Discrete Emotions in Later Life

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More positivity than negativity is demonstrated in this analysis of discrete emotions among 353 community-dwelling individuals from 72 to 99 years old. A complexity in positive emotions was displayed, with more happiness, contentment, and gratitude reported than frustration, sadness, and anger. Our results also imply that another individual’s presence may elicit negative emotions such as anger and guilt, whereas perceptions of support may elicit various positive emotions. As expected, certain negative emotions were associated with poor health, with a link between sadness and sickness being most prominent. Of note, poor health did not undermine positive emotions. These findings provide an optimistic view of emotions in later life, even among individuals who are poor, not well educated, and/or physically unwell.

According to Fiske and Taylor (1991), “simple positive and negative affect have contributed substantially to our understanding of the quality of life in old age (e.g., Bowling, Farquhar, & Grundy, 1996; Chipperfield & Havens, 2001; Heiner & Smith, 1999; Hilleras, Jorm, Herlitz, & Winblad, 1998; Lawton, Ruckdeschel, Winter, & Kleban, 1999). The related empirical evidence, however, has not supported the anecdotal view that old age is a time of psychological despair and vulnerability to emotional distress. In fact, longitudinal studies find little evidence of age-related declines in positive affect, although some cross-sectional studies do indicate that older age groups have lower levels of positive affect than younger age groups (Kunzmann, Little, & Smith, 2000).

The experience of discrete positive emotions, such as pride and contentment, may be critical in old age if positive emotions have an “undoing” effect on negative emotions (Fredrickson, 2000), hastening physiological recovery from those negative emotions (Fredrickson & Levenson, 1998). Moreover, positive emotions may broaden people’s ways of thinking such that they support “thought-action repertoires,” which are responsible for building personal, physical, and intellectual resources (Fredrickson, 2000). Because this has implications for actions that serve the ancestral function of promoting survival (Fredrickson, 2001), the study of discrete emotions may enhance our understanding of the quality of life and survival among older individuals.

Discrete Emotions

According to Fiske and Taylor (1991), “simple positive and negative reactions do not capture all the intensity and complexity” (p. 411) that is embodied in discrete emotions, which entail more than good and bad feelings. In fact, discrete, emotion-specific autonomic nervous system profiles involving accelerated heart rate and peripheral vascular responses have been identified for some negative emotions (Levenson, 1992; Levenson, Ekman, Heider, & Friesen, 1992), implying that discrete emotions may be qualitatively different at the physiological level. They are also seen as doing a better job of accounting for changes in symptomology over time (Leventhal & Patrick-Miller, 1993), and specific emotions such as fear appear to motivate individuals to engage in preventative health behaviors (Mayne, 2001). As such, a perspective that differentiates between discrete emotions may be more useful than the dimensional model that distinguishes only between positive and negative affect.

A differentiated model of emotions is also essential to understand the cognitive coping process in that “each emotion is brought about by a different appraisal of the personal significance of an adaptational encounter” (Lazarus, 1993, p. 12). Moreover, as suggested by Weiner’s (1986, 1995) attribution theory, the study of discrete emotions is useful for a general understanding of human motivation. According to that theory, specific “attribution-dependent” emotions like sympathy and anger follow from specific causal attributions which, in turn, influence behaviors such as punishment and helping. For example, if the transgression of a person is attributed to a controllable cause, anger tends to be elicited which, in turn, increases the likelihood of retaliatory punishment.

The study of discrete emotions in later life—Discrete emotions like hope or shame continue to receive far less attention than they deserve, and the paucity of this research is particularly apparent in the very old population. This is illustrated by our literature search for articles in the “Ageline” database over a 25-year period, between 1970 and 1996. We searched for studies on several global measures (e.g., depression, life satisfaction) and 14 discrete emotions (Perry, Chipperfield, Weiner, & Chuchmach, 1997). Because our interest was in noninstitutionalized older persons, we included only those studies involving community-dwelling older populations.

More than 500 studies were identified on global life satisfaction and hundreds examined depression. In contrast, relatively few studies focussed on discrete emotions in older persons. For example, only one study involved anger, regret,
or relief, and only two investigations examined gratitude and hope. It is particularly noteworthy that, over the 25-year span, fewer than five citations were found for seven of the most oft-mentioned discrete emotions (frustration, anger, regret, shame, gratitude, hope, and relief).

Although there is lack of research on discrete emotions as experienced in later life, older individuals have been included in studies that examine global indicators of positive and negative affect (see Kunzmann et al., 2000, for a review). However, according to Kunzmann and colleagues (2000) even in these studies, analyses have not considered differences in affect between young-old (≤80 years) and old-old (>80 years) individuals. Because many participants in our study were over the age of 80 years, this provided an opportunity to learn more about discrete emotions in a very old population.

The Present Study: Discrete Emotions and Global Affect in Later Life

Our study expanded the analysis of emotions beyond the common global affective measures to include discrete positive and negative emotions. In a representative sample of older community-dwelling individuals, we examined 14 recently experienced discrete emotions that have been assessed in life-span analyses of emotions (e.g., Carstensen, Pasupathi, Mayr, & Nesselroade, 2000) and are traditionally included in scales of global positive and negative affect (e.g., Watson, Clark, & Tellegen, 1988). Some of the discrete emotions such as pride, guilt, shame, and anger are germane to Weiner’s attribution theory (Weiner, 1986, 1995). Also included in our study were emotions such as boredom, which may be particularly relevant if, for instance, the breadth and range of activities becomes more and more restricted in later life. Finally, we assessed regret and gratitude, two emotions that, under some circumstances, may be especially likely to occur in later life. For example, one may experience regret if it is perceived that past controllable opportunities were missed, and one may feel grateful for having exceeded the life expectancy or for the assistance and support received from children or other caregivers.

Objectives.—The first objective in our study was to provide a systematic description of discrete emotions experienced in later life. If the profile of discrete emotions in old age resembles the earlier life profile, positive discrete emotions might be reported quite frequently by older individuals, just as they are by relatively younger adults (Carstensen et al., 2000). This seems especially plausible given that age-related declines in positive emotions are unlikely to occur (Gross et al., 1997), positive and negative affect seems stable over age (Stacey & Gatz, 1991), and age does not appear to be related to emotional intensity or affect (e.g., Diener, Sandvik, & Larsen, 1985; Lawton, Kleban, Rajagopal, & Dean, 1992).

Within the array of positive emotions in our study, it was predicted that some would be experienced more frequently than others. On the basis of Carstensen and colleagues’ (2000) findings, we expected that the discrete emotions of happiness and contentment would be among the most frequently reported positive emotions, and frustration and sadness would be among the most frequently reported negative emotions. However, if older individuals are adept at regulating negative emotions (Gross et al., 1997), we would expect fewer reports of negative, relative to positive, emotions.

In keeping with past literature and acknowledging that global approaches can embellish a description of the broader emotional experience, the second objective in our study was to assess affective life from a global perspective. Hence, using the traditional approach of combining information across multiple discrete emotions, we created several indexes to examine overall affect, both positive and negative, and emotional complexity, defined as the diversity or range of emotions.

Our final objective was to explore various relationships between selected factors and both the discrete and global emotion measures. In particular, we considered whether sociodemographic variables (e.g., gender, age), social networks or supports (e.g., marital status, perceived support), and overall physical health and well-being (e.g., morbidity, life satisfaction) were associated with our global and discrete emotion measures.

Although research has found almost no indication that sociodemographic factors relate to one particular discrete emotion, happiness (Myers, 2000; Myers & Diener, 1995), such factors may relate to other discrete emotions. Socioeconomic status (SES), for instance, may relate positively to contentment and negatively to fear, although this association could be due to a third variable such as adverse living conditions. Gender may also relate to negative discrete emotions; women, for example, may report more frequent sadness, as suggested by the “well-known gender gaps in misery” in which women tend to ruminate and get depressed or anxious (Myers & Diener, 1995, p. 12). If women simply have a greater propensity to express their emotions, they may also report more frequent positive discrete emotions than men.

The literature examining the relationship between social support or networks and global measures of well-being recognizes the increasingly critical role of social support in old age (e.g., Antonucci, 1990; Chipperfield & Havens, 1991). In contrast, little is known about how social support relates to discrete emotions. If, as maintained by socioemotional theory, older couples can keep their negative emotional experience “in check by interweaving expressions of affection along with the negative emotions” (Carstensen, 1998, p. 358), we might expect that the presence of a spouse would be associated with positive emotions and the absence of a spouse with negative emotions. This would also be consistent with research in which married individuals report higher levels of life satisfaction than unmarried individuals (Hong & Duff, 1997).

There is a paucity of studies on positive emotions and health (Mayne, 2001), although positive affect is thought to produce disease resistance (Stone, Cox, Valdimarsdottir, Jandorf, & Neale, 1987). In general, within studies that have examined global positive affect, there is little evidence of its association with health or well-being. In contrast, negative affect levels have been shown to relate to multiple measures of poorer health (Billings, Folkman, Acree, & Tedlie-Moskowitz, 2000), and linkages have been reported between discrete
emotions such as sadness and psychological distress (e.g., Gallo, Rabins, Lyketsos, Tien, & Anthony, 1997) and anger and physical well-being (e.g., for reviews see Leventhal & Patrick-Miller, 1993; Tucker & Friedman, 1997). On the basis of these findings, our expectation was that negative discrete emotions would relate to health, whereas positive emotions may not.

In sum, by assessing recently experienced emotions such as pride and sadness, this investigation adds to the surprisingly small literature on discrete emotions. Our focus on older, community-dwelling individuals including many old-old individuals provided a rare opportunity to explore the emotional life of this unique population in very late life.

**METHODS**

The participants for the present study were a subsample of individuals selected from one of the largest (n = 9,000) and longest (25-year) population-based, longitudinal gerontological studies: the Aging in Manitoba (AIM) Study. The characteristics of the subsample used for the present analyses are presented following a brief description of the overall AIM project.

**The Aging in Manitoba (AIM) Project**

Data for the AIM project were obtained using a face-to-face interview format. At three different points in time (1971, 1976, 1983), stratified random sampling techniques were used to select participants from the overall population of older adults in the Canadian Province of Manitoba. Follow-up data were subsequently obtained for participants from these three province-wide, independent cross-sectional waves: The 1971 and 1976 participants were reinterviewed at three later times (1983–84, 1990, 1996), and the individuals in the 1983 wave were reinterviewed twice (1990, 1996).

Previous analyses indicate that the sampling procedures were successful in minimizing bias and selective attrition, while simultaneously achieving representativeness, both initially (e.g., Mossey, Havens, Roos, & Shapiro, 1981) and at follow-up (Chipperfield, Havens, & Doig, 1997). The modest level of nonresponse did not erode the representativeness of the surviving AIM sample with respect to demographic factors such as location, gender, education level, and nationality (Chipperfield et al., 1997). Moreover, the rigorous tracking procedures have resulted in exceptional follow-up rates, exceeding 95%.

**The Present Study**

The participants in this study comprised a subset of the 1,868 individuals who had been part of the general AIM follow-up study conducted in 1996. We included only individuals from three cities/towns in the Province of Manitoba, the largest of which consisted of approximately 700,000 people. Individuals more distantly located, especially those in remote areas of the province, were excluded due to the complexities and resources needed to conduct in-person interviews. As well, we excluded institutionalized individuals because of their reduced capacity to respond to our questions, thereby focusing only on community-dwelling individuals. Finally, from among the AIM participants who were willing to participate, we excluded those who were unable to respond to the AIM interview in English or who had observed difficulty with comprehension of questions. The final number of eligible participants for our study was 461, approximately 20% (461 of 1,868) of the individuals who had participated in the larger province-wide AIM 1996 interview.

Interviewers telephoned all eligible individuals to arrange a convenient time for the interview. If the respondent was eligible but was unable to, or did not wish to participate in the study, the interviewer recorded the reason: not wanting to be in the study (n = 57), having previously participated in too many other interviews (n = 22), having an illness (n = 20), being too busy (n = 11), other unstated reasons (n = 14), inability to establish contact (n = 9), and death since the AIM interview (n = 3). Thus, we were able to interview 76.5% (353 of 461) of all individuals who met the eligibility criteria for our study.

These 353 participants were compared with the larger AIM sample (n = 1,868) on several demographic factors. As expected, our smaller subsample was significantly younger (Ms = 79.94 vs 82.21), t(2184) = −6.21, p < .05, had higher income (Ms = $1,448.89 vs $1,103.97), t(2219) = 5.88, p < .05, and more years of education (Ms = 10.69 vs 8.73), t(1455) = 10.09, p < .01. This is not surprising given that we excluded institutionalized individuals, who tend to be older, and rural individuals, who tend to have lower incomes and education levels. These differences have implications for the external validity of our findings. For example, our findings may not generalize to older individuals living in rural or remote areas. Moreover, our findings cannot be generalized to the broad population that includes institutionalized older individuals. However, because our interest was in community-dwelling individuals, we would not wish to generalize to this population.

Between August and November 1996 trained personnel conducted face-to-face interviews in the respondent’s home, which, on average, lasted about 1 hr. The interview included questions on a variety of beliefs (e.g., health beliefs), perceptions (e.g., perceptions of control), and behaviors (e.g., health promotion behaviors), but the data reported here focus only on the emotion questions. Table 1 presents a profile of the sample, including information on demographic status (e.g., age, gender), social networks and support (e.g., marital status, living arrangements), and health and well-being (e.g., chronic health conditions).

**Demographic Variables**

**Age.**—The mean age of participants was 79.94 years and the range was 72 to 99 years (Table 1). Using the conventional classification of 80 years and older as “old-old” (e.g., Menec & Chipperfield, 1997), our sample contained a large number of these individuals (n = 172), reflecting the longitudinal nature of the study that began 25 years earlier.

**Gender.**—Our study consisted of 221 women (62.59%) and 132 men (37.41%). The lower proportion of men than women parallels a true gender difference in the population of older adults.
assesses the “quality” of support. This was measured using four items from Krause and Markides’ (1990) scale that ask how often someone has “been right there with you (physically) in a stressful situation?” “comforted you by showing you physical affection?” “listened to you talk about your private feelings?” and “expressed interest and concern in your well being?” (0 = never, 3 = very often). A perceived social support score was obtained for each person by summing the responses on these items ($M = 7.36, \alpha = .59$).

### Health/Well-Being Variables

**Chronic health conditions.**—Individuals were asked to identify from a predetermined list any problems or diseases encountered within the last year (e.g., high blood pressure, heart attack, stroke, arthritis or rheumatism, Alzheimer’s/dementias, incontinence, diabetes, cancer). A composite measure of the total number of chronic conditions, that is, morbidity, was obtained by summing the affirmative answers. As indicated by a mean of 4.19, comorbidity was common, that is, individuals had several chronic health conditions simultaneously.

**Perceived seriousness of illness.**—Perceived seriousness of illness was assessed by asking individuals whether they had any diseases or ongoing health conditions that they considered serious. Over half of the respondents ($n = 196, 55.52\%$) indicated that they did not have any serious conditions; the remaining respondents ($n = 157, 44.48\%$) reported one or more.

**Perceived health.**—Global perceived health ratings were assessed by participants’ responses to a single question: “For your age, would you say, in general, your health is excellent, good, fair, poor, or bad?” These scores were subsequently reverse coded such that high scores reflected excellent health. On average, comparative health was rated between fair and good ($M = 3.67$).

**Life Satisfaction Index A.**—Life satisfaction was measured using Neugarten, Havighurst, and Tobin’s (1961) 20-item Life Satisfaction Index A (LSIA). Respondents indicated whether they agreed (2), were not sure (1), or disagreed (0) with statements such as “As I grow older, things seem better than I thought they would be” and “I have gotten more of the breaks in life than most of the people I know.” By calculating the mean of the 20 items, a LSIA score was created ($M = 0.72, \text{Cronbach} \alpha = .74$).

### Discrete Emotions in Later Life

Participants were asked how often, during the past 2 days, they had felt proud, angry, grateful, guilty, hopeful, ashamed, happy, regretful, bored, sad, afraid, frustrated, relieved, and content (0 = never, 1 = once in awhile, 2 = fairly often, 3 = very often). They were also given the opportunity to reveal any “other” emotions. Nineteen self-generated emotions were reported, but none more than five times; thus, these self-generated emotions were disregarded.

Responses to the 14 discrete emotions specified in the

### Table 1. Characteristics of the Study Sample ($n = 353$)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Range</th>
<th>Mean or Percentage</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociodemographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>72–99</td>
<td>79.94</td>
<td>5.66</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>37.41</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>62.59</td>
<td></td>
</tr>
<tr>
<td>Monthly income (dollars)</td>
<td>0–5000</td>
<td>1448.89</td>
<td>1024.83</td>
</tr>
<tr>
<td>Education (years)</td>
<td>2–25</td>
<td>10.69</td>
<td>2.83</td>
</tr>
<tr>
<td><strong>Social networks and support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not married</td>
<td>0</td>
<td>54.40</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>45.60</td>
<td></td>
</tr>
<tr>
<td>Cohabitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living alone</td>
<td>0</td>
<td>48.90</td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>1</td>
<td>51.10</td>
<td></td>
</tr>
<tr>
<td>Perceived social support</td>
<td>0–12</td>
<td>7.36</td>
<td>2.34</td>
</tr>
<tr>
<td><strong>Health and well-being</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Chronic health conditions</td>
<td>1–15</td>
<td>4.19</td>
<td>2.73</td>
</tr>
<tr>
<td>Seriousness of illness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not serious</td>
<td>0</td>
<td>55.52</td>
<td></td>
</tr>
<tr>
<td>Serious</td>
<td>1</td>
<td>44.48</td>
<td></td>
</tr>
<tr>
<td>Perceived health</td>
<td>1–5</td>
<td>3.67</td>
<td>0.73</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>.053–1.00</td>
<td>0.72</td>
<td>0.18</td>
</tr>
</tbody>
</table>

*a*These table values correspond to percentages, thus no means or standard deviations are available.
Interview were used to develop an emotional profile of our sample of community-dwelling older individuals. Our primary indicators of discrete emotions were the frequencies with which each of the 14 reported emotions was experienced within the 2-day period preceding the interview. From this information, we also documented the occurrence of each emotion, that is, whether it occurred at all (yes, no).

**Composite Emotions in Later-Life: Global Measures**

We calculated two global emotion measures of “affect” and “complexity” by summing over groupings of discrete emotions in order to identify three component scores: total, positive, and negative emotion scores. The grouping of discrete emotions into positive and negative components is both logically derived and mirrors the conventional approach adopted by other researchers (e.g., Bradburn, 1969; Kercher, 1992). As expected, the positive and negative groupings correspond to factors that emerged in a principal components factor analysis (PCA) of our data that forced a two-factor solution. Happiness, gratitude, hope, contentment, pride, and relief formed a positive affect factor that explained 26.70% of the variance (α = .61). Frustration, anger, sadness, guilt, regret, shame, boredom, and fear comprised a negative affect factor that explained 14.60% of the variance (α = .80).

It is noteworthy that when the number of factors was unrestricted in a subsequent PCA analysis, four factors emerged. The same six positive emotions formed one factor and three separate negative factors emerged: guilt, shame, regret (Factor 1); fear, sadness, boredom (Factor 2); and frustration, anger (Factor 3). This may suggest that, relative to positive emotions, negative emotions reflect greater diversity or differentiation. Nonetheless, for the purposes of our study, we opted for the conventional positive–negative dimensional distinction to create composite global measures.

**Global affect.**—A composite total global affect score was created by summing the frequencies of all 14 discrete emotions (0 = never, 1 = once in awhile, 2 = fairly often, 3 = very often). The actual range in scores was 1–35 (M = 12.06, SD = 4.81), although a score of 42 could hypothetically be obtained if an individual were to report experiencing all 14 emotions “very often” (14 × 3). Positive affect and negative affect scores were created by summing over the frequencies of the six positive discrete emotion items (M = 8.99, SD = 3.48) and the eight negative emotion items (M = 3.07, SD = 3.13).

**Global complexity.**—The total complexity score, a global indicator of the diversity or breadth of an individual’s emotions, reflected the number of discrete emotions reported to have occurred during the 2 days before the interview (M = 7.04, SD = 2.65, range = 1–14). Some individuals experienced all 14 emotions, whereas others reported only one emotion. The positive complexity score was a count of the discrete positive emotions that were reported to have occurred (M = 4.71, SD = 1.28), and the negative complexity score was a count of discrete negative emotions (M = 2.33, SD = 2.05).

**Results and Discussion**

Our profile of later-life discrete emotions begins with a descriptive examination of the frequency of discrete emotions. These analyses considered which emotions were reported most and least frequently and whether there was variation within the discrete emotions, for example, whether individuals reported significantly more happiness than sadness. Likewise, a descriptive examination of the simple occurrence of discrete emotions assessed the extent to which individuals reported any emotions or no emotions at all.

**A Profile of Later-Life Discrete Emotions**

**Frequency of discrete emotions.**—Table 2 shows the relative mean frequency of each of the 14 discrete emotions, illustrating that, of all discrete emotions, happiness occurred with the highest mean frequency, on average, occurring “very often” in the 2 days prior to our study. Of note, happiness was reported more than twice as frequently as relief. The predominance of “happiness” in our study is consistent with the finding from studies that include adults at younger ages (Carstensen et al., 2000; Weiner, Russell, & Lermon, 1979), suggesting that happiness is a dominant emotion across the lifespan. If happiness is “essential to the folk concept of the good life” (King & Napa, 1998, p. 156), then it appears that many older people are living the “good life.”

To consider possible variation within subjects across the various discrete emotions, we conducted a repeated measures analysis of variance (ANOVA). Each discrete emotion represented a level of the within-subject independent variable, and the frequency ratings of each of the six positive emotions corresponded to the dependent variable. The omnibus test of the within-subject factor illustrated significant variation in the frequency ratings of the positive

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Frequency</th>
<th>Occurrence</th>
</tr>
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<tbody>
<tr>
<td>Happya</td>
<td>2.00</td>
<td>0.83</td>
</tr>
<tr>
<td>Contemb</td>
<td>1.92</td>
<td>0.95</td>
</tr>
<tr>
<td>Gratefulc</td>
<td>1.81</td>
<td>0.96</td>
</tr>
<tr>
<td>Hopebd</td>
<td>1.56</td>
<td>0.96</td>
</tr>
<tr>
<td>Pridec</td>
<td>1.04</td>
<td>1.00</td>
</tr>
<tr>
<td>Reliefd</td>
<td>0.78</td>
<td>0.80</td>
</tr>
</tbody>
</table>

**Note:** Bonferroni t tests were significant for all pairwise comparisons with the exception of the following: a vs b and b vs c for positive emotions and g vs h, h vs i, h vs j, i vs k, i vs l, j vs k, l vs m, l vs n, and m vs n for negative emotions.
discrete emotions experienced in our study, $F(5,326) = 133.23, p < .0001$.

A Bonferroni adjustment for multiple comparisons was used for subsequent pairwise $t$ tests, revealing that individuals reported feeling happiness significantly more frequently than any other positive emotion, with the exception of contentment (Table 2). Although the frequency of contentment and gratitude in the last 2 days did not differ significantly, these two emotions occurred significantly more frequently than any of the other positive emotions. All other pairwise mean comparisons were also significant (see Table 2), showing that gratitude was experienced significantly more frequently than hope, which in turn was experienced significantly more frequently than pride, which was also experienced significantly more frequently than relief.

Turning to the negative emotions in Table 2, the two most frequently experienced emotions, frustration and sadness, were experienced only “once in awhile” (i.e., $M < 1$) during the past 2 days. Other negative emotions were experienced very infrequently, suggesting a relative lack of negative emotions. Nonetheless, in a repeated measures ANOVA in which the eight discrete negative emotions corresponded to the within-subject independent variable, and the frequency ratings for each discrete emotion corresponded to the dependent variable, a significant effect for the within-subject factor, $F(7,341) = 28.94, p < .0001$, illustrated that some negative emotions were reported significantly more frequently than others.

As with the positive emotions, post hoc tests showed that many pairwise comparisons were significant. Of note, frustration was experienced significantly more, in particular, approximately three times more frequently than fear or shame. In contrast to the positive emotions, however, numerous pairwise comparisons were not significant, suggesting less variation within the negative emotions (Table 2). For example, there were no significant differences in the frequency of frustration and sadness, the two most frequently reported emotions, nor were there differences in the frequency of the three least frequently reported emotions, guilt, fear, and shame.

Finally, multiple paired $t$ tests were used to compare the frequency of positive and negative discrete emotions, revealing a very clear and optimistic profile. Each of the positive discrete emotions was experienced significantly more frequently than each of the negative emotions. Even the least frequently experienced positive emotion, relief, was experienced significantly more than the most frequently experienced negative emotion, frustration, $t(337) = 2.59, p = .01$.

**Occurrence of discrete emotions.**—As shown in Table 2, almost everyone (94.2%) reported the occurrence of happiness, the most prominent emotion during the past 2 days. Remarkably, over 85% of the individuals also reported contentment, gratitude, and hope; and, although fewer reported pride and relief, these positive emotions occurred for the majority of individuals. Again, each of the positive discrete emotions shown in Table 2 was reported to occur by more individuals than was each of the negative emotions. In fact, happiness, contentment, and gratitude, the top three positive emotions, were twice as likely to occur than were the top negative emotions (frustration, sadness) and six times more likely than some negative emotions (fear, shame). In contrast, each of the discrete negative emotions occurred in only a minority of the individuals, as few as 14.2% indicating that they had felt fear or shame.

**A Profile of Later-Life Global Emotions**

Having provided a profile of discrete emotions in later life, we now turn to our profile of global emotions. In doing so, the focus is on the two composite measures: affect, the sum of all affective experiences, and complexity, the breadth or mix of different emotions.

**Global affect.**—Several observations are notable with respect to the composite affect measures. First, the mean positive affect score ($M = 8.99$) was significantly higher than the mean negative affect score ($M = 3.07$), $t(348) = 24.3, p < .001$, despite a larger possible range and thus higher possible scores for negative affect. This again shows a more positive than negative affective state. Second, the range of 1 to 35 for the total affect score demonstrates substantial individual variation in the overall affective experience of participants in our study. Some individuals experienced little affect, whereas some experienced a great deal of affect.

**Global complexity.**—Interindividual variation in the total complexity score was also evident, with some people reporting as few as one emotion and some as many as 14. Overall, however, the total mean “complexity” score of 7.04 suggests that, on average, older people experience a complexity or breadth in emotions as reported within a 2-day period. On average, individuals were likely to have reported feeling nearly five ($M = 4.71$) of the six positive emotions but only two ($M = 2.33$) of the eight negative emotions. Hence, the mean positive complexity score was significantly higher than the mean negative complexity score, $t(348) = 24.3, p < .001$, despite higher possible scores for negative complexity. Of note, no one reported a complete absence of any of the 14 emotions. Virtually everyone (98.7%) reported experiencing one or more of the positive discrete emotions. In contrast, 81 individuals (23.3%) reported a complete absence of any negative emotions.

To summarize, our profiles of discrete and global emotions show that almost every person in our study experienced certain positive emotions. Each positive discrete emotion was also experienced more frequently than each negative emotion, and individuals displayed a more complex mix of positive than negative emotions. In fact, some negative emotions were reported very infrequently, with nearly one quarter of our participants reporting no negative emotions at all. This reported lack of negative emotions is congruent with Gross and colleagues’ (1997) contention that older individuals seem to be adept at regulating negative emotions.

**Relationships Between Selected Variables and Discrete Emotions**

Our analysis of the linkages between selected variables and discrete emotions focused on the frequency of the 14 recently experienced discrete emotions. In general, although
these analyses are correlational, we have assumed that the various selected factors can be viewed as independent variables and emotions as the dependent variables. As discussed at a later point, however, there are instances in which it is quite reasonable to interpret the emotions as the independent variables.

Pearson correlations or point biserial correlations were conducted to consider how each of the continuous variables (e.g., age, perceived health) or dichotomous variables (e.g., gender, martial status) might be associated with each discrete emotion. Because some of these correlations could be significant by chance alone, we used Bonferroni adjusted p values after setting our initial unadjusted p value at .10. Due to the exploratory nature of this research and the corresponding concern about Type II errors, we began with an unadjusted p value of .10. This is more conservative than Kirk’s recommendation of setting p as high as .20 (Kirk, 1982, p. 42) when dismissing a possible relationship (Type II error) as regarded as more serious than identifying one by mistake (Type 1 error). The Bonferroni correction was applied separately for positive and negative emotions because, in some cases, predictions differed for positive and negative emotions. Thus, the resulting corrected p values were .017 (.10/6) for tests involving the six positive emotions and .013 (.10/8) for tests involving the eight negative emotions.

Discrete emotions and demographics.—In general, the discrete emotions of older people were unrelated to income, education, gender, or age. For example, income was unrelated to the frequency of any discrete emotions reported during the last 2 days, suggesting that poorer and wealthier people are equally happy, content, grateful, hopeful, proud, and relieved. Thus, these findings lend credence to the adage that “money can’t buy happiness.” The general lack of associations between demographic variables and discrete emotions like pride and frustration in our study is consistent with the conclusion that demographic factors appear to be unrelated to happiness (Myers, 2000; Myers & Diener, 1995). Taken together, these findings suggest that analyses of demographic variables will do little to promote our understanding of the emotional life of older people.

We found only three exceptions in which demographic variables did relate to discrete emotions. First, education correlated significantly and negatively with fear (r = −.14, p = .009), although the correlation may be due to a variety of third variables because more highly educated individuals likely differ from their less educated counterparts in many ways. For example, they may have higher SES, more comprehensive skills to cope with fear, or stronger perceptions of control. These factors, rather than their education per se, could explain their lower levels of fear.

Second, although unrelated to 13 of the 14 discrete emotions, gender (0 = men, 1 = women) correlated positively with sadness (r = .14, p = .006). Of course, women and men may feel similar levels of sadness, but women may simply be more willing to express sadness. Given that gender differences did not emerge for other discrete emotions, any such tendency would seem to be restricted to sadness.

Third, age was marginally negatively correlated with anger (r = −.12, p = .025), suggesting perhaps a developmental “mellowing” in this discrete emotion. It could be argued that our general failure to find either linear or curvilinear relationships between age and 13 of the 14 discrete emotions in our study was due to emotional responses being well-established in later life, resulting in little emotional variation among the youngest (age 72 years) and the oldest (age 99) individuals. However, as previously demonstrated, substantial interindividual variability was evident for our measures of affect and complexity, making this explanation less tenable. Moreover, our findings are consistent with conclusions regarding the stability of positive and negative affect over age (Stacey & Gatz, 1991).

Discrete emotions and social networks or support.—Table 3 shows that perceptions of support generally related to the frequency of expressed positive emotions but not to the discrete negative emotions examined in this study. The opposite was true for the social network variables of marital status (0 = not married, 1 = married) and cohabitation (0 = living alone, 1 = cohabiting). These did not correlate with any of the positive discrete emotions, but did correlate with some negative emotions. Marital status and cohabitation were significantly associated with anger; married individuals and those living with another person experienced more anger. Cohabitation also correlated significantly with regret and guilt; cohabiting individuals reported more of these negative emotions. Because anger and guilt are social in nature, they may be more likely to occur in the presence of another person, for example, I was angry at him for not cleaning up, or I felt guilty because I hurt her feelings.

If these discrete negative emotions are most prominent among married or cohabiting individuals, could these individuals be at an emotional disadvantage, relative to their unmarried counterparts who live alone? This conclusion would be inconsistent with the many studies that find salutary effects of marriage, including survival (Hanson, Isacsson, Janson, & Lindell, 1990) and higher life satisfaction for older married individuals than their unmarried counterparts (e.g., Hong & Duff, 1997; Kehn, 1995). One possible explanation for the more frequent anger and guilt among married or cohabiting individuals is that many of them may have been caregivers. Just as depression is high among caregivers (Gallagher-Thompson & Powers, 1997), so are anger and guilt likely to be. As such, higher frequencies of anger and guilt might be due to the caregiving role, rather than the spouse or cohabiting partner per se.

In summary, our findings suggest different conclusions depending on the measure of support. This illustrates the need to examine social network variables (i.e., marital status and cohabitation) separately from perceived social support, despite significant intercorrelations between these variables. In particular, our findings may imply that the presence of another individual can elicit negative emotions, but that support of another elicits positive emotions. Further longitudinal studies are needed, however, to assess the direction of causality.

Discrete emotions and health and well-being.—Although the three health measures were significantly intercorrelated, these indices of health were differentially related to discrete
emotions. As illustrated in Table 3, the discrete positive emotions did not relate to perceived serious illnesses (0 = not serious, 1 = serious). Thus, in terms of positive emotions, those in poorer health appeared comparable to their more healthy counterparts. In contrast, perceptions of serious illness correlated with the frequency of frustration and sadness and marginally (p < .05) with regret and boredom.

Table 3 shows that significant relationships also emerged between half of the discrete negative emotions and the number of chronic health conditions. The correlation of greatest magnitude was between chronic health conditions and sadness. Chronic health conditions were also significantly correlated with frustration, regret, and fear and marginally with guilt and shame. In contrast, although the number of chronic health conditions correlated modestly with relief, chronic conditions were unrelated to the frequency of the discrete positive emotions of happiness, contentment, gratitude, hope, or pride.

A similar overall pattern of correlations emerged for perceived health and the frequency of discrete emotions. Significant relationships were found for half of the discrete negative emotions. Perceptions of health were again most strongly associated with sadness—poorer health correlating with more sadness. Perceptions of health were also significantly inversely associated with frustration, anger, and boredom. In contrast, perceptions of health were again unrelated to five of the six positive emotions, correlating only modestly with contentment.

Our assessment of discrete emotions and health represents a departure from much of the existing literature that examines more global measures of positive and negative affect (e.g., Casten, Lawton, Winter, Kleban, & Sando, 1997). In general, we found little evidence of relationships between positive discrete emotions and health, which may mean that poor health does not undermine positive emotions. If good health is not a prerequisite for positive day-to-day emotions, the prospect of becoming ill does not necessarily imply the end of a positive emotional life. On the other hand, if the causal relation between health and emotions is reversed in order, as suggested by experimental studies that have manipulated emotions and assessed subsequent health (e.g., Cohen, Tyrrell, & Smith, 1993), our findings may imply that positive emotions do little to promote good health in later life. Our data do not permit us to examine the causal pathways of the emotion–health relationships.

Table 3. Correlations Between Social Support and Network Variables, Physical Health and Well-Being, Life Satisfaction, and Discrete Emotions

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Perceived Support</th>
<th>Marital Status</th>
<th>Cohabitation</th>
<th>Perceived Seriousness</th>
<th>Chronic Conditions</th>
<th>Perceived Health</th>
<th>Life Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy</td>
<td>.27***</td>
<td>.01</td>
<td>.07</td>
<td>-.03</td>
<td>-.09</td>
<td>.12</td>
<td>.39***</td>
</tr>
<tr>
<td>Grateful</td>
<td>.20***</td>
<td>-.10</td>
<td>-.07</td>
<td>-.01</td>
<td>-.04</td>
<td>-.01</td>
<td>.14*</td>
</tr>
<tr>
<td>Content</td>
<td>.19***</td>
<td>-.02</td>
<td>-.02</td>
<td>-.05</td>
<td>-.11</td>
<td>.15*</td>
<td>.32***</td>
</tr>
<tr>
<td>Hope</td>
<td>.16***</td>
<td>.05</td>
<td>.03</td>
<td>.10</td>
<td>-.02</td>
<td>.06</td>
<td>.11</td>
</tr>
<tr>
<td>Pride</td>
<td>.20***</td>
<td>.09</td>
<td>.04</td>
<td>.03</td>
<td>-.04</td>
<td>.01</td>
<td>.11</td>
</tr>
<tr>
<td>Relief</td>
<td>.02</td>
<td>.00</td>
<td>-.01</td>
<td>-.00</td>
<td>.15*</td>
<td>-.03</td>
<td>.02</td>
</tr>
</tbody>
</table>

Negative

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Perceived Support</th>
<th>Marital Status</th>
<th>Cohabitation</th>
<th>Perceived Seriousness</th>
<th>Chronic Conditions</th>
<th>Perceived Health</th>
<th>Life Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frustration</td>
<td>.04</td>
<td>.01</td>
<td>.01</td>
<td>.17**</td>
<td>.22***</td>
<td>-.15***</td>
<td>-.28***</td>
</tr>
<tr>
<td>Sad</td>
<td>-.01</td>
<td>-.09</td>
<td>-.09</td>
<td>.27***</td>
<td>.27***</td>
<td>-.19***</td>
<td>-.29***</td>
</tr>
<tr>
<td>Anger</td>
<td>.04</td>
<td>.18***</td>
<td>.19***</td>
<td>.02</td>
<td>.07</td>
<td>-.14*</td>
<td>-.21***</td>
</tr>
<tr>
<td>Regret</td>
<td>-.01</td>
<td>.10</td>
<td>.14*</td>
<td>.11†</td>
<td>.19***</td>
<td>-.06</td>
<td>-.17***</td>
</tr>
<tr>
<td>Boredom</td>
<td>-.06</td>
<td>.03</td>
<td>.01</td>
<td>.11†</td>
<td>.10</td>
<td>-.15*</td>
<td>-.39***</td>
</tr>
<tr>
<td>Guilt</td>
<td>-.02</td>
<td>.12†</td>
<td>.15*</td>
<td>.06</td>
<td>.12†</td>
<td>-.07</td>
<td>-.06</td>
</tr>
<tr>
<td>Fear</td>
<td>-.04</td>
<td>-.03</td>
<td>-.02</td>
<td>.07</td>
<td>.20**</td>
<td>-.07</td>
<td>-.20***</td>
</tr>
<tr>
<td>Shame</td>
<td>-.01</td>
<td>.10</td>
<td>.09</td>
<td>.08</td>
<td>.13†</td>
<td>-.03</td>
<td>-.10</td>
</tr>
</tbody>
</table>

Notes: For all continuous variables, higher scores reflect stronger values. In the case of dichotomous variables, higher scores are reflective of the label: marital status (0 = unmarried, 1 = married), cohabitation (0 = living alone, 1 = 1 or more cohabitants), perceived seriousness of illness (0 = no, 1 = yes).

1p < .05 (marginally significant); *p < .017; **p < .005; ***p < .001.
being, was correlated significantly with 9 of the 14 discrete emotions (Table 3). The strongest associations with life satisfaction were found for one positive emotion, happiness, and one negative emotion, boredom. This suggests that life satisfaction, which is construed as a global positive measure, is also sensitive to negative emotions. Our findings extend the past research that has identified a relationship between global measures of positive and negative affect and life satisfaction (e.g., Suh, Diener, Oishi, & Triandis, 1998).

To summarize, Table 3 illustrates that positive emotions show associations with perceived social support and life satisfaction. However, relative to positive emotions, negative emotions are more often linked to the two social network measures of marital status and cohabitation and the three health measures. Taken together, these findings might suggest a more prominent role of discrete negative emotions than discrete positive emotions in the domains of social networks and health.

Global composite emotion measures and selected variables.—To examine whether selected variables predicted global emotion measures, we conducted six separate multiple regression analyses. The previously described variables (i.e., demographics, social support, health and well-being) represented the independent variables, and the three components (positive, negative, total) of affect and complexity were the dependent variables. Because cohabitation was highly correlated with marital status ($r = .85$) and would have caused multicollinearity problems, it was excluded as a predictor. Subsequent analyses of collinearity diagnostics revealed that the models with the remaining predictors were free of multicollinearity (tolerance values >.20; variance inflation factors <4.0).

Table 4 shows the overall model $F$ values for each of the six models that were significant at $p < .05$, with a total degrees of freedom of 280 (regression $df = 9$, residual $df = 271$) and $R^2$ values ranging from .055 to .133. Table 4 also provides a summary of the beta weights for the predictors of the global composite measures in Models 1 through 6. Just as in the case of discrete emotions, the demographic variables were unrelated to global measures; age, gender, income, and education did not predict any of the six global indexes. For the analyses of affect, the predictors differed for the positive and negative indexes. Higher levels of perceived social support predicted higher levels of positive affect (Model 1: $\beta = .299$). In contrast, being married (Model 2: $\beta = .156$) and having more chronic conditions (Model 2: $\beta = .236$) predicted the level of negative affect.

The findings regarding the global complexity measures parallel those that emerged in the analyses of affect. Again, for negative complexity, being married (Model 5: $\beta = .185$) and having more chronic health conditions (Model 5: $\beta = .238$) predicted a greater complexity or breadth of negative emotions. And again, perceived social support was the only significant predictor of positive complexity (Model 4: $\beta = .189$), with more support predicting a greater complexity in positive emotions.

The results in Table 4 highlight the role of social support in later-life emotions and are consistent with our previously reported findings that older individuals who live with a spouse or another person express more anger, regret, and guilt. Table 4 shows that married individuals also reported a greater complexity of negative emotions than those who were not married. In contrast, they did not report a narrower range of positive emotions, nor did they have lower overall global affect. Consistent with the previously reported significant correlations between perceived support and five of the six discrete positive emotions, Table 4 also shows that perceived support predicted a greater complexity or range of positive emotions. Taken together, these findings may be congruent with the socioemotional selectivity theory (Carstensen, 1992) in which social interaction is selected in an attempt to regulate affect. That is, older individuals may be selecting social encounters for the purpose of promoting positive emotions and reducing negative emotions. Of course, in the socioemotional selectivity theory, social encounters are seen as causing the positive emotions, and the present correlational analyses do not tell us whether perceptions of higher support led to the more frequent or varied positive emotions or whether people who experience more frequent or varied positive emotions attract or simply perceive more support.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Affect</th>
<th></th>
<th>Complexity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
</tr>
<tr>
<td>Age</td>
<td>.100</td>
<td>.024</td>
<td>.087</td>
<td>.064</td>
</tr>
<tr>
<td>Gender (0 = male, 1 = female)</td>
<td>.025</td>
<td>.082</td>
<td>.073</td>
<td>.026</td>
</tr>
<tr>
<td>Monthly income</td>
<td>-.030</td>
<td>-.047</td>
<td>-.053</td>
<td>-.076</td>
</tr>
<tr>
<td>Education</td>
<td>.001</td>
<td>.055</td>
<td>.037</td>
<td>.009</td>
</tr>
<tr>
<td>Marital status (0 = unmarried, 1 = married)</td>
<td>.042</td>
<td>.156*</td>
<td>.135</td>
<td>.081</td>
</tr>
<tr>
<td>Perceived social support</td>
<td>.299**</td>
<td>-.074</td>
<td>.165**</td>
<td>.189**</td>
</tr>
<tr>
<td>Chronic health conditions</td>
<td>-.029</td>
<td>.236**</td>
<td>.138</td>
<td>-.046</td>
</tr>
<tr>
<td>Perceived health</td>
<td>.037</td>
<td>-.093</td>
<td>-.036</td>
<td>-.112</td>
</tr>
<tr>
<td>Seriousness of illness (0 = no, 1 = yes)</td>
<td>-.025</td>
<td>.063</td>
<td>.024</td>
<td>-.046</td>
</tr>
<tr>
<td>$F$ (Overall model)</td>
<td>1.77</td>
<td>4.60</td>
<td>3.40</td>
<td>3.22</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.055</td>
<td>.133</td>
<td>.101</td>
<td>.096</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p ≤ .001.
Finally, the results in Table 4 underscore the connection between poor health and negative affect in later life. Poor health, as measured by the number of chronic health conditions, predicted negative affect and the complexity or breadth of negative emotions (Table 4). The causal direction of the relation between negative affect and poor health, however, can only be clarified with carefully conducted longitudinal studies.

General Discussion

The recently experienced discrete emotions of the community-dwelling older individuals in our study were characterized more by happiness, contentment, gratitude, hope, relief, and pride than by frustration, sadness, anger, and so forth. This reflects much more positivity than negativity, conveying an emotional reality quite discrepant from the image of the depressed older person and quite similar to emotional profiles of younger adults. In fact, several parallel findings emerged when comparing the common discrete emotions measured in our study of exclusively older individuals (M age = 80 years) to those in Carstensen and colleagues’ (2000) life-span study (M age = 55 years). First, in both studies, among the positive discrete emotions, happiness and contentment were reported most frequently, and pride was among the least frequently reported. Second, among the negative emotions, frustration, followed by sadness, were reported most frequently, and shame was reported least frequently. Third, in both studies, every positive discrete emotion was experienced relatively more frequently than every discrete negative emotion. These similarities are quite striking given the study differences in sample characteristics (e.g., age, ethnic composition) and measurement approaches (single vs. multiple measures).

Our emphasis on discrete emotions is not intended to undervalue more global affective measurement approaches. Rather, the evaluation of global emotion measures, in combination with discrete emotions, provides a comprehensive description of later-life emotions. Without including global measures in our study, we would not have learned that the emotional experience of older individuals is generally characterized by a richness or complexity. Nor would we have discovered the complete absence of negative emotions for many individuals, supporting the contention that older individuals are adept at regulating negative affect.

Study Strengths and Limitations

The reliability of our measures was enhanced by assessing emotions in the past 2 days, the value of which is supported by Suh, Diener, and Fujita’s (1996) finding that well-being was influenced only by events that occurred recently. Although older people presumably have a well-preserved memory for emotional information (Carstensen, 1998), proximal emotions are also more reliably assessed than are distant ones. For example, the recall of anger that was experienced yesterday is apt to be more accurate than the recall of anger that was experienced months ago. By examining proximal emotions, we avoided the inflation of scores that results when individuals are asked about emotions that occur over longer periods of time (Watson, Clark, & Tellegen, 1988).

Although attempts were made to enhance the reliability of our measures, a potential threat to their validity is social desirability, especially because older individuals may be particularly prone to overreport positive emotions and underreport negative emotions. Additionally, such biases may be exacerbated by face-to-face interviews, which make the exchange more personal and therefore more prone to social desirability. On the other hand, this is the method of choice with much older individuals who often need clarification of instructions and assistance due to visual and dexterity problems that interfere with written responses. Moreover, although social desirability scores have been shown to correlate modestly with self-reports of subjective well-being (Myers & Diener, 1995), they also predict peer reports of subjective well-being (Diener, Sandvik, Pavot, & Gallagher, 1991). Indeed, subjective well-being measures have been shown to have good construct validity, they converge with observational data, and they have temporal stability (Myers & Diener, 1995). Thus, although social desirability is a potential problem in all research on self-report measures of well-being, social desirability does not invalidate measures of subjective well-being. For these reasons and because our results are consistent with Carstenson and colleagues’ (2000) life-span analysis, we believe that the positive image portrayed by our results is unlikely due solely to social desirability.

A Final Note

In summary, the large majority of older people in our study reported experiencing positive discrete emotions during a 2-day period, they experienced them frequently, and they displayed a richness or complexity in their positive emotional profiles. As such, old age seems to be characterized not as a time of deep emotional despair but rather as a time when individuals experience frequent and varied positive emotions. The predominance of positive discrete emotions, such as happiness, contentment, and gratitude would suggest that even in later life individuals may continue to experience the positive emotions that can in turn help to build their personal, physical, and intellectual resources (Fredrickson, 2001).

Our optimistic message is not intended to trivialize the many challenges associated with aging, and our data do not mean that old age is a time of bliss. In fact, future research should explore the types of individuals or the conditions under which deviations from this general positive profile can be identified. Moreover, future research should attempt to understand the antecedent conditions that explain why older individuals experience both positive and negative emotions. Although the challenges of aging should never be trivialized, our results indeed provide a very optimistic view of emotions as experienced by older people, even those who are poor, not well educated, or physically unwell.

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**Editor Nominations**

**Journal of Gerontology: Psychological Sciences**

The Gerontological Society of America’s Publications Committee is seeking nominations for the position of Editor of the *Journal of Gerontology: Psychological Sciences*.

The position will become effective January 1, 2004. The Editor makes appointments to the journal’s editorial board and develops policies in accord with the scope statement prepared by the Publications Committee and approved by Council (see the journal’s masthead page). The Editor works with reviewers and has the final responsibility for the acceptance of articles for his/her journal. The editorship is a voluntary position. Candidates must be members of The Gerontological Society of America and dedicated to developing a premier scientific journal.

Nominations and applications may be made by self or others, but must be accompanied by the candidate’s curriculum vitae and a statement of willingness to accept the position. The deadline for all nominations and applications is March 14, 2003. Nominations and applications should be sent to the GSA Publications Committee, Attn: Jennifer Campi, The Gerontological Society of America, 1030 15th Street, NW, Suite 250, Washington, DC 20005-1503 or publications@geron.org.