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THE RELATIONSHIP BETWEEN INDIVIDUAL CHARACTERISTICS,

BEHAVIORAL MOTIFS, AND INTERACTIVE FRIENDSHIP

PROCESSES AMONG OLDER RELOCATED ADULTS

by

Elizabeth Dugan

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the Faculty of the Graduate School at
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An integrative conceptual framework for friendship research was proposed by Adams and Blieszner (1994). Their framework states that individual characteristics, expressed through a behavioral motif, affect friendship patterns, and that friendship patterns vary by the structural and cultural context. The purpose of this study was to determine if the conceptual framework can explain variation in the friendships of older adults. A cross-sectional survey design was used to assess interactive processes of a random sample of older urban and rural relocated adults in North Carolina (N=282). It was hypothesized that: (1.) Individual characteristics (e.g., age, gender, education, marital status, and health) would predict affective, behavioral, and cognitive processes and frequency of contact, a proxy measure of processes. (2.) Behavioral motif (e.g., social involvement, proximity) would moderate the relationship between individual characteristics and friendship processes and frequency of contact. (3.) The relationship of individual characteristics and behavioral motif to interactive friendship processes of older relocated adults would vary with the structural and cultural context (e.g., rural, urban). Stepwise and hierarchical multiple regression analyses were used to test the hypotheses. Mixed support was found for the first hypothesis. No support was found for the second hypothesis. Limited support was found for hypothesis three.

More affective processes were related to being female, having less education, and living farther from the friend. More behavioral processes were related to having more

education, being female, and living closer to the friend. The closest thoughts and warmest feelings were for friends who lived farther away. Health, marital status, and age were not important to the thoughts, feelings, or actions associated with friendships. Social activity was related to behavioral interactions and frequency of contact. Proximity was related to all of the friendship processes and frequency of contact.

The ability of personal characteristics, patterns of daily life, and contexts to explain friendship patterns is most evident for overt friendship processes such as frequency of contact. Despite statistically significant findings, the model as measured here, did not work especially well for affective or cognitive interactive processes. Nonetheless, the recognition of multiple influences on friendships is one of the conceptual strengths of the framework and now has some empirical support. Further refinement in concepts and measures of the model should lead to additional insights.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of

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INTRODUCTION

At all stages of life, people have a need and capacity to form and maintain

intimate social attachments. John Donne, in the seventeenth century, perceptively noted

that no man is an island unto himself; every man is a piece of the continent, a part of the

main (Donne, 1975). The socially interdependent character of humans is evident to

philosophers and scientists alike. The similarity of separation distress in children and

emotional isolation in adults suggests these reactions may be functions of the same

attachment system (Weiss, 1989). Physiological, emotional, and policy factors provide

evidence of the importance of these relationships. First, social bonds promote survival.

There are clear physiological benefits of social support and harmful outcomes in the loss

or absence of social relationships. For example, social support has been found to reduce

morbidity and mortality, to foster adaption to and recovery from physical illness, and to

promote physical and mental health (Berkman & Syme, 1979; Broman, 1993; Krause,

1986; Wortman & Conway, 1985). Second, social bonds such as close friendships often

are sources of pleasure and prompt feelings of happiness (Rook, 1989). Indeed, for older

adults, contact with friends has been found to be of more consequence to morale than

contact with kin (Arling, 1976; Lee & Shehan, 1989). Third, several societal trends may

result in changing expectations for friends about the receipt or provision of care in later

life. The consequences of the movement to reduce or eliminate federally-funded

programs could produce serious gaps in the support networks of frail older adults. In

addition, the changing structure of families (e.g., fewer and nonproximate kin) may mean that friends will be expected to compensate for kin in the provision of services.

There has been a long historical interest in friendship -- predating both Plato and Cicero (see Blieszner & Adams, 1992; and Lopata, 1990). Despite the long and intense interest in friendship documentation of true "isolates" is quite rare, thus suggesting a biological need for social affiliations.

The classic Oxford English Dictionary traces the etymology of friend:

1. One joined to another in mutual benevolence and intimacy;... 2. Used loosely in various ways: e.g. applied to a mere acquaintance, or to a stranger, as a mark of goodwill or kindly condescension on the part of the speaker; by members of the "Society of Friends" adopted as the ordinary mode of address;... 3. A kinsman or near relation;... 4. A lover or paramour, of either sex;... 5. One who wishes (another, a cause, etc.) well; a sympathizer, favourer, helper, patron, or supporter (Simpson & Weiner (Eds.), 1989, p.192-193).

These definitions connote a range of pleasant relationships, stressing goodwill and affection. The cluster of ideas represented in the meaning of friend can make it difficult to specify exactly what the term is intended to express.

It is not surprising, then, that the literature related to friendship is difficult to synthesize due to the number and variety of ways friendship has been defined. We may describe an individual as a friend with confidence that our meaning is clear. However, the term could be interpreted as referring to either an acquaintance or an intimate (Adams,

1989). Studies related to friendship have focused on a wide range of nonkin relations including the following: friend, acquaintance, neighbor, confidant, companion, close friend, best friend, and helper. Despite the diversity of definitions there is a consensus about two essential aspects of friendship -- it is a voluntary relationship and is not strictly institutionalized. Admittedly, the nature of the role contributes to the difficulty in defining it. There are few social conventions governing who can or cannot become friends, and there are no public rituals attached to friendship. The connections are not formally made or broken. While friendships are constrained by social factors, they are not usually institutionalized or regulated to the extent found in kinship relations (Johnson, 1983). Allan and Adams (1989), however, suggested that friendship is in fact, a norm-governed relationship. Nonetheless, the role of friend is voluntary, a relationship for all seasons - or none, as we so choose (Brown, 1990). Friendships are entered into by free choice and maintained on the basis of mutual preferences (Johnson, 1983). Whereas relatives are designated by blood or legal ties and neighbors by proximity, friends are selected (Adams & Blieszner, 1994).

Despite the long historical interest the scientific study of friendship has occurred primarily in the past three decades. Since the publication of Beth Hess's (1972) examination of friendship patterns across the life course there has been an impressive increase in research on friendship. Relevant studies are found in a range of disciplines such as, communication, psychology, sociology, anthropology, and gerontology. Subsequently, a number of notable advancements have been made, including: the

conceptualization of friendship as a distinct category of relationship; a recognition of the relevance of the quality of interaction as well as the quantity of interaction; and the use of a multiplicity of methods to study friendship (Blieszner & Adams, 1992). Unfortunately similar progress in theory development has not occurred, resulting in studies that have been atheoretical or directed by limited discipline-specific theories.

To close this theoretical gap, Blieszner and Adams (1992) incorporated both sociological and psychological traditions in their conceptual framework for friendship research. The purpose of their integrative framework was to impose order on a diverse and expanding area of research. The elements of the model and the connections among them will be described in detail in the literature review chapter. Briefly outlined, their framework states that individual characteristics, as expressed through a behavioral motif (e.g., the pattern of one's daily life), affect friendship patterns, and that friendship patterns vary by the structural and cultural context (Adams & Blieszner, 1994; see Figure 1). The descriptive power of this model lies in the recognition of the importance of structure, process, and context in shaping friendship patterns. The construction of this conceptual framework was a significant contribution to the study of interpersonal relationships. However, it has yet to be empirically operationalized. Virtually no studies have addressed the interactive processes of older adults (Blieszner & Adams, 1992). The purpose of this study is to determine if the integrative conceptual framework can explain variation in the interactive friendship processes of older relocated adults (see Figure 2).

The literature to be reviewed will support two main points. First, the significance of friendship as a social relationship will be demonstrated. Second, the process of theory-building will be advanced through an operationalization of the Adams and Blieszner integrative conceptual framework. In addition, the literature will demonstrate a need for data on the friendship patterns of older relocated adults.

Figure 1.

III. Structural and Cultural Context

**I. Individual
Characteristics
(e.g., age, sex,
race, class)**

II. Friendship Patterns

b. Network

a. Social
Structural
Position

S
t
r
u
c
t
u
r
e

a. Dyad

S
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P
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P
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Interpretation

Internalization

Behavioral

Motif

Interactive
Processes

b. Psychological
Disposition

Interactive Processes
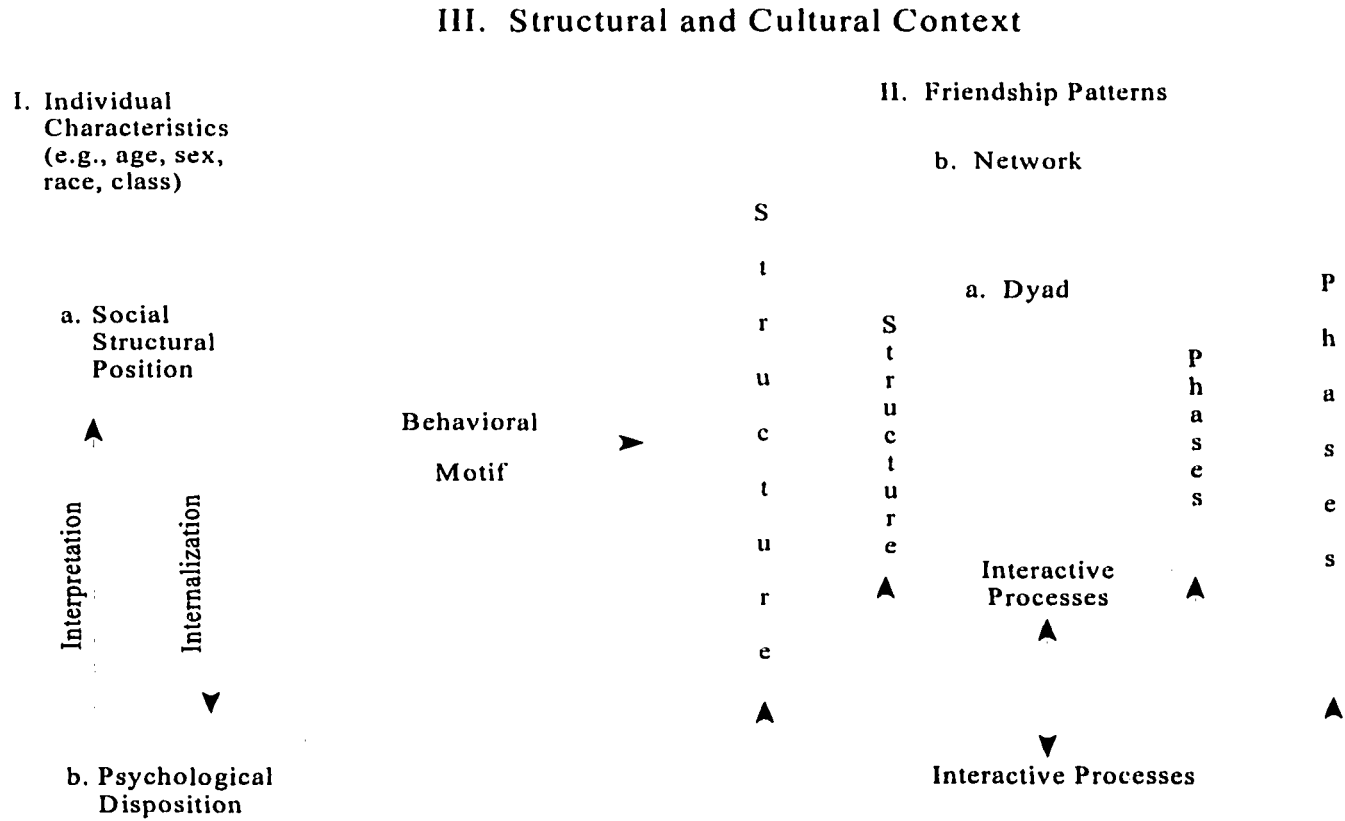
An Integrative Conceptual Framework For Friendship Research

Adams, R.G. and Blieszner, R. (1994). An Integrative Conceptual Framework for Friendship Research. Journal of Social and Personal Relationships, 11, 163-184.

Assumptions and Purpose of The Study

Two assumptions influenced this research. First, an examination of the personal

attributes and daily patterns of older adults will contribute to the theoretical development

of friendship research. As specified in the model, structural and cultural context,

individual characteristics conceptualized at the social structural and psychological

dispositional levels, and behavioral motif are assumed to influence the friendships of

older adults. The state of theory concerning friendship is still in the embryonic stages of

development. The purpose of this research is to take the next theoretical step and to

provide a partial operationalization of an integrative conceptual framework of friendship

in later life. A secondary goal of this study is to examine the friendships of adults

relocating in later life. Many older relocated adults in North Carolina have adequate

economic, social, and personal resources. By examining the relationships of a relatively

advantaged group of elderly adults, patterns of friendship can be determined for those

with favorable circumstances in late life -- providing a view of friendship in the "best" of

circumstances.

<u>Research Questions</u>

Specifically, the research questions directing the research are: 1) Do individual

characteristics of older relocated adults predict interactive friendship processes

(affective, behavioral, cognitive, processes and frequency of contact, a proxy measure of

processes)? 2) Is behavioral motif a moderating variable in the relationship between

individual characteristics and interactive friendship processes, and frequency of contact

among older adults? 3) Does the relationship of individual characteristics and behavioral motif to interactive friendship processes, and frequency of contact, vary with the structural and cultural context of older adults? It is hypothesized that: H_1: Individual characteristics predict interactive friendship processes, and frequency of contact. H_2: Behavioral motif moderates the relationship between individual characteristics and friendship processes, and frequency of contact. And H_3: The relationship of individual characteristics and behavioral motif to interactive friendship processes and frequency of contact of older relocated retirees varies with structural and cultural context.

Limitations of the Study

Several limitations of this study are acknowledged. The first limitation relates to issues of internal validity. This is a secondary analysis of a study in which friendship was not the main focus. The original research was designed to examine the theory of intergenerational kin solidarity (Atkinson, Kivett & Campbell, 1986; Bengtson & Roberts, 1991) among a group of nonstationary older adults. As a result, the measures to operationalize the Adams and Blieszner (1994) framework were assembled after the data were collected. Although every effort was made to ensure validity in measurement of the concepts in the conceptual model, there may be a lack of correspondence between the theoretical concepts and the measurement of them in this study. For instance, the broad concept of behavioral motif is a difficult one to understand, and even more challenging to operationalize. A further difficulty was trying to measure affective, behavioral, and cognitive processes, concepts that were not well-defined in the initial description of the

conceptual framework. This may limit the confidence placed in the findings, because a failure to find hypothesized relationships could be interpreted as either resulting from inadequate measures or as a true departure from the theoretical framework. Nevertheless, the data source was rich enough to provide suitable proxy measures of these complex concepts in order to partially operationalize the integrative framework and to accomplish the goals of this study.

Secondly, this analysis concerns only one friend who was identified as most important to the older adult. Information about one friend provides data about dyadic structure and process, but not friendship network patterns which have important contextual effects on friendships. In addition, studies based on one friend relationship may underestimate the variability of friendships. Thus, the full model was not operationalized since the integrative framework conceptualized dyadic patterns as being nested within friendship networks.

Lastly, all of the respondents included for analysis were white, which is not reflective of the population of all older relocated adults in North Carolina, although it is reflective of migrants who relocate for amenity reasons. Consequently, a lack of information about racial differences in friendship patterns will persist.

Figure 2.

Structural and Cultural Context
Rural
Urban

Individual Characteristics	Behavioral Motif	Interactive Processes:
Age	Social Involvement:	Affective
Gender	Social Groups	Behavioral
Education	Hobbies	Cognitive
Marital Status	Volunteerism	
Health		**Proxy Measure of**
	Proximity to Friend	**Interactive Processes:**
* Social Structural and Psychological Disposition Effects Not Deconstructed.		Frequency of Contact
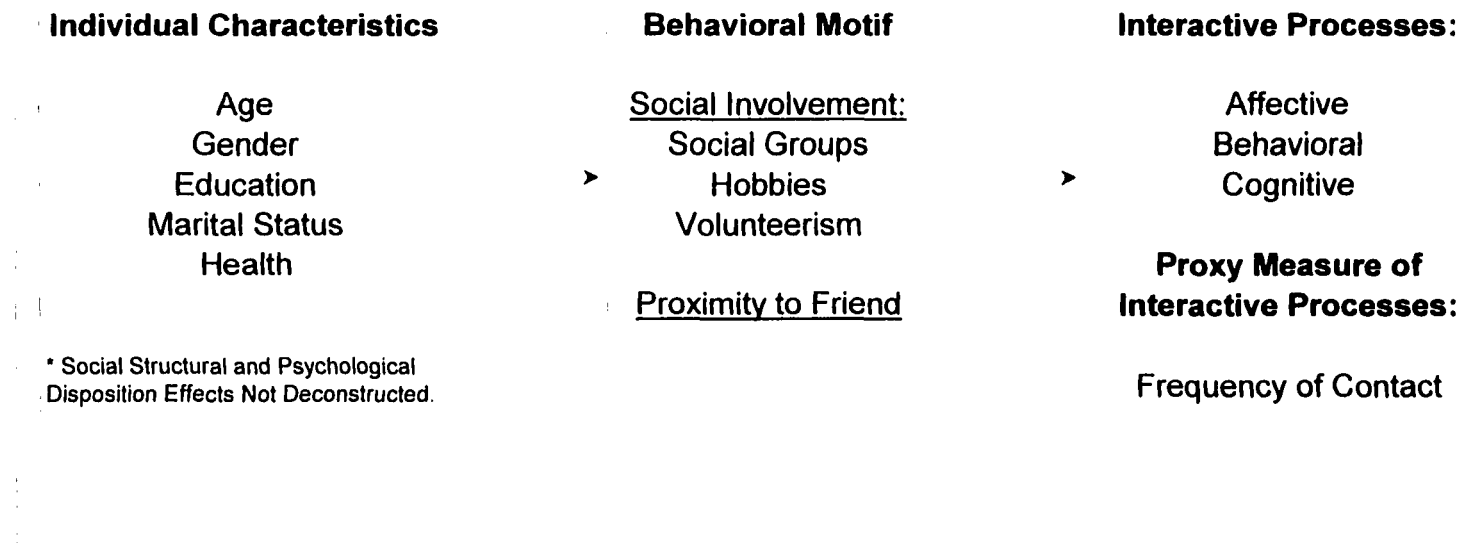
An Integrative Conceptual Framework for Friendship Research: A Partial Operationalization of the Adams and Blieszner (1994) Model

Based on Adams, R.G. and Blieszner, R. (1994). An Integrative Conceptual Framework for Friendship Research. Journal of Social and Personal Relationships, 11, 163-184.

LITERATURE REVIEW

The objective of this section is to review and integrate the literature examining

aspects of the integrative conceptual model. The chapter is organized in five parts. In the

first part, the different individual characteristics important to friendship patterns are

examined. In the second section, the concept of a behavioral motif is discussed. The

third section presents the friendship patterns identified in the literature. The fourth part

addresses the influence of the structural and cultural context on friendship patterns of

older adults. The last part examines retirement migration. Before turning to the first part,

the question of why studies of older adult friendship are valuable is considered.

Friendship is important at any stage of life, but perhaps more so in later life as

other sources of support diminish (Adams & Blieszner, 1994). Friendship may be one of

the most pleasurable relationships entered into; a friend is someone with whom you enjoy

spending time and sharing activities. Achieved rather than ascribed, friendships do not

arise by chance, but rather, are entered into by deliberate effort and choice (Allan, 1979).

Uniquely, they are voluntary, reciprocal, and noninstitutionalized ties. Moreover, once

established, there is great latitude in the relationship and the expression of being a friend.

All forms of friendship are premised on a rough equality (Hess, 1972). Those who are

friends see and treat one another as equals within the relationship (Allan & Adams,

1989). Generally, friends are of the same age cohort, class position, and marital status

(Allan & Adams, 1989; Booth, 1972; Hess, 1972).

Much still remains to be understood about friendship, however, especially among older adults. The relationship of personal characteristics, social involvement, and context to friendship patterns has not been thoroughly examined. Through the use of the Adams and Blieszner (1994) framework this study will operationalize one of the few theoretical tools for friendship research and provide information about the friendship patterns of older relocated adults, a growing subgroup among the elderly population.

Individual Characteristics

Adams and Blieszner (1994) incorporated sociological and psychological traditions by recognizing the roles of structure, process and context in patterns of friendship. Their integrative model states that Individual Characteristics (e.g., age, gender) influence one's social structural position and psychological disposition, which are expressed through a Behavioral Motif. An implication of the framework then, is the necessity to conceptualize individual characteristics at both the structural and dispositional levels to examine how they combine to shape interactive processes. Social structure encompasses the interconnections among social positions whose occupants have access to differing levels of power, prestige, and wealth, and thus, different opportunities for and constraints on behaviors that might lead to friendship. Psychological disposition includes characteristics such as personality, motives, and personal preferences that affect behavior. Differences in behavior that are interpreted using a dispositional approach may be thought to arise from genetic or socialization influences. The framework maintains that social structural and psychological dimensions of individual characteristics affect one

another through the process of internalization and interpretation. That is, an individual internalizes social structural expectations and these in turn, affect his or her disposition (Adams & Blieszner, 1994). Dispositional explanations of friendship patterns emphasize the effects of individual attributes such as personality, motives, and personal preferences. A dispositional approach to adult friendship intervention would focus on changing the individual's attitude or disposition, and not the position in the social structure. Unfortunately most studies fail to develop any theoretical rationale, be it dispositional or structural to support their analyses or conclusions (Adams & Blieszner, 1994). A major contribution of this study will be to interpret the results of the statistical analysis of the influence of personal attributes on friendships in both dispositional and structural terms.

Age

Age influences both the social structural position and psychological disposition of adults. A structural effect of age is the opening or closing of certain social positions. Age norms are prescriptive and proscriptive, supported by widespread consensus and enforced through varying mechanisms (Hägestad, 1990; Setterston & Hägestad, 1996). For example, in nearly every society people are socialized to enter or exit from roles based on their age (Altergott, 1988; Foner, 1996). A change in stage of life course, such as marriage or retirement, is likely to influence friendship patterns (Allan & Adams, 1989). Also, age has effects on psychological disposition or psychological maturity (Belsky, 1990). As a result, friendship must adjust to structural and dispositional age-related changes including interpersonal abilities, needs, and obligations or opportunities

of other social roles and relationships (Brown, 1990). Jerrome (1992) compared life after retirement with earlier stages, in order to explore a retiree's new needs and responsibilities. She found that the activities of friendship in later life included, as in earlier years, mutual help and support, emotional intimacy and the joint pursuit of shared interests. As with younger people, friendship for older adults was valued as a way of passing the time, as a source of companionship and help, and as an opportunity to give and receive affection and intimate attention. She suggested that one difference was that friendship may be the *only* role which involves these activities in late life (Jerrome, 1992).

Most friendships, at all life stages, are age-homogeneous and involve partners who are virtually the same age (Booth, 1972; Brown, 1990). Brown (1990) suggested that age-homogeneity results from social norms and is a consequence of age being a major mechanism for structuring society. Despite the normative and structural constraints on doing so, people can and do carry on friendships with individuals older and younger than themselves (Brown, 1990). For example, Powers and Bultena (1976) found a significant number of persons having friendships with partners of different ages.

Unfortunately most differences in friendship patterns attributed to age have not been interpreted within either a structural or dispositional framework. Thus, there are conflicting views about the role of age in social relationships. Some suggest that older adults are at risk of losing relationships due to age-related changes such as retirement, relocation, and death, and they are at a greater risk of becoming socially isolated (Bell,

1981; Johnson & Troll, 1994; Mullins & Dugan, 1990). Increasing age has been associated with a decline in the numbers of friends as well as less initiative in making new ones (Allan, 1989; Allan & Adams, 1989; Roberto, 1989). Age-related declines in health functioning can reduce mobility and the ability to socialize (Bury & Holme, 1990; Rook, 1989). Johnson and Troll (1994) observed that among the very old, the increased age of friends increased the probability that friends had died or become too incapacitated to maintain interactions. Similarly, Dugan and Kivett (1994) in a study of very-old rural adults found that the ability to integrate socially was limited by sensory impairments and contributed to loneliness.

Alternative data however, suggest that old age may be a time to reinvest in friendship and a time to accrue as well as lose friendships (Adams, 1987; Allan & Adams, 1989; Jerrome, 1981; Shea, Thompson, & Blieszner, 1988). Decreasing employment responsibilities and demands of kin may allow older persons to invest in the development of satisfying friendships. In fact, adults can make friends at virtually any age, keep them for as many years as desired, and disavow them whenever it seems necessary or convenient (Brown, 1990). Johnson and Troll's (1994) study demonstrated the enduring value of friendship into extreme old age, even when illness or disability reduced the capacity to engage in reciprocal, frequent interactions. The very old adults in their study altered the definition of a friend to match existing relationships and current patterns of interaction (Johnson & Troll, 1994).

Gender

Gender impacts an individual's social structural position and psychological disposition. A structural explanation for gender differences suggests that men and women, though residing in the same town, inhabit socially different communities (Gillespie, Krannich & Leffler, 1985). The cultural expectations about appropriate behavior for men and women influence the friendships they form and maintain. A dispositional interpretation stresses that men and women are taught to act differently, men to be instrumental and women to be expressive, and as a result they have different friendship styles (Fox, Gibbs & Auerbach, 1985; Powers & Bultena, 1976; Wright, 1989). There are conflicting views about the importance of gender to variations in friendship. Bell (1981) asserted that there is no social factor more critical than that of sex in explaining friendship variations. On the other hand, Wright (1988) argued that a statistically significant difference in gender friendship patterns does not necessarily denote the difference has any theoretical or practical meaning. Further, he cautioned against overlooking the within-group variability for any gender differences observed in measures of central tendencies. Clearly, there are great overlaps in the friendship patterns of men and women. For example, Connidis and Davies (1992) reported that men and women were more similar than different in their choices of companions and confidants. Regrettably, modal patterns of differences have been exaggerated, and in some cases have resulted in gender-based stereotypes or worse yet, caricatures (Wright, 1989). With that

cautionary note sounded, a brief review of findings on gender differences in friendship will be presented.

There are consistent themes that emerge when scholars attempt to summarize the findings on gender differences in friendship. For instance, Bakan labeled women's friendships as communal and men's as agentic (1966). Booth described women's friendships as affectively richer than those of men (1972). Similarly, Reisman (1981) noted that women are more likely to have relationships that are reciprocal while men are more likely to have ones that are associative. Perhaps the clearest image was presented by Wright (1982) who suggested that women's friendships are more likely to be face-to-face while men's friendships are side-by-side.

Male friendships are characterized by similar patterns of activity and shared interests (Weiss & Lowenthal, 1975). Powers and Bultena (1976) found that males had more frequent social interaction with a larger number of persons, were less likely to replace lost friends, and were less likely to have intimate friends than women.

Women report friendships that involve more confiding, more frequent and more intimate self-disclosures than men (Reisman, 1988). The friendships of women emphasize intimacy, emotional sharing, and discussions of personal problems more than those of males (Caldwell & Peplau, 1979; Reisman, 1990). Women are more likely than men to report having confidants or intimate friendships (Powers & Bultena, 1976). It is not surprising then that women are more likely than men to have an intimate friend in late life (Powers & Bultena, 1976; Rubin, 1983). Females rate their same-sex friendships as

more disclosing than males (Reisman, 1990). Males evidently look to cross-sex friendships for this intimacy and are not specifically concerned by its absence in their same-sex friendships (Reisman, 1990). Tschann (1988) found the intimate disclosure of married men to friends was lower than that of unmarried men, married women and unmarried women. Women value friendship more highly than men, invest more in friendships and appear to reap more personal rewards from them (Duck & Wright, 1993). In sum, the main differences in the friendships of men and women are seen as those of content and the degree of emotional intimacy. Men talk less and do more together than women and men are sociable rather than intimate (Jerrome, 1992).

Education

Access to power, prestige, and wealth are highly correlated with educational achievement, which has clear implications for one's social structural position. As a result of the strong relationship between education and social position, it is often used as a measure of social class. Allan (1979) found striking differences in the friendships of English working-class and middle-class adults. Working-class respondents consistently claimed fewer friends than their middle-class counterparts (Allan, 1979; Chown, 1981). This observation suggests that friendship as a social form is a more integral feature of middle-class culture than of working-class culture (Allan, 1979). Research on lower or working-class American life has stressed the strong cultural constraints on intimacy with nonrelatives (Lopata, 1979). Another social class difference is the process through which middle-class adults decontextualized their friendships. Allan (1979) found middle-class

adults purposefully interacted in a variety of settings, and emphasized the importance of the relationship rather than the shared activity. In contrast, working-class adults were more likely to limit their friendships to specific social contexts and structures. This limiting of interaction could be an adaptive strategy used by the working-class to control the potential demands that could be made on them as a result of the norm of reciprocity (Allan, 1979).

Marital Status

The composition of one's social network is influenced by marital status. A great amount of adult social life is based on pairs. Although friends are pivotal members of the social support network of married persons, they must coexist with family demands, obligations, and commitments (Roberto & Stanis, 1994). Overall, the research literature indicates that social contacts vary with marital status. For many older persons, friendships are more important than family relations to morale and well-being (Crohan & Antonucci, 1989). However, marriage functions as a principal source of emotional support and companionship for many older married men and women (Connidis & Davies, 1990). In general, those who do not have particular ties available to them are more likely than those who do to turn to other relationships for confiding and companionship (Connidis & Davies, 1992).

Marital status, or more specifically changes in marital status, can have serious consequences on morale and well-being (Lopata, 1979; Mullins & Dugan, 1990). Widowhood affects men and women differently, with men being more isolated than

women (Allan & Adams, 1989). Longino and Lipman (1981; 1982) suggested that the energy women spend on developing relationships with family and other persons during their younger years appears to pay off in later life. In this study, the widowed women maintained contact with friends and family who served as vital sources of social support. With the loss of a spouse, older individuals often turn to their friends for increased social support and companionship (Roberto & Stanis, 1994). Yet, the effects of widowhood on friendship indicate that widows seem to have difficulty maintaining the customary friendship styles of their early and middle years (Brown, 1990; Lopata, 1979). Widows often lose contact with married couples who were friends with them and their spouse (Robert & Stanis, 1994). Gallagher and Gerstel (1993) found that compared to married women, widows spent significantly more hours providing help, especially of a practical kind, to a larger number of friends. Keith (1986a) found that older married persons interacted more with family while older unmarried individuals interacted more with friends. Similarly, Hatch and Bulcroft (1992) found that widowed women had more frequent contact with friends compared to respondents in all other gender and marital groups. In Keith's (1986b) study the never married seemed to establish more friendship bonds than members of other unmarried groups. Unmarried adults' nonintimate disclosure to friends has been found to be higher than that of married persons' disclosure, regardless of gender (Tschann, 1988). Further, Tschann (1988) suggested that marital status had a noticeable influence on self-disclosure in friendship for men but not for women.

Health

In their review of the voluminous literature related to social support, Crohan and Antonucci (1989) observed that social support is an important determinant of well-being for both its direct contribution and its ability to moderate the effects of stress. Research has documented a clear and consistent relationship between health and social support (Berkman & Syme, 1979; Broman, 1993; Krause, 1986; Krause & Borawski-Clark, 1994; Wortman & Conway, 1985). Changes in the health status or life circumstance of either partner can have an impact on friendship, and negative life events are more likely to occur in late adulthood than at any other period of life (Blieszner, 1989). Declining health can limit one's access to friends, a social structural constraint on friendship. A dispositional effect of poor health is the tendency to withdraw, to look inward, and to become less interested in the maintenance of numerous social contacts.

Johnson (1983; 1985) found that friendship involvement decreased among people over 65 who had a persistent health impairment. Despite high levels of solidarity, friends rarely function as caregivers or the providers of daily care. Moreover, decrements in health can restrict the ability to develop or maintain friendships. In an examination of the constraints and facilitators to friendship among the oldest-old, physical status was found to be a major determinant of being able to sustain face-to-face contact with friends (Johnson & Troll, 1994). Litwak (1985) found that sicker older people selected friends who were younger. He attributed this to the fact that sicker persons were also older and

their age peers were more likely to have died; and that sicker persons require services that demand the physical vigor characteristic of younger people (Litwak, 1989).

Giving support to friends can be extremely gratifying, because it allows individuals to feel that they can make a contribution to others and implies that support will be available for them when they need it (Crohan & Antonucci, 1989). Similarly, Mancini (1980) found that feeling that one could help a physically ill peer, if needed, was an important contributor to morale. Since balanced exchanges are a prominent part of friendship, older adults in declining health may limit their social involvement because of a diminished ability to reciprocate (Allan & Adams, 1989).

Behavioral Motif

A major component of the Adams and Blieszner (1994) theoretical framework is a behavioral motif. It is a metaphor for the rich diversity of day to day life, and comprises both the routine and unpredictable aspects of an individual's daily activities and his or her response to them (Blieszner & Adams, 1992). It is in the domain of daily life that integration into public and private social worlds is achieved, or isolation from others is experienced (Altergott, 1988). A behavioral motif is conceptualized as the foundation for the friendship patterns in which a person engages. The effects of individual characteristics on aspects of friendship patterns are frequently investigated by researchers, yet very few have described the *means* by which such effects occur. Duck (1990) compared this to trying to explain the connection between ingredients and dinner without discussing cooking. Behavioral motif is the theoretical mechanism of how individual

characteristics and friendship patterns are connected. The key notion of behavioral motif concerns the *intersection* of social lives. Thus, the centrality of the behavioral motif to understanding the relationship of individual characteristics to friendship patterns was a distinct contribution of the integrative conceptual framework.

Unfortunately, it is very difficult to assess the full range of circumstances and activities that comprise a multidimensional construct such as behavioral motif. In practice, rich descriptive metaphors are extremely complicated and difficult to operationalize. A partial operationalization of a behavioral motif might reflect the level of formal social activity and the day to day circumstances (e.g., distance from a friend) that are related to friendship opportunities. Thus, measuring participation in social groups, hobbies, and volunteerism provides a proxy measure of social involvement, an important part of daily life. A high level of social activity makes it more likely that friends are encountered during the everyday lives of older adults. What people do in their spare time (e.g., leisure and recreation activities) they generally do with others (Hendricks & Hendricks, 1986). Research has shown that membership in formal organizations extends well into the later years, although considerable variation in participation is found according to the type and location of the organization (Kivett, 1985). In the literature on voluntary associations in later life, membership is associated with morale, and a sense of relative well-being (Jerrome, 1992; Ward, 1979). Proximity influences how often friends see each other and the types of activities they engage in when together.

Social Groups

Group participation in religious activities, clubs, or group meetings offers a view of the breadth of an older adult's social network beyond familial ties (Rowles, 1983). In fact, participation in group meetings provides a source of belonging for very old rural adults (Dugan & Kivett, 1994). Participation in group activities has a direct effect upon loneliness and may foster social integration (Creecy, Berg & Wright, 1985). There are differences in the social lives of older men and women, with women spending more time with neighbors, friends, and relatives than men, although older men experienced more leisure (Altergott, 1988).

Hobbies

Adults are found to have a core of leisure that persists through the life course consisting of accessible activities, usually in or near the residence, that form an integral part of the ongoing round of daily life (Kelly, Steinkamp, & Kelly, 1986). Jerrome (1981) found joining clubs and recreational associations was a key strategy for maintaining and developing friendships among older adults. Shared activities may provide a basis for friendship in age-dissimilar dyads (Brown, 1990). Approximately forty-two percent of older adults are involved in crafts and hobbies on a regular basis (Hendricks & Hendricks, 1986). Chappell (1983) found that participation in specific recreational activities leads to greater satisfaction when engaged in with friends. In fact, older adults engaging in indoor recreation with nonfamily were more likely to be very satisfied with the activity than those participating with family members (Chappell, 1983).

Volunteerism

Volunteering is an activity intended to help others that is not based on obligation, and is not performed primarily for material gain (Fischer & Schaffer, 1993). The range of estimates on the numbers of older volunteers is astonishingly broad, ranging from a low of about 11 percent to a high of 52 percent (Fischer & Schaffer, 1993). Adults with more education, higher incomes, higher occupational status, and better health are more likely to volunteer than other people (Fischer & Schaffer, 1993; Hendricks & Hendricks, 1986). Moreover, among volunteers, the more affluent and the better educated are the most active and give the most time (Fischer & Schaffer, 1993). For older adults, volunteerism may function as a way to maintain personal ties and promote a heightened sense of self-worth (Hendricks & Hendricks, 1986). Volunteerism offers benefits to both the community and the adult volunteer. Obviously, unpaid assistance helps organizations to produce and deliver goods or services. For volunteers, the opportunity to meet people with similar interests and values provides contacts that may lead to friendships. Dugan and Kivett (1993) found volunteerism to be a predictor of stability in retirement relocation. Participation in volunteer organizations was a means through which older adults in their study established strong and lasting ties to their new community.

Proximity

For new friendships close proximity and frequent contact are of more importance than for older friendships. Indeed, in a study of older women living in Chicago the emotionally closest friendships were with nonlocal friends while the most emotionally

distant relationships were with local friends (Adams, 1985-86). She found that the friends who lived nearest tended to be their newest, most casual friends who they happened to see relatively often. Although old, nonlocal friends were most often regarded by the women as their best and most intimate friends, they were not their most important helpers or the most important for their psychological well-being (Adams, 1985-86). In 1987, Rook found that for respondents who reported many minor life stresses companionship provided by proximate others buffered stress more effectively than did social support provided by nonlocal others.

Interactive Friendship Processes

Researchers have paid a great deal of attention to the types of friendships observed among children, college students, and adults. However, the lack of a common theoretical framework and differences in methodology make comparisons across studies and a synthesis of findings difficult. Adams and Blieszner's (1994) integrative model proposes that friendship patterns consist of three interacting elements: structure, interactive processes, and phases. The elements interact at both the dyadic and network levels. However, for purposes of this analysis the discussion will be limited to the dyadic level.

Interactive processes are the dynamic aspects of the relationships between dyad members and among network participants (Blieszner, in press). These processes include the covert cognitive and affective responses and the overt behavioral events that occur when people socialize (Blieszner, in press). Put simply, they reflect what we think, feel,

and do as friends. Virtually no studies have addressed the interactive processes of older

adults, especially the cognitive and affective processes (Blieszner & Adams, 1992).

Affective Processes

Affective processes encompass emotional reactions to friends and friendship

(Blieszner & Adams, 1992). These processes include the positive feelings and emotional

reactions such as closeness, affection, empathy, trust, loyalty, satisfaction, commitment,

joy, and contentment. They also may involve negative feelings such as indifference,

anger, hostility, or jealousy. Interestingly, Blieszner found older adults were less likely to

describe affective processes than cognitive or behavioral ones. She (in press) reported

that the most frequently cited feelings were respect, affection, security, enjoyment,

indifference, love, trust, comfort, and satisfaction. The feelings reported varied by type of

friend -- for long-term friends feelings of comfort, compatibility, satisfaction, and security

were most often reported. Whereas for nearest, newest, and farthest friends the most

often mentioned feelings were of respect, liking, and loving (Blieszner, in press).

Behavioral Processes

Behavioral processes are the action components of friendship and, simply stated,

are the behaviors involved in acting as friends (Blieszner & Adams, 1992).

Communication, more specifically, the disclosure of one's thoughts and feelings is an

important behavioral process. Displays of affection, social support, resource exchange,

cooperation, accommodation to a friend's desires, coordination, sharing activities and

interests are behaviors associated with good friendships. Less positive processes, such as concealment, manipulation, and conflict may be observed as well.

Cognitive Processes

Cognitive processes reflect the internal thoughts that each partner has about him- or herself, the friend, and the friendship (Blieszner & Adams, 1992). These thoughts concern such things as how one evaluates his or her performance and the partner's performance of the friend role, assesses the stability of the friendship, explains events that occur in the friendship, interprets his or her own behavior as well as the other partner's intentions or needs (Blieszner & Adams, 1992). In addition, cognitive processes also include evaluations of another's attractiveness, character, similarity to self, and other important qualities (Blieszner, in press).

As conceptualized in the integrative framework, the three types of friendship processes interact with each other, such that behaviors can affect thoughts and emotions, cognitive processes can result in affective reactions that in turn influence future actions (Blieszner & Adams, 1992). Individuals differ both in the extent to which they employ interactive processes strategically versus assuming a more passive stance, and in the extent to which their dispositions are oriented more toward one type of interactive process than toward others (Blieszner, in press). Friendship processes can have either a strengthening or a weakening effect on the friendship. Further, dyadic friendship patterns may be defined as the combination of interactive friendship processes.

Friend Interaction

Frequency of contact is often used as a proxy measure of interactive processes because it reveals only that interaction takes place, but not the nature of the process involved (Blieszner & Adams, 1992). Some friendships are based on routine, repeated, predictable interactions and others are formed after chance meetings (Adams & Blieszner, 1994). Interaction increases in terms of the frequency, duration, and number of settings in which it occurs as partners move from initial acquaintance to close friendship (Perlman & Fehr, 1987). The loss of roles due to retirement, widowhood, illness, and residential mobility all may limit friend interaction in late adulthood (Blieszner, 1989). Blieszner, however, accurately noted that though the form and frequency of interaction may change with aging, the essential elements of friendship can endure indefinitely (1989). Mullins and Dugan (1990) found that older adults who had less contact with friends and who were less satisfied with the quality of friend relationships were more lonely than other residents of congregate housing.

Friendship Patterns

Over the last thirty years a body of literature has emerged to describe later life friendship patterns. Research has identified racial, gender, age, health, and marital status differences in friendship behavior (Adams, 1987; Chatters, Taylor & Jackson, 1986; Jerrome, 1992; Matthews, 1986; Wright, 1989). Despite the diversity of patterns of friendship, they may be conceptualized as falling into either of two broad descriptive categories: emotional and instrumental patterns.

Emotional Patterns

Many close friendships have a high degree of closeness, trust, and involve frequent exchanges of emotional support. Crohan and Antonucci (1989) reviewed the social support literature and found that the type of support provided by friends most often was emotional intimacy and companionship. For example, when feeling lonely or worried older adults were likely to turn to friends for comfort (Cantor, 1979). Confiding and companionship are important aspects of friendship, especially for women. Gender differences have been observed with women having affectively richer friendships. Women stated they value and desire relationships that emphasize intimacy, emotional sharing, and discussions of personal problems (Caldwell & Peplau, 1982). Duck and Wright (1993) observed women's friendships tended to be more expressive than those of men, and women were more likely to demonstrate expressive characteristics overtly.

Instrumental Patterns

Friendship, especially in the formation phase, involves the reciprocal exchange of support and services. For older adults who do not have kin close by, friends may substitute for kin in the provision of instrumental services (Cantor, 1979). Men's friendships often center on shared activities and similar interests (Weiss & Lowenthal, 1975). In retirement communities and congregate housing there may develop an informal barter or exchange system of services. For instance, Bill may cut Fred's lawn, and in turn, Fred may trim Bill's hair. The exchanges serve to cement and express the friendship involved.

Structural and Cultural Context

Friendships occur within a structural, cultural, and historical context. Both

structure and culture vary among societies, subgroups of a given society, and over

historical time (Adams & Blieszner, 1994). Few studies consider the social landscape in

which friendships are embedded. Only a handful of studies have examined the contextual

influences on social interaction (Adams, 1985-86; Allan, 1979; Matthews, 1986). An

even more disturbing trend is the failure of many researchers to consider the contextual

effects on friendship patterns and then to generalize findings from one particular

subgroup (e.g., college undergraduates, divorced adults, etc.) to the broader population.

Blieszner and Adams (1992) propose that the conceptual framework operates differently

among subgroups in a given society because the structure and cultural context vary by

subgroups within a society. The challenge for researchers then, is to identify how specific

characteristics of contexts, including both structure and culture, influence friendship

patterns.

The starting point for one's cultural context is the home. Homes are critical focal

points around which people organize their everyday behaviors and experiences (Golant,

1994). More than just a place in which they satisfy their usual shelter and security needs,

it is also where they first adjust to their manifestations of growing old (Golant, 1994).

The structural and cultural context of those who are friends must be considered, for this

as much as any other factor, shapes their interaction by making some activities easier to

accomplish with some people than with others (Allan, 1979). The life situation structures

social relationships through the available pool of potential friends, proximity, domestic

arrangements, outside activities, family life cycle position, and material resources (Allan,

1979). The life situation (context) is, in turn, likely to constrain, direct, or stimulate the

formation of relationships and the activities friends come to share together. One

contextual factor of growing interest to scholars concerns the rural and urban

environments in which older adults live. Of particular interest in this study is the

relationship of context to the friendship patterns of older relocated adults.

Rural

Approximately 1 in 4 older persons live in a small town or rural community (Bull,

1993). The term "rural" is used to refer to three dimensions: ecological, occupational,

and socio-cultural (Bealer, Willits & Kuvelsky, 1965). The ecological dimension -- size,

density, and location of a population is most commonly used for classification purposes

(Krout, 1986). The demographics of rural areas can be seen to alternatively facilitate and

inhibit interaction between older adults and their friends (Krout, 1986). On one hand,

small towns have higher percentages of older persons, thus offering greater availability of

age peers. Older rural adults report a considerable amount of contact with friends and

neighbors, and appear satisfied with this level of contact (Krout, 1986). Kivett (1976)

and Kivett and Scott (1979) found from 60 to 71 percent of a North Carolina rural elderly

sample had either frequent (at least once a week) or occasional (at least once a month)

contact with friends and neighbors. In a study that compared urban and rural adults, Scott

and Roberto (1987) observed that more rural than urban older persons gave and received

help from friends for a variety of problems. However, the low density and limited public transportation resources in rural areas may contribute to social isolation (Krout, 1986).

Urban

The movement from an agricultural to an industrial culture has led some individuals to assume that urban human lives have become fractured, isolated, and meaningless. There are equivocal findings about the role of urbanism and social relations. Some studies of friendship in general, and older adult friendship in particular, show that urban settings allow for and in some ways facilitate social integration (Adams, 1987; Johnson, 1983; Matthews, 1986). Urban areas offer access to public transportation and social services, which are two vital contributors to the social integration and independence of many older adults. In addition, congregate housing is available primarily in urban areas, providing elderly residents with opportunities for frequent contact with age peers and potential friends (Mullins & Dugan, 1991). Conversely, Lee and Whitbeck (1987) found that urban residents were slightly less involved in friendship networks than were rural residents. In a large national sample of older adults, urbanism was associated with both expecting and receiving less assistance from others (Amato, 1993). However, Fischer (1982) found that urbanism was not related to receiving counseling or companionship support, and was not related to overall satisfaction with support networks. Unfortunately, relatively little systematic research has been carried out on rural/urban differences in the friendship patterns of older adults (Krause, 1986).

Retirement Migration

Although many older adults move to retirement communities as they age, the vast

majority age in place in their homes (Chapman, 1994). The growing numbers of active,

relatively healthy, and independent retirees can select from a variety of residential

options, yet most decide not to move (Golant, 1994). When they do move, it is usually to

dwellings only a short distance away (Golant, 1987). In any recent five-year period,

people of retirement age are only about one-half as likely to make long-distance moves as

the U.S. population as a whole (Flynn, Longino, Wiseman, & Biggar, 1985). People tend

to stay put when they retire (Longino, 1992; 1994). The inertia of most retirees is partly

explained by their strong social attachments and emotional connections to their long-

occupied places and a reluctance to disrupt established family and friendship networks

(Golant, 1994). An accurate description of the circumstances of most older adults was

contributed by Longino:

> The retiree's house represents an accumulation of a lifetime, a comfortable,
>
> secure, and familiar setting in which friends visit and to which children return for
>
> holidays; ties to the community, the neighborhood, tavern, clubs and church are
>
> secure and socially rewarding; opportunities to indulge recreational interests and
>
> to be useful are within driving distance and plentiful enough to match the life-
>
> style the retiree desires in retirement; and the climate in which the retiree has lived
>
> for years poses no serious health problems. Under these circumstances, why
>
> would anyone think of moving? (Longino, 1994, p.405).

In general, the retirees who are the most likely to relocate are those who have the fewest ties to the local community and whose desired retirement life-styles require residential change, those who want to return to places of fond memories and old relationships, and those with the health, economic, and psychic resources to move (Longino, 1992; 1994).

Litwak and Longino (1987) presented a developmental typology of migration suggesting there are three basic types of retirement moves: amenity, assistance, and institutional. The first move, an amenity move, tends to follow retirement closely; movers are often married couples in good health with better than average economic resources and are motivated primarily by life-style considerations (Longino, Biggar, Flynn, & Wiseman, 1984). An assistance move, second in the typology, occurs when older adults develop chronic disabilities that make everyday household tasks difficult to perform. Coupled with widowhood, the increasing disability motivates many older adults to move closer to kin for help. The third type of move results when the need for care exceeds the capabilities of kin and a move into an institution is needed. Not all older people will necessarily make all three moves. The motivation may be slight for the first type of move, stronger for the second, and strongest for the third (Longino, 1992).

Relocation involves separation from friends and the generation of new contacts (Allan & Adams, 1989). Whether people maintain old friendships, alter their everyday friendship behavior, and develop new friendships varies depending on the characteristics of the new residential situation and on those of the mover (Allan & Adams, 1989). Different contexts offer different opportunities for organizational involvement, place

different normative constraints on friendship, have populations at different levels of functional impairment, and have different degrees of age density (Allan & Adams, 1989). Older persons' adjustment to these circumstances depends not only on the actual characteristics of the setting, but on the similarity of it and their previous environments (Prager, 1986). In a longitudinal examination of the effects of relocation on friendship patterns, old friendships remained stable in resource exchange and affection, while newly developed friendships increased on both dimensions (Shea, et al., 1988).

METHODS

This study used a cross-sectional survey design to assess interactive friendship processes of a random sample of rural and urban older relocated adults. This chapter includes four parts. The first part describes the sampling procedure. The second section focuses on the data collection methods. The third section reports on the measurement procedures. The fourth section addresses the statistical analyses to be employed to answer the research questions.

Sample

The data for this analysis were from a larger study of the family supports and relationships of older rural and urban migrants in North Carolina. The sample of the original study consisted of 308 adults 65 years or older who had moved (interstate or intrastate) since age 60. Only older adults, who did not reside in a nursing home and who provided information about a friend of most importance were included in the present sample of 282 older persons. All of the respondents used in this analysis were white, since less than three percent of the larger sample (7 adults) reported a nonwhite racial status. The sample included 166 rural and 115 urban adults (one adult was not classified as urban or rural due to missing data).

A simple random sample procedure using compact cluster and random permutation techniques was employed. "Snowballing" was used in some secured retirement communities. The sample was selected from three counties representing the

coastal, piedmont, and mountain areas of North Carolina having at least a 30/70 rural-to-urban ratio and with at least nine percent or more of their residents 65 years or older classified as inmigrants by the 1990 Census. One county was selected at random in each region from a pool of counties having the highest concentration of the criteria. The demographic profile of each selected county (number of older adults on public assistance, mean age of older adults, and average income) was compared to the overall state profile. If the county differed greatly from the state profile, another county was selected from the pool until a more comparable match was obtained.

A listing was obtained from census township data of the number of persons 65 years or older living in enumeration districts (ED) within the selected counties. Three digit numbers were assigned to ED's within each county. Twenty ED's were randomly selected from a county. Within these ED's, three enumeration districts were selected initially for each of the three counties, beginning with the lowest digits. A sampling ratio was used for each county based upon the number of older adults to the remaining population in a ED.

Local officials in the areas were contacted prior to the study and sent a description of the research. In addition, local newspapers reported on the research and published photos of the interviewers and project staff taken at an interviewer training session. Interviewers went door-to-door and interviewed every person within the selected ED meeting the inclusion criteria. All housing units containing five or more adults were removed from the population and sampled separately (e.g., retirement and nursing

facilities). The number of units in single home retirement communities was controlled to eliminate over-sampling. Three call backs were made to eligible persons not available on the first contact. Interviewers explained to every eligible person the general purposes of the research, the scope and approximate length of the interview, and the confidential nature of his or her responses. The overall rejection rate was 32 percent. Reasons for refusal to participate in the research were usually related to lack of time. Subjects who completed interviews were paid $20.00 for their participation in the study.

Data Collection

Approximately six interviewers were screened and selected in each of the three counties. The age range of the interviewers was from 36 years to 71 years. Approximately two-thirds of the interviewers were female and one third were male. Most of the interviewers had some prior experience with surveys (e.g., Census). All of the interviewers were white. Local Agricultural Cooperative Extension Specialists, Council on Aging Administrators, or other community leaders recommended the interviewers. Interviewers received two days of training performed on location in each of the counties. The first phase of training focused on the purpose of the research, general guidelines, specifications for problematic issues, and item by item discussion of the questionnaire. The second day of training included demonstration interviews by the project staff and pairing of the interviewers for practice sessions. To guarantee quality control, each interviewer performed two practice interviews which were subjected to project staff examination before beginning assignments.

Measurement

The questionnaire, following revision from a pilot study, was a 173-item

instrument covering seven major areas: general information, migration motives, health,

activities, family relationships, subjective well-being, and service needs and use.

Interviews lasted approximately two hours and were conducted in the respondent's home.

While the friend of most importance is used as the referent, the unit of analysis for the

present study was the individual, not the dyad.

Dependent Measures

Three types of interactive friendship processes were examined: affective,

behavioral, and cognitive, and a proxy measure of processes, frequency of contact.

Affective processes was operationalized by one question. Adults were asked to rate on a

six-point scale of very little to very much (1-6), the closeness to the friend identified as

most important. There is some disagreement as to whether closeness measures a

structural or process construct. Closeness has been used to measure affective processes

(Reiss & Shaver, 1988) or the solidarity or social distance of friends (Adams & Blieszner,

1994). For this analysis, closeness was conceptualized as an affective process.

Behavioral processes were defined as giving help, exchange of gifts, checking on

you, listens to you, gives advice, comforts you, shared activities (eat, shop, and visit with

friend), and communication (write, phone). There were ten possible responses daily,

several times a week, about once a week, several times a month, once a month, several

times a year, about once a year, every couple of years, once a decade, and never (coded 10

- 1 respectively). Cronbach's alpha of reliability for the behavioral processes scale was .80 for the eleven-item scale.

Cognitive processes was the summation of four items which asked for ratings of mutual understanding (you understand friend, friend understands you), getting along with friend, and similarity in views about life. Responses for mutual understanding and getting along with friend ranged from very little to very much (coded 1- 6). Cronbach's alpha of reliability for the four-item scale was .82. Similarity in views of life was measured using the Cantril (1965) ladder technique. Subjects were shown a picture of a ladder with 10 rungs, 0-9, representing total disagreement (coded 0) and total agreement (coded 9) of views of life. They were asked to indicate where on the ladder they and their most important friend stood at the present time.

A proxy measure of interactive processes was operationalized by one item determining the frequency of contact with the most important friend. Responses ranged from daily contact (10) to never (1).

Independent Measures

Individual characteristics examined were age, gender, education, marital status, and health. Gender was coded male (1) and female (0). Education was the number of years of schooling the person had completed. Current marital status was coded married (1), or not married (widowed, divorced, single) (0). Self-reported health was measured using the Cantril ladder technique (1965). Subjects were shown a picture of a ladder with 10 rungs, 0-9. They were asked to suppose that the top of the ladder (9) represented

perfect health, and the bottom of the ladder represented the most serious illness (0). They were then asked to indicate where on the ladder their health was at the present time. Structural and cultural context was determined by the location of a respondent's home -- whether it was in a rural or urban community. A rural community was defined as one having less than 1,500 residents. Living in a rural location was coded zero and an urban location was coded one.

Behavioral motif was operationalized by proximity to friend and a count of involvement in three types of social activities social groups, hobbies, and volunteerism. Frequency of involvement in two levels of social groups, hobbies, and volunteer organizations were measured. Scores were obtained for the frequency of involvement in each and ranged from daily (10) to never (1). The scores were summed to provide a count of social involvement. Proximity to most important friend was coded as same household (8), less than 30 minutes (7), less than 59 minutes (6), one to three hours (5), four to six hours (4), seven to ten hours (3), eleven to fifteen hours (2), and sixteen plus hours (1).

<div align="center">Statistical Analyses</div>

<u>Reduction Of The Model</u>

In order to develop the most parsimonious regression model needed to test the hypotheses, a forward stepwise multiple regression procedure was initially used. (Without this step, the multiple regression equations calculated to test the research hypotheses would have included more than twenty variables: five individual characteristic

variables: age, gender, education, marital status, and health; one context variable: location; two behavioral motif variables: social involvement and proximity to friend; and the twelve interaction terms; and then each dependent variable). Variables that were identified as statistically significant at the $p=.05$ level or higher were included in the subsequent hierarchical multiple regression analyses (Tables 2 - 5). The individual characteristic variables (age, gender, education, marital status, and health) were entered in step one, behavioral motif variables (social involvement, proximity to friend) were entered on step two, and the two way interaction terms (i.e., age * social involvement, age * proximity to friend, etc.) were entered on step three. The context variable, regardless of its statistical significance in the forward regression equation, was entered last.

The variables retained for affective processes were: gender, education, proximity, and education*proximity. For behavioral processes the variables retained were: gender, education, social involvement, proximity, gender*proximity, and education*social involvement. The variables retained for cognitive processes were: gender, education, proximity, and education*proximity. The variables retained for frequency of contact were: health, proximity, social involvement, and health*social involvement.

Regression Diagnostic Procedures

Regression diagnostic procedures to test the assumptions of multiple regression identified several cases with extreme standardized residuals (i.e., $z > 2$). Cases with extreme residuals were dropped from analyses of the dependent variables (Pedhazur, 1982). This process resulted in 13 cases being dropped from the affective processes

analysis, 2 cases dropped from the analysis of behavioral processes, 12 cases dropped from the cognitive processes equations, and 2 cases dropped from the frequency of contact analysis. Multiple regression diagnostics indicated a pattern in the plots of the standardized residuals and values of frequency of contact, cognitive and affective processes. For affective and cognitive processes the pattern appeared to be linear. Frequency of contact appeared to have a curvilinear pattern. A pattern in the plots can be indicative of a violation of one of the assumptions of multiple regression, that is, the assumption that errors are not associated with different values of Y (the dependent variable). When evidence of a violation of assumptions appears one strategy is to transform the variables so that the model will be more adequate. For example, taking logs, square roots, or reciprocals can stabilize variance, achieve normality, or linearize a relationship (Norusis, 1988). Transformations (square root or log) of the three dependent variables (affective processes, cognitive processes, and frequency of contact) did not significantly improve the models. Examination of two indices of influence (the Leverage and Durbin statistics) showed that the original non-transformed equations were not unduly influenced and that the violations were not serious. Further, an examination of the normal probability plot of each of the equations revealed that no serious departures from normality occurred, especially after outliers were removed from the analysis. As a result, the analyses used to test the research hypotheses were conducted using the non-transformed data. Multicollinearity was studied by examining the tolerance statistics and the variance inflation factors and did not pose a significant problem in the analyses. The

variance inflation factors ranged from 1 to 37 (10 or less is the preferred level), and the condition indices ranged from 1 to 68 (30 or less is the preferred level).

Hypothesis Testing

The three hypotheses were tested by four hierarchical multiple regression analyses. One model was used for each of the outcome measures of friendship processes (affective, behavioral, and cognitive processes, and frequency of contact). Hypothesis one that individual characteristics would predict interactive friendship processes and frequency of contact with most important friend, was supported if the overall R^2 was statistically significant, the first step of the regression resulted in a statistically significant change in R^2, and the t value of the standardized Betas was significant at the $p < .05$ level.

Hypothesis two stated that behavioral motif would moderate the relationship between individual characteristics and interactive processes. The statistical analysis must measure and test the differential effect of the independent variable on the dependent variable as a function of the moderator (Baron & Kenny, 1986). Moderation implies that the relation between two variables (e.g., individual characteristic and interactive process) changes as a function of the moderator variable (behavioral motif). To determine if a moderating relationship is present, the interaction must be statistically significant. Hypothesis two (that behavioral motif would moderate the relationship between individual characteristics and interactive processes) was supported if the entry of the interaction terms resulted in a statistically significant change in R^2, and the t value of the standardized Betas was significant at the $p < .05$ level.

Hypothesis three that the relationship of individual characteristics and behavioral motif to interactive friendship processes and frequency of contact would vary according to context was supported if the entry of the location variable resulted in a statistically significant change in $\underline{R}^2$, and the $\underline{t}$ value of the standardized Betas was significant at the $\underline{p}$ <.05 level.

RESULTS

Data Analyses

Descriptive Data

Sample characteristics. Frequencies, percentages, and means of demographic

variables were obtained for descriptive purposes (Table 1). Ages ranged from sixty-five

to ninety-seven years, with a mean of seventy-four years. Slightly more than one-half of

the participants were female (56%). Approximately 71% of the older adults had thirteen

or more years of schooling completed. The majority were currently married (73%), and

nearly 18% reported having been married more than once. Overall, the subjects indicated

good health (mean of 6.9 rating, with 9.0 representing the best possible health). Further

evidence of the activity and relative good health of the sample was found in the

percentage who reported exercising (80%) (Not shown).

In regard to lifetime occupation, 50% reported either a professional or managerial

occupation, 17% were homemakers, 14% worked in clerical positions, 7% were in sales,

and the remaining 11% were categorized as other. More than one in three (37%) had

annual incomes in excess of $35,000. Overall, the adults indicated a high level of life

satisfaction (7.8) and social activity (Table 1). More than 70% were extremely satisfied

with their lives (Not shown).

The length of residence in the present county ranged from one to thirty-four years,

with an average of nine years. A majority of the older adults (64%) resided in their own

house, 17% lived in a retirement community, 9% lived in an apartment or town home, 3% lived in a mobile home, and 7% lived in a retirement facility that provided some care (Not shown).

For interactive processes, the means were 5.3 for affective processes, 66.6 for behavioral processes, and 23.9 for cognitive processes. The range of scores and standard deviations indicated variability in the friendship processes of older relocated adults.

Table 1.

<u>Descriptive Characteristics of Older Relocated Adults (N=282)</u>

Variable	n	%	<u>M</u>	<u>SD</u>	Range
Age in years			74.4	6.1	65-97
65-75	162	57			
76-85	109	39			
86-97	11	4			
Gender					
Male	124	44			
Female	158	56			
Years of Education			14.5	2.9	6-24
1-12 years	83	29			
13-16 years	140	50			
17-24 years	59	21			
Marital Status					
Married	205	73			
Not Married	77	27			
Health (0-9 scale)			6.9	1.6	0-9

(table continues)

*Percentages may not equal 100% due to rounding.

Table 1. (continued)

Variable	n	%	M	SD	Range
Life Satisfaction			7.8	1.2	1-9
Occupation					
Professional	105	37			
Manager	37	13			
Sales	21	7			
Clerical	39	14			
Homemaker	48	17			
Other	32	11			
Annual Household Income					
< $14,999	35	13			
$15-24,999	56	20			
$25-34,999	55	20			
$35-44,999	38	14			
$45-54,999	20	7			
$55-74,999	25	9			
> $75,000	19	7			
Other	36	13			

(table continues)

*Percentages may not equal 100% due to rounding.

Table 1. (continued)

Variable	n	%	M	SD	Range
Number of Years in this County			9.0	6.0	1-34
Social Involvement			30.1	11.6	1-55
Volunteerism			10.8	4.1	3-20
Hobbies			14.8	4.3	4-20
Social Groups			11.6	4.1	1-19
Affective Processes			5.3	.9	1-6
Behavioral Processes			66.6	15.3	27-104
Cognitive Processes			23.9	3.1	9-27

*Percentages may not equal 100% due to rounding.

Friendship characteristics. Frequencies, percentages, and means of friendship variables were obtained for descriptive purposes (Table 2). The average age of the most important friend was approximately sixty-seven, with a standard deviation of 11 years. Fifty-three percent of the most important friends were female, 47% were male. The average number of friends was forty and the average number of close friends was nine. The length of the most important friendship ranged from 1 - 80 years, with the average being approximately 20 years. Twenty-six percent had at least monthly contact with the friend of most importance. Nearly 13% saw the friend once a year or less. Seventy-one percent of the respondents lived within thirty minutes of the most important friend. However, more than 17% lived ten or more hours away from their most important friend. Sixty-two percent of the sample reported being very satisfied with their relationships with friends (Not Shown). When asked to identify what person (non-family member) was most important to them, 79% reported a friend, 13% named a neighbor, 7% identified a pastor or rabbi, and approximately 1% cited a health care worker (Not shown).

Table 2.

Friendship Characteristics of Older Relocated Adults (N=282)

Variable	n	%	M	SD	Range
Age of Most Important Friend			66.9	11.3	20-88
Gender of Friend					
Male	133	47			
Female	149	53			
Number of Close Friends			8.5	10.3	0-98
Number of Friends			40.0	32.3	0-98
Length of Friendship (Years)			19.7	18.8	1-80
Frequency of Contact With Friend					
Several times week	6	2			
Once a week	9	3			
Several times month	21	8			
Once a month	37	13			
Several times year	16	6			
Once a year	16	6			
Every couple years	47	17			
Once decade	82	29			
Never	47	17			

(table continues)

*Percentages may not equal 100% due to rounding.

Table 2. (continued)

Variable	n	%	M	SD	Range
Proximity to Friend					
< 30 Minutes	203	72			
< 59 Minutes	4	3			
1-3 Hours	8	3			
4-6 Hours	17	6			
7-10 Hours	19	7			
11-15 Hours	14	5			
16 + Hours	15	5			

*Percentages may not equal 100% due to rounding.

Results of Hypothesis Testing

Inferential statistics were used to test the research hypotheses. The overall F value

for each of the four predictive models was statistically significant: Affective processes,

Adjusted R^2 = .04, $F(5,260)$ =3.16, $p \leq .01$ (Table 3); Behavioral processes, Adjusted R^2 =

.22, $F(7,264)$ =11.99, $p \leq .001$ (Table 4); Cognitive processes, Adjusted R^2 = .03, $F(5,261)$

=2.83, $p \leq .01$ (Table 5); Frequency of Contact, Adjusted R^2 = .72, $F(5,267)$ =138.99, $p \leq$

.001 (Table 6).

Hypothesis One

Mixed support was found for the first hypothesis -- individual characteristics

predicted interactive friendship processes for three of the four dependent variables

(affective, behavioral, and cognitive processes). However, frequency of contact was not

predicted by individual characteristics.

As seen in Table 3, two individual characteristics (gender and education) were

related to affective processes. The first step of the equation resulted in a change in R^2 =

.04, $p \leq .01$. Feelings of closeness to friend were higher for women (Beta = -.12) and

those with less education (Beta = -.13). Gender and education explained a small but

significant amount of variance in affective processes.

The individual characteristics of gender and education were related to behavioral

processes (Table 4). The first step of the equation resulted in a change in R^2 = .10, $p \leq$

.001. Those with more education (Beta =.17) and females (Beta = -.29) had more

behavioral interactions with friends. Gender and education explained nearly one-half of the total variance in behavioral processes.

As seen in Table 5, only partial support for hypothesis one was found for cognitive processes. Education (Beta =-.11) and gender (-.10) were entered on step one and resulted in a significant change in R^2=.03, however neither gender nor education had a significant Beta. This result suggests that the individual variables are related to each other so that neither of them predicts the dependent variable uniquely. Overall, individual characteristics explained a small but significant amount of variance in the cognitive processes model.

Hypothesis one was not supported by the data for frequency of contact with friend (Table 6). No individual characteristics were significantly related to frequency of contact with most important friend. Health was entered on step one, but it did not have a significant Beta or result in a significant change in R^2.

Hypothesis Two

No support was observed for the hypothesis that behavioral motif moderates the relationship of individual characteristics and interactive processes or frequency of contact. Behavioral motif was entered on step two and the interaction terms were entered on step three of the equations. No interaction terms in any of the four models were statistically significant.

As seen in Table 3, the education*proximity interaction term entered on step 3 was not significant, and did not moderate the relationship of individual characteristics and

affective processes. That is, there was no evidence that those with higher education and close proximity felt more or less close to the friend of most importance than those with less education or farther proximity. The second step of the hierarchical regression showed proximity, a behavioral motif variable, to have a significant relationship to affective processes (Beta = -.12). Feelings of closeness were higher among those adults who were farther distances from their most important friend. The model including the behavioral motif variables resulted in an increase of 1% of the variance explained in affective processes.

No evidence was found to support the hypothesis that behavioral motif moderated the relationship of individual characteristics and behavioral processes (Table 4). Step two of the equation shows that close proximity (Beta = .34) and more social activity (Beta = .13) were significant predictors of behavioral processes, and resulted in a change in R^2 of .14. The addition of the gender*proximity and education*social involvement interaction terms at step three of the equation did not contribute to a significant change in the amount of variance explained, and the Betas for the interaction terms were not significant. The model with behavioral motif variables increased the amount of variance explained by 14%.

There was no support of the hypothesis that behavioral motif moderates the relationship of individual characteristics and cognitive processes (Table 5). Step two of the equation shows that proximity (Beta = -.13) was related to cognitive processes and resulted in a change in $R^2 = .02$, $p \leq .05$. Cognitive processes, such as understanding,

getting along, and agreement in views about life, increased with farther proximity. The education*proximity interaction entered on step three was not related to behavioral processes and resulted in no change in R^2. The model including behavioral motif variables resulted in an increase of 2% of the variance explained in cognitive processes.

No evidence was found to support the hypothesis that behavioral motif moderates the relationship of individual characteristics and frequency of contact (Table 6). Step two of the regression shows that proximity (Beta = .83) and social involvement (Beta = .08) were both related to frequency of contact and contributed to a change in R^2 = .71, at the $p \leq .001$ level. The health*social involvement interaction entered on step three did not have a significant Beta or contribute to a significant change in R^2. The model with behavioral motif variables increased the amount of variance explained by 71%.

Hypothesis Three

Only limited support was found for hypothesis three that the relationship of individual characteristics and behavioral motif to interactive processes and frequency of contact would vary according to structural and cultural context. As seen in Tables 3-5, location was not significantly related to affective, behavioral, or cognitive processes. Table 6, however shows that location and frequency of contact had a significant relationship. Urban (Beta =.08), rather than rural older adults, had more frequent contact with their most important friends. The model with the context variable explained an additional 1% of the variance in frequency of contact.

Table 3.

Hierarchical Multiple Regression of **Affective** Interactive Processes on Individual

Characteristics, Behavioral Motif, and Context of Older Relocated Adults (N=275)

Variable	B	$SE\ B$	β	t	Change in R^2
Step One:					.04**
Gender	-.16	.08	-.12	-1.90*	
Education	-.03	.01	-.13	-2.13*	
Step Two:					.01*
Proximity	-.04	.02	-.12	-1.92*	
Step Three:					.01
Education*Proximity	-.01	.01	-.44	-1.20	
Step Four:					.00
Location	-.04	.08	-.03	-.54	

Adjusted R^2 = .04, $F(5,260)$ =3.16**

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 4.

Hierarchical Multiple Regression of **Behavioral** Interactive Processes on Individual

Characteristics, Behavioral Motif, and Context of Older Relocated Adults (N=275)

Variable	$\underline{B}$	$\underline{SE}\ \underline{B}$	β	$\underline{t}$	Change in $\underline{R}^2$
Step One:					.10***
Education	.87	.30	.17	2.89**	
Gender	-8.77	1.76	-.29	-4.99***	
Step Two:					.14***
Proximity	2.55	.41	.34	6.22***	
Social Involvement	.17	.07	.13	2.33*	
Step Three:					.00
Gender*Proximity	-.69	.82	-.15	-.84	
Educ*Social Involvement	-.01	.02	-.20	-.68	
Step Four:					.00
Location	.97	1.65	.03	.59	

Adjusted $\underline{R}^2$ = .22, $\underline{F}(7,264)$ =11.99***

* $\underline{p}$ < .05. ** $\underline{p}$ < .01. *** $\underline{p}$ < .001

Table 5.

Hierarchical Multiple Regression of **Cognitive** Interactive Processes on Individual

Characteristics, Behavioral Motif, and Context of Older Relocated Adults (N=275)

Variable	B	SE B	β	t	Change in R^2
Step One:					.03*
Education	-.09	.05	-.11	-1.85	
Gender	-.47	.29	-.10	-1.62	
Step Two:					.02*
Proximity	-.16	.07	-.13	-2.16*	
Step Three:					.00
Educ*Proximity	-.01	.03	-.18	-.49	
Step Four:					.01
Location	.37	.29	.08	1.26	

Adjusted R^2 = .03, $F(5,261)$ =2.83**

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 6.

Hierarchical Multiple Regression of **Frequency of Contact** on Individual Characteristics,

Behavioral Motif, and Context of Older Relocated Adults (N=275)

Variable	$\underline{B}$	$\underline{SE}\,\underline{B}$	β	$\underline{t}$	Change in $\underline{R}^2$
Step One:					.00
Health	.09	.08	.07	1.10	
Step Two:					.71***
Proximity	.93	.04	.83	25.23***	
Social Involvement	.02	.01	.08	2.53**	
Step Three:					.00
Health*Social Involvement	.00	.00	.08	.50	
Step Four:					.01*
Location	.34	.15	.08	2.33*	

Adjusted $\underline{R}^2$ = .72, $\underline{F}(5,267)$ =138.99***

* $\underline{p}$ < .05. ** $\underline{p}$ < .01. *** $\underline{p}$ < .001

DISCUSSION

This research makes three contributions to the study of friendships in later life. The first contribution involves operationalizing an abstract descriptive framework developed specifically for friendship research. As indicated by the model, distinctions are made between structural and dispositional explanations for the relationships found between individual characteristics and interactive processes. Behavioral motif, a key element of the framework did not influence relationships as expected. The friendships of older relocated adults were not shaped by an interaction of patterns of daily life and individual characteristics as hypothesized. That is, the influence of personal attributes, such as age or gender, on the processes of friendship was not moderated by the pattern of day to day life for older relocated adults. Second, personal attributes, daily patterns, and context were found to variously predict according to the friendship process (overt, covert) of interest. Despite some statistically significant findings, the model as measured here, did not work especially well for affective or cognitive interactive processes, indicating that there are other influences at work yet to be discovered. Theoretically, this result could indicate that in order to fully understand the covert aspects of friendship the entire conceptual model -- including the phases, structures, and processes of dyads that, in turn, influence and are influenced by friendship networks -- should be operationalized. Nonetheless, the recognition of multiple influences on individuals, dyads, and friendships is one of the conceptual strengths of the integrative framework and now has some

empirical support. Third, information about patterns of friendship among people not aging in place (e.g., retirement migrants) was obtained.

Theoretical Conclusions

The ability of personal characteristics, patterns of daily life, and structural and cultural contexts to explain friendship patterns is most evident for overt interactive processes such as frequency of contact. Less straightforward however, are the predictors of the thoughts and feelings for friends. It may be that covert aspects of friendship, such as affective and cognitive processes, are closely related to the elements of the conceptual model that were omitted in the present operationalization. Alternatively, the model may in fact, be less useful in understanding the emotional aspects of friendships than overt interactions with friends. Despite the limitations of the partial operationalization, the results clearly emphasize the important role of proximity to friendship in later life. Proximity was perhaps the best measure of behavioral motif in this analysis, because it measured the likelihood that friends would have opportunities to cross social paths.

Although the amount of variance explained for affective and cognitive processes was relatively small, several variables were important to understanding differences in interactive processes. The ways in which older relocated adults think and feel about friends are shaped by gender, class, and propinquity. Adams and Blieszner (1994) suggested that individual characteristics have implications for both one's social structural position and psychological disposition. The structural and dispositional effects of

individual traits could not be separated in the present study, therefore both views are offered to explain the relationships of individual characteristics and interactive processes.

<u>Personal Attributes</u>

Structural approaches explain gender differences in social relations by the different positions women and men typically occupy in the social system, and their differing access to economic, political, and ideological resources of power and privilege (Fischer & Oliker, 1983). A structural perspective suggests that gender facilitates or constrains access to potential friends, and the nature and timing of appropriate social interaction. Alternatively, a dispositional view interprets gender differences in friendship as due to ongoing inclinations which may originate in biology, culture, or early or adult socialization (Fischer & Oliker, 1983). However, one caveat is warranted in any discussion of gender differences in friendships. Wright (1988; 1989) has persuasively argued that an exaggeration of either the extent or the magnitude of gender differences in friendships should be avoided since nearly all close friendships involve shared interests and activities, various kinds of intimacy, emotional support, small talk, shop talk, and exchanges of tangible favors. Rather than polar opposites, the gender differences are usually a matter of *averages* and *degrees* (Wright, 1989). With his point in mind, the findings from the present study will be interpreted structurally and dispositionally.

More interactive processes, specifically affective, behavioral, and cognitive processes were found in the relationships of women and their friends. On average, women had emotionally closer relationships and engaged in more activities with their

friends than did men. Similar findings were reported by Booth (1972) who suggested the friendships of women were affectively richer than those of men. Structurally interpreted this indicates that men are in social positions that inhibit the experience of interactive processes. For example, differences in mortality rates may leave older men with fewer available friends than women. Fischer and Oliker (1983) suggested that structural changes for women, in particular the loosening of constraints of parenthood explain why women have more friends than men in later adulthood. Alternatively, a dispositional perspective explains this difference with the proposition that most women are genetically predisposed and or socialized to nurture and maintain close relationships.

More affective and cognitive processes were found among older adults having fewer years of education. This contributes to an understanding of the role of social class in friendship, because the majority of adults in this sample are members of the middle or upper-middle social classes. Some caution should be observed though, as a correlation was observed between education and gender, with men on average having more years of education than women. Thus, whether this difference is entirely attributable to social class (education) is not clear. If the difference is a matter of social class, it could be explained structurally as indicating that having less education offers access to social positions that encourage the expression of thoughts and feelings about friends, or conversely that having more education places one in a position that limits the expression of affective and cognitive processes. Dispositional explanations suggest that genetic or socialization differences between those with less versus more education result in

personalities that have dissimilar patterns for expressing thoughts and feelings for friends. Adults with higher education reported more behavioral processes. Structurally interpreted, this finding suggests that adults with more education may be socially located in communities that promote frequent interactions with friends. An alternate explanation using a dispositional approach suggests that adults with more education have the intellectual tools necessary to ensure frequent behavioral interactions with their friend of most importance than their less educated peers.

Age and friendship processes were not related. Interactions with and thoughts about friends were not contingent upon chronological age. The feelings and activities of friendship, such as expressions of affection or trust, exchanges of help and support, communication, and the joint pursuit of shared interests were not related to age. No evidence was found to indicate either differing age-related psychological needs or social norms for friendship. Thus, no structural effects of stage of life course or dispositional effects of stage of development on voluntary social relationships were observed.

Marital status did not influence the thoughts, feelings, or activities with the friend of most importance. This suggests that a tie to a very close friend transcends marital status constraints. Dispositionally, no difference was apparent in the preference for friendships according to marital status. Structurally, the effects of marital status on social norms for friendship behavior may not be as important as proposed for older relocated adults. No evidence was found to support the proposition that marital status influenced the social location and patterns of interaction of elderly migrants.

In addition, self-reported health status was not related to friendship processes. This was a relatively healthy sample that indicated frequent satisfying interactions with friends. Limited variability in reported health status may have contributed to this observation. Alternatively, older adults may adopt compensatory strategies in order to maintain relationships with close friends when faced with declines in health status. Structurally, for older adults in relatively good health, no evidence was found to suggest that access to friends is limited by declining health status. Dispositionally, for people of this particular health status, there appeared to be no tendency to socially withdraw and to focus inward. Interest in maintaining social contacts was not dependent upon health status.

Behavioral Motif

Why behavioral motif did not shape the relationships between personal characteristics and friendship patterns as theorized is unclear. Intuitively, it seems logical and likely that this metaphor for day to day life, including both the planned and unplanned aspects of daily life, should influence friendships. However the results showed no moderating effects of the daily patterns of life on the activities, thoughts, and feelings for friends. Three possible explanations exist for the absence of a relationship. First, the theoretical construct of behavioral motif is different than presently proposed. Second, the operationalization, which focused on social activity and proximity lacked correspondence with the concept. Third, the friendships of older relocated adults rely less on behavioral motif than expected, at least for friendships formed in contexts which the

older adult no longer frequents. Admittedly, the present measurement was less than optimal because it relied on the assessment of formal-organization factors (social groups, hobbies, volunteerism) and proximity to influence intimate dyadic relations. Behavioral motif is a rich, multidimensional concept that encompasses more than social activity and proximity. In fact, future research may need to rely on multiple proxy measures to provide information about the many dimensions of a behavioral motif (e.g., daily activities, social interactions, planned activities, proximity, and patterns or social routines, etc.). Nevertheless, the consistent direct relationship observed between behavioral motif and interactive friendship processes indicates that the partial operationalization while not perfect, was useful.

Propinquity

Proximity was related to affective, behavioral, cognitive processes and frequency of contact with most important friend. The warmest thoughts and feelings were reserved for friends who lived farther away. Relationships with old friends were treasured, despite geographical distance. Analogous findings were reported by Adams (1985-86) who found that the farther away a friend lived the more likely they were to be regarded as an emotionally close one. She found that the emotionally closest friends tended to be the oldest friends, even though time has a way of geographically dispersing people (Adams, 1985-1986). Similarly, this study found relationships between proximity and length of friendship and length of friendship and emotional closeness. The longer the duration of the friendship the closer the relationship. Distance may serve as a buffer, insulating

adults from negative aspects of a close friend and allowing one to maximize the positives. The long shared history and fond memories may compensate for proximity in emotionally close friendships in later life. Shea et al. (1988) reported that even though respondents did not live near their old friends or see them often, they retained strong feelings of affection for them. Blieszner (in press) recommended that given the findings related to psychological well-being, older adults were well-advised to sustain long-term, long-distance friendships for as long as possible.

Behavioral processes were related to living close to the most important friend -- closer proximity facilitated more frequent contact. Similarly, Adams (1985-86) found that the most frequent contact was with friends who lived near the older women in her study. The present findings support those of Verbrugge (1983) who found residential proximity to be a strong predictor of contact. Similarly, Hays (1989) found close friends had more interactions, involving more days, times, and locations of interactions than casual friends.

Context

The structural and cultural context of a community are two different, though related, components of the environment. Culture refers to the social rules and norms of an environment, while structural context reflects the hierarchy of social position or social patterns. In this study, rural and urban locations were conceptualized as providing information about both the structure and culture of the communities. Admittedly, location is only one part of the complex concept context. Social norms are expected to

vary for different contexts -- for instance, in rural areas there is a traditional emphasis on owning property and a sense of being tied to the land, and, on the importance of friendly reciprocal relations with neighbors. Conversely, the social rules for urban residents traditionally stress the value of respecting privacy and personal independence. The hierarchy of social positions in rural areas is related to the amount of land owned, the length of time the property has been in the family, gender and racial status. In urban areas the social hierarchy is related to an older adult's occupational and financial achievement, gender and racial status.

Characteristics of the contexts did not predict friendship processes as expected. However, frequency of contact was higher for older adults in urban areas. Additional analyses were conducted to determine if another contextual factor might influence the friendship patterns. Supplemental multiple regression equations were calculated using an alternative context variable -- the region of home (North Carolina mountains, sandhills, or coast). No relationship was found in any of the supplemental analyses. Thus, while theoretical considerations would suggest an important effect of context on friendships, none was found except for frequency of contact.

Several explanations exist for why few contextual differences were found. First, the contexts were fairly broadly defined -- a rural area was defined as one having fewer than 1,500 residents. North Carolina may provide a unique context because the areas studied were fairly similar despite distinctions attributed to either a rural or urban setting. Unlike other states, rural areas in North Carolina are not necessarily farming

communities. Further, there has been a moderate level of industrialization in some rural areas. Moreover, the urban areas in North Carolina generally are smaller and slower-paced than the large urban regions from which many of the residents migrated. As a result, there may not be distinct cultural values or social norms associated with residence in an urban or rural location in North Carolina as compared to the cultural differences found in urban and rural areas of other states (e.g., comparing Chicago and a rural area in Illinois). Second, the life experience of the retired migrant may explain why there were no contextual effects on friendship observed. A lifetime resident of an urban area may migrate to a rural location, however the urban cultural norms assimilated over the course of a lifetime may be quite salient and remain with the resident, regardless of the characteristics of the new community. Third, it might be that the older adult's immediate social environment (e.g., religious subculture or occupational group) is more influential to friendship patterns than are the broader cultural contexts.

The Friendships of Older Migrants

It is important to recognize that older migrants are not a homogenous group in regard to social activity and voluntary social relationships. There was great variability in the average age of the most important friend, the number of close friends, and the amount of social interaction with friends. The noninstitutionalized nature of friendship is reflected in the diversity of the relationships observed. The diversity in friendship characteristics is striking considering the relative similarity of the sample on several key characteristics (e.g., health status, education level, and annual income). Nearly 3 out of 4

(71%) adults in this study had 13 or more years of education, which contrasts sharply with census data indicating that only 24% of adults age 60 and older in North Carolina had thirteen or more years of schooling. Similarly, only 21% of older North Carolinians had annual incomes above $35,000, however in this sample, more than one in three (37%) had annual incomes in excess of $35,000 (U.S. Census, 1990). Thus, the data support other findings which show amenity migrants to be relatively advantaged compared to adults indigenous to an area.

Longino (1992; 1994) identified two social types of migrants -- those who blend into the local community and those who remain aloof from the natives. While a cross-sectional survey does not provide enough information to definitely determine the social type, there was some evidence to suggest that the adults merged into the local social fabric the longer they lived in the community. For example, for those residing in the present county at least five years, slightly more than one-fifth were within thirty minutes of their most important friend, and for those who lived there at least ten years, the proportion was two-thirds. In addition, living in the migration destination for a longer period of time was related to having more frequent contact with friend and having an older close friend.

The retirement migrants in this analysis differ slightly from some other relocated adults studied in the United States. A convenience sample of older Anglophone Canadians in Florida contained a higher percentage of men and married adults, who had on average less education, and who were slightly younger than the migrants to North

Carolina (Tucker & Marshall, 1988). Similarly, a nonrandom telephone survey of older adults who moved into western North Carolina at or near retirement had a higher percentage of male participants, a younger average age, and a higher percentage of married persons (Hass & Serow, 1993). However, Cuba's (1991; 1992) random sample of migrants to Cape Cod was comprised of adults with nearly the same average age, average number of years of education, and similar percentages of males and females, and married and unmarried adults as the present study. Thus, while the sample differed from nonrandom samples and the national population of adults age 65 years and older, it is representative of older adults relocating in retirement for amenity reasons.

Future Research

Two areas of future research are suggested by results from this study. First, the predictive power of the conceptual model may be enhanced with a broader conceptualization of behavioral motif and the use of more refined measures of affective and cognitive processes. To date, virtually no studies have been conducted which examine how the behavioral motif, or day-to-day pattern of living influences friendship processes. Though originally intended as a descriptive model, Adams and Blieszner's (1994) conceptual framework was a useful tool in the prediction of dyadic friendship processes. With further refinement in operationalization the model will provide insight into friendship processes and patterns. Future studies based on the framework will add to our understanding of the many influences on friendship patterns and permit comparisons of friendship patterns across diverse groups. This study examined the friendships

identified as most important, a question as to whether a more inclusive approach would result in similar conclusions is worth considering. Second, greater illumination into the importance of friendship to the lives of older migrants is warranted. In both the search for and the selection of a retirement destination, previous place experience and ties to family and friends are seen as important in directing elderly migration (Cuba, 1991). Yet the role of friendship in destination selection is unclear. Whether the availability of potential friends is consciously considered when selecting a retirement migration destination is not known.

In conclusion, friendship is an important vital relationship in the lives of older relocated adults. Many of the close friendships were established after retirement migration. Few adults indicated that they did not have a close friend, providing evidence that friendship is nurtured and maintained by the vast majority of older relocated adults. Despite sharing similar descriptive characteristics there was a high level of variability in the type, number, and patterns of friendships among the older adults. Some evidence of the importance of structural, dispositional, contextual, and behavioral influences on friendships in late life was found providing empirical support of the Adams and Blieszner (1994) integrative conceptual framework. The next steps in theory building will involve refinement of concepts and measures, and perhaps a combination of qualitative and quantitative methods to further explicate the nature of friendship in old age.

REFERENCES

Adams, R. G. (1985-86). Emotional closeness and physical distance between friends: Implications for elderly women living in age-segregated and age-integrated settings. International Journal of Aging and Human Development, 27, 55-76.

Adams, R. G. (1987). Patterns of network change: A longitudinal study of friendships of elderly women. The Gerontologist, 27, 222-227.

Adams, R. G. (1989). Conceptual and methodological issues in studying friendships of older adults. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process, (pp. 17-41). Newbury Park, CA: Sage.

Adams, R. G. & Blieszner, R. (1994). An integrative conceptual framework for friendship research. Journal of Social and Personal Relationships, 11, 163-184.

Aiken, L. S. & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.

Allan, G. (1979). A sociology of friendship and kinship. London: George Allen & Unwin.

Allan, G. (1989). Friendship. New York: Harvester Wheatsheaf.

Allan, G. & Adams, R. G. (1989). Aging and the structure of friendship. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship (pp. 45-64). Newbury Park, CA: Sage.

Altergott, K. (1988). Daily life in later life: concepts and methods for inquiry. In K. Altergott (Ed.), <u>Daily life in later life comparative perspectives</u> (pp. 11-22; 117-146). Newbury Park, CA: Sage.

Amato, P. R. (1993). Urban-rural differences in helping friends and family members. <u>Social Psychology Quarterly, 56,</u> 249-262.

Arling, G. (1976). The elderly widow and her family, neighbors and friends. <u>Journal of Marriage and the Family, 38,</u> 757-768.

Atkinson, M. P., Kivett, V. R. & Campbell, R. (1986). Intergenerational solidarity: An examination of a theoretical model. <u>Journal of Gerontology, 41,</u> 408-416.

Bakan, D. (1966). <u>The duality of human existence</u>. Boston, MA: Beacon.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. <u>Journal of Personality and Social Psychology, 51,</u> 1173-1182.

Bealer, R., Willits, F. K., & Kuvelsky, W. P. (1965). The meaning of rurality in American society: Some implications of alternative definitions. <u>Rural Sociology, 30,</u> 255-256.

Bell, R. R. (1981). <u>Worlds of friendship</u>. Newbury Park, CA: Sage.

Belsky, J. K. (1990). <u>The psychology of aging: theory, research, and interventions, 2nd ed.</u> Pacific Grove, CA: Brooks/Cole.

Bengtson, V. L. & Roberts, R. E. L. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. Journal of Marriage and the Family, 53, 856-870.

Berkman, L. S. & Syme, S. L. (1979). Social networks, host resistance, and mortality: A nine year follow-up study of Almeda County residents. American Journal of Epidemiology, 109, 186-204.

Blieszner, R. (1982). Social relationships and life satisfaction in late adulthood. (Doctoral dissertation, The Pennsylvania State University, 1982). Dissertation Abstracts, 43, 2366B. (University Microfilms No. 82-28863).

Blieszner, R. (1989). Developmental processes of friendship. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process (pp. 108-126). Newbury Park, CA: Sage.

Blieszner, R. (in press). Friendship processes and well-being in the later years of life: implications for interventions. Journal of Gerontologic Psychiatry.

Blieszner, R. & Adams, R. G. (1992). Adult friendship. Newbury Park, CA: Sage.

Booth, A. (1972). Sex and social participation. American Sociological Review, 37, 183-192.

Broman, C. L. (1993). Social relationships and health-related behavior. Journal of Behavioral Medicine, 16, 335-350.

Brown, B. B. (1990). A life-span approach to friendship: Age-related dimensions of an ageless relationship. In H. Z. Lopata & D. R. Maines (Eds.), Friendship in context (pp. 23-50). Greenwich, CT: JAI Press.

Bull, C. N. (Ed.) (1993). Aging in rural America. Newbury Park, CA: Sage.

Bury, M. & Holme, A. (1990). Quality of life and social support in the very old. Journal of Aging Studies, 4, 345-357.

Caldwell, M. A. & Peplau, L. A. (1982). Sex differences in same-sex friendship. Sex Roles, 8, 721-732.

Cantor, M. (1979). Neighbors and friends: An overlooked resource in the informal support system. Research on Aging, 1, 434-463.

Cantor, M. H. (1989). Social care: Family and community support systems. The Annals of the American Academy of Political and Social Science,503, 99-112.

Cantril, H. (1965). The pattern of human concern. New Brunswick, NJ: Rutgers University Press.

Chapman, N. J. (1994). Community and neighborhood issues. In A. Monk (Ed.), The Columbia retirement handbook, (pp. 347-364). New York: Columbia University Press.

Chappell, N. L. (1983). Informal support networks among the elderly. Research on Aging, 5(1), 77-99.

Chatters, L. M., Taylor, R. J. & Jackson, J. S. (1986). Aged blacks' choices for an informal helper network. Journal of Gerontology, 41, 94-100.

Chown, S. M. (1981). Friendship in old age. In S. Duck & R. Gilmour (Eds.), Personal relationships 2 (pp. 231-246). London: Academic Press.

Connidis, I. A. & Davies, L. (1990). Confidants and companions in later life: The place of family and friends. Journal of Gerontology: Social Sciences, 45, S141-149.

Connidis, I. A. & Davies, L. (1992). Confidants and companions: Choices in later life. Journal of Gerontology: Social Sciences, 47, S115-122.

Creecy, R. F., Berg, W. E. & Wright, R. (1985). Loneliness among the elderly: A causal approach. Journal of Gerontology: Social Sciences, 40, 487-493.

Crohan, S. E. & Antonucci, T. C. (1989). Friends as a source of social support in old age. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process (pp. 129-146). Newbury Park, CA: Sage.

Cuba, L. (1991). Models of migration decision making reexamined: The destination search of older migrants to Cape Cod. The Gerontologist, 31, 204-209.

Cuba, L. (1992). Aging places: Perspectives on change in a Cape Cod community. Journal of Applied Gerontology, 11, 64-83.

Donne, J. (1975). Devotions upon emergent occasions. Montreal: McGill-Queen's University Press.

Duck, S. (1990). Relationships as unfinished business: Out of the frying pan and into the 1990s. Journal of Social and Personal Relationships, 7, 5-28.

Duck, S. & Wright, P. H. (1993). Reexamining gender differences in same-gender friendships: A close look at two kinds of data. Sex Roles, 28, 709-727.

Dugan, E. & Kivett, V. R. (1993). Predicting stability in retirement relocation: The importance of community and family ties. Paper presented at the 14th Annual Meeting of the Southern Gerontological Society. Richmond, VA.

Dugan, E. & Kivett, V. R. (1994). The importance of emotional and social isolation to loneliness among very old rural adults. The Gerontologist, 34, 340-346.

Dykstra, P. A. (1990). Next of (non)kin.: The importance of primary relationships for older adults' well-being. Amsterdam: Swets & Zeitlinger.

Fischer, C. S. (1982). To dwell among friends: Personal networks in town and city. Chicago, IL: University of Chicago Press.

Fischer, C. S. & Oliker, S. J. (1983). A research note on friendship, gender, and the life cycle. Social Forces, 62, 124-133.

Fischer, L. R. & Schaffer, K. B. (1993). Older volunteers: A guide to research and practice. Newbury Park, CA: Sage.

Flynn, C. B., Longino, C. F., Jr., Wiseman, R. F., and Biggar, J. C. (1985). The redistribution of America's older population: Major national migration patterns for three census decades, 1960-1980. The Gerontologist, 25, 292-296.

Foner, A. (1996). Age norms and the structure of consciousness: Some final comments. The Gerontologist, 36(2), 221-223.

Fox, M., Gibbs, M. & Auerbach, D. (1985). Age and gender dimensions of friendship. Psychology of Women Quarterly, 9, 489-501.

Gallagher, S. K. & Gerstel, N. (1993). Kinkeeping and friend keeping among older women: The effect of marriage. The Gerontologist, 33, 675-681.

Gillespie, D. L., Krannich, R. S. & Leffler, A. (1985). The missing cell: Amiability, hostility, and gender differentiation in rural community networks. The Social Science Journal, 22, 17-30.

Golant, S. M. (1987). Residential moves by elderly persons to U.S. central cities, suburbs, and rural areas. Journal of Gerontology: Social Sciences, 42, 534-539.

Golant, S. M. (1994). Aging in place or moving: The multiple meanings of retirees' housing. In A. Monk (Ed.), The Columbia retirement handbook, (pp. 329-346; 365-383). New York: Columbia University Press.

Hass, W. H. & Serow, W. J. (1993). Amenity retirement migration process: A model and preliminary evidence. The Gerontologist, 33, 212-220.

Hagestad, G. O. (1990). Social perspectives on the lifecourse. In R. Binstock & L. George (Eds.), Handbook of aging and the social sciences (3rd edition), pp. 151-168. New York: Academic Press.

Hatch, L. R. & Bulcroft, K. (1992). Contact with friends in later life: Disentangling the effects of gender and marital status. Journal of Marriage and the Family, 54, 222-232.

Hays, R. B. (1989). The day-to-day functioning of close versus casual friendships. Journal of Social and Personal Relationships, 6, 21-37.

Hendricks, J. & Hendricks, C. D. (1986). Aging in mass society: Myths and realities, 3rd edition. Boston, MA: Little, Brown, and Company.

Hess, B. B. (1972). Friendship. In M. W. Riley, M. Johnson, & A. Foner (Eds.), Aging and society (Vol. 3, pp. 357-393). NY: Russell Sage.

Jerrome, D. (1981). The significance of friendship for women in later life. Ageing and Society, 1, 175-197.

Jerrome, D. (1992). Good company. Edinburgh: Edinburgh University Press.

Johnson, C. L. (1983). Fairweather friends and rainy day kin: An anthropological analysis of old age friendships. Urban Anthropology, 12, 103-123.

Johnson, C. L. (1985). Dyadic family relations and social supports. The Gerontologist, 23, 377-383.

Johnson, C. L. & Troll, L. E. (1994). Constraints and facilitators to friendships in late late life. The Gerontologist, 34, 79-87.

Jones, D. C. & Vaughan, K. (1990). Close friendships among senior adults. Psychology & Aging, 5, 451-457.

Keith, P. M. (1986a). The social context and resources of the unmarried in old age. International Journal of Aging and Human Development, 23, 81-96.

Keith, P. M. (1986b). Isolation of the unmarried in later life. Family Relations, 35, 389-395.

Kelly, J. R., Steinkamp, M. W. & Kelly, J. R. (1986). Later life leisure: How they play in Peoria. The Gerontologist, 26, 531-537.

Kivett, V. R. (1976). The aged in North Carolina: Physical, social and environmental characteristics and sources of assistance (Technical Bulletin No. 237, Agricultural Research Service). Raleigh, NC: North Carolina State University.

Kivett, V. R. (1985). Aging in rural society: Non-kin community relations and participation. In R. T. Coward & G. R. Lee (Eds.), The elderly in rural society, (pp. 171-191). New York: Springer.

Kivett, V. R. & Scott, J. P. (1979). The rural by-passed elderly: Perspectives on status and needs (Technical Bulletin No. 260, Agricultural Research Service). Raleigh, NC: North Carolina State University.

Krause, N. (1986). Social support, stress, and well-being among older adults. Journal of Gerontology, 41, 512-519.

Krause, N. & Borawski-Clark, E. (1994). Clarifying the functions of social support in later life. Research on Aging, 16, 251-279.

Krout, J. A. (1986). The aged in rural America. New York: Greenwood Press.

Lee, G. R. & Shehan, C. L. (1989). Social relations and the self-esteem of older persons. Research on Aging, 11(4), 427-442.

Lee, G. R. & Whitbeck, L. (1987). Residential location and social relations among older persons. Rural Sociology, 52, 89-97.

Litwak, E. (1985). Helping the elderly: The complementary roles of informal networks and formal systems. New York: Guilford.

Litwak, E. (1989). Forms of friendships among older people in an industrial society. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process (pp. 65-88). Newbury Park, CA: Sage.

Litwak, E. & Longino, C. F., Jr. (1987). Migration patterns among the elderly: A developmental perspective. The Gerontologist, 27, 266-272.

Longino, C. F., Jr. (1992). The forest and the trees: Micro-level considerations in the study of geographical mobility in old age. In A. Rogers (Ed.), Elderly migration and population redistribution, (pp. 23-34). London: Belhaven Press.

Longino, C. F., Jr. (1994). Where retirees prefer to live: The geographical distribution and migratory patterns of retirees. In A. Monk (Ed.), The Colombia retirement handbook, (pp. 405-416. New York: Colombia University Press.

Longino, C. F., Jr., Biggar, J. C., Flynn, C. B., and Wiseman, R. F. (1984). The retirement migration project: A final report to the National Institute on Aging. Coral Gables, FL: University of Miami Center for Social Research in Aging.

Longino, C. F., Jr. & Lipman, A. (1981). Married and spouseless men and women in planned retirement communities: Support and network differentials. Journal of Marriage and the Family, 43, (pp. 169-177).

Longino, C. F., Jr. & Lipman, A. (1982). The married, the formerly married and the never married: Support system differentials of older women in planned retirement communities. International Journal of Aging and Human Development, 15, (pp. 285-297).

Lopata, H. Z. (1979). <u>Women as widows</u>. New York: Elsevier North-Holland.

Lopata, H. Z. (1990). Friendship: Historical and theoretical introduction. In H. Z. Lopata & D. R. Maines (Eds.), <u>Friendship in context</u> (pp. 1-19). Greenwich, CT: JAI Press.

Mancini, J. A. (1980). Friend interaction, competence, and morale in old age. <u>Research on Aging, 2,</u> 416-431.

Matthews, S. H. (1986). <u>Friendships through the life course</u>. Beverly Hills, CA: Sage.

Mullins, L. C. & Dugan, E. (1990). The influence of depression and family and friendship relations on residents' loneliness in congregate housing. <u>The Gerontologist, 30,</u> 377-384.

Mullins, L. C. & Dugan, E. (1991). Elderly social relationships with adult children and close friends and depression. <u>Journal of Social Behavior and Personality, 6,</u> 315-328.

Norusis, M. J. (1988). <u>SPSS-X introductory statistics guide</u>. Chicago, IL:SPSS Inc.

Oliker, S. J. (1989). <u>Best friends and marriage</u>. Berkeley, CA: University of California Press.

Ossafsky, J. (1978). Aging in rural mid-America: Are we up to the challenge? In L. Forester (Ed.), <u>The aging in rural mid-America: A symposium on values for an evolving quality of life</u>. Lindberg, Kansas: Bethany College.

Pedhazur, E. J. (1982). Multiple regression in behavioral research: Second edition. Fort Worth, TX: Harcourt Brace Jovanovich, Inc.

Perlman, D. & Fehr, B. (1987). The development of intimate relationships. In D. Perlman & S. Duck (Eds.), Intimate relationships (pp. 13-42). Newbury Park, CA: Sage.

Peters, G. R. & Kaiser, M. A. (1985). The role of friends and neighbors in providing social support. In W. Sauer & R. Coward (Eds.), Social support networks and the care of the elderly: Theory, research, practice, and policy (pp.123-158). New York: Springer.

Powers, E. A. & Bultena, G. L. (1976). Sex differences in intimate friendships of old age. Journal of Marriage and the Family, 38, 739-747.

Prager, E. (1986). Components of personal adjustment of long distance movers. The Gerontologist, 26, 676-680.

Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), Handbook of personal relationships: Theory, relationships and interventions. Chichester: John Wiley & Sons.

Reisman, J. M. (1981). Adult friendships. In S. W. Duck & R. Gilmour (Eds.), Personal relationships 2: Developing personal relationships. London: Academic Press.

Reisman, J. M. (1988). An indirect measure of the value of the value of friendship for aging men. Journal of Gerontology: Psychological Sciences, 43, 109-110.

Reisman, J. M. (1990). Intimacy in same-sex friendships. Sex Roles, 23, 65-82.

Roberto, K. A. (1989). Exchange and equity in friendships. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process (pp. 147-165). Newbury Park, CA: Sage.

Roberto, K. A. & Scott, J. P. (1984-1985). Friendship patterns among older women. International Journal of Aging and Human Development, 19, 1-10.

Roberto, K. A & Stanis, P. I. (1994). Reactions of older women to the death of their close friends. Omega, 29, 17-27.

Rook, K. S. (1987). Social support versus companionship: Effects on life stress, loneliness, and evaluations by others. Journal of Personality and Social Psychology, 52(6), 1132-1147.

Rook, K. S. (1989). Strains in older adults' friendships. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process (pp. 166-194). Newbury Park, CA: Sage.

Rose, S. & Roades, L. (1987). Feminism and women's friendships. Psychology of Women Quarterly, 11, 243-254.

Rowles, G. D. (1983). Geographical dimensions of social support in rural Appalachia. In G. D. Rowles & R. J. Ohta (Eds.), Aging and milieu: Environmental perspectives on growing old (pp. 111-128). New York: Academic Press.

Rubin, L. B. (1983). Intimate strangers: Men and women together. New York: Harper & Row.

Scott, J. P. & Roberto, K. A. (1987). Informal supports of older adults: A rural-urban comparison. Family Relations, 36, 444-449.

Setterson, R. A. & Hagestad, G. O. (1996). What's the latest? Cultural age deadlines for family transitions. The Gerontologist, 36(2), 178-188.

Shea, L., Thompson, L., & Blieszner, R. (1988). Resources in older adults' old and new friendships. Journal of Social and Personal Relationships, 5, 83-96.

Simpson, J. A. & Weiner, E. S. C. (Eds.) (1989). The Oxford English dictionary (2nd ed., Vol. VI). Oxford: Oxford University Press.

Tesch, S. A. & Martin, R. R. (1983). Friendship concepts of young adults in two age groups. Journal of Psychology, 115, 7-12.

Tschann, J. M. (1988). Self-disclosure in adult friendship: Gender and marital status differences. Journal of Social and Personal Relationships, 5, 65-81.

Tucker, R. D. & Marshall, V. W. (1988). Descriptive overview of older Anglophone Canadians in Florida. In L. C. Mullins and R. D. Tucker (Eds.), Snowbirds in the sun belt: Older Canadians in Florida (pp. 5-16). Tampa: International Exchange Center on Gerontology.

Verbrugge, L. M. (1983). A research note on adult friendship contact: A dyadic perspective. Social Forces, 62, 78-83.

Ward, R. A. (1979). The meaning of voluntary association participation to older people. Journal of Gerontology, 34, 438-445.

Weiss, R. S. (1989). Reflections on the present state of loneliness research. In M. Hojat & R. Crandall (Eds.), Loneliness: Theory, research, and applications (pp. 1-16). Newbury Park, CA: Sage.

Weiss, L. & Lowenthal, M. F. (1975). Life-course perspectives on friendship. In M. F. Lowenthal, M. Thurnher, D. Chiriboga, & Associates (Eds.), Four stages of life (pp. 48-61). San Francisco, CA: Jossey-Bass.

Wortman, C. B. & Conway, T. L. (1985). The role of social support in adaption and recovery from physical illness. In S. Cohen & S. L. Syme (Eds.), Social support and health (pp. 281-302). New York: Academic Press.

Wright, P. H. (1982). Men's friendships, women's friendships and the alleged inferiority of the latter. Sex Roles, 8, 1-20.

Wright, P. H. (1988). Interpreting research on gender differences in friendship: A case for moderation and a plea for caution. Journal of Social and Personal Relationships, 5, 367-373.

Wright, P. H. (1989). Gender differences in adults' same- and cross-gender friendships. In R. G. Adams & R. Blieszner (Eds.), Older adult friendship: Structure and process. Newbury Park, CA: Sage.

Yoon, G. H. (1978). The natural history of friendship: Sex differences in best-friendship patterns. Dissertation Abstracts, 39, (3-B, 1553).