Content and Function of the Self-Definition in Old and Very Old Age

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Spontaneous self-definition was investigated in a heterogeneous sample of N = 516 participants of the Berlin Aging Study, aged between 70 and 103 years. The content of the self-definition revealed that old and very old persons view themselves as active and present-oriented. The self-definition also reflected an inward orientation, and central themes of life-review, health, and family. Participants generated more positive than negative evaluations in their self-definition, but the ratio of positive to negative evaluations was less favorable for the oldest old (> 85 years) than that of persons aged 70 to 84 years. Older individuals with more health-related constraints reported fewer and less rich self-defining domains (i.e., a less multifaceted self-definition). Positive emotional well-being was associated with naming more and richer self-defining domains. Multifacetedness, however, did not buffer against the negative effect of low functional capacity on subjective well-being.

Content of the Self-Definition in Very Old Age

In very old age, themes that were relatively unimportant in young and middle adulthood gain in salience (P. B. Baltes, 1987; 1997; Breytspraak, 1994; Erikson, 1982; Havighurst, 1963; Neugarten, 1964; Thomae, 1979; 1987). Erikson (1959), for example, proposed that old age is characterized by a tension between integrity and despair, and that this tension manifests itself by reflections about the past and thoughts about death. Peck (1968) added three themes to this description: (a) coping with physical decline, (b) loss of professional status, and (c) the process of dying. L’Ecuyer (1990) suggested that the reorganization of the self-definition is the major task between ages 60 and 77. Similarly, Waterman and Archer (1990) argued that in late adulthood, due to a decrease in professional and family roles and obligations, there is increased room for new self-definings in such domains as hobbies and personal interests. After age 80, according to L’Ecuyer, the central task is to conclude the process of self-definition in the form of a complete Gestalt (“oeuvre”), by means of a life review and the integration of the different aspects of the self-definition (Waterman & Archer, 1990). Thus, the self-definition of very old persons may rely on experiences, achievements, and events that happened in the past, rather than in the present or the future. Also, the themes “life review” and “death and dying” should have a particularly high salience for self-definition in old age.

As Peck (1968) proposed, body image (i.e., physical attractiveness and appearance) should be less important for defining oneself in old age, in comparison to young adulthood, because physical decline and approaching one’s death might lead to the transcendence of the importance of good looks. Similarly, financial concerns might be unimportant for the self-definition of older persons because materialistic belongings are likely to lose importance when one’s future is limited and one has to face death. In addition, finances might be less of an issue of concern for Ger-
man elderly people because, as a function of the welfare system, their pensions are relatively fixed.

The domains of health, everyday competence and independent living, and daily living routine should also be very important to the self-definition in advanced old age, because they are much more vulnerable to change than in previous life stages (Atchley, 1991; M. M. Baltes, Maas, Wilms, Borchelt, & Little, in press; M. M. Baltes & Silverberg, 1994; Whitbourne, 1985). Empirical evidence for the salience of health in older adults' self-concept stems from Hooker's (1992) work on possible selves, which showed that, compared with college-students, older adults aged 52 to 89 years were more likely to report possible selves in the domain of health.

Outdoor activities which require physical mobility are likely to be of minor importance for old and very old people, because they are at a high risk for mobility-related constraints (Manton, Stallard, & Corder, 1995). On the other hand, hobbies and interests that do not require physical mobility should be more salient for older individuals. After retirement, they have ample time to invest in this life domain.

Based on Carstensen's Socioemotional Selectivity Theory (SST, Carstensen, 1993), it can be expected that family represents an important area for older persons' self-definitions. According to SST, people are increasingly selective with regard to their social partners when approaching the end of life. Whereas social partners become less important for gaining information with increasing age, emotion regulation becomes an increasingly important motive for social contact in old age. Family members and relatives, usually long-standing members of one's social convoy (Antonucci, 1990), might have particular emotional salience in old age as the number of same-aged friends decreases because of their health-related problems, reduced mobility, or because they have died.

There are very few studies that include substantial numbers of individuals older than 85 years, and use open-ended measures (rather than questionnaires or adjective checklists) to access central self-defining domains (one exception is Johnson & Barer, 1997). The few investigations of self-definition that have included individuals over the age of 60 tend to confirm our expectations, based on theoretical considerations, concerning the saliency of certain themes and life domains for this age group, but the results are somewhat inconsistent. Dittmann-Kohli (1995), for example, found that previous life events and life history, as well as physical integrity and functional capacity versus physical decline and its consequences, represent essential aspects of the self-definition of adults between the ages of 60 and 90 years compared with younger adults (15–34 years). McCrae and Costa (1988) found age-related differences in the self-definition of persons between 32 and 84 years of age: With increasing age, themes such as age, health, life events, life situations, hobbies/interests, and attitudes were mentioned more frequently, whereas the frequency of the domains family roles, social relationships, neuroticism, personality traits, and daily living routines decreased. George and Okun (1985), however, found no significant age-related differences in their cross-sectional comparison of the content of the self-definition of three age groups (45–54, 55–64, and over 65 years). Likewise, Filipp and Klauser (1986), reported no age differences in a cross-sectional comparison of five male cohorts (born between 1905 and 1945). A longitudinal analysis of the changes in self-definitions over 26 months, however, showed that themes such as social roles, political or religious attitudes, body image, and social style were increasingly reported to be self-defining, whereas emotionality and autonomy were mentioned less frequently.

Functional Characteristics of the Self-Definition: Evaluation and Multifacetness

Two aspects of the self-definition are considered to be essential for a positive self-view, and for maintaining continuity of the self-definition: (a) the personal evaluation of self-defining domains as positive or negative, and (b) the multifacetness of the self-definition. In order to empirically investigate their proposed function, both dimensions of the self-definition (evaluation and multifacetness) were included in the present study and related to an independent measure of emotional well-being.

Several authors have repeatedly stressed that positive or negative evaluation of self-defining aspects is very important for a general sense of self-worth and emotional well-being (Epstein, 1990; Pelham & Swann, 1989; Marsh, 1987; Showers, 1992; Showers & Ryff, 1996). Research on a global sense of self-worth has revealed few age-related differences (cf., Bengtson, Reedy, & Gordon, 1985; George, 1981; Herzog & Rodgers, 1981). Whether and how old and very old adults evaluate themselves in their spontaneous self-definition is not known. This was one goal of the present study. Further, we were interested in whether these evaluations are related to emotional well-being in advanced age. We expected that, in late adulthood, the increasingly negative gain-loss-balance (Heckhausen, Dixon, & P. B. Baltes, 1989) would be reflected in a positive correlation between age and the number of negatively evaluated self-defining domains, and a negative correlation between age and the number of positively evaluated domains.

*Multifacetness* refers to the number of self-defining domains and their richness (i.e., the number of aspects within self-defining domains), and serves to guarantee continuity of the self-definition (Freund, 1995). A multifaceted self-definition (i.e., a self-definition that is comprised of a large number of different domains that contain many aspects) provides alternative sources for a self-definition and offers more possibilities to compensate for loss and impairment, and, therefore, is likely to favor continuity (Linville, 1987; Rosenberg & Gara, 1985; Tofts, 1983; Ogilvie, 1987). For example, with regard to richness, if the self-definition of a person in the domain "hobbies" contains only the aspect "I play tennis," this self-defining domain cannot be maintained, if playing tennis is impossible due to physical constraints. If, however, the domain "hobbies," apart from playing tennis, contains additional aspects such as coach, referee, advisor, or spectator, as well as watching movies, then the self-defining domain "hobbies" can be maintained. Not only is tennis likely to continue as a field of interest if physical constraints limit active participation, but there is the additional aspect of enjoying movies. We therefore assumed that the higher the degree of richness of a self-defining domain, that is, the more
aspects it involves, the less vulnerable it should be to the losses and health constraints of old age.

Similarly, a large number of self-defining domains is expected to provide more continuity because there is a greater supply of alternative or substitute domains which come into play when one is lost. For instance, if one out of an original ten domains is lost, there are still nine left, which means that the self-definition is hardly impaired. The same loss would be severe if the self-definition had originally been based on only two domains. This function of maintaining continuity is, of course, best investigated in a longitudinal study.

Given the increased likelihood of losses and of health-related constraints in old age (e.g., Manton, Stallard, & Corder, 1995), the stability of the self-definition is especially at risk for elderly people. The maintenance of the self-definition is often posited as an important task in old age, essential for the well-being of an individual (e.g., P. B. Baltes & Baltes, 1990; Brandstätter & Greve, 1994; Troll & Skaff, 1997). Many self theorists have pointed out the importance of maintaining one’s self-definition (e.g., Allport, 1961; Epstein, 1990; Lecky, 1945; Swann, 1990). Epstein (1973), and later Swann (1990), suggested that the main function of the self-definition is to structure and organize experience. According to this view, the self-definition offers concepts, which guide behavior, provide orientation for interacting with the environment, and provide a sense of identity (Allport, 1961). Symbolic interactionists have long emphasized the importance of social partners for self-related knowledge, as well as the important function of the self-definition for communicating to social partners who you are and how you are likely to behave (e.g., Cooley, 1902; Mead, 1925). More recently, Stryker (1987) stressed the importance of personal commitment to social roles (identities). According to Stryker, identities function to guide expectations, and to orient behavior.

If a multifaceted self-definition (i.e., a self-definition composed of a large number of rich domains) serves as a source of alternative self-defining domains and aspects, it might contribute to emotional well-being in advanced old age, even in the face of poor health and physical constraints. Staudinger, Freund, Linden, and Maas (in press), for example, reported that a multifaceted self-definition reduced the vulnerability for depression in connection with physical impairment. To date, however, it has not been shown whether multifacetness has an impact on the positive aspects of subjective well-being.

Central Questions of the Present Study

The present study asked five central questions about the content, evaluative valence, and multifacetness of the self-definition of individuals aged between 70 and 100+ years.

(1) Which domains are represented in older persons’ self-defin-itions? We assumed that the content of the self-definition would reflect the themes salient for this age group. We expected the following domains to be particularly salient for old (79 to 84 years) and very old (85 to 100+ years) persons: health, everyday competence, daily living routines, interests / hobbies, family, life-balance / life-review, and death / dying. Furthermore, we expected that the self-definition would be rooted in past rather than in present or future events, achievements, and experiences. Professional status may also play a role in older persons’ self-definition, because professional status carries personal as well as societal meaning that goes beyond retirement. Finally, we hypothesized that body image, financial considerations, and outdoor activities would be domains that infrequently characterize older persons’ self-definition. In the present study, the salience of a given life-domain for older adults’ self-definition was operationalized as the number of participants nominating the respective life-domain as self-defining.

(2) Is the content of the self-definition different for old and very old persons? We expected that more very old persons (85-100+ yrs) than old persons (70-84 yrs) would name the domains of health, everyday competence, daily living routines, interests / hobbies, family, life-balance / life-review, and death / dying as self-defining. In addition, we hypothesized that very old adults would include statements about body image, financial considerations, and outdoor activities less frequently in their self-definition than persons aged between 70 to 84 years.

(3) Do old and very old persons differ in the evaluation of their self-defining domains?

(4) Are there differences between old and very old persons with regard to the multifacetness of their self-defini-tions? We expected that the number of different self-defining domains, as well as their richness, decrease due to the increasing constraints and losses experienced in advanced old age.

(5) Do individuals who produce a multifaceted self-definition or include positive evaluations also report higher emotional well-being?

METHODS

Data are reported from the first measurement occasion (1990–93) of the Berlin Aging Study (BASE: P. B. Baltes, Mayer, Helmhchen, & Steinhagen-Thiessen, in press; P. B. Baltes & Smith, 1997). In this article, we only refer to those aspects of BASE which are relevant for this study. The research design, sample selection, and procedure of BASE are described in detail elsewhere (see P. B. Baltes et al., in press; Lindenberger, Gilberg, Pötter, Little, & P. B. Baltes, in press; P. B. Baltes & Smith, 1997).

Sample

The present study is based on the first measurement sample of N = 516 participants in the Berlin Aging Study (for details see P. B. Baltes & Smith, 1997). The heterogeneous age-by-sex stratified sample, which was locally representative of the western districts of Berlin, included 258 women and 258 men aged between 70 and 103 years. The sample was divided into 6 age/cohort groups (each n = 86): 70–74 years (born 1915–1922), 75–79 years (born 1910–1917), 80–84 years (born 1905–1913), 85–89 years (born 1900–1908), 90–94 years (born 1896–1902), and 95–103 years (born 1883–1897). Selectivity analyses (Lindenberger et al., in press) indicated that the sample was positively selected. However, selection effects were relatively small and
did not affect in any major way the variance and covariance structure of the major constructs of BASE.

The average age of the BASE sample at the first measurement occasion was 85 years. At the time of the study, 30% of the sample were married, 55% widowed, 7% divorced, and 8% had never married. Eighty six percent of the BASE participants resided in their own homes and 14% in institutions (e.g., homes for seniors, nursing homes, hospitals). Representative for these cohorts in Germany, 65% of the sample had primary level education, 28% secondary level, and 8% tertiary level. The percentage of non-German participants in the BASE sample was very low (4.5%), matching the population distribution for over 70-year-olds. During the 12-month period after study participation, 5.6% of the sample had died, a mortality value similar to age-mortality statistics for this age range and its stratified sample composition.

Measures

Self-definition.—The self-definition was assessed using an oral version of the open question “Who am I?” (Bugental & Zelen, 1950; Kuhn & McPartland, 1954). This open-ended measure seemed to be especially appropriate for assessing the content of the self-definitions of old and very old individuals, as there is practically no reliable empirical knowledge about the salient life-domains of this age group (cf. Filipp & Klauer, 1986; for a detailed theoretical discussion of using open-ended measures for assessing the self-definition see Freund, 1995). Subjects were asked to generate ten answers to the question “Who am I?”. These answers were taped and transcribed verbatim. Two examples of protocols are provided in Table 1.

There were two main steps to the procedure used to code the answers to the question “Who am I?”. In the first step, “Who am I?” protocols were segmented into meaningful idea units defined on the basis of a coding system consisting of 24 content domains (see Table 2 for a list) that had been developed specifically for assessing self-definition of old and very old people (Freund, 1995; Freund & Smith, in press). A segment was defined as beginning with a new thematic content category and ending with the start of a different category (Krippendorf, 1980). Agreement between two independent persons segmenting the protocols was high ($M = 95.1\%$ and $M = 86.8\%$, computed for a sample of $n = 156$; agreement was calculated against “target” segmented protocols completed by a third person).

In a second step, idea units (segments) were coded as reflecting one of the 24 content categories (listed in Table 2)

<table>
<thead>
<tr>
<th>Example 1: 100 year old man</th>
<th>Domain</th>
<th>Richness</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a male / who is 100 years old</td>
<td>Demographic variables</td>
<td>2</td>
</tr>
<tr>
<td>During my life I have been to many places in the world and have seen a lot of things</td>
<td>Life review</td>
<td>1</td>
</tr>
<tr>
<td>Now, I am living here in Berlin</td>
<td>Demographic variables</td>
<td>1</td>
</tr>
<tr>
<td>I’ve been on the pension for more than 40 years</td>
<td>Professional occupation</td>
<td>1</td>
</tr>
<tr>
<td>My hobby was furniture making and I made a lot of my present furniture myself</td>
<td>Hobbies/interests at home</td>
<td>1</td>
</tr>
<tr>
<td>I traveled with my wife every year. But not as far away as it is usual nowadays.</td>
<td>Hobbies/interests outdoors</td>
<td>1</td>
</tr>
<tr>
<td>I have a lot of friends in my life of whom, unfortunately, only a few are still alive. / But I am happy to know that I still have very close relationships to friends my age as far as they are still there.</td>
<td>Social relations</td>
<td>2</td>
</tr>
<tr>
<td>For the last 20 years I’ve not been able to read or write anymore, and that makes life really difficult. / I’m not able to watch TV anymore.</td>
<td>Everyday competence</td>
<td>3</td>
</tr>
<tr>
<td>Since my wife died not long ago I feel very lonely</td>
<td>Emotions</td>
<td>1</td>
</tr>
<tr>
<td>To divert myself I still have the radio.</td>
<td>Hobbies/interests at home</td>
<td>1</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Example 2: 89 year old woman</th>
<th>Domain</th>
<th>Richness</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not do a lot of things. / I tidy up my apartment.</td>
<td>Daily living routine</td>
<td>2</td>
</tr>
<tr>
<td>Politics interest me. / And how it [the reunification of Germany] will all work out. / I read the newspaper.</td>
<td>Interests reflecting participation (at home)</td>
<td>3</td>
</tr>
<tr>
<td>I feel lonely.</td>
<td>Emotions</td>
<td>1</td>
</tr>
<tr>
<td>I play cards and solitaire. / I keep myself busy looking after my flowers.</td>
<td>Interests/hobbies at home</td>
<td>2</td>
</tr>
<tr>
<td>I am unselfish.</td>
<td>Personality traits</td>
<td>1</td>
</tr>
<tr>
<td>I can hardly hear anymore.</td>
<td>Everyday competence</td>
<td>1</td>
</tr>
<tr>
<td>I’m the grandmother of some dear grandchildren</td>
<td>Family</td>
<td>1</td>
</tr>
<tr>
<td>I’ve come to believe that to give is more blessed than to receive</td>
<td>Life knowledge</td>
<td>1</td>
</tr>
<tr>
<td>Financially I have enough money to live on</td>
<td>Financial considerations</td>
<td>1</td>
</tr>
<tr>
<td>In a way, I think my life was worthless.</td>
<td>Life review</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Self-defining statements (segmented idea units) were coded for content (24 categories), and for three dimensions (richness, evaluation, time). The richness of a self-defining statement (i.e., number of aspects mentioned within each content category) is indicated by sections separated with slashes.
Segments were also coded in separate rounds with respect to three dimensions: (a) **Richness**: How many different aspects were mentioned to elaborate a self-defining domain. (b) **Time reference** (past, present, or future); and (c) **Explicit, personal evaluation**: A self-defining statement may be simply descriptive (neutral), though it may also convey an explicit positive or negative evaluation. Statements that included an explicit evaluation (e.g., “I am a very good cook,” or “It’s so sad that I cannot get around in the city anymore”) were coded as positive or negative depending on the words used. All other statements were coded as neutral (e.g., “I am interested in politics.”). These neutral statements may have implied desirable or less desirable characteristics, but, for the present purpose, we decided only to consider evaluations explicitly made by the older person. This coding strategy is more objective than one which would rely on the value judgments of coders as to whether a statement was positive or negative. For the three dimensions, agreement between two coders was satisfactory (computed for a sample of \( n = 156 \), \( \kappa = .82 \) for richness, \( \kappa = .84 \) for time reference, and \( \kappa = .85 \) for personal evaluation).

The idea-units (segments) in the transcribed protocols were coded and assigned to one of the 24 content categories as well as rated along the three dimensions according to the explicit statements contained in the self-definitions, avoiding, as far as possible, any interpretation on the part of the raters. The coding-system was adapted from previous coding schemes in the literature. Specifically, our coding system adapted and expanded the systems developed by Cross and Markus (1991), Epstein (1973), Filipp and Klauer (1986), George and Okun (1985), Gordon (1968), and Kuhn and McPartland (1954) (for a more detailed discussion of how the coding system was derived, see Freund, 1995).

Measures of functional health constraints. — Physical and sensory constraints were operationalized as a unit-weighted standardized composite of indicators for mobility (self-reported maximal walking distance [7-point scale], motor balance as assessed by the Romberg Test [keeping balance while standing with closed eyes and arms outstretched], and the number of steps needed to do a full 360 degree circle), near and distance visual acuity (using standardized reading tables, measured in Snellen Decimals), audition (assessed with a Bosch ST-20-1 audiometer measuring pure tones with frequencies ranging from 0.25 to 8.00), and self-reported independence with respect to everyday competence (ADL, Katz, Down, Cash, & Grotz, 1970). Details regarding the various assessment procedures are described in Steinhagen-Thiessen and Borchelt (in press; see also Marsiske, Klumb, & M. M. Baltes, 1997; Lindenberger & Baltes, 1997).

**Emotional well-being.** — Positive and negative emotions were assessed by means of a checklist, containing 10 positive and 10 negative “emotional” adjectives (Watson, Clark, & Tellegen: PANAS, 1988). Subjects were asked to indicate on a 5-point scale how often they had experienced each emotion in the course of the last year (for detailed in-
formation, see Smith, Fleeson, Settersten, & Kunzmann, in press). Mean values were computed for the 10 positive and 10 negative items (Cronbach’s Alpha for positive emotions: $\alpha = .78$, for negative emotions: $\alpha = .81$). In accordance with Watson, Clark, and Tellegen (1988), positive and negative emotions were not correlated in the Berlin Aging Study ($r = .05$).

Subjective well-being was assessed using a 15-item German translation of the Philadelphia Center Morale Scale (PCGMS, Lawton, 1975; Liang & Bollen, 1983). Participants indicated on a five-point Likert-scale how much they agreed with each item (1 = does not apply to me at all, 5 = applies very well to me; Cronbach’s Alpha $\alpha = .83$).

**Procedure**

All testing was carried out in the subject’s place of residence (e.g., private home, nursing home, hospital) by trained research assistants. The “Who am I?” was collected as the first item in a 90-minute interview session about self and personality (see Smith & Baltes, in press, for details about this session). The PANAS was included later in the same session. The interview took place in individual, face to face sessions. All responses were spoken by the participants and recorded by the interviewer (as well as tape-recorded). Health-measures were obtained in a different session by physicians.

**RESULTS**

All participants ($N = 516$) were able to produce some response to the question “Who am I?”. Furthermore, 86.7% of the protocols contained at least 10 self-defining statements that could be coded according to the 24 content categories. Only 4.2% of the sample generated fewer than five statements that could be coded as falling into one of the 24 categories. Interrater agreement, computed for a subsample of $n = 156$, was Kappa $\kappa = .85$ for content categories, $\kappa = .82$ for richness, $\kappa = .85$ for personal evaluation, and $\kappa = .84$ for time reference (Kappa computed according to Brennan & Prediger, 1981). The rating procedure proved to be sufficiently reliable. In sum, the “Who am I?” proved to be a feasible method for assessing spontaneous self-definitions in a sample including the oldest olds.

**Self-Defining Domains**

Figure 1 shows for the 24 content domains in the coding system (Table 2), the percentage of participants who reported a given domain as being self-defining at least once. The frequency distribution indicates that the self-definition of old and very old persons comprised a broad spectrum of themes and life-domains. As Figure 1 shows, even in advanced old age an activity-oriented lifestyle was predominant. The majority of the sample considered hobbies and interests which can be pursued at home (general interests: 61%; interests re-
flecting social participation: 47%) as well as daily living routine (48%) as self-defining. Also as predicted, family proved to be one of the most salient domains for older persons' self-definition (rank 4 of the distribution). We explored the possibility as to whether naming family or other social partners depended on marital status. Marital status (married: $n = 154$ vs single/divorced/widowed: $n = 362$) did not affect the frequency with which participants mentioned family as self-describing. Marital status, however, did affect the frequency with which participants mentioned other social partners (friends, acquaintances) in their self-definition. Participants who were not married (single, divorced, or widowed) were significantly more likely to name friends/acquaintances than married participants ($\chi^2 = 17.8, p < .001$).

Contrary to expectations, thoughts about death and dying played a rather insignificant role, and constituted only a very small part of the self-definition (5%). At the same time, the self-definition of older persons reflected the expected inwards orientation (life review: 42%) and preoccupation with one's own person (personal characteristics: 45%). Likewise, health played a central role for the self-definition of old and very old individuals (rank 3 of the frequency distribution). Everyday competence, however, was reported as being self-defining by only one third of the sample (30%). Old and very old persons also defined themselves as more active than expected: 41% of the sample mentioned hobbies and interests away from home.

**Age-Related Differences in the Content of the Self-Definition**

Figure 2 shows separate profiles of the content of the self-definition for the age groups 70 to 84 years (old) and very old (85-103 years) participants of BASE. Illustrated is the percentage of participants who named a domain as self-defining at least once.

![Figure 2](image-url)

**Figure 2.** Content of the self-definition of old (70-84 years) compared with very old (85-103 years) participants of BASE. Illustrated is the percentage of participants who named a domain as self-defining at least once.
85 to 103 years (very old). Chi-square tests were used to investigate age-related differences with respect to the frequency of reported self-defining domains. Due to the large number of computed frequency comparisons, the alpha level was a priori set to a maximum of 1%. Compared to old persons, very old individuals defined themselves less frequently in the domains family/relatives ($\chi^2 = 7.97, p < .01$), interests and hobbies outdoors (general interests; $\chi^2 = 21.12, p < .001$), interests reflecting social participation ($\chi^2 = 3.96, p = .05$), and interpersonal style ($\chi^2 = 9.25, p < .01$), and more frequently in the domains daily living routine ($\chi^2 = 8.96, p < .01$) and sociodemographic variables ($\chi^2 = 23.42, p < .001$). Contrary to our expectations, there was no empirical evidence for age differences in the domains hobbies and interests at home and life review, and only marginally significant age differences for the domains health ($\chi^2 = 4.11, p < .05$) and thoughts about death and dying ($\chi^2 = 9.25, p < .01$).

The number of self-defining statements referring to the present, the past, or the future, was analyzed in order to test the hypothesis that the past plays an important role for the self-definition in advanced old age. The majority of the self-defining statements referred to the present ($M = 8.7$ of 10 statements), only a very small amount to the past ($M = .57$), and the future was hardly mentioned ($M = .14$). This suggests that the self-definition in advanced old age, in general, focuses on the present. There was, however, a significant difference between the two age groups with regard to references to the past: Individuals aged 85 to 103 years referred more often to the past ($M = .69$) than persons aged 70 to 84 years ($M = .45$; $t(514) = -2.40, p < .05$).

### Evaluative Valence of the Self-Definition

The spontaneous self-definition of old and very old individuals was mainly composed of descriptive, evaualtively neutral statements. Out of the ten reported self-defining items, an average of $M = 6.4$ contained no explicit evaluation. Only $M = 1.3$ statements contained an explicitly negative evaluation, and $M = 2.2$ an explicitly positive one.

A comparison of mean values revealed an age difference with respect to the evaluation of self-defining domains: Very old individuals mentioned significantly more negatively evaluated domains ($t(514) = -3.84; p < .001$) and significantly less positively evaluated domains ($t(514) = 2.2, p < .05$) and purely descriptive ones ($t(514) = 2.24, p < .05$). Although even the oldest group (85+ years) reported more positive than negative evaluations, the proportion of positively to negatively evaluated self-defining domains was more unfavorable in advanced old age. These differences are illustrated in Figure 3.

The evaluation of the self-definition was significantly related to emotional well-being: The number of positively evaluated self-definitions correlated with positive emotions ($r = .16, p < .01$), whereas the number of negative evaluations correlated with both positive ($r = -.18, p < .01$) and negative emotions ($r = .28, p < .01$). These correlations remained significant even after statistical controls for chronological age and physical/sensory constraints (partial correlation for positive evaluation and negative emotions: $r = .15, p < .001$; for negative evaluation and positive emotions: $r = -.11, p < .01$, [b] negative emotions: $r = .29, p < .001$). Positive ($r = .12, p < .05$) but, particularly, negative evaluation of the self-definition ($r = -.42, p < .01$) were significantly related to the PCGMS score of subjective well-being. Again, the correlations remained significant after controlling for chronological age and the unit-weighted composite measure of physical/sensory constraints (partial correlation for positive evaluation and well-being: $r = .12, p < .05$; for negative evaluation and well-being: $r = -.42, p < .01$).

### Multifacetness

On the average, the self-definitions of old and very old individuals included $M = 6.8 (SD = 1.4)$ different domains. These domains contained a mean of $M = 2.3$ aspects (richness). Number of domains and richness exposed a low but statistically significant correlation ($r = .10, p < .05$). While the sheer number of self-defining domains was not age-related ($r = -.05, n.s.$), there was a small negative age-correlation for richness ($r = -.10, p < .05$). This relationship can be explained by physical and sensory constraints, as the negative age-correlation disappeared after a statistical control for physical and sensory constraints (partial correlation $r = .01, n.s.$). However, both aspects of multifacetness revealed low but significant negative correlations with the unit-weighted composite of health-related constraints (for number of domains: $r = -.09, p < .05$; for richness: $r = -.16, p < .01$), which remained significant even when age was controlled for (for number of domains: partial correlation $r = -.08, p < .05$; for richness: $r = -.13, p < .01$).

Both the number of self-defining domains ($r = .11, p < .05$) and richness ($r = .15, p < .01$) showed a small but statistically significant correlation with positive emotions, but no relationship with negative emotions or subjective well-being. The hypothesis that multifacetness buffers the negative effect of physical and sensory constraints on emotional well-being ($r = -.30, p < .01$) was not supported. Hierarchical regression analysis did not reveal any evidence for an
interaction between the unit-weighted composite of health-related constraints and the two aspects of multifacets predicting positive emotions (entering the interaction term as a last step in the equation for testing a moderating effect: overall $R^2 = .03, p < .01; \Delta R^2 = .001, p = .55, \beta = 5.13$). Furthermore, regression analyses revealed that the lack of any relationship between the unit-weighted composite of health-related constraints and negative emotions ($r = .08$, NS) was not due to a moderator function of multifacets (again, entering the interaction term as a last step in the equation for testing a moderating effect: overall $R^2 = .13, p = .04; \Delta R^2 = .0002, p = .75, \beta = 2.77$).

**DISCUSSION**

The question, how old and very old persons define themselves, was examined in the context of the Berlin Aging Study with a heterogeneous sample of old (70 to 84 years) and very old (85 to 103 years) adults. Before discussing the important findings, we want to set out several limitations to their interpretations. One of the limitations of the present study is due to its cross-sectional design. Age-related differences only indirectly address questions concerning the maintenance of continuity of the self-definition and age-related changes. Cohort effects cannot be excluded. Age and cohort effects could only be separated in a longitudinal study employing a cohort sequential design (P. B. Baltes, Reese, & Nesselroade, 1988). In addition, it would be interesting to compare the results of this study with younger age groups (young or middle-aged adults), in order to find out whether findings regarding the content and structural characteristics of the self-definition are prototypical for advanced old age.

The specific coding system which served as the present basis for the evaluation of the free responses to the question “Who am I?”, is, of course, but one of many possibilities for the study of the self-definition. By segmenting the interview protocols into meaningful idea units and by categorizing these units into 24 content domains, it is likely that interesting and relevant information is neglected: for example, the cross-linkage and the complexity of the self-definition (Linville, 1987), the hierarchical order of the self-defining domains (Ogilvie, 1987; Rosenberg & Gara, 1985), the centrality of self-defining domains (Kling, Ryff, & Essex, 1997), or the interrelatedness of self-concepts with other people (Niedenthal & Beike, 1997). Also, it should be noted that the question “Who am I?” might pull for present-related, descriptive statements, rather than for past or future-oriented and evaluative statements. Further research addressing alternative methods for assessing various aspects and dimensions of the self-definition is needed (Freund & Smith, in press).

Despite these general limitations, the present study is unique in that it surveyed the spontaneous self-descriptions in an age by sex stratified sample of 516 individuals between the ages of 70 and 103 years. The study design allowed comparisons of responses from very old individuals (older than 85 years) with those from persons between the ages of 70 and 84 years. Furthermore, the sample was locally representative of the population older than 70 in a large city.

**Content of the Self-Definition**

Old and very old persons in the BASE sample described a broad spectrum of life domains in their self-definition. On the one hand, an activity-oriented lifestyle proved to be the central theme: The majority of the sample considered hobbies and interests, social participation, and daily living routine as self-defining domains. Thoughts about death and dying played a rather insignificant role. These findings, as well as the strong focus on the present reflected in the self-definings, are in contrast to the image drawn by the disengagement theory (Cumming & Henry, 1961; see also Achenbaum & Bengtson, 1994), according to which adults in advanced old age mainly ponder over their past lives, disengage from activities and society, and, above all, are preoccupied with preparation for death. On the other hand, life review and statements about personality traits also played an important role in the self-definition of old and very old persons, indicating that they are not exclusively activity-oriented, but are also rather self-reflecting and preoccupied with their own private lives (Erikson, 1982). As expected, health proved to be an important aspect of the self-definition in advanced old age.

In general, there seemed to be more similarities than differences between the old (70 to 84 years) and the very old (85 to 103 years) with regard to the content of their self-definition: Only five of the 24 categories revealed statistically significant age-related differences. The group of participants older than 85 years mentioned the domains family/relatives and interpersonal style less frequently than the younger age group (70 to 84 years), an age-related trend that was also found by McCrae and Costa (1988) in a younger sample. This result speaks against our expectation, based on Carstensen’s Socioemotional Selectivity Theory (e.g., Carstensen, 1993), that people tend to focus on emotionally most meaningful social contacts when approaching the end of life. We had predicted that family members and relatives, people who have been in one’s social convoy (Antonacci, 1990) for much of one’s lifetime, would be more prominent than friends, especially in the very old. Although family proved to be one of the most salient life domains for self-definition in old and very old age, age-related differences showed that very old persons (85 to 100+ years) less frequently defined themselves using this domain when compared with persons aged 70 to 84 years. One possible explanation of this finding is that extremely close social partners, such as one’s husband or wife, might be highly integrated into one’s self in very old age. This integration of close family members into one’s self might take place to such a degree that they are perceived as part of oneself, rather than external social partners who deserve mentioning. Interestingly, there was no difference between the group of participants who were still married and the group of participants who were widowed, divorced, or single, with respect to the frequency of naming the life domains family as self-defining. Widowed, divorced, or single older adults, however, did mention other social partners not belonging to their family (i.e., friends, acquaintances) more frequently than married persons. Not being married in old age might make relationships with other social partners more important.
As predicted, outdoors activities, usually requiring good health and physical mobility, were less often mentioned by the very old participants, whereas the domain health was mentioned more frequently. These results indicate that health is a central theme in the self-definition in advanced old age. This interpretation is supported by the fact that both the number of self-defining domains and their richness were negatively correlated with physical and sensory constraints, whereas chronological age did not correlate with these two aspects of the self-definition when statistically controlled for the unit-weighted composite of physical and sensory capacity.

These descriptive analyses of the content of the self-definition offer insight into the possibly age-specific topics and challenges that older adults face. Interestingly, when old and very old individuals define themselves, they turn both “inward” (personal characteristics, life review) and “outward” (hobbies, social participation). This finding supports an integration of the activity and disengagement theory (cf. Achenbaum & Bengtson, 1994; Maddox, 1994; Thomae, 1987).

Self-Evaluation and Multifacettens

Finally, we would like to resume the discussion of the function of the evaluation and multifacettens of the self-definition. The hypothesis that multifacettens of the self-definition promotes emotional well-being in advanced old age was supported. These findings agree with the central argument of the activity theory, namely, that a large number of various roles is essential for the well-being in old age (Atchley, 1982; Lemon, Bengtson, & Peterson, 1971; Maddox, 1994; Rosow, 1973; Thoits, 1987). However, there was no evidence for a moderator function of multifacettens against the negative impact of physical and sensory constraints. Neither the number of self-defining domains nor their richness buffered the negative effect of physical constraints on emotional well-being. This result supplements findings of the Berlin Aging Study, which showed that although multifacettens reduces the vulnerability for depression in connection with physical illness (number of diagnoses) in advanced old age, it does not contribute to the maintenance of emotional well-being in the face of physical impairment (Staudinger, Freund, Linden, & Maas, in press). Thus, the multifacettens of the self-definition seems to guard against depression, but does not have a positive impact on emotional well-being in the presence of physical constraints.

One possible interpretation of this finding is that multifacettens might lead to a compartmentalization of the self-definition that threatens one’s overall sense of identity, rather than foster the maintenance of the self-definition in the face of loss (Donahue, Robins, Roberts, & John, 1993; see also Labouvie-Vief, Chiodo, Goguen, Diehl, & Orwell, 1995). Future research will have to address the question of the optimal margin of multifacettens of the self-definition in different age-groups for helping to maintain one’s self-definition and, at the same time, for not leading to a lack of an overarching sense of a coherent self.

Another question of the present study concerned the relationship between the evaluation of the self-definition and emotional well-being. In general, the spontaneous self-definition of old and very old adults contained relatively few explicit evaluations—more than half of the self-defining statements were purely descriptive. This finding, however, does not necessarily suggest that the self-defining consisted mainly of cold cognitive statements, as our study considered only the explicit evaluations of the participants. Furthermore, the question “Who am I?” might elicit descriptive rather than evaluative answers. A self-defining statement such as “I am retired,” may be linked with very positive emotions for some individuals, but strongly negative ones for others, without these emotions being mentioned explicitly in answer to the question “Who am I?”. Although participants in the present study made relatively few evaluations in their self-definies, the evaluative statements that were made spontaneously did reveal some distinctive patterns.

Both old and very old adults proportionately expressed more positive than negative evaluations. Furthermore, as was expected, the persons older than 85 years evaluated fewer self-defining domains as positive, and more as negative, compared with the group of persons aged 70 to 84 years. These findings contradict the prevailing stereotype that negative events are most likely to occur in old, and especially advanced old age, leading to an increasingly negative ratio of gains and losses (Heckhausen, Dixon, & P. B. Baltes, 1989). On the basis of research on social comparison processes (Higgins, 1990; Suls & Wills, 1991), one might argue that old and very old persons use negative age-related expectations as a standard of comparison for evaluating their own life situation. Such downward comparisons might indeed result in positive evaluations, even though, compared with younger age groups or their own past, the situation might have changed for the worse (Heckhausen & Krueger, 1993).

Further analyses relating positive and negative evaluation to indicators of subjective well-being provided evidence for the importance of this aspect of the self-definition in old age. We found that the positive evaluation of the self-definition was related to positive emotional well-being. In contrast, negative evaluation correlated with both positive and negative aspects of well-being. These findings stress the importance of a detailed analysis of the evaluative aspect of the self-definition, in order to specify the relationship between the different self-defining facets and measures of well-being, similar to Showers’ (1992) concept of “compartmentalization” of positively and negatively evaluated self-defining domains (cf. Showers & Ryff, 1996; Woolfolk, Novalany, Gara, Allen, & Polino, 1995). To date, research on self-esteem in advanced old age has not revealed large differences in comparison with younger age groups (for an overview, see Bengtson, Reedy, & Gordon, 1985). However, most of these studies refer to young old adults and positively selected samples. Furthermore, they use mostly global, domain-overarching measures for assessing self-esteem, which do not permit separate analyses of positive and negative domain-specific evaluations of the self-definition and might conceal age-related differences in the structure of self-esteem.

Taken together, the results of our study show that the self-definition provides a window on the salient themes of a
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given age group. The self-definition also has an important function for emotional well-being in advanced old age. Positive evaluation, as well as richness and number of self-defining domains, was associated with the experience of positive emotions. Considering the numerous conditions and processes which may influence the well-being of an individual (P. B. Baltes & M. M. Baltes, 1990; M. M. Baltes & Carstensen, 1996; Brandstätter & Greve, 1994; Carstensen & Freund, 1994; George, 1981; Smith & Baltes, 1996), the magnitude of the effects, which at first sight might not look very impressive, point to the importance of self-related processes in old age.

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Appendices

Appendix 1. The verbatim instruction was the following: “In this task you are asked to describe yourself. Imagine you sit down in a quiet hour and think about the following question: Who am I? This means for example: What do you do? What do you feel? What do you represent? What interests you? Who are you? Think about how you would answer this question. Just say in ten short statements whatever comes into your mind, and I will write it down for you. How would you describe yourself? I am…”

Appendix 2. In BASE, N = 109 individuals were diagnosed as having suspected dementia (see also Smith & Baltes, 1996). The diagnoses were differentiated at three levels: Level 1 (n = 37) indicated participants with symptomatic memory difficulties, and Levels 2 and 3 (n = 33 and n = 39, respectively) indicated cases with moderate to severe symptomatology (DSM-III-R). In all of these individuals, language functioning was still intact. They were able to respond to questions and to produce sentences. For research ethical reasons, individuals with severe dementia that involved the loss of language were excluded from participation in the study.

Appendix 3. Although of less theoretical interest in the present context, we also looked at the relationship between the number of purely descriptive statements and positive and negative affect. Whereas the number of purely descriptive statements was not significantly related to positive affect (r = .07), it was negatively correlated with negative affect (r = −.12, p < .01). This correlation remained after controlling for health (partial r = −.12, p < .01). A speculative interpretation of this finding is that pure descriptions of oneself are subjectively perceived as the outcome of having successfully avoided a negative state (or trajectory). Avoiding a negative outcome might lead to the absence of negative affect rather than contributing to positive affect (cf., Freund & Baltes, in press).

Appendix 4. Being diagnosed as having suspected dementia (n = 109; see Appendix 2) was associated with lower multifacets (for number of domains t[514] = 4.06, p < .001; for richness t[514] = 5.39, p < .001). Excluding participants with suspected dementia from the analyses, however, did not change the findings. Again, we did not find evidence supporting the hypothesis that multifacets of the self-definition buffers negative effects of health-related constraints.