Published in final edited form as:
Psychol Aging. 1990 September ; 5(3): 335–347.

Choosing Social Partners: How Old Age and Anticipated Endings Make People More Selective

Barbara L. Fredrickson and **Laura L. Carstensen**
Stanford University

Abstract

Carstensen's selectivity theory, which explains age-related change in social behavior in terms of emotion conservation and increasing discrimination among social partners, was investigated in 2 studies. In Study 1, 80 people aged 14 to 95 classified descriptions of people according to their similarities as social partners. Three-way multidimensional scaling revealed that people primarily organized social partners in terms of affect anticipated in the interaction and that this dimension was most important to older people. Study 2 showed how anticipated social endings influence partner selection: 380 people aged 11 to 92 chose familiar or novel partners under unspecified and ending conditions. Overall, older people chose familiar partners most frequently; yet when social endings were salient, younger people patterned the preferences of the elderly. These results suggest that social partner selectivity functions to conserve emotion resources in the face of limited future opportunities.

From birth, humans are immediately social. Long before infants can perform basic life functions, such as walking or independent feeding, they engage in complex social interaction, making fine discriminations among the emotional states of their caretakers and responding in kind to these states (Scherer, 1982; Stern, 1985; Tronick, 1982). This readiness for social interaction is so prominent, so reliable, it is considered by most to be innate (Campos & Barrett, 1984).

People maintain social connections with numerous others throughout life. But during the later part of adulthood, rates of social interaction begin to decline. The basic finding that social activity declines in old age is widely accepted, supported by both cross-sectional research (Cumming & Henry, 1961; Gordon & Gaitz, 1976; Youmans, 1962) and longitudinal research (Carstensen, 1989; Field & Minkler, 1988; Palmore, 1981). Yet, the meaning of this reduction remains the most hotly disputed issue in social gerontology (Carstensen, 1987; Palmore, 1981).

Proponents of what has come to be called *activity theory* claim that reductions in social contact reflect barriers to interaction, such as limited mobility associated with health problems and the deaths of friends and loved ones (Maddox, 1963). This perspective has prompted numerous interventions designed to provide the elderly with opportunities for social interaction and even tangible rewards for interaction when higher rates are obtained (Blackman, Howe, & Pinkston, 1976; Konarski, Johnson, & Whitman, 1980; Quattrochi-Tubin & Jason, 1980). Indeed, the primary aim of applied social gerontology has been to

Correspondence concerning this article should be addressed to Laura L. Carstensen, Department of Psychology, Stanford University, Jordan Hall, Building 420, Stanford, California 94305.

We are indebted to Roger Shepard, James Pennebaker, Susan Nolen-Hoeksema, Jannay Morrow, and Michael Schober for helpful comments on earlier versions of the manuscript. We also thank Rachel Mend and David Pagano for data collection and Kathryn Lee for graphic design.

increase rates of social contact. Empirical evidence for the contention that increased social activity improves psychological well-being, however, remains equivocal (Carstensen, 1986; Carstensen & Erickson, 1986).

The activity approach works in direct opposition to *disengagement theory*, an alternative explanatory model of declining social activity. Proponents of this theory assert that reductions in interaction reflect a natural process by which older people voluntarily decrease their investment in social contact in a symbolic preparation for death (Cumming & Henry, 1961). From this perspective, interventions aimed at increasing social contacts are inherently ill conceived. Yet, the theory has been criticized for failing to acknowledge the vital involvement in the social world that elderly people do maintain. The presence of intimate friendships and confidants is clearly central to psychological well-being even among the oldest old (Antonucci & Jackson, 1987; Duckitt, 1982,1983; Erikson, Erikson, & Kivnick, 1986; Lowenthal & Haven, 1968). Also, the flattening of affect and emotional withdrawal implicit in disengagement theory are not supported empirically (see Malatesta, 1981).

At a theoretical level, a central question concerns the role that older individuals play in the reduction of social contact: Are reductions imposed on or instigated by the older adult? Carstensen (1987,1989) has proposed selectivity theory as an alternative to disengagement and activity theories of socioemotional aging. She contends that throughout life, people become more selective in choosing their social partners. Selectivity serves at least two functions: It allows individuals to conserve physical energy, a task that becomes increasingly important with age, and it operates as a mechanism for affect regulation. Because most emotions occur in the context of social relationships, maximizing contact and investment in one's closest relationships and minimizing interaction with less familiar social partners is an adaptive mechanism for affect regulation, particularly in old age. Stated simply, selectivity theory suggests that by reducing levels of social interaction, older people optimize the experience of positive affect and minimize negative affect. Besides positing affect as central to age-related reductions in social interaction, a selectivity view diverges theoretically from previous models of socioemotional aging in that (a) change is assumed to be gradual and to begin early in life, (b) observed reductions in interaction do not include all classes of social partners, and (c) change is not accounted for exclusively by a decrease in the availability of social partners but instead is rooted in the thoughts and preferences of the aging individual.

Although incompatible with both activity and disengagement theories, selectivity theory is congruous with broader models of late-life adaptation—models that view development in terms of gains and losses (P B. Baltes, 1987) and that view individuals as active in selecting optimal environments (Lawton, 1987). P. B. Baltes and M. M. Baltes described successful aging as a process of selective optimization with compensation: People adapt to losses in circumscribed areas of competence by selecting and concentrating on other domains that are of high priority (M. M. Baltes, 1986; M. M. Baltes & Schmid, 1987; P. B. Baltes, 1987; P. B. Baltes, Dittman-Kohli, & Dixon, 1984). Relatedly, Lawton and Nahemow's (1973) press-competence model of aging contends that people experience stress when the demands of a particular environment either exceed or fail to challenge their abilities. Lawton (1987) argued that the field of gerontology has focused primarily on the "press" aspect of the model, paying too little attention to individual competencies. In response, he proposed the proactivity hypothesis, which states that individuals play a central role in orchestrating their own environments: "Far from being pawns, older people engage in active behavior by choosing what is desirable or relevant from all that exists in the 'environment out there.' An even more active level is to create an environment of one's own choice" (p. 37).

The model of psychological change developed in selectivity theory suggests age-related cognitive changes in an individual's consideration of potential social partners. Specifically, selectivity theory posits that with age and the subsequent demand for increased conservation of energy, the criteria for choosing social partners change. For example, older people may judge novel partners less desirable and familiar partners more desirable because familiar partners lead more reliably to positive (or at least predictable) affect. Also, place in the life cycle may limit future possibilities with novel social partners. For an 80-year-old, for example, developing a long-term friendship with a new acquaintance is extremely unlikely As such, old age can represent an inevitable social ending, a circumstance that may limit interest in social interaction with unfamiliar people. We contend that the patterns of social activity in old age reflect a general phenomenon associated with perceived social endings. In this view, partner selectivity is a self-regulatory mechanism not specific to old age and death, but instigated by a range of social situations—including geographic relocation, retirements, and graduations—that constrain prospects for future contacts.

Empirical Strategy

We investigated age-related differences in social cognition in an effort to understand age-related differences in social behavior. In Study 1, we assessed judgments of social partners among people aged 14 to 95 years using a card-sort procedure that reduces demand for socially desirable responding. We then used three-way multidimensional scaling to identify the dimensions used to discriminate among the different types of people who might be partners in social interaction. Multidimensional scaling is a mathematical modeling technique that relies on similarity judgments; as such, data reflect subjects' own cognitive distinctions among social partners, rather than their responses to prespecified rating scales. (Readers interested in a thorough exposition of how three-way multidimensional scaling can be used to recover cognitive-social schemata are directed to Rudy & Merluzzi, 1984) Collecting similarity data has two clear advantages. First, it minimizes investigator contamination at the measurement stage, so it enables investigators to discover rather than impose relevant organizing constructs (Rudy & Merluzzi, 1984; Shepard, 1974). Second, by avoiding leading questions like "Would you like spending social time with your new neighbor?" similarity classification lessens the effects of social desirability and demand characteristics. This makes it an advantageous assessment tool for older adults because clinical experience and research suggest that the elderly can be susceptible to social conformity (Klein, 1972). In Study 1, we hypothesized that (a) common psychological dimensions would emerge across groups and (b) the relative salience of those dimensions would vary with age. Specifically, because we posit that emotion conservation becomes increasingly important with age, we predicted that affective dimensions would be most salient to our oldest subjects.

In Study 2, we investigated whether partner selectivity is responsive to situational constraints, particularly the constraints associated with anticipated social endings. In a within-subject design, we manipulated the salience of social endings and asked people ranging in age from 11 to 92 to choose among familiar and novel social partners. We hypothesized that (a) in general, older people—because of their place in the life cycle—would choose familiar social partners more often than would younger people but (b) younger people would pattern the social choices of the elderly when endings were made salient.

Study 1

Method

Subjects—Forty elderly, 20 middle-aged, and 20 adolescent individuals served as voluntary participants in this study. The elderly sample comprised two age-matched groups: 20 home-dwelling community residents (mean age = 80.0; range = 69–92) and 20 nursing home residents (mean age = 83.4; range= 75–95). The middle-aged sample (mean age = 39.9; range = 35–44) was recruited at Stanford University, and most were university employees. The teen sample (mean age = 16.4; range = 14–19) was recruited from a local private high school in San Francisco. All subjects were offered $10 compensation for their participation in a study of social activity. Given our primary interest in the elderly samples, and the sex composition of the elderly population from which these samples were drawn, we intentionally overincluded female subjects in each sample: Overall, 76% of subjects were female. While none of the teen sample had yet attended college, 100% of the middle-aged, 95% of the community elderly, and 50% of the nursing home samples had had at least some college education.

Because health is inextricably confounded with age, focusing exclusively on very healthy or very infirm old people can lead to gross misconceptions about aging per se. This confound poses a particular challenge in research on normal aging when the objective is to study the psychological aspects of age, not of illness. Moreover, we have argued that a primary motivating force behind selectivity is declining energy reserve, which of course is associated with poor health. In this research, we expected that both healthy and infirm old people would demonstrate partner selectivity but that active subjects would be less likely to show the effect and institutionalized subjects would be more likely Most of our community elderly sample were recruited at a local senior center. Because senior centers are used by only 15% of the aged population (Stone, 1986), this sample probably represents socially active and healthy old people; nursing home populations represent less active and more infirm old people.

Measures

Written materials: Subjects rated their own physical and mental health, relative to the average person their age, on a 10-point scale ranging from *poor* (1) to *excellent* (10). We assessed perceived social support using three questions reported by Berkman and Syme (1979): (a) "How many dose friends do you have?" (b) "How many relatives do you have that you feel close to?" and (c) "How often do you see these people each month?" Finally, we assessed trait sociability and trait shyness using Cheek and Buss's (1981) 11-item Shyness and Sociability Scale. We included these measures to demonstrate similarity among groups along individual difference dimensions that potentially affect social activity.

Card-sort tasks: Brief descriptions of 18 potential social partners were printed individually on 4 × 6 inch index cards. Examples include "a member of your immediate family," "a recent acquaintance with whom you seem to have much in common," and "a sales representative." Descriptions were general so that subjects of all ages could envision each social partner as someone with whom they might interact. For example, descriptions like "a younger relative" were used rather than "your grandchild" to provide consistent stimuli across ages. A complete list of potential social partners is presented in Table 1. In addition to the social partner card sort, we compiled two other sorts— one 5-item set of foods and one 18-item set of physical symptoms (adapted from Pennebaker, 1982)—to give subjects a brief example of and a parallel practice trial with the card-sort task.

Procedure—Subjects first provided informed consent and relevant personal information, including self-rated health and perceived social support. Subjects then completed the Shyness and Sociability Scale. Next, following the brief example of the card-sort task with food items, and the practice trial with physical symptoms, subjects completed the social partner card sort. Verbal instructions were as follows:

> Now I'm going to ask you to do the same kind of sorting task with people instead of symptoms. And, of course, there will again be many different ways you could arrange the cards, but we're interested in what particular grouping of people makes most sense to *you.* Now let me give you a little background to make this task easier for you. All of these people described on these cards refer to people you know or to people you might know. I'd like you to imagine that with each of these people, you have the chance to sit down and talk with him or her—perhaps over coffee or a snack— for half an hour or so. You will interact with each of these people in a *social* manner, not a professional or business manner. (For example, one of the cards is printed with *your doctor,* and for this card you should consider spending time socially with your doctor, not seeing him or her on an office visit.)
>
> Now, what I'd like you to do is to sort these cards into piles based on how similar or alike you feel it would be for you to spend some time talking with these people —to interact socially with them— for this short time. You should put people with whom such interaction would be alike or similar into the same pile: For example, if you think that spending time with your sister is very much like spending time with a close friend, then you'd put those two cards in the same pile. Whereas, those who in some way would be different for you to interact with should go into a different pile: For example, a sales representative might go in a different pile than the sister and the close friend. You can use as many or as few piles as you need to represent your views—and it is okay to place a person in a pile all their own. Remember, what we're interested in is your own view of these people as those whom you might interact with socially, so there is no correct or incorrect sorting arrangement.

Subjects were handed the set of 18 cards in a predetermined random order. Their task was to arrange the cards such that similar social partners were sorted into same groups and dissimilar social partners were sorted into different groups. After the card-sort task, subjects were asked open-ended questions about which social partners described on the cards were most preferred, and which, if any, they currently did not know well but would like to get to know better.

Results and Discussion

Self-Rated Health, Social Traits, and Social Support—To provide a strong test of our hypotheses, we needed to limit differences among groups to their cognitive consideration of the social partners represented in the card-sort task. First, we needed to demonstrate that the four groups were well matched on measures of mental and physical health, personality traits relevant to social behavior, and perceived social support. Mean responses by group on these measures are presented in Table 2. All post hoc multiple comparisons were computed with Tukey's method ($\alpha = .05$).

Health status: All subjects rated their mental health as better than the average person their age, and groups did not differ on this index, $F(3, 73) = 1.65$, *ns.* Although subjects also rated their physical health as better than average relative to peers, groups differed on this index, $F(3, 74) = 4.71$, $p < .01$. Post hoc pairwise comparisons indicated that the nursing home residents, on average, rated their physical health lower than the community elderly and the middle-aged samples but not significantly lower than the teen sample.

Social traits: Groups did not differ on levels of trait sociability, $F(3, 73) < 1$, *ns*, but they did differ on levels of trait shyness, $F(3, 73) = 4.27$, $p < .01$. Post hoc pairwise comparisons indicated that teens, on average, rated themselves as shyer than the sample of community elderly. The shyness ratings of the three adult groups did not differ.

Perceived social support: Groups differed in their reported numbers of close friends, $F(3, 74) = 5.01$, $p < .01$. Post hoc pairwise comparisons indicated that the community elderly sample reported more close friends than any other sample. The remaining groups did not differ on numbers of close friends they reported. Also, groups did not differ on the number of relatives to whom they felt close, $F(3, 74) = 2.34$, *ns.* Finally, groups differed on the frequencies they reported seeing close friends and relatives each month, $F(3, 74) = 4.40$, $p < .01$. Post hoc pairwise comparisons revealed that the teen sample reported more frequent contact than did the middle-aged and nursing home samples but not significantly more than the community elderly sample.

Overall, although some reliable group differences emerged, the four samples were well matched on the questionnaire assessments. The samples did not differ on self-rated mental health, trait sociability, or number of relatives they felt close to. The differences among the groups were not surprising: Nursing home residents rated themselves as less physically healthy, an expected finding given this relatively frail population; teens were more shy, a finding consistent with shyness research (Cheek, Carpentieri, Smith, Rierdan, & Koff, 1986), and the community elderly reported more friends, a finding that probably reflects the recruiting source. It is important to note that the nursing home sample, although frail, did not differ greatly from the other samples: Like the other samples, they reported better than average physical health; they showed comparable levels of trait sociability and trait shyness; they did not differ from the middle-aged and teen samples in mean number of close friends; and they did not differ from the middle-aged or elderly community samples on how often they reported seeing close friends and relatives each month. In short, the questionnaire measures did not clearly distinguish among samples by age or residential status. As such, obvious differences in self-reported health, shyness, sociability, or perceived social support cannot adequately account for differences in the cognitive consideration of social partners.

Overview of Multidimensional Scaling—We recorded the groupings of potential social partners made by each of the 80 subjects as 0–1 incidence matrices, in which 1 indicated that two items had been placed in the same pile (see Rudy & Merluzzi, 1984). We then summed these similarity matrices across the 20 subjects of each group to produce four similarity matrices (i.e., teen, middle-aged, community elderly, and nursing home matrices). Finally, we analyzed these four matrices using three-way multidimensional scaling (MDS). MDS models arrange stimuli in multidimensional space according to perceived similarity so that stimuli that are frequently grouped as similar to one another are proximate, whereas stimuli frequently grouped as different from one another are distant. Once the MDS procedure achieves a stable representation of the data, investigators interpret the dimensions that define the multidimensional space. Three-way MDS models have the added capability of analyzing group or individual differences. Group differences are represented with weights for each group on each dimension of a multidimensional configuration that is common to all subjects.

Scaling Results

Overall stimulus configuration: First, we analyzed the similarity matrices for the four groups with the SINDSCAL algorithm of three-way MDS (Carroll & Wish, 1974), yielding the common three-dimensional configuration represented in Figures 1 and 2. This solution accounted for 77% of the variance in the similarity data and was considered appropriate

because no interpretable relationships resulted from the addition of more dimensions to the solution. In addition, we found no substantive sex differences in card-sort responses.

Dimension 1 is clearly the primary dimension in this scaling solution: It accounted for 46% of the variance in the similarity data. Figures 1 and 2 each represent Dimension 1 on their horizontal axes. Family members and the close friend cluster to the right in both representations of the stimulus configuration. These social partners shared positive values on Dimension 1 with the poet or artist, the author, and the "acquaintance with whom you seem to have much in common." By contrast, social partners with negative values on Dimension 1 included the "acquaintance with whom you seem to have nothing in common," the disliked person, the sales representative, and the stranger. This pattern of proximities led us to interpret Dimension 1 as *anticipated affect:* It distinguished positive from negative affect in the anticipated social interaction. Dimension 1 cannot simply be an index of familiarity because the presumably unfamiliar poet or artist and author were perceived as similar to the more familiar friends and family. The comment of 1 elderly subject aided our interpretation of Dimension 1: "I always enjoy meeting famous people."

Dimension 2, represented on the vertical axis of Figure 1, accounted for 18% of the variance. Potential social partners with positive values on Dimension 2 included all family members and relatives, as well as the close friend, the much-in-common acquaintance, the casual acquaintance, and the attractive stranger. By contrast, those with negative values on Dimension 2 included the poet or artist, the author, the clergy person, the local politician, and the disliked person. At first glance, Dimension 2 seems to represent degree of formality, particularly because all social partners with occupational titles have low values. Yet, considering that the disliked person and the nothing-in-common acquaintance shared low values with those in occupational roles, the more relevant concept is social distance, rather than role-defined formality per se. In practical terms, social distance translates into low probability of future contact or involvement. So, we interpreted Dimension 2 as the likelihood of subsequent interaction and labeled it *future contact.*

Dimension 3, represented on the vertical axis of Figure 2, accounted for 14% of the variance. Potential social partners with positive values on Dimension 3 included the author, the poet or artist, the new neighbor, the attractive stranger, the much-in-common acquaintance, the casual acquaintance, and the stranger. Those with negative values were a seemingly odd assortment, including family members, the close friend, the disliked person, the sales representative, and the nothing-in-common acquaintance. We interpreted this third dimension as *information seeking:* It represents the degree to which subjects would seek out additional information about the social partners in order to get acquainted. It makes sense that quite familiar social partners (e.g., close friends and family) as well as those individuals clearly not worthwhile (e.g., disliked person and sales representative) would not be queried in the getting-acquainted process to the same degree as novel individuals who are genuinely compelling.

Group differences: To represent differences among groups, three-way MDS yielded weights for the four groups on the dimensions uncovered in the common stimulus configuration. Weights indicate the salience (or importance) of the three dimensions to each group of subjects and are used to gain insight into each group's distinct cognitive representation of the potential social partners. Figure 3 represents the dimension weights for each group. High-dimension weights indicate that the associated dimension is more important to a group, whereas low-dimension weights indicate that a dimension is less important to a group.

The pattern of dimension weights suggests that anticipated affect (Dimension 1, illustrated on the horizontal axes of Figure 3) becomes increasingly important with age and infirmity. In particular, nursing home residents tended to consider potential social partners almost exclusively on the basis of anticipated affect, with little regard for possibilities of future contact or information seeking. The importance of future contact (Dimension 2, represented on the vertical axis of Figure 3, top) declined with age and infirmity: It was most important to the teen sample and least important to the nursing home sample. This pattern reasonably reflected the ages and life circumstances of the four groups. Finally, information seeking in effort to get acquainted (Dimension 3, represented on the vertical axis of Figure 3, bottom) was most important to the middle-aged sample, followed in order by the community elderly and teen samples. The nursing home sample showed almost no interest in information seeking.

The weights represented in Figure 3 can be applied to the coordinates of the overall stimulus configuration represented in Figures 1 and 2 to obtain configurations unique to each group. The scaling solution for the nursing home sample, for example, would be distributed along Dimension 1 in an elliptical fashion. In other words, older, institutionalized subjects judged the potential social partners primarily on the basis of anticipated affect, with little regard for differences in future contact or information seeking.

Verification of Dimension Interpretation—Three-way MDS produces unique dimensions, leaving only the interpretation of those dimensions a task for the investigators. To provide consensual validity for the subjective interpretation of the three scaling dimensions, we asked 111 student raters to evaluate each of the 18 potential social partners on three bipolar scales that directly corresponded to the interpretation of the three-dimensional scaling solution represented in Figures 1 and 2. Raters were blind to the authors' a priori interpretations of the dimensions that distinguished among the social partners.

On the first bipolar scale (Anticipated Affect), raters indicated how positively they would feel about interacting socially with each potential social partner. On the second bipolar scale (Future Contact), raters judged how likely subsequent interaction with each potential social partner would be. Finally, on the third bipolar scale (Information Seeking), raters indicated the degree to which they might actively seek information about each potential social partner to get acquainted. All ratings were made on 7-point scales.

We averaged the ratings of each potential social partner on each scale over raters. Using multiple linear regression, we then regressed these mean ratings over the potential social partners' coordinates on the three-dimensional MDS solution. The results of this multiple regression are shown in Table 3.

Two conditions should be met for a fating scale to provide a good interpretation of a scaling dimension (Kruskal & Wish, 1978): First, the multiple correlation for the rating scale must be significant at $p < .01$, and second, the rating scale must have a high regression weight on that and only that dimension. Our results satisfied both conditions. The last column of Table 3 indicates that the multiple correlations of all three bipolar scales were significant at .001, indicating that the mean ratings of each scale were well predicted by the coordinates of the MDS configuration. The optimum dimension weights corresponding to each multiple correlation are shown in the first three columns of Table 3. The pattern of these weights strongly confirms the a priori dimension labels: Dimension 1 is best fit by the Anticipated Affect scale; Dimension 2 is best fit by the Future Contact scale; and Dimension 3 is best fit by the Information-Seeking scale.

Results of this validation procedure indicated that the organization of potential social partners uncovered in the scaling analysis can be conceptualized in terms of anticipated affect, future contact, and degree of information seeking. In turn, these findings support our interpretation of group differences in the relative importance of these three dimensions in the cognitive consideration of potential social partners.

Partner Preferences—Selectivity theory predicts that older people will favor familiar social partners and that young and middle-aged people will more often interact with novel partners. Exploring these ideas, we asked our card-sort subjects some final questions regarding their partner preferences. First, we asked them which individuals (among those described on the cards) they would most like to spend their social time with. We divided subject responses into two categories: "familiar partners only" and "novel partners included." Groups differed significantly in their partner preferences, $\chi^2(3, N = 79) = 19.74$, $p < .001$: The majority of the teen sample (75%), half the middle-aged, and half the community elderly samples (i.e., 50% each) included novel social partners among those most preferred; in contrast, only 5% of the nursing home residents favored a novel social partner.

Finally, we asked subjects whether any of the descriptions printed on the cards represented people whom they did not know well but whom they would like to get to know better. Again, groups differed significantly in their responses, $\chi^2(3, N = 75) = 24.88$, $p < .001$: The majority of each age group except the nursing home sample nominated social partners they wanted to get to know better (teen sample, 95%; middle-aged sample, 100%; community elderly, 81%; nursing home sample, 42%). These findings underscore the pattern of increasing social conservation with age and infirmity

In sum, the card-sort method and MDS analyses of Study 1 uncovered naturally occurring dimensions that organize people's consideration of their potential social partners. The results demonstrate that people at different points in the life cycle differ in their cognitive appraisal of potential social partners. Compared with their younger counterparts, elderly individuals, particularly nursing home residents, give more importance to the affect anticipated in the interaction than to possibilities for future contact or information seeking. This Ending is consistent with the predictions of selectivity theory: If emotion conservation is a primary goal, then anticipation of positive versus negative experience in a potential interaction is a necessary precursor to choosing optimal social partners. Also consistent with selectivity theory we found that nursing home residents showed a strong preference for familiar over novel social partners.

Study 2

Yet, what is it about age that makes interaction with novel social partners less compelling? Old age places implicit limits on opportunities for future involvement. That is, place in the life cycle can represent a type of social ending. Intuitively, anticipated endings may be more a function of nearness to death than to chronological age per se. The differences we obtained between our two age-matched elderly samples support this contention; given the fragility of nursing home residents, one could assume that their life expectancy is lower than their community-dwelling peers. Moreover, "the belief that a nursing home is one's final home" (Gubrium, 1975, p. 84) may heighten age-related partner selectivity among nursing home residents. That is, older adults may view the nursing home itself as a symbol of inevitable social endings (see also Rowles, 1979, and Tobin & Lieberman, 1976, for discussions of the meaning of place in late life). We argue that individuals facing social endings may respond cognitively by favoring familiar over novel social partners, which functions to maximize pleasurable social contact in the short run. Yet, unlike the "symbolic preparation for death"

discussed by disengagement theorists, we propose that social endings instigate affect regulation via partner selectivity, not affect flattening or unilateral social withdrawal.

Moreover, we do not conceptualize the cognitive responses to anticipated social endings as necessarily caused by, or specific to, age or impending death. Rather, we believe that people at other points of the life cycle will also respond to situations characterized by social endings in much the same way that the elderly respond to their life circumstances. For example, a young college graduate heading for volunteer work in Africa or a single scholar facing the academic job market might also show a preference for familiar over novel social partners. When social endings are salient, individuals may recognize they do not have limitless time in which to develop new social relationships. This awareness, in turn, can trigger partner selectivity; that is, people facing endings may prefer to spend social time with members of their family and longtime friends rather than with new acquaintances. Alternatively, when anticipated endings are not an issue, individuals will more frequently choose novel social partners (e.g., new acquaintances or attractive strangers) perhaps because of compelling possibilities for future involvement.

Although Study 1 illuminated differences in judgments of social partners associated with age and infirmity, several questions arose that prompted further investigation. First, compared with their younger counterparts, do most older people more frequently choose familiar over novel social partners? If so, this would confirm that partner selectivity is indeed related to {but not necessarily *caused by)* age. Second, can we alter the circumstances of younger people so that their social choices pattern those of older people? If we can manipulate the partner preferences of the young by introducing anticipated endings, this would suggest that partner selectivity in the face of social endings is a general phenomenon not unique to age or nearness to death. In Study 2, we explored these ideas in a within-subject design: We asked people across a wide age range to choose their preferred social partners under unspecified and ending conditions.

Method

Subjects—Volunteer subjects were 380 community residents in the San Francisco and Los Angeles areas surveyed by telephone. Telephone numbers were drawn from randomly selected blocks of the alphabet in community telephone directories. Within these blocks, a random position on the directory page was identified, and each household in that position on every page was called. A female interviewer greeted individuals who answered the telephone and asked if they could spare a few minutes to answer a few simple questions about how they might spend their leisure time; 70% of those called consented to this request. Subjects ranged in age from 11 to 92 years and were 234 women (mean age = 48.9, *SD* = 18.2) and 146 men (mean age = 46.6, *SD* = 18.9).

Procedure—The interviewer first recorded the subject's sex and age, then posed the *unspecified* partner-choice question of Condition 1:

> Imagine that you have half an hour of free time, with no pressing commitments. You have decided that you'd like to spend this time with another person. Assuming that the following three people are available to you, which person would you choose to spend that time with?

Social partner options included one familiar social partner ("a member of your immediate family") and two novel social partners ("a recent acquaintance, with whom you seem to have much in common" and "the author of a book you've read"). Order of partner options was varied. We selected these social partners from those in Study 1 with positive affective valences (i.e., high values on Dimension 1) so that each could reasonably be viewed as a

desirable partner. After subjects reported their choices, the interviewer posed the *ending* partner-choice question of Condition 2:

> Now imagine this new situation: In just a few weeks, you plan to move across the country—by yourself. No members of your family or current social circle will be accompanying you on this cross-country move. Although you are preparing for your big departure, you find that you have half an hour of free time, with no pressing commitments. You have decided that you would like to spend this time with another person. Assuming that the following three people are available to you, which person would you choose to spend that time with?

The social partner options in Condition 2 were the same as in Condition 1, although items were presented in a different random order and varied across subjects. The frame of geographic relocation was not intended to be a strict analogy of old age. Rather, it represents a logically distinct example of a social ending.

Results and Discussion

Because we found no significant sex differences in subject responses, all analyses reported here reflect responses of both sexes combined. We initially screened the data in 5-year cohorts (e.g, under 25, 25–29, 30–34, etc) and subsequently collapsed them into larger age groupings that preserved clear age-related trends. This screening procedure ultimately resulted in three age groups: young (mean age = 23.2; range = 11–29), middle-aged (mean age = 45.7; range = 30–64), and old (mean age = 72.0; range = 65–92). Sample sizes are presented in Table 4.

Age Differences in Partner Choice—As hypothesized, in Condition 1—in which subjects chose a social partner without any modifying conditions—age groups differed in their social partner choices, test-of-association $\chi^2(2, N = 380) = 21.25$, $p < .001$. Table 4 lists partner preferences by age group. Only 35% of young subjects chose familiar social partners, an amount no greater than expected by chance selection among the three alternatives, goodness-of-fit $\chi^2(1, N = 75) = 0.06$, *ns.* In contrast, 65% of old subjects chose familiar social partners, significantly more than expected by chance, goodness-of-fit $\chi^2(1, N = 97) = 43.63$, $p < .001$. These results are consistent with the age-related differences put forth in selectivity theory.

One initially puzzling finding in Table 4 is that the social partner choices of the middle-aged group were nearly identical to those of the old group. Given the relatively young age of this cohort, anticipated social endings do not potently explain their social preferences. An alternative explanation of the middle-aged social choices might lie in immediate-family commitments. That is, people with young families may prefer familiar over novel social partners simply because time constraints dictate frugal allocation of their social energy.

To explore this idea, a subset of the sample ($n = 211$) was asked whether they were caretakers of children living in their home. Not surprisingly, the vast majority responding positively were in the middle-aged group (83%, compared with 12% of the young group and only 6% of the old group). The relationship of family status to partner preference was revealing (see Table 5): Having children in the home accounted for the partner choices of the middle-aged sample, test-of-association $\chi^2, N = 121) = 15.42$, $p < .001$. That is, among middle-aged subjects' responses to Condition 1, 79% of those who had children chose familiar social partners, significantly more than expected by chance, goodness-of-fit $\chi^2(1, N = 57) = 53.37$, $p < .001$. By contrast, only 42% of those without children selected familiar social partners, not significantly more than expected by chance, goodness-of-fit $\chi^2(\text{l}, N = 64) = 2.26$, *ns.* Figure 4 shows a clearer view of partner preferences delineated by age and

family status. In general, people in their 30s and older preferred familiar over novel social partners; yet, only people in their 50s and older showed a preference for familiar partners beyond that associated with home-dwelling children. In sum, the middle-aged people *without* children acted like the young sample, whereas the middle-aged people *with* children acted like the old sample. The presence of children, however, cannot account for the social partner preferences of the old group.

Responses to Anticipated Social Endings—Can the social circumstances of younger people be manipulated to induce social decisions characteristic of older people? We expected the geographic relocation scenario to make the young group favor familiar social partners, as the old group did under general circumstances. The results presented in Table 6 support our hypothesis. Recall that under unspecified conditions (Condition 1), only 35% of the young subjects chose familiar social partners (no more than chance). In contrast, under conditions characterized by social endings (Condition 2), a full 80% of the young subjects chose familiar social partners. This within-subject difference, from 35% to 80%, is significant, $\chi^2(1, N = 75) = 26.27$, $p < .001$ (refer to Glass & Hopkins, 1984, p. 291, on chi-square statistics for paired observations). Although the majorities of both the middle-aged and old groups already preferred familiar social partners, the minorities that did not also exhibited significant increases toward partner selectivity in Condition 2, χ^2, (1, $N = 208$) = 47,51 and $\chi^2(1, N = 97) = 10.52$, respectively. This shows that the heightened salience of anticipated endings inherent in geographic relocation can be influential at any age.

In sum, Study 2 supported our two hypotheses: First, under unspecified circumstances, middle-aged and older people choose familiar social partners more frequently than do younger people. More important, the introduction of anticipated social endings induces younger people to mimic the social choices of older people. This supports the notion that social endings comprise a general phenomenon, one that can explain, in part, the increased selectivity in partner choice evidenced by people aware of upcoming social endings.

Discussion

The first study uncovered three dimensions used to discriminate among potential social partners at the cognitive level. The dimension that accounted for most of the variance in subject responses distinguished positive from negative affect in the anticipated social interaction. Other dimensions distinguished among varying possibilities for future interaction and the degree of information seeking likely to transpire. Consistent with selectivity theory, groups differed in the relative importance they placed on these three dimensions: (a) Nursing home residents placed most importance on anticipated affect, followed in order by the community elderly, the middle-aged, and finally, the teens; (b) teens held future contacts as most important, followed in order by the middle-aged, the community elderly, and then the nursing home residents; finally, (c) the middle-aged group was most invested in information seeking to get acquainted, followed in order by the community elderly, the teens, and finally, the nursing home residents. We contend that differences in the cognitive appraisal of potential social partners reflect differences in the social experience and social goals of the different groups. Whereas younger people are most interested in the future prospects of the relationship and opportunities for gaining knowledge, older people, particularly those living in nursing homes, are primarily concerned with the immediate affective rewards and costs of interaction. The finding that nursing home residents do not prefer or seek out novel partners provides clear evidence for this contention.

Old age is not a uniform experience across individuals. Some octogenarians, for example, enjoy relatively good health and are active community members, whereas others are more disabled; still others are confined to long-term-care facilities. We do not claim to have

disentangled the effects of age per se, from those of health, disability, or both, particularly because the self-ratings of health that we collected may have underestimated actual health differences among our samples. Moreover, in addition to their being infirm, institutionalized elderly—because they are living in their "last home"—may conceive social endings as more salient than our community groups. We suggest that such salience also contributes to the high degree of partner selectivity evidenced by our nursing home sample. Future research of this kind would best incorporate more objective measures of physical health and of anticipated social endings to distinguish effects of age from those of disability and perceived limitations of the future. Despite these limitations, this study demonstrates that partner selectivity is evident to some degree in two very different samples of old people, thereby providing support that this phenomenon is indeed associated with age-related factors.

The second study confirmed two hypotheses regarding social partner selection. First, it showed that older people more often choose familiar social partners than do younger people. However, as the post hoc analysis of the effect of having children living at home suggests, factors other than age are also associated with partner selectivity. Second, Study 2 demonstrated that selectivity in partner choice can be manipulated by increasing the salience of social endings. This pattern of results suggests that the social behavior characteristic of the elderly—that is, diminished interest in "fringe" social interaction, coupled with great investment in family—may not be a response unique to age, physical health, or nearness to death but instead may reflect normal self-regulatory responses to constraints in current and expected social circumstances.

We realize that the partner options of Study 2 confounded familial ties with familiarity. As such, we cannot dismiss the possibility that our youngest subjects prefer novel partners because they seek to individuate themselves from their kin. That is, except under unusual circumstances, such as moving away, families may be of low social priority to adolescents and young adults. By contrast, families may assume top social priority for middle-aged and older adults. This alternative way of considering the data suggests unique social priorities associated with youth rather than old age. Yet the proposition that teens consider family members as less desirable social partners is not consistent with the results of Study 1: Teens in that study anticipated positive affect in interactions with family members much as middle-aged adults did. Additional research that differentiates familiar and familial social relationships is necessary to test directly alternative explanations for the pattern of partner choices that we found.

In both studies, the potential for affective gain played a dominant role in older people's selection of social partners. When anticipated affect was either negative or absent, elderly subjects regularly found the prospective social partner to be less appealing. Although affect was also important to our younger subjects, future prospects and information gain also played central roles in their selection processes. Our youngest subjects were predominantly interested in novelty even when negative affect was probable. In illustration, in Study 1, when subjects were asked which of the social partners they would most like to get to know better, 1 adolescent responded: "The people I dislike—I would like to find out what it is about them I dislike." This decision implies foregoing positive affect in favor of information gain. Such affective risk taking was plainly absent among our older subjects, especially the nursing home residents who were, in all likelihood, closest to the end of their lives. The comment of 1 nursing home resident was typical: "I don't have time for any of those [other] people. When I get a few moments to myself, I want to rest." This statement well conveys the proactive conservation that distinguishes selectivity theory from activity theory. The essential difference between selectivity theory and disengagement theory is that selectivity predicts that affective gain from interaction is *more*, not *less*, salient among older people

compared with their younger counterparts. Our results indicate that it is precisely within the affective domain that older people evaluate and choose their social partners.

These findings are not compatible with models of social aging based on the tacit assumption that old and young people are psychologically equivalent and that declining rates of social interaction simply reflect limited access to social partners. Rather, we see evidence for developmental changes in socio-emotional aging, changes that indeed play a role in the reduction of social interaction. This is not to say that social activity is unimportant in old age. Instead, our findings underscore the fact that social activity is not a monolithic construct and further, that social partners are not uniformly compelling.

Finally, we want to acknowledge that additional age-related factors, factors unrelated to ontogenetic change per se, also influence interaction patterns. Ageist attitudes reflected in some people's behavior, for example, might also influence older people's partner preferences. Such issues clearly deserve further research attention.

When differences between old and young have been observed, the behavior of the old is often assumed to reflect decrement that begs for remediation. We do not intend to minimize the importance of social and physical barriers to social interaction. Rather, we aim to expand our focus to include age-related psychological change at the level of the individual. The old may be more selective in choosing their social partners in an effort to regulate emotion and conserve physical energy Perhaps also their lifelong accumulation of social experiences have taught them to be better judges of rewarding social relationships. Additionally, perhaps the realization that time is a limited personal resource fundamentally changes older peoples' social priorities. Presently, little empirical research has been directed toward normative intraindividual change that may contribute to reduced social interaction in late life. As we face a rapidly aging population, it is more essential than ever to understand the meaning and the mechanisms responsible for these reductions. Such investigations will not only inform us about old age but will allow us to know when and how best to intervene.

Acknowledgments

This research was supported by grants to Laura L. Carstensen (NIA AG05592 and NIA AG07476) and was facilitated by a Jacob K. Javits Fellowship awarded to Barbara L. Fredrickson.

References

Antonucci, T.; Jackson, J. Social support, interpersonal efficacy, and health: A life course perspective. In: Carstensen, LL.; Edelstein, BA., editors. Handbook of clinical gerontology. New York: Pergamon Press; 1987. p. 291-311.

Baltes, MM. Selective optimization with compensation: The dynamics between independence and dependence. Paper presented at the annual meeting of the Gerontological Society of America; Chicago. 1986 November.

Baltes MM, Schmid U. Psychological gerontology. The German Journal of Psychology. 1987; 11:87–123.

Baltes PB. Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. Developmental Psychology. 1987; 23:611–626.

Baltes, PB.; Dittman-Kohli, F.; Dixon, RA. New perspectives on the development of intelligence in adulthood: Toward a dual-process conception and a model of selective optimization with compensation. In: Baltes, PB.; Brim, OG., Jr, editors. Life-span development and behavior. Vol. 6. New York: Academic Press; 1984. p. 33-76.

Berkman L, Syme SL. Social networks, host resistance and mortality: A nine year follow-up study of Alameda County residents. American Journal of Epidemiology. 1979; 109:186–204. [PubMed: 425958]

Blackman DK, Howe M, Pinkston EM. Increasing participation in social interaction of the institutionalized elderly. The Gerontologist. 1976; 16:69–76. [PubMed: 128490]

Campos, JJ.; Barrett, KC. Toward a new understanding of emotions and their development. In: Izard, CE.; Kagan, J.; Zajonc, RB., editors. Emotions, cognition, and behavior. Cambridge: Cambridge University Press; 1984. p. 229-263.

Carroll, JD.; Wish, M. Models and methods for three-way multidimensional scaling. In: Atkinson, RC.; Krantz, DH.; Luce, RD.; Suppes, P., editors. Contemporary developments in mathematical psychology. Vol. 2. San Francisco: Freeman; 1974. p. 57-105.

Carstensen LL. Social support among the elderly: Limitations of behavioral interventions. The Behavior Therapist. 1986; 6:111–113.

Carstensen, LL. Age-related changes in social activity. In: Carstensen, LL.; Edelstein, BA., editors. Handbook of clinical gerontology. New York: Pergamon Press; 1987. p. 222-237.

Carstensen, LL. A longitudinal analysis of social and emotional dimensions of interpersonal relationships. Paper presented at the annual meeting of the Gerontological Society of America; Minneapolis, MN. 1989 November.

Carstensen LL, Erickson RE. Enhancing the social environments of elderly nursing home residents: Are high rates of interactions enough? Journal of Applied Behavior Analysis. 1986; 19:349–355. [PubMed: 3804868]

Cheek JM, Buss AH. Shyness and sociability. Journal of Personality and Social Psychology. 1981; 41:330–339.

Cheek, JM.; Carpentieri, AM.; Smith, TG.; Rierdan, J.; Koff, E. Adolescent shyness. In: Jones, WH.; Cheek, JM.; Briggs, SR., editors. Shyness: Perspectives on research and treatment. New York: Plenum Press; 1986. p. 105-115.

Cumming, E.; Henry, WH. Growing old: The process of disengagement. New York: Basic Books; 1961.

Duckitt JH. Social interaction and psychological well-being: A study of elderly persons living in the inner-city area of Pretoria. Humanitas: Journal for Research in the Human Sciences. 1982; 8:121–129.

Duckitt JH. Predictors of subjective well-being in later life: An empirical assessment of theoretical frameworks in social gerontology. Humanitas: Journal for Research in the Human Sciences. 1983; 9:211–219.

Erikson, EH.; Erikson, JM.; Kivnick, HQ. Vital involvement in old age: The experience of old age in our time. New York: Norton; 1986.

Field D, Minkler M. Continuity and change in social support between young-old, old-old, and very-old adults. Journal of Gerontology. 1988; 43:P100–P106. [PubMed: 3385147]

Glass, GV.; Hopkins, KD. Statistical methods in education and psychology. 2. Englewood Cliffs, NJ: Prentice-Hall; 1984.

Gordon, C.; Gaitz, CM. Leisure and lives. In: Binstock, R.; Shanas, E., editors. Handbook of aging and the social sciences. New York: Van Nostrand Reinhold; 1976. p. 310-341.

Gubrium, JF. Living and dying at Murrey Manor. New York: St. Martin's Press; 1975.

Klein RL. Age, sex and task difficulty as predictors of social conformity. Journal of Gerontology. 1972; 27:229–236. [PubMed: 5060727]

Konarski EQ, Johnson MR, Whitman TL. A systematic investigation of resident participation in a nursing home's activities program. Journal of Behavior Therapy and Experimental Psychiatry. 1980; 11:249–257.

Kruskal, JB.; Wish, M. Sage University Paper series on Quantitative Applications in the Social Sciences, Series No. 07–011. Beverly Hills, CA: Sage; 1978. Multidimensional scaling.

Lawton, MP. Environment and the need satisfaction of the aging. In: Carstensen, LL.; Edelstein, BA., editors. Handbook of clinical gerontology. New York: Pergamon Press; 1987. p. 33-40.

Lawton, MP.; Nahemow, L. Ecology and the aging process. In: Eisdorfer, C.; Lawton, MP., editors. Psychology of adult development and aging. Washington, DC: American Psychological Association; 1973. p. 619-674.

Lowenthal, M.; Haven, C. Interaction and adaption: Intimacy as a critical variable. In: Neugarten, BL., editor. Middle age and aging: A reader in social psychology. Chicago: University of Chicago Press; 1968. p. 390-400.

Maddox GL. Activity and morale: A longitudinal study of selected elderly subjects. Social Forces. 1963; 42:195–204.

Malatesta CZ. Affective development over the lifespan: Involution or growth? Merrill-Palmer Quarterly. 1981; 27:145–173.

Palmore, E. Social patterns in normal aging: Findings from the Duke Longitudinal Study. Durham, NC: Duke University Press; 1981.

Pennebaker, JW. The psychology of physical symptoms. New York: Springer-Verlag; 1982.

Quattrochi-Tubin S, Jason LA. Enhancing social interactions and activity among the elderly through stimulus control. Journal of Applied Behavior Analysis. 1980; 13:159–169. [PubMed: 7364695]

Rowles, GD. The last new home: Facilitating the older person's adjustment to institutional space. In: Golant, SM., editor. Location and environment of the elderly population. New York: Wiley; 1979. p. 81-94.

Rudy TE, Merluzzi TV. Recovering social-cognitive schemata: Descriptions and applications of multidimensional scaling for clinical research. Advances in Cognitive-Behavioral Research and Therapy. 1984; 3:61–102.

Scherer, KR. The assessment of vocal expression in infants and children. In: Izard, CE., editor. Measuring emotions in infants and children. Cambridge, England: Cambridge University Press; 1982. p. 127-163.

Shepard RN. Representation of structure in similarity data: Problems and prospects. Psychometrika. 1974; 39:373–421.

Stern, DN. The interpersonal world of the infant. New York: Basic Books; 1985.

Stone, R. Advance data from vital and health statistics of the National Center for Health Statistics (PHS No. 124). Washington, DC: U.S. Department of Health and Human Services, Public Health Service; 1986 September 30. Aging in the eighties, age 65 years and over—Use of community services.

Tobin, SS.; Lieberman, MA. Last home for the aged. San Francisco: Jossey-Bass; 1976.

Tronick, EZ., editor. Social interchange in infancy: Affect, cognition, and communication. Baltimore, MD: University Park Press; 1982.

Youmans, E. Leisure time activities of older persons in selected rural and urban areas of Kentucky (Progress Report 115). Lexington, KY: Kentucky Agricultural Experiment Station; 1962.

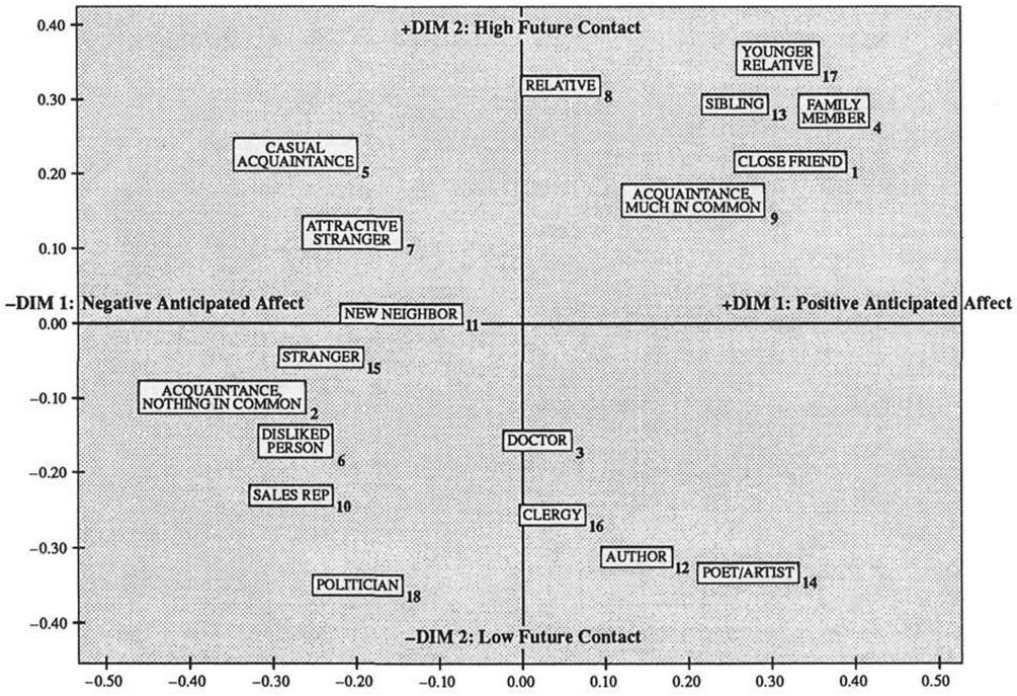

Figure 1.

Stimulus configuration derived by S1NDSCAL for potential social partners for Dimensions 1 and 2. (Subscripts refer to the item numbers of verbatim descriptions presented in Table 1.)

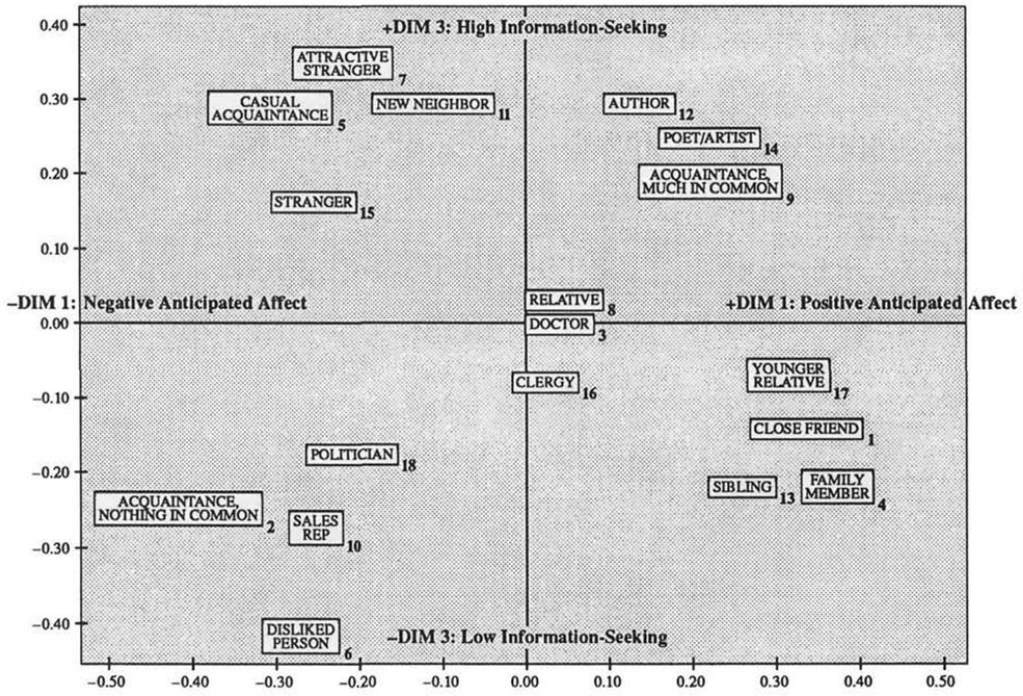

Figure 2.

Stimulus configuration derived by S1NDSCAL for potential social partners for Dimensions 1 and 3. (Subscripts refer to the item numbers of verbatim descriptions presented in Table 1.)

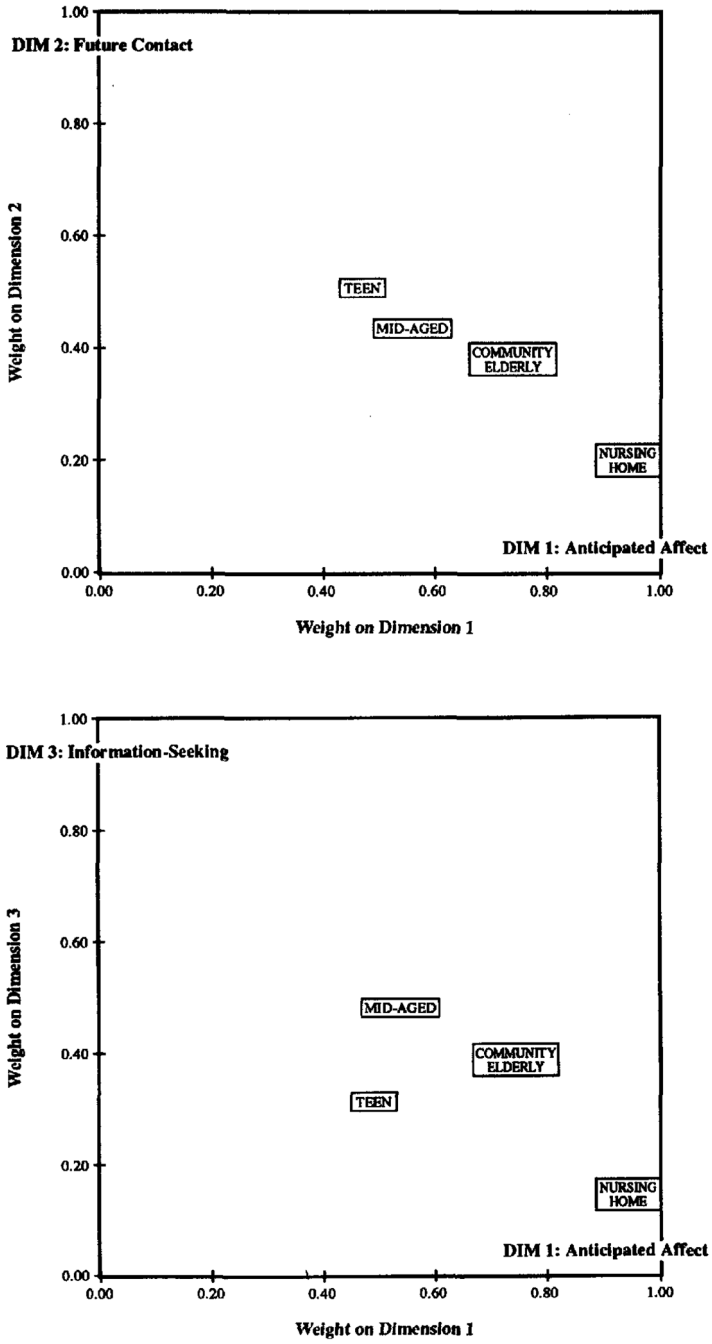

Figure 3.
Dimension weights indicating the salience of the three dimensions for separate groups. (Top: Weights for Dimensions 1 and 2. Bottom: Weights for Dimensions 1 and 3.)

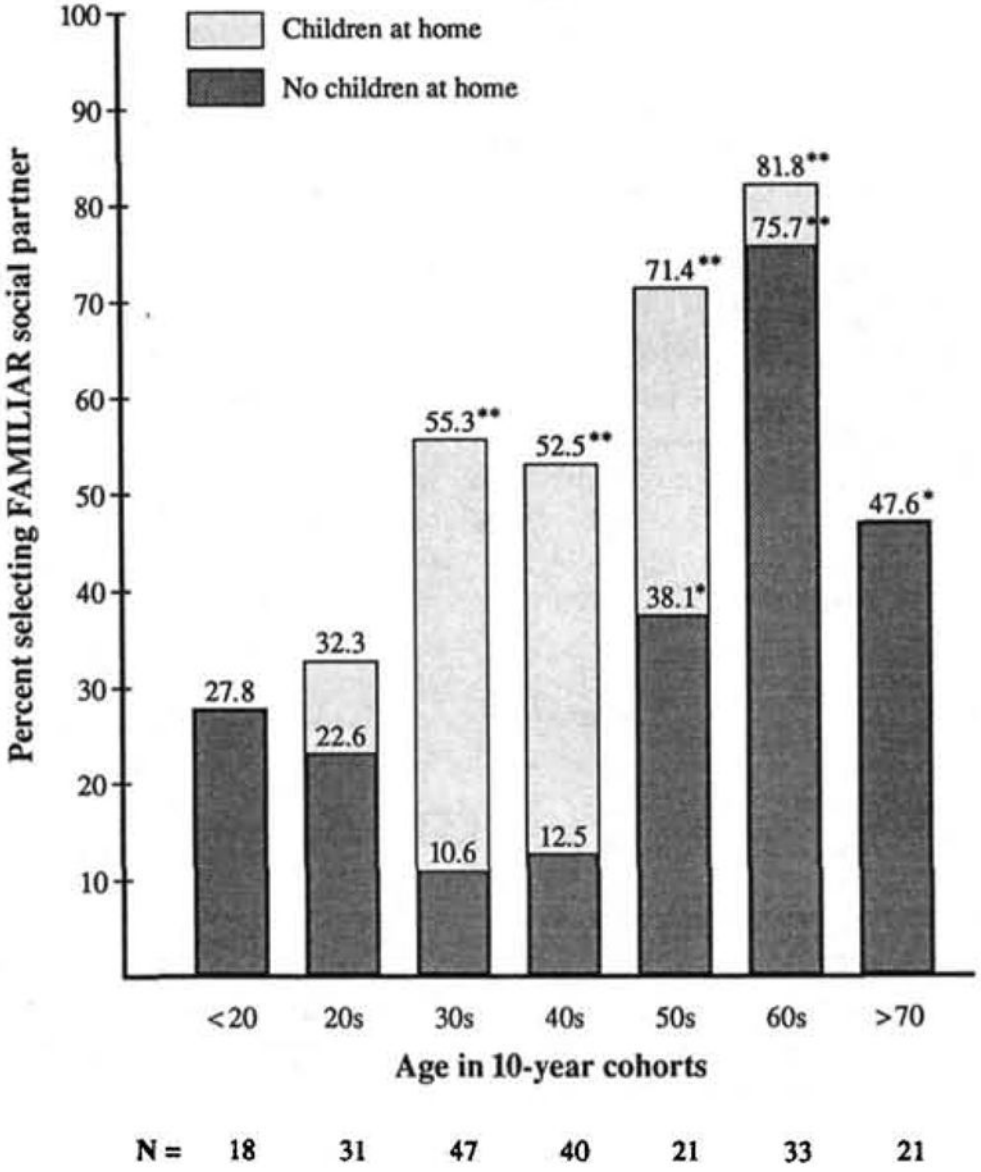

Figure 4.

Preferences for familiar social partners by age in 10-year cohorts. (Percentages of each cohort without children at home are indicated by darker bars. Asterisks indicate that choice of the familiar social partner is more frequent than expected by chance selection alone: *p < .05 and * *p <.10)

Table 1

List of 18 Potential Social Partners Used in the Card-Sort Task

Item	Description on card
1.	A close friend of yours
2.	A recent acquaintance, with whom you seem to have nothing in common
3.	Your doctor
4.	A member of your immediate family
5.	A casual acquaintance of yours
6.	A person whom you know but dislike
7.	An attractive person whom you do not know
8.	A relative, not in your immediate family
9.	A recent acquaintance, with whom you seem to have much in common
10.	A sales representative
11.	A new neighbor
12.	The author of a book you've read
13.	Your sibling
14.	A poet or artist whose work you like
15.	A stranger about your age
16.	A clergy person (e.g., pastor, rabbi, or priest)
17.	A younger relative (e.g., niece, nephew, or cousin)
18.	A person running for a local political position

Table 2

Mean Ratings of Health, Social Traits, and Social Support by Group

	Group			
Measure	**Teens**	**Middle-aged**	**Community elderly**	**Nursing home**
Self-rated health				
Mental				
M	6.75	8.00	7.89	7.42
SD	2.00	1.38	2.00	2.39
Physical				
M	$7.10^{a,b}$	7.85^{a}	8.11^{a}	6.05^{b}
SD	1.86	1.56	1.81	2.12
Social trait				
Sociability				
M	24.90	25.20	25.17	24.58
SD	4.71	5.09	4.34	5.25
Shyness				
M	23.30^{a}	$20.00^{a,b}$	16.28^{b}	$18.47^{a,b}$
SD	5.13	6.26	7.36	6.15
Perceived social support				
Close friends				
M	4.60^{a}	5.05^{a}	8.44^{b}	3.80^{a}
SD	3.10	2.06	6.53	2.91
Close relatives				
M	3.05	7.15	6.61	4.45
SD	1.90	8.46	6.42	2.72
Frequency of contact				
M	15.90^{a}	8.43^{b}	$13.25^{a,b}$	5.52^{b}
SD	12.30	8.07	11.38	7.12

Note. Means with different superscripts, within measures, are significantly different at $p < .05$.

Table 3

Multiple Regression of Biopolar Scale Ratings on Dimensions of Social Partner Scaling Solution

	Regression weights (direction cosines): Dimension			
Rating scale	**1**	**2**	**3**	***R***
Anticipated Affect	.822	.387	.416	.912*
Future Contact	.464	.884	.047	.940*
Information Seeking	.260	.065	.963	.849*

Note. Direction cosines are regression coefficients that have been normalized so that their sum of squares equals 1.00 for every scale.

* p<.00l.

Table 4

Cross-Tabulation of Age Group by Social Partner Choice in Condition 1

	Social partner choice					
	Familiar		Novel		Total	
Age	**%**	***n***	**%**	***n***	**%**	***n***
Young	35	26	65	49	20	75
Middle-aged	64	132	36	76	55	208
Old	65	63	35	34	25	97
Total	58	221	42	159	100	380

Note. Test-of-association $\chi^2(2, N = 380) = 21.25, p < .001$.

Psychol Aging. Author manuscript; available in PMC 2011 August 15.

Table 5

Cross-Tabulation of Social Partner Choices in Condition 1 for Middle-Aged Subjects With and Without Children

	Social partner choice					
	Familiar		Novel		Total	
Family status	%	*n*	%	*n*	%	*n*
No children	42	27	58	37	53	64
Children	79	45	21	12	47	57
Total	60	72	40	49	100	121

Note. Test-of-association $\chi^2(1, N = 121) = 15.42$, $p < .001$.

Psychol Aging. Author manuscript; available in PMC 2011 August 15.

Table 6

Cross- Tabulation of Social Partner Choices in Conditions 1 and 2 for Young Subjects

	Condition 2					
	Familiar		Novel		Total	
Condition 1	**%**		**%**	***n***	**%**	***n***
Familiar	81	21	19	5	35	26
Novel	80	39	20	10	65	49
Total	80	60	20	15	100	75

Note. $\chi^2(1, N = 75) = 26.27$, $p < .001$.

Psychol Aging. Author manuscript; available in PMC 2011 August 15.