disease activity more favourably to that of the average patient were rated by their care providers as exhibiting more positive psychosocial adjustment (Affleck et al, 1988). It is important to note that these principals of social comparison have applications beyond threat due to disease; this process is involved in coping with stressful situations.

Not engaging in social comparison may result in poor adjustment to life changes, since downward evaluations seem to be efforts to regulate emotions by making the person feel better in comparison with worse-off others. In fact, Hansson, Jones, Carpenter, and Remondet (1986) found that those widowed elderly who did not engage in social comparison exhibited the most loneliness, and engaged in a number of other maladaptive behaviour patterns.

Personality and Social Comparison

There is evidence to suggest that personality traits have some influence on the outcomes of downward social comparison. For example, Gibbons and McCoy (1991) tested the hypothesis that both high and low self-esteem persons engage in downward social comparison, but do so in different ways. They found that high self-esteem people, when threatened, derogate a downward comparison target, which was classified as a form of active downward comparison. Low self-esteem persons did not derogate the target when threatened, but they did report mood improvement after the comparison opportunity, which was classified as passive downward comparison. Furthermore, the more similar the threatened, low self-esteem persons thought they were to the target, the better they felt after the comparison. Given the strong relationship between neuroticism and self-esteem (e.g., McCrae & Costa, 1988; McCrae and Costa, 1990), one could reasonably expect to find similar effects if measures of neuroticism were included.

Social Support

A number of social and psychological factors may influence the functional adaptation of the elderly.

Specifically, informal support may be a key factor in successful aging (Mancini & Simon, 1984). Association with others is often a significant factor in whether or not one feels a sense of belonging. Its importance may be intensified as one ages because the society withdraws behaviorally, in the form of expecting or mandating retirement, and attitudinally, in the form of attributing lesser abilities to those who are old. Family members and friends are principal players in an older adult's network of informal support and may be regarded as pivotal to how life is experienced toward the later part of the individual life cycle (Mancini & Simon, 1984). Social support has been suggested as a mediating factor in determining an individual's response to a variety of stressful situations (Schultz & Saklofske, 1983). It has been said to protect an individual against distressing life events, extend coping resources, and facilitate adaptation (Schultz & Saklofske, 1983). Maladaptive ways of thinking and behaving have been more common among those with fewer social supports (Silberfeld, 1978). Social support has been identified as a key situational moderator of or buffer to the effects of psychosocial stressors. Cutrona (1986) states that

perceived social support has consistently been linked to positive mental health. Many researchers have concluded that social support buffers the effects of stressful events and life changes (e.g., Dean, Lin, & Ensel, 1981). Others have pointed to its protective functions in strengthening coping abilities and adjustment (e.g., Andrews, Tennant, Hewson, & Vaillant, 1978).

Conversely, lack of social support has been associated with psychiatric problems (Andrews et al., 1978). Hirsch (1980) reported a high correlation between natural support systems (i.e., family and friends) and measures of mental health. Lowenthal and Haven (1968) studied elderly people to determine the effects of social support on coping and adaptation. They discovered that maintaining relationships with a confidant and participating in social organizations were significantly related to high morale and better adjustment to stressful events.

Inadequate social support systems may lead to negative psychosocial outcomes, such as loneliness. Rokach (1988) describes a crippled social support system, which is ineffective or unable to meet the individual's needs. Such

a network is a disappointing one. Subjects in that study related that their loneliness stemmed from a support system which did not fulfil their needs nor provide the support they needed.

Loneliness in Old Age

Popular stereotypes portray old age as a time of increasing loneliness, especially in a care facility. Addressing loneliness as a possible negative psychosocial outcome specific to age related losses is necessary.

Peplau and Perlman (1979) state that loneliness occurs when a person's network of social relationships is smaller or less satisfying than the person desires. Loneliness is said to reflect the discrepancy between a person's desired and achieved levels of social interaction. Peplau, Russell, and Heim (1979) assert that the desire for social contact fluctuates, depending on factors which include the nature of the situation and social norms. Personal expectations about the types of relationships that are possible or probable in a given situation may differentially affect the desire for contact.

Given the somewhat predictable physical changes of aging and a more limited set of age peers to socialize with,

older persons may have more realistic expectations of their current and future relationships. They may have experienced enough social losses over their lifetime to have acquired a greater equanimity over them (Revenson, 1986). Thus, the aging individual may develop an expectation for lowered contact while focusing on the value and the quality of their achieved contact. In support of this, Perlman, Harrison, and Bond (1985) reported that seniors exhibited lower desired and achieved levels of social contact than university students, and were less lonely than the university students.

Integrating the Perspectives

Saklofske and Yackulic (1989) found general, social, and emotional loneliness to be positively related to neuroticism. Stephan, Fath, and Lamm (1988), in a study on a German sample, also found a strong positive correlation between neuroticism and loneliness.

This evidence is especially insightful when combined with Shute and Howitt's (1990) postulated theory of loneliness. Shute and Howitt propose that loneliness is a social construction and relates to no particular biological state. Secondly, from their perspective, loneliness is

believed to be integral to the self-concept and will respond to any changes in the self-concept. Thirdly, it is argued that the self-concept and feelings of loneliness are both dependent on social comparisons. Finally, retirement and old age may bring about radical changes in the criteria for social comparisons due to the socially held beliefs about loneliness and isolation in old age.

Shute and Howitt (1990) state that in all age groups, people differ in terms of their levels of loneliness. These feelings of loneliness are generated by a number of factors including the degree of social isolation experienced by those individuals. Further, many of the factors which adversely influence the self-concept will also increase the likelihood that the individual will define himself or herself as lonely. As such, clinical symptoms such as depression will increase such self-definitions as being lonely because of the relationship between depression and the self-concept (Peplau, Miceli, & Morash, 1982).

Shute and Howitt (1990) argue that what is different about the elderly is that, socially, the link between the self-concept and loneliness becomes reduced. The reason for this may be that as the individual approaches and enters old

age, he or she appraises the realities of the situation and sees the difficulties of retaining friendships because of bereavement, increased immobility, and the loss of the working environment as a source of friendships. This sort of loss of friendship cannot reasonably be seen as a reflection on oneself since it is the result of external factors over which the individual has little or no control. If reduced social contact in old age is not the fault of the individual, it cannot have implications for the self-concept, or for self-definitions of loneliness.

In contrast, to the 20 year old person, popularity and feelings of self-worth seem to be much more intimately connected. Here social isolation cannot be explained away as being the result of factors beyond the control of the individual. At this age, if an individual has no friends, the explanation is not likely reduced opportunity, but rather that people do not like the individual. This explanation has profound implications for the self-concept and for self-definitions of being lonely.

The theory proposed by Shute and Howitt (1990) is enhanced by taking into consideration the relationship between neuroticism and loneliness. It is possible that

those individuals who are high in neuroticism are most susceptible to threats to the self-concept, and therefore to threats to general adaptation and the experience of loneliness. The inclusion of the role of personality is consistent with previous studies (Saklofske & Yackulic, 1989; Stephan, Fath, & Lamm, 1988), as well as with continuity theory.

The relationship between social comparison and personality also contributes to the power of Shute and Howitt's theory. Gibbons and McCoy (1991) demonstrated that although both high and low self-esteem persons engage in downward social comparison, they do so in different ways. Although both groups engage in downward social comparison, only low self-esteem people are likely to show positive affective response. Moreover, this positive response appears to be mediated by perceptions of similarity to the target rather than disparagement of the target. Thus, simply realizing that there are others who are worse off can be encouraging for low self-esteem people, and it is not necessary for them to derogate those other people (Gibbons & McCoy, 1991).

In contrast, high self-esteem persons derogate downward

comparison targets, but only when threatened. They do not feel better as a result. When not threatened, they do not appear to be significantly affected by this type of comparison. Buunk, Collins, Taylor, VanYperen and Dakof (1990) found similar results, but add that high self-esteem individuals were better able to make use of either upward or downward comparisons for the purpose of self-enhancement than were low self-esteem individuals.

This information, considered in conjunction with evidence associating low neuroticism with higher self-esteem, suggests that when presented with the same resources, those individuals who are high in neuroticism are less able to take effective advantage of the resources. Therefore, Shute and Howitt's postulate that social comparison is important to the self-concept and feelings of loneliness can only be strengthened by the inclusion of personality factors.

Finally, although this theory was proposed as a means of understanding loneliness, the theory also has value as a way of understanding general adaptation. When considered together with the effects of personality, Shute and Howitt's postulates are in line with the premises behind Atchley's

continuity theory.

Hypotheses

The above argument leads to the development of the following hypotheses:

Long-term emotional stability (low neuroticism) will be a significant predictor of adaptation to entry into long-term care (i.e., higher life satisfaction, lower levels of loneliness, and lower levels of depressed affect).

Intrapersonal resources (i.e., positive attitude to aging and downward social comparison) will be a significant predictor of adaptation.

Interpersonal resources (i.e., social support) will be a stronger predictor of functional adaptation for those individuals lower in intrapersonal resources than for those who have high intrapersonal resources.

CHAPTER II

Method

Sample

Respondents were 33 elderly residents of two Homes for the Aged in Windsor, Ontario. Twenty-eight of the participants were female, and 5 were male. Ages ranged from 62 years to 93 years of age, with a mean age of 82. To be included in the study, participants must not have been in the residence for longer than 2 years. Average length of time in the care facility was 15 months. Participants were screened by staff as having no obvious cognitive impairments and having no history of mental disorder. Only 1 participant was dropped from the study for demonstrating signs of cognitive impairment, and only 1 resident refused to participate in the study.

Procedure

After obtaining consent of each care facility to solicit residents' voluntary participation, the administration was asked to provide a list of those residents who have no history of mental disorder or cognitive impairment. The researcher introduced herself to each potential participant in their rooms, provided a letter

of introduction (see Appendix A), and described the project. Potential participants were then asked if they had time and if they were willing to participate in the project. If the resident declined, they were thanked and removed from the list. If the resident agreed, the researcher briefly described the study and ensured that he or she understood the terms of the consent form before obtaining the resident's signature (see Appendix B). The interviewer then spent some time establishing rapport with the participants.

The measures were administered in the form of an interview. This method was chosen to accommodate for any problems the resident may have had in terms of physical difficulties such as poor eyesight or difficulties in writing. Once the interview was completed, the researcher thanked the resident for his or her time, and discussed the purposes and procedure with the participants. At this time, the researcher answered any questions they had regarding the study. Also, the researcher ensured that the participants were not adversely affected by the interview protocol.

Finally, a copy of the debriefing sheet (see Appendix C) was left with each participant. No identification of the participant's identity appeared on the measures.

Interview Schedule

To accommodate the use of an interview procedure, several scales were adapted to the interview format. A complete review of the interview schedule is included (see Appendices D thru L). Measures were presented in the following order for the purposes of the interview schedule: a) Life Satisfaction Index; b) Social Comparison; c) Attitudes to Aging; d) Eysenck's Neuroticism scale (short form); e) Perceived Social Support scale; f) Self-Image scale; g) Fear of Aging scale; h) Center for Epidemiologic Studies Depression Scale; and i) Emotional and Social Loneliness Inventory. However, the information which follows regarding the measures reflects first those variables which will act as predictors, followed by those variables which will be outcome measures.

Demographics. Participants were asked to indicate their sex, age, length of stay as a resident in a nursing home, and marital status.

Attitudes to Aging. The items chosen for this study originated from the Tuckman-Lorge (1953) Attitudes Toward Old People scale. This instrument assesses negative stereotypes and common misconceptions about old people, and

attitudes about old people. The original instrument consisted of 137 statements about old people, divided into 13 categories: (1) physical, (2) financial, (3) conservatism, (4) family, (5) attitude toward the future, (6) insecurity, (7) mental deterioration, (8) activities and interests, (9) personality traits, (10) best time of life, (11) sex, (12) cleanliness, and (13) interference. No psychometric characteristics were available for this measure.

Sixteen items were chosen to construct a short form appropriate for an interview format. Items were selected to reflect the potential positive and negative aspects of aging, such as "Old people are in the happiest period of their lives", and "Old people cannot manage their own affairs". Yes-no categories indicate endorsement of each statement as characteristic of older persons (see Appendix D).

Interpersonal Support Evaluation List (ISEL). Fourteen items were selected from the original 40 item measure (Cohen, Mermelstein, Kamarack & Hoberman, 1985). The original scale consisted of declarative statements regarding appraisal of support, sense of belonging, tangible support,

and self-esteem due to support, to which the individual answers True or False.

Internal reliability ranges from .77 to .86. Ranges for the subscales are .77-.92 for appraisal, .60-.68 for self-esteem, .75-.78 for belonging, and .71-.74 for tangible support. Test-retest correlations for a four week period was .87, and for a two day period was .87.

Items included in this study were selected to reflect the amount of perceived social support the individual received. Examples of items selected are "There is at least one person I know whose advice I really trust," and "There are several different people with whom I enjoy spending time." (See Appendix E).

Social Comparison. Eight questions were developed to assess the reference groups to which older persons might compare themselves. Possible groups for social comparison were (a) other older people, (b) the individual's past, (c) people younger than the individual, and (d) older people from the individual's past. Questions measure whether the subjects feel they are presently better off, or experiencing more difficulties than each comparison group. For example, one item reads: "I'd like you to think about the things you have

to deal with in your life. Do you think you are better off compared to other older people you know?". (See Appendix F).

Neuroticism. Items included in this measure are the nine items reflecting neuroticism from the short-form of the Eysenck Personality Inventory (Form B). These are Nos. 2, 4, 14, 16, 23, 31, 33, 40, and 50. For example, item 31 is "Do ideas run through your head so that you cannot sleep?" Cronbach's alpha for this measure is .75. (See Appendix G).

Fear of Aging. The measure of fear of aging is a 4-item scale developed by Klemmack, Durand and Roff (1980). The measure has been demonstrated to have high internal consistency in prior studies (coefficient alpha = .77 with a sample of 1,030, Klemmack & Roff, 1983; coefficient alpha = .81 with a sample of 1,012, Durand, Roff & Klemmack, 1980). A sample item from this index is "I feel that people will ignore me when I am old." (See Appendix H).

Life Satisfaction. Life satisfaction will be assessed using a single item indicator for life satisfaction and happiness (Robinson, 1973). Single item indicators of life-satisfaction and happiness have been used as an overall global measure of the individual's perception of his or her satisfaction with life. They often are used as a validity

criterion in the development of life satisfaction and morale scales (Robinson & Shaver, 1973) (See Appendix I).

Self-Image. Zola's (1962) measure of Feelings About Age were used to examine an older person's image of himself or herself as older. This is a three-item scale examining an individual's age perception. As well, Jeffers, Eisdorfer and Busse's (1962) Comparative Age Identification measure was used. This is a single item interview indicator, which asks the respondent to compare feelings about his or her own age with feelings about the age of other people who are approximately the same chronological age (see Appendix J). No validity or reliability information is available on these scales.

Emotional/Social Loneliness and Isolation (ESLI). Vincenzi and Grabosky's (1987) ESLI scale was used to measure the emotional/social isolation and loneliness that an individual may experience. This is a 15-paired-item scale that examines "what is true in one's life" and "how one feels" about a situation. Only the measure of how one feels about a situation was chosen for this study, as previously selected measures (i.e., perceived social support, social comparison) reflect the individual's social situation. This

measure reflects the emotional and social loneliness that one experiences. It is possible to use this part of the scale separately, as the original analyses considered the items of "how one feels" separately from "what is true in one's life" (see Appendix K).

Within the "how one feels" category, the alpha reliability coefficient for emotional loneliness was .86 for the 8 items; the coefficient for social loneliness was .82 for the 7 items. The test-retest reliability coefficient was .80.

CES-D. The Center for Epidemiologic Studies Depressions Scale (CES-D scale) was used for this research. The CES-D scale is a 20-item self-report scale designed to measure depressive symptomology, with emphasis on the affective component, depressed mood, in the general population. A sample item is "I felt hopeful about the future." This scale lends itself easily to use with an interview format (see Appendix L).

The measures of internal consistency were high, with a coefficient alpha ranging from .84 to .90; split halves ranged from .76 to .85, and Spearman-Brown ranged from .86 to .92. Test-retest correlations ranged between .45 and .70

over a period of 2 months. The CES-D displays moderate correlations with scales designed to measure symptoms of depression (i.e., Lubin, $r = .37$ to $.70$; Bradburn Negative Affect, $r = .55$ to $.63$; Bradburn Balance, $r = .61$ to $.72$).

Chapter III

Results

Homogeneity

Prior to the statistical testing of the hypotheses, the data were examined to ensure the homogeneity of the sample. This was necessary because the data were collected at two different Homes for the Aged. An ANOVA was performed for each variable by each of the homes. This analysis revealed no significant differences between the homes. It was thus concluded that the sample was a homogeneous one, and statistical analysis proceeded under this assumption.

Reliability

Tests of internal consistency for each of the measures were calculated using Cronbach's coefficient alpha, with adequate reliability levels found for all the measures (see Table 1). Since the Life Satisfaction measure was one item in length, no reliability tests were performed on this measure.

Table 1 Internal consistency of each measure

<u>Measure</u>	<u>Reliability (Cronbach's alpha)</u>
Attitude to Aging	.67
Social Comparison	.63
Neuroticism	.65
Social Support	.77
Loneliness (ESLI)	.91
Depressed Affect (CES-D)	.93

Composite Variables

Prior to conducting further calculations, a composite independent variable was created by combining Attitude to Aging and Social Comparison. This new variable was called Intrapersonal Resources (Intra). A composite dependent variable was created by combining Life Satisfaction, Loneliness, and Depressed Affect. This new variable was called Adaptation (Adapt). Collapsing the variables to create the composite variables was done to augment the cases-to-independent variables ratio, thus increasing the power of further analyses. Tabachnick and Fidell (1989) state that composite variables can be created when there is a theoretical or a statistical basis for doing so. In this case, Intra was created for the theoretical similarities between Attitude to Aging and Social Comparison, and Adapt

was created for the theoretical and statistical relationship among Life Satisfaction, Loneliness, and Depressed Affect.

Scoring

In general, the scales were scored so that a low score was the best possible outcome for each measures. The measures of Attitude to Aging, Social Comparison, and Social Support were scored in such a way that a low score on the measure reflects a high degree of this construct or a positive orientation to the construct. For example, a low score on Attitude to Aging reflects a positive attitude; a low score on Social Comparison means downward social comparison is being used; and a low score on Social Support reflects a high amount of perceived social support.

Neuroticism was scored such that a low score reflects a low degree of neurotic tendency. The Life Satisfaction Index was scored in such a way that a low score reflects a high degree of satisfaction. The CES-D (Depressed Affect) and the ESLI (Loneliness) were scored such that a low score meant low levels of depressed affect and low levels of loneliness, respectively.

Means

The means were calculated for each of the measures. For a summary of the means, see Table 2.

Table 2 Mean scores for each measure

<u>Measure</u>	<u>Mean</u>
Attitude to Aging	44.42 (SD=3.01)
Social Comparison	11.52 (SD=4.27)
Intra	34.91 (SD=5.81)
Life Satisfaction	2.12 (SD=1.24)
Loneliness	9.52 (SD=10.20)
Depressed Affect	32.79 (SD=13.35)
Adapt	44.42 (SD=20.84)

Correlations

Correlations among the dependent and independent variables were calculated, including Intra and Adapt. As expected, a positive attitude to aging, and engaging in downward social comparison was related to adaptation. Also, having high intrapersonal resources was related to adaptation, as was having strong social support. Low levels of neuroticism were also related to adapting well.

Table 3 Correlations among the variables

	CES-D	Att	SoCom	Neur	ISEL	ESLI	Intra	Adapt	LSI
CES-D	1.0								
Att	.39*	1.0							
SoCom	.64**		1.0						
Neur	.56**		.40*	1.0					
ISEL		.49*	.36*		1.0				
ESLI	.41*	.49*		.48**	.58**	1.0			
Intra	.68**	.70**	.87**		.52**	.39*	1.0		
Adapt	.88**	.51**	.54**	.62**	.53**	.79**	.66**	1.0	
LSI	.63**		.56**		.53**	.68**	.59**	.79**	1.0

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

Regressions

A standard multiple regression was performed between adaptation as the dependent variable, and social support, neuroticism and intrapersonal resources as the independent variables. See Table 4 for the unstandardized regression coefficients, the standardized regression coefficients, the semipartial correlations (sr^2), and R , R^2 , and adjusted R^2 . R for regression ($R = .82$) was significantly different from zero, $F(3,29) = 19.19$, $p < .001$. Only two of the independent variables contributed significantly to the prediction of adaptation. These were neuroticism ($sr^2 = .18$) and intrapersonal resources ($sr^2 = .11$). Social support was not significant ($sr^2 = .04$). Altogether, 66% (63% adjusted) of

the variability in adaptation was predicted by knowing scores on these three independent variables.

Table 4 Standard Regression on Adaptation by Social Support, Neuroticism and Intrapersonal Resources

<u>Variables</u>	<u>B</u>	<u>β</u>	<u>sr^2 (unique)</u>
Social Support	1.9	.23	.04
Neuroticism	4.6	.45	.18
Intra Resources	1.4	.40	.11

$$\underline{R}^2 = .66$$

$$\text{Adj. } \underline{R}^2 = .63$$

$$\underline{R} = .82$$

A hierarchical regression was employed to determine if the addition of social support, and then neuroticism improved prediction of Adaptation beyond that afforded by differences in Intrapersonal resources. See Table 5 for the unstandardized regression coefficients, the standardized regression coefficients, the semipartial correlations (\underline{sr}^2), and \underline{R} , \underline{R}^2 , and adjusted \underline{R}^2 after entry of all three independent variables. \underline{R} was significantly different from zero at the end of each step ($\underline{R} = .82$). After step 3, with all the independent variables in the equation, $\underline{R}^2 = .66$, $F(3,29)=19.19$, $p < .001$. After step 1, with Intra in the equation, $\underline{R}^2 = .43$, $F_{inc}(1,31)=23.88$, $p < .001$. After step 2, with Social Support in the equation, $\underline{R}^2 = .48$, F_{inc}

(2,30)=2.72, $p>.05$. After step 3, with Neuroticism added to the equation, $R^2 = .66$, $F(3,29)=19.19$, $p< .001$. Addition of Social Support did not reliably improve R^2 .

Table 5 Hierarchical Regression on Adaptation by Intrapersonal Resources, Social Support and Neuroticism

<u>Variables</u>	<u>B</u>	<u>β</u>	<u>sr²(incremental)</u>
Intra Resources	1.4	.40	.43
Social Support	1.9	.22	.05
Neuroticism	4.6	.45	.23

$$R^2 = .66$$

$$\text{Adj. } R^2 = .63$$

$$R = .82$$

A hierarchical regression was employed to determine if the addition of Intrapersonal Resources, and then Social Support improved prediction of Adaptation beyond that afforded by differences in measures of Neuroticism. See Table 6 for the unstandardized regression coefficients, standardized regression coefficients, the semipartial correlations (sr^2), and R , R^2 , and adjusted R^2 after entry of all three independent variables. R was significantly different from zero at the end of each step ($R = .82$). After step 3, with all the independent variables in the equation, $R^2 = .66$, $F(3,29)=19.19$, $p< .001$. After step 1, with Neuroticism in the equation, $R^2 = .39$, $F_{inc}(1,31)=19.74$,

$p < .001$. After step 2, with Intra in the equation, $R^2 = .63$, $F_{inc}(2,30) = 25.22$, $p < .001$. After step 3, with Social Support added to the equation, $R^2 = .66$, $F(3,29) = 19.19$, $p > .05$.

Addition of Social Support did not reliably improve R^2 .

Table 6 Hierarchical Regression on Adaptation by Neuroticism, Intrapersonal Resources, and Social Support

<u>Variables</u>	<u>B</u>	<u>β</u>	<u>sr² (incremental)</u>
Neuroticism	4.6	.45	.39
Intra Resources	1.4	.40	.24
Social Support	1.9	.23	.03

$$\underline{R}^2 = .66$$

$$\text{Adj. } R^2 = .63$$

$$\underline{R} = .82$$

A hierarchical regression was employed to determine if the addition of Intrapersonal Resources improved prediction of Adaptation beyond that afforded by differences in measures of Neuroticism and Social Support. See Table 7 for the unstandardized regression coefficients, the standardized regression coefficients, the semipartial correlations (\underline{sr}^2), and \underline{R} , R^2 , and adjusted R^2 after entry of all three independent variables. \underline{R} was significantly different from zero at the end of each step ($\underline{R} = .82$). After step 3, with all the independent variables in the equation, $R^2 = .66$, $F(3,29) = 19.19$, $p < .001$. After step 1, with Neuroticism in

the equation, $R^2 = .39$, $F_{inc}(1,31)=19.74$, $p < .001$. After step 2, with Social Support in the equation, $R^2 = .52$, $F_{inc}(2,30)=18.79$, $p < .001$. After step 3, with Intrapersonal Resources added to the equation, $R^2 = .66$, $F(3,29)=19.19$, $p < .001$. Addition of Intrapersonal Resources significantly improved R^2 .

Table 7 Hierarchical Regression on Adaptation by Neuroticism, Social Support and Intrapersonal Resources

<u>Variables</u>	<u>B</u>	<u>β</u>	<u>sr²(incremental)</u>
Neuroticism	4.6	.45	.39
Social Support	1.9	.23	.13
Intra Resources	1.4	.40	.14

$$R^2 = .66$$

$$\text{Adj. } R^2 = .63$$

$$R = .82$$

Covariance

A 2x2 between groups analysis of covariance was performed on Adaptation, to determine the effects of Intrapersonal Resources and Social Support independent of the influence of Neuroticism. Independent variables consisted of Intrapersonal Resources (low and high) and Social Support (low and high). Levels of the independent variables were determined by a median split. For Intrapersonal Resources, the median was 34; those cases

below 34 were considered low, and those cases above were considered high. For Social Support, the median was 15; those cases below 15 were considered low, and those cases above were considered high. The covariate was Neuroticism.

After adjustment for the covariate, Adaptation varied significantly with Intrapersonal Resources, $F(1,32)=6.3$, $p<.01$. That is, those who demonstrated higher Intrapersonal Resources showed higher levels of adaptation ($\bar{X}=33.50$) than those who were lower in Intrapersonal Resources ($\bar{X}=54.71$). The strength of the relationship between Adaptation and Intrapersonal resources was small, $\eta^2 = .18$.

No statistically significant main effect of Social Support was found. Nor was there a significant interaction between Social Support and Intrapersonal Resources after adjustment for the covariate.

Analyses of Variance

An analysis of variance was performed on Adaptation. The independent variable was Neuroticism (low and high). Levels of the independent variables were determined by a median split. For Neuroticism, the median was 12; those cases below 12 were considered low, and those cases above were considered high. There was a statistically significant

main effect for level of Neuroticism on Adaptation, $F(1,32)=15.66$, $p<.001$. Those individuals who were low in neuroticism demonstrated higher levels of adaptation ($\bar{X}=31.40$) than those high in neuroticism ($\bar{X}=55.28$). The strength of the relationship between Neuroticism and Adaptation was moderate, $\eta^2 = .33$.

Chapter IV

Discussion

The purpose of this research was to gain a fuller understanding of the mechanisms involved in adapting to major life changes. It was hypothesized that those individuals who demonstrate long-term emotional stability (low neuroticism) would show highest functional adaptation to entry into long-term care. As predicted, those individuals demonstrating long-term emotional stability show significantly higher levels of functional adaptation than those who score higher in neuroticism. Also, long-term emotional stability is found to be highly correlated with low levels of depressed affect and loneliness and with higher life satisfaction. Furthermore, neuroticism predicts a high degree of the variance in adaptation. In summary, people who show long-term emotional stability appear to be happiest and better adjusted to the home for the aged.

There was also support for the role of intrapersonal resources in adaptation. As predicted, those individuals with a positive attitude to aging and who use downward social comparison (i.e., intrapersonal resources) demonstrate a high level of adaptation. Thus, intrapersonal

resources predict a high degree of variance in adaptation, exceeded only by neuroticism. Possible explanations for this finding will be explored further on.

Although social support is highly correlated with the dependent variables (i.e., life satisfaction, depressed affect, and loneliness), it is the weakest predictor of adaptation, and does not contribute significantly beyond the effects of intrapersonal resources and neuroticism. Due to the size of the sample, statistical analysis examining the relative value of social support versus intrapersonal resources could not be performed. However, there is evidence suggesting that for those people with strong intrapersonal resources, social support is not as important in adaptation. In contrast, attitude to aging and social comparison (i.e., intrapersonal resources) serve to improve adaptation above and beyond the effects of social support, as demonstrated in the hierarchical regressions.

Intrapersonal versus Interpersonal Resources

The finding that intrapersonal resources play a larger role in adapting to life changes than interpersonal resources (i.e., social support) is consistent with previous research. For example, Clark (1982), in a study of personal

and social resources among the aged, reported personal resource scores correlated .52 with coping scores, while social resource scores correlated .25 with coping scores. These findings demonstrate that greater availability of resources appears to put the aged in a better position to cope, even though they may be facing new problems in a changing social environment.

Research has indicated that internal resources (intrapersonal) appear to have differential effects than external resources (interpersonal) (Hobfoll & Lieberman, 1987). While internal resources have been found to be quite robust, the benefit of social support has been found to be limited to situations in which social interaction is possible and in which social interaction does not add to already experienced stress. Furthermore, social support has been found to have a time-limited effect, whereas internal resources do not (Hobfoll & Lieberman, 1987).

Previously, it was argued that no single resource will be beneficial for all events because resources need to be ecologically congruent with situations and individual needs. This perspective offers a potential explanation for the predictive value of intrapersonal resources in the current

research. Having a positive attitude to aging and engaging in downward social comparison may be mechanisms which have specific value for adjusting to the life changes associated with old age, and in this case, entry into long-term care.

Long-term emotional stability and Coping

The current study replicates findings linking personality (e.g., neuroticism), coping, and well-being (e.g., McCrae & Costa, 1986; Bolger, 1990). The relationship between neuroticism and loneliness supports previous research (Saklofske & Yackulic, 1989; Stephan, Fath, & Lamm 1988). The current research also demonstrates that long-term emotional stability is a major determinant of functional adaptation, and further, has replicated findings whereby low levels of neuroticism result in higher functional adaptation.

Continuity theory has argued that when making adaptive choices, we are motivated to maintain a sense of internal continuity. Yet maintaining the tendency towards neuroticism seems to work against successful adaptation. Why would an individual want to maintain neuroticism?

Swann, Hixon, and Ronde (1992) ask us to :

Consider how a woman who perceives herself as socially

inept might feel upon overhearing her husband characterize her as socially skilled. If she takes his comment seriously, she will probably find it thoroughly unsettling, as it challenges a long-standing belief about who she is and implies that she may not know herself after all. And if she does not know herself, what does she know? (Swann et al., 1992, p.118).

In the same light, there may be more pragmatic reasons for this woman wanting her husband to recognize her social shortcomings. As long as he recognized her limitations, he will have modest expectations of her, and their interactions will proceed smoothly. However, should he form an inappropriately favourable impression, he could have unrealistic expectations that she could not meet.

How is the low self-image of people high in neuroticism maintained over time? Swann et al. (1992) offers evidence that may help answer this question. Swann et al. found that people gravitate toward relationship partners who see them as they see themselves. For people with negative self-concepts, this means involving themselves with partners who derogate them. Just as persons with positive self-concepts were more committed to spouses who thought well of them than

to spouses who thought poorly of them, persons with negative self-concepts were more committed to spouses who thought poorly of them than to spouses who thought well of them.

Swann draws on self-verification theory (Swann, 1990) to explain these findings. Self-verification theory assumes that the major determinant to successful social relationships is the capacity for people to recognize how other perceive them. As such, people monitor the reactions of others to be used as a basis for inferring their own self-concepts.

Swann et al. (1992) argues that because self-concepts are abstracted from the reactions of others, they should allow people to predict how others will respond to them in the future. As a result, people come to rely on stable self-concepts, to the point that substantial self-concept change is viewed as a threat to intrapsychic and interpersonal functioning. This reasoning is wholly in line with Atchley (1982, 1985) and the role of internal continuity.

Conclusion

The evidence presented here clearly points to the role of long-term emotional stability in adapting to life changes. Long-term care facilities would be able to facilitate adaptation by assessing each new resident's past coping styles. Discovering how individuals have typically coped with stress in their lives could be considered as a means of discovering which residents will need more individualized attention by caregivers. Different coping styles will be an indicator of residents who may need attention beyond even initial adjustment. Professional development workshops could focus on understanding and enhancing different coping styles, and their implications for adapting.

Programs could be developed for enhancing individual coping styles. For example, the evidence presented here points to the role of continuity theory in adapting to life changes. One implication of this research is that, to facilitate adapting to long-term care, support services might focus on the individual strengths and resources of residents, and provide programs, services, and activities that support and enhance these resources.

Enhancing individual strengths also accommodates for the effects of neuroticism. Since maintaining tendencies towards neuroticism would be maladaptive, focusing on the strengths of the individual could enhance pre-existing coping skills.

The role of social support in adapting to long-term care is not fully clear. Anecdotal evidence indicates that most residents referred to their families when discussing social support. However, other residents of the facility were not mentioned, despite daily interaction between participants and other residents. The question which arises is, How do elders perceive interactions within the residence? Residents spend time with each other in the common rooms, and at dinner and social functions. It is unclear, however, if they are benefitting from these interactions, or what role these interactions play in the psychological lives of the residents.

It is possible that very little emotional support is actually due to these interactions, and that only those interactions beyond daily routine offer social support. In this case, family visits take on increased significance. Support could also be monitored and enhanced by visits from a

resident psychologist/gerontologist. Personal experience suggests that residents do appreciate the interaction.

Future Research

Further research is necessary to fully understand the roles of intrapersonal and interpersonal resources. In accordance with the ecological congruence perspective, measures of social support and intrapersonal resources could be taken immediately following entry into the long-term care facility, and then again at different time intervals to assess any differential time effects and individual differences in adjustment.

Also, research examining a variety of resources would be helpful to assess what resources are most important and effective in adapting to long-term care. It is suggested that intrapersonal resources such as self-esteem and locus of control be considered in future research.

Appendix A
Letter of Introduction

April 6, 1992

Dear Sir/Madame:

My name is Gail Matheson Cox, and I am a student in the graduate program in Applied Social Psychology at the University of Windsor. Together with Dr. Michael Kral, I am conducting a study of how people respond to life changes as part of my Master's thesis.

The research format includes an hour long confidential interview. Upon completing this interview, you will be provided with oral and written feedback concerning the purpose of the study. You should be aware that this research has been passed by the Ethics Committee of the Psychology Department of the University of Windsor. As such, your responses will be anonymous and confidential.

Participants are free to terminate the interview at any time. If you are not completely satisfied with the questions and procedure that are used in this research, you may contact the Chair of the Psychology Department Ethics Committee, Dr. J. Porter, 253-4232, ext. 7012.

A copy of the results of this study will be made available to you if you would like a copy. Should you have any concerns or questions upon completion of the study, please do not hesitate to contact me at 973-5724 or Dr. Michael Kral at the Psychology Department, University of Windsor, 253-4232, ext. 2220. Thank you for your assistance.

Sincerely,

Gail Matheson Cox

Appendix B
Consent Form

CONSENT FORM

Research Title: Adjusting to Life Changes
 Investigators: Gail Matheson Cox and Dr. Michael Krai
 Psychology Department
 University of Windsor

Before engaging in the interview, we would like to ensure that you have been fully informed about the nature of this research project, and about our obligation to comply with the ethical standards for human research that have been adopted by the University of Windsor.

The purpose of this interview is to gather information for a Master's thesis in psychology regarding the ways in which people respond to life changes. If you would like to participate in the interview, please sign this Consent Form, and answer the questions as honestly as you can. In order to ensure that your responses are completely anonymous, your consent form will be separated from your responses, and your name will not appear on the interview response record. The researcher will be happy to answer any questions you have regarding this study at any point during the interview.

A summary of the responses of all those in the study will be included in the project's final report and may also be used in research publications or for teaching purposes. However, this data will not be used to identify you in any way.

You have the right to refuse to participate in this study or to withdraw at any time. You do not have to answer any questions that you do not wish to answer.

If you have any concerns or questions about this research, you should direct them to Dr. J. Porter, Chair, Ethics Committee, Department of Psychology, University of Windsor, 253-4232, ext. 7012.

I understand that I will be completing the interview as administered by Gail Matheson Cox, that my responses will be voluntary, anonymous and confidential, and that I have the right to withdraw from this study at any time. I understand that the results of this study may be published, or used for teaching purposes.

DATE _____ SIGNATURE _____

Appendix C
Debriefing Form

FEEDBACK FORM

Project Title: Adjusting to Life Changes
Investigators: Gail Matheson Cox and Dr. Michael Kral
Psychology Department
University of Windsor

Thank you for participating in this study. The purpose of the study was to examine the way we adjust to life changes. In today's society, the media and common stereotypes often portray changes in later life unfavourably. Despite this, much of the psychological research suggests that most people adjust well to these changes. We want to understand the mechanisms involved in positively adjusting to life changes.

The interview was designed to gain information about how attitudes, social support and social comparison processes might influence adjustment to life changes. Specifically, we believe that those individuals with a positive attitude towards aging, who perceive their social support as adequate, and who engage in social comparison will show the highest degree of adjustment to life changes. An example of a question that measured attitude to aging was: "Old people are in the happiest period of their lives." Perceived social support was measured with questions such as: "My friends give me the moral support I need." An example of a social comparison item was: "Do you think you are better off compared to older people you know?" Finally, adjustment was measured with items such as: "On the whole, how happy are you with your life today?"

It is hoped that the information from this study will make it possible to facilitate adjustment to life changes. If you have any questions about this study, I would be happy to answer them at this time. Should you have any questions or comments at a later time please contact me at 973-5724, or Dr. Kral at the Psychology Department, University of Windsor, 253-4232, ext. 2220.

IF YOU ARE EXPERIENCING ANY EMOTIONAL DISCOMFORT NOW OR AT A LATER TIME, AND WISH TO SPEAK TO SOMEONE ABOUT IT, PLEASE CONTACT (NAME OF ON-SITE COUNSELLOR AT NURSING HOME AND DETAILS ABOUT HOW TO CONTACT THIS PERSON).

Appendix D
Attitude to Aging Scale

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Attitudes to Aging

I have some statements about old people that I'd like to read to you. If you agree with the statement, I'd like you to say Yes after I read the statement. If you don't agree, say No. Please let me know if a statement seems unclear.

1. Old people are in the happiest period of their lives.

Yes _____ No _____

2. Old people would like to be young again.

Yes _____ No _____

3. Old people never had it better.

Yes _____ No _____

4. Old people love life.

Yes _____ No _____

5. Old people have a chance to do all the things they wanted to.

Yes _____ No _____

6. Old people cannot manage their own affairs.

Yes _____ No _____

7. Old people become less intelligent.

Yes _____ No _____

8. Old people are not useful to themselves or others.

Yes _____ No _____

9. Old people are lonely.

Yes _____ No _____

10. Old people feel miserable most of the time.

Yes _____ No _____

11. Old people are helpless.

Yes _____ No _____

12. Old people are a nuisance to others.

Yes _____ No _____

13. Old people make friends easily.

Yes _____ No _____

14. Old people think the future is hopeless.

Yes _____ No _____

15. Old people are not important in family affairs.

Yes _____ No _____

16. Old people get love and affection from their children.

Yes _____ No _____

Appendix E
Interpersonal Support Evaluation List (ISEL)

Perceived Social Support - ISEL

I have some statements to read to you, and each one may or may not be true about you. Now, if a statement is true of you, I'd like you to answer by saying TRUE. If a statement is not true of you, say FALSE.

- T F 1. There is at least one person I know whose advice I really trust.
- T F 2. When I need suggestions for how to deal with a personal problem, I know there is someone I can turn to.
- T F 3. I feel that there is no one with whom I can share my most private worries and fears.
- T F 4. If a family crisis arose, few of my friends would be able to give me good advice about handling it.
- T F 5. There are very few people I trust to help solve my problems.
- T F 6. There are several different people with whom I enjoy spending time.
- T F 7. If I wanted to have lunch with someone, I could easily find someone to join me.
- T F 8. I regularly meet or talk with members of my family or friends.
- T F 9. If I were sick and needed someone to drive me to the doctor, I would have trouble finding someone.
- T F 10. If I needed a quick emergency loan of \$100, there is someone I could get it from.
- T F 11. If I were sick, there would be almost no one I could find to help me with my daily chores.
- T F 12. In general, people do not have much confidence in me.
- T F 13. I have someone who takes pride in my accomplishments.
- T F 14. Most people I know think highly of me.

Appendix F
Social Comparison

Social Comparison

1a. I would like you to think about the things you have to deal with in your life. Do you think you are better off, about the same, or worse off compared to other older people you know?

_____ Better off

_____ About the same

_____ Worse off

1b. I'd like you to think about the things you have to deal with in your life. Do you think you have more things to cope with, about the same, or less to cope with compared to other older people you know?

_____ Less to cope with

_____ About the same

_____ More to cope with

2a. When you think about the things that you have to deal with in your life, do you think you have more difficulties now, about the same, or less difficulties now than at other times in your past?

_____ Less difficulties now

_____ About the same

_____ More difficulties now

2b. When you think about the things that you have to deal with in your life, do you think you are more fortunate now, about the same, or less fortunate now than at other times in your past?

_____ Less fortunate now

_____ About the same

_____ More fortunate now

3a. When you think about the things you have to deal with in your life, do you think you are better off, about the same, or worse off than people who are younger than you?

_____ Worse off than younger people

_____ About the same

_____ Better off than younger people

3b. When you think about the things you have to deal with in your life, do you think you have more things to cope with, about the same, or less things to cope with than people who are younger than you?

_____ More to cope with than younger people

_____ About the same

_____ Less to cope with than younger people

4a. I'd like you to think about the older people you knew when you were younger. Do you think you are better off, about the same, or worse off than they were?

_____ Worse off than older people were when I was young

_____ About the same

_____ Better off than older people were when I was young

4b. I'd like you to think about the older people you knew when you were younger. Do you think you have more difficulties, about the same, or less difficulties than they did?

_____ More difficulties than they did

_____ About the same

_____ Less difficulties than they did

Appendix G
Eysenck's Neuroticism Scale (short form)

Personality Measure

What I'd like to do now is to ask you some questions about experiences you may or may not have. I'd like you to answer each question YES or NO.

Y N 1. Do you often need understanding friends to cheer you up?

Y N 2. Do you find it very hard to take no for an answer?

Y N 3. Do you often worry about things you should not have said or done?

Y N 4. Are your feelings rather easily hurt?

Y N 5. Are you often troubled by feelings of guilt?

Y N 6. Do ideas run through your head so that you cannot sleep?

Y N 7. Do you get palpitations or thumping in your heart?

Y N 8. Do you worry about awful things that might happen?

Y N 9. Are you easily hurt when people find fault with you or your work?

Appendix H
Fear of Aging Scale

Fear of Aging

Now I'm going to read you some statements about growing old. What I'd like you to do is tell me if you AGREE with the statement, or DISAGREE.

1. I feel that people will ignore me when I am old.

_____ Agree _____ Disagree

2. I'm afraid my health will be bad when I'm old.

_____ Agree _____ Disagree

3. I'm concerned that I will be lonely when I am old

_____ Agree _____ Disagree

4. I worry that I will be poor when I'm old.

_____ Agree _____ Disagree

Appendix I
Life Satisfaction Index

Life Satisfaction Index

1. On the whole, how happy or satitsfied are you with your life today?

1	2	3	4	5
very			not	at all

Appendix J
Self-Image Scale

Self-Image

1. How old do you feel? _____
2. What age would you most like to be? _____
3. Do you consider yourself elderly?
_____ Yes _____ No
4. Would you say you feel older or younger than most people your age?
_____ Older _____ Younger

Appendix K
Emotional Social Loneliness Inventory (ESLI)

ESLI

Now I'm going to read you some questions about things we all feel at one time or another in our lives. I'd like you to tell me how often each statement is true about the way you feel at this time. Here are the ways you could answer: (Place response card on table.)

Usually True 3
 Often True 2
 Sometimes True 1
 Rarely True 0

(After ensuring respondent is clear on responses, begin.)

1. I don't feel like I have a close friend.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

2. I'm afraid to trust others.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

3. I don't feel like I have a mate.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

4. Those close to me feel burdened by me when I share my problems.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

5. I don't feel needed or important to others.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

6. I don't feel I can share personal thoughts with anyone.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

7. I don't feel understood.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

8. I don't feel safe to reach out to others.

_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

9. I feel lonely.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
10. I don't feel part of any social group or organization.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
11. I don't feel like I made contact with anyone today.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
12. I don't feel I have anything to say to people.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
13. I don't feel I'm being myself with others.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
14. I fear embarrassing myself around others.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually
15. I don't feel I am interesting.
_____ 0 Rarely _____ 1 Sometimes _____ 2 Often _____ 3 Usually

Appendix L

Center for Epidemiologic Studies Depression Scale (CES-D)

CES-D

I have some questions to ask you about things that may have bothered you lately. The questions are about feelings most people have had at least some of the time. I'd like you to try to be as open and honest as you can be. You don't have to answer any questions that you don't want to.

What I need you to do is to tell me often you have felt this way during the past week. For example: (place response card on table)

Rarely or None of the Time (Less than 1 Day)

Some of the Time (1-2 Days)

Occasionally (3-4 Days)

Most of the Time (5-7 Days)

(After ensuring respondent is clear on responses, begin.)

During the past week:

1. I was bothered by things that usually don't bother me.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

2. I did not feel like eating; my appetite was poor.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

3. I felt that I could not shake off the blues even with help from my family or friends.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

4. I felt that I was just as good as other people.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

5. I had trouble keeping my mind on what I was doing.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

6. I felt depressed.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

7. I felt that everything I did was an effort.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

8. I felt hopeful about the future.

_____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

9. I thought my life had been a failure.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
10. I felt fearful.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
11. My sleep was restless.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
12. I was happy.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
13. I talked less than usual.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
14. I felt lonely.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
15. People were unfriendly.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
16. I enjoyed life.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
17. I had crying spells.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
18. I felt sad.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
19. I felt that people dislike me.
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days
20. I could not get "going".
 _____ < 1 Day _____ 1-2 Days _____ 3-4 Days _____ 5-7 Days

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