

Age Identity and Subjective Well-Being: A Comparison of the United States and Germany

Gerben J. Westerhof¹ and Anne E. Barrett²

¹Center for Psychogerontology, Radboud University Nijmegen, The Netherlands.

²Department of Sociology, Florida State University, Tallahassee.

Objectives. This article investigates the theoretical and empirical relationship between age identity and subjective well-being (SWB) in a cross-national context. Feeling younger than one's actual age is considered a self-enhancing illusion that contributes to SWB even beyond factors predicting age identities and SWB, such as health and socioeconomic status. As the United States is more youth oriented than Germany, age identities are expected to be more adaptive for American adults.

Methods. Data are from respondents between 40 and 74 years of age who participated in the National Survey of Midlife Development in the United States ($N = 2,006$) or the German Aging Survey ($N = 3,331$).

Results. Analyses using the pooled sample reveal that feeling younger than one's actual age is related to higher levels of life satisfaction and positive affect and to lower levels of negative affect, even when controlling for sociodemographic variables. Country-specific analyses indicate that the relationship between age identity and negative affect holds only for the United States.

Discussion. Age identities play a role in more varied aspects of psychosocial adaptation in the United States than in Germany. It is concluded that the cultural context needs to be included more explicitly in gerontological theories and research.

WESTERN culture has been criticized for its celebration of youth and devaluation of old age (Fry, 1996). Research reveals that older individuals are confronted with ageism on a daily basis. This ranges from subtle forms of patronizing to inappropriate treatment in medical settings and even includes institutionalized forms such as legislation regarding retirement (Pasupathi & Löckenhoff, 2002). In addition to creating a stressful environment, ageism might be turned toward the self with debilitating consequences (Rothermund & Brandtstädter, 2003). Levy (2003) found that older persons who were subliminally primed with negative stereotypes of old age performed worse on memory tasks, handwriting, and walking and showed higher cardiovascular stress than older persons who were primed with positive stereotypes of old age. These findings document the incapacitating effects that living in an ageist environment can have for older adults.

Whereas these effects are beyond cognitive awareness, individuals have been found to resist the internalization of aging stereotypes on an explicit level (Zebrowitz, 2003). Many older adults resist the label "elderly" and report youthful self-perceptions. Adults in middle and later adulthood tend to feel younger than their actual age, and this discrepancy is larger in older than in middle-aged adults (Barak & Stern, 1986; Goldsmith & Heiens, 1992; Montepare & Lachman, 1989). Although they may be "old" according to cultural standards, many people do not feel old individually.

Resisting the internalization of ageist stereotypes can be considered a self-enhancing strategy (Filipp & Ferring, 1989; Montepare & Lachman, 1989; Staats, 1996), the effectiveness of which has been shown in studies of physical health (Levy, Slade, Kunkel, & Kasl, 2002a) and mortality (Levy, Slade, & Kasl, 2002b; Maier & Smith, 1999). Studies also

indicate that persons who feel younger than they actually are report higher levels of subjective well-being (SWB) (Barak & Stern, 1986; Logan, Ward, & Spitze, 1992; Montepare, 1996). However, others find no association (Filipp & Ferring, 1989) or even an inverse relation (Montepare & Lachman, 1989) with SWB.

At least two aspects of these studies on SWB deserve closer consideration. First, most investigations are not well situated in the literature on SWB. As a result, the choice of measures is not always grounded in theory. Also stemming from this limitation, most studies do not systematically control for social factors that may influence age identity, SWB, or both. As both tend to have a number of similar correlates such as health and socioeconomic status (Barak & Stern, 1986), the observed relationship between age identity and SWB might be a spurious one. Second, it is unclear how far the results of these studies generalize. As nearly all studies were carried out in the United States, typically using nonrepresentative samples, it remains unclear whether age underestimation has the same adaptive value over the adult life course in all regions of the United States as well as other cultures. Although Western cultures are typically seen in the same way with respect to the denial of old age, one might expect that there are differences between Western cultures as well. For example, Filipp and Ferring (1989) found no relationship of subjective age with self-concept and life satisfaction in a German sample.

Our study investigates the relationship between age identity and SWB among middle-aged and older Americans and Germans in two nationally representative samples. In the following, we first discuss the theoretical relation between age identity and SWB. Next, we address possible differences in this association between Americans and Germans.

AGE, AGE IDENTITY, AND SUBJECTIVE WELL-BEING

Over the last several decades, there has been a flourishing interest in the study of SWB (Diener, Suh, Lucas, & Smith, 1999). Beginning with the study of Andrews and Whithey (1976), there is a widespread consensus that SWB is a multi-dimensional concept, including cognitive evaluations of life in general (i.e., life satisfaction) as well as positive and negative affect. These three dimensions represent correlated, yet clearly separable, aspects of SWB (Diener et al., 1999). The different patterns of relationships with other variables also document the validity of the threefold structure of SWB (Westerhof, 2001).

One might expect that the SWB of older adults is negatively affected by age-related losses of roles and relationships, age-related declines in psychophysical functioning, as well as widespread ageism in our society. Yet, research has found remarkably few age differences in SWB. Only positive affect is consistently found to be somewhat lower in older adults (Diener & Suh, 1998; Mroczek & Kolarz, 1998; Westerhof, 2001).

Psychological lifespan theories have focused on the strategies by which individuals adapt to age-related changes in order to maintain a positive sense of well-being. Identification with younger ages can be considered such a strategy in a culture that views and treats old age in a negative way (Sneed & Whitbourne, 2003). Heckhausen and Schulz (1998) also have argued that individuals can compensate for the negative implications of ageism by feeling young. This strategy might contribute to well-being as it belongs to the domain of positive illusions. Research on positive illusions suggests that judging oneself more favorably than objective indicators might warrant promotes SWB (Taylor & Brown, 1988). Positive illusions are also important in avoiding negative mental health states such as depression (Alloy & Abramson, 1988). The ability to maintain positive self-perceptions, such as feeling young, appears to be central to psychosocial adjustment throughout life. Hence, age identity is expected to be related to positive as well as negative dimensions of SWB.

CULTURAL SIMILARITIES AND DIFFERENCES

Although Schulz and Heckhausen (1999) have argued that cultural variations in the use of adaptation strategies might exist, this issue has received limited empirical and theoretical attention in gerontology. For example, although the model of selective optimization with compensation was originally developed in Germany (Baltes & Baltes, 1990), it is applied in the United States without taking into consideration any cross-national differences. This example has relevance for our study as youthful age identities are viewed as a compensatory strategy (Heckhausen & Schulz, 1998). In the following, we will discuss how orientations toward individualism and collectivism, which are considered one of the basic dimensions of cultural differences (Hofstede, 1980), might be related to the use of youthful identities as a compensating strategy.

The United States has a stronger individualistic orientation than Germany (Diener, Diener, & Diener, 1995; Hofstede, 1980). The somewhat less individualistic culture of Germany might result from a cultural history with a traditionally hierarchical and feudal structure of society, more formalized social behaviors, and relatively recent experiences with democracy (Bode, 2003).

Furthermore, Esping-Andersen (1990) describes Germany as a corporatist welfare state regime where health care and social security are more a concern of the state than the individual. In contrast, the liberal system of the United States is associated with greater individual responsibility for health and social welfare.

These differences in value orientations and accompanying social structures have implications for well-being as well as age identity. Besides wealth, the level of individualism is considered one of the most important factors contributing to the well-being of nations (Diener et al., 1995; Diener & Suh, 1999; Veenhoven, 1999). Whereas the United States and Germany do not differ much with regard to wealth (e.g., the rate of consumption power of German compared with American citizens was 1.010 in 1996; Organization for Economic Cooperation and Development [OECD], 2004), the stronger orientation toward individualism in the United States might result in higher levels of well-being. It, indeed, has been found that Americans enjoy greater well-being than Germans, as measured by life satisfaction and positive and negative affects (Diener & Suh, 1999; Veenhoven, 1993). Individualism adds to the individual possibilities of realizing one's own goals and thus may contribute to well-being (Diener & Suh, 1999). However, individualism also might lead to a greater tendency to express self-enhancement (Markus & Kitayama, 1991; Westerhof, Dittmann-Kohli, & Katzko, 2000). In the American cultural context, one's worth as an individual is less a social given than in Germany and needs to be earned and demonstrated (Crocker & Park, 2004).

Individualism may be related to age identity as well. Individualism tends to be linked with the youth-centeredness of a culture. In youth-oriented cultures, older persons are at risk of losing self-worth when their economic self-sufficiency or autonomous functioning in everyday life declines (Gergen & Gergen, 2000). Compared with the German context, the American system places greater responsibility on individuals to plan for their later years and remain economically productive and thereby stimulates a higher value for youth. In contrast, the German system generates more collective support, also for older persons. Although there is a trend toward more flexible life courses in both countries, the welfare state of Germany is more explicitly and formally age graded (Dannefer, 2000). For example, Germany has a mandatory age of retirement (65 years), and retirement is basically a single transition that is closely tied to chronological age (Kohli, 1994). This stronger age-graded nature of the German system might make it more difficult to deny one's age. Consistent with these arguments, our prior work indicates that Americans maintain more youthful identities than do Germans, in particular at older ages (Westerhof, Barrett, & Steverink, 2003).

In addition to the stronger identification with younger ages observed among Americans in midlife and beyond (Westerhof et al., 2003), one also might expect that the adaptive value of youthful identities is higher in this cultural context. Positive illusions are expected to have a stronger impact on positive and negative aspects of SWB in a culture that supports self-enhancement and favors youthfulness to a greater degree. Furthermore, the individualistic system of the United States might leave more room for individual strategies of adaptation to aging (Staudinger, Fleeson, & Baltes, 1999; Suh, Diener, Oishi, & Triandis, 1998). As both cultures appear to be youth oriented, but the United States more so than Germany, we expect that age

identity will be related to SWB in both countries, but this relationship will be stronger in the United States than in Germany.

METHODS

Samples

United States.—American data are drawn from the National Survey of Midlife Development in the United States (MIDUS) (Brim, Ryff, & Kessler, 2004) collected in 1995 and 1996 by the MacArthur Foundation's Network on Successful Midlife Development. This survey was a random-digit dialing sample of noninstitutionalized English-speaking adults aged 25–74 years, living in the 48 contiguous states, whose household included at least one telephone. In the first stage of the multi-stage sampling design, investigators selected households with equal probability via telephone numbers. At the second stage, they used disproportionate stratified sampling to select respondents. The sample was stratified by age and gender; men between ages 65 and 74 were oversampled. Respondents took part in a computer-assisted telephone interview lasting 30 minutes on average. Respondents also were mailed a questionnaire requiring 1.5 hours, on average, to complete. The response rate was estimated to be 70% for the telephone interview and 87% for the self-administered questionnaire, yielding an overall response rate of 61% ($.70 \times .87 = .61$). Three thousand thirty-two persons participated in both the telephone and the questionnaire phase of the study.

Germany.—In the German Aging Survey, independently living persons between 40 and 85 years old were interviewed in 1996 (Dittmann-Kohli, Bode, & Westerhof, 2001). The sample consisted of randomly chosen individuals from the population registers of 290 cities in the Federal Republic of Germany. It was stratified by age group (40–54, 55–69, 70–85 years), gender, and residence in the former Federal Republic of Germany/German Democratic Republic. Fifty percent of those contacted ($N = 9,613$) were willing to participate ($N = 4,838$). The response rates were 63%, 56%, and 40% in the respective age groups. A face-to-face-interview of about 1.5 hours was held with questions concerning life circumstances in different domains (family and social relations, work and activities, living arrangements, health, and income) as well as respondents' evaluations of them. A paper-and-pencil questionnaire including several psychological scales, attitudinal items, and questions about chronic conditions was left with respondents. They filled out the questionnaire on their own, and it was collected later by the interviewer. Four thousand thirty-four respondents returned the questionnaire (a return rate of 83%). Respondents who returned the questionnaire did not significantly differ from respondents who did not. The total response rate was 42% ($.50 \times .83 = .42$).

The MIDUS sample covers an age range of 25–74 years and the German Aging Survey 40–85 years. In this study, respondents are included in the overlapping age range of 40–74 years ($N_{USA} = 2,006$; $N_{FRG} = 3,331$). We underscore that our study employs cross-sectional data that do not allow the determination of causal relationships between age identity and SWB. Our models assume a causal order (e.g., nationality influences age identity, which shapes SWB); however, relationships are likely

to be considerably more complex than our data permit us to explore.

Measures

Age identity.—Subjective age has been measured in the two countries with slightly different questions. In the American sample, the following question was asked in the self-administered questionnaire: “Many people feel older or younger than they actually are. What age do you feel most of the time?” In the German sample, the following question was used: “Aside from your actual age, when you should express it in the number of years, how old do you feel?” The difference between one's actual and subjective ages is used as a measure of age identity. When a respondent's subjective age is younger than his or her actual age, a positive value is obtained; when subjective age is older, age identity has a negative value. To avoid the influence of extreme scores in the regression analyses, the top and bottom 1% of the scores were declared missing. Age identity ranges from –10 (10 years older than one's actual age) to 35 (35 years younger than one's actual age).

Subjective well-being.—We examine three dimensions of SWB identified in prior work: life satisfaction and positive and negative affect (Diener et al., 1999). In the American sample, the life satisfaction measure was an adaptation of Cantril's (1965) Self-Anchoring Scale. It asked respondents to “rate their life overall these days” on a scale from 0 to 10, where 0 is the worst possible life overall and 10 is the best possible life overall. Variants of Cantril's measure have been used extensively in numerous studies worldwide, usually providing satisfactory psychometric properties (Andrews & Robinson, 1991). In the German sample, the Satisfaction with Life Scale (Pavot & Diener, 1993) was used. This five-item scale with a 5-point answering format has good reliability (Cronbach's $\alpha = .86$) and validity in this sample (Westerhof, 2001). The German scale was linearly transformed to scores ranging from 0 to 10.

The affect measures in the American study asked respondents to indicate on a 5-point scale how much of the time during the last 30 days they felt six types of negative affect (e.g., hopeless, nervous, and sad; $\alpha = .87$) and six types of positive affect (e.g., cheerful, calm, and peaceful; $\alpha = .91$; see Mroczek & Kolarz [1998] for a description of the development of these measures). In the German study, the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) was used. Respondents were asked to rate on a 5-point scale how much of the time during the last month they felt 10 negative affects (e.g., nervous, afraid, and distressed; $\alpha = .82$) and 10 positive affects (e.g., interested, excited, and proud; $\alpha = .87$). In both samples, the mean frequency of negative and positive affect was computed.

Sociodemographic variables.—Nationality is represented by a dichotomous variable: Germans are coded 1 and Americans 0. Chronological age is measured in years. Gender, socioeconomic status, health, and marital and employment status are used as controls as they have been found to be related to SWB (Diener et al., 1999) or age identity (Barak & Stern, 1986). Gender is coded 1 for women and 0 for men. Socioeconomic status was assessed by educational level and household income. Education is coded in the American sample using four categories: did not graduate

Table 1. Variable Distribution by Nationality

Variable	United States (<i>n</i> = 2,006)		Germany (<i>n</i> = 3,331)		<i>t</i> ₄₄₉₆
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Age identity	9.598	7.586	6.327	6.084	15.933**
Subjective well-being					
Life satisfaction	7.811	1.591	6.781	2.028	17.967**
Positive affect	3.395	0.728	3.336	0.613	2.916*
Negative affect	1.510	0.598	2.090	0.505	-34.895**
Sociodemographics					
Age	54.007	9.453	56.409	9.969	-8.022**
Female	0.498	0.500	0.479	0.500	1.221
Socioeconomic status	0.041	0.816	0.031	0.813	0.409
Married	0.700	0.458	0.827	0.379	-10.014**
Employed	0.711	0.453	0.468	0.499	16.482**
Chronic conditions	2.016	1.876	2.516	1.889	-8.678**
Subjective health	2.285	0.808	1.562	0.779	29.880**

p* < .01; *p* < .001.

from high school, graduated from high school, some college (no degree), and graduated from college. In Germany, three categories were used: lower education (Hauptschulabschluss ohne Ausbildungsabschluss), middle education (Hauptschulabschluss mit Ausbildungsabschluss oder Realschulabschluss), and higher education (Realschulabschluss/Abitur mit Ausbildungsabschluss oder Hochschulabschluss). The Ausbildungsabschluss (vocational training) was included in this variable as many older individuals received their training only later in life as a result of the Second World War. These categories correspond roughly to <10 years of education, between 10 and 12 years, and >12 years. In the MIDUS Study, household income was measured as the sum of five separate gross yearly income sources: self, spouse, Social Security, government assistance, and all other income sources. In the German Aging Survey, respondents were asked for their actual total monthly household income (after an explanation of the different income sources that should be summed). Respondents who refused to answer were explained the importance of the question and then asked to indicate which of 14 income categories applied to them. These respondents were assigned the middle value of the category they chose. In both samples, missing values were imputed according to age group, gender, and educational level, and in the German sample also according to place of residence (i.e., former Federal Republic of Germany/German Democratic Republic). This was done for 18.7% of the American sample and 15.5% of the German sample. The education and income variables were *z* standardized within each country. The mean of these *z* scores was computed as an indicator of socioeconomic status (see Staudinger et al. [1999] for this procedure). Marital status is controlled in the analyses; the currently married are coded 1 and the unmarried 0. A dichotomous variable indicating employment status also is added with respondents coded 1 if currently working for pay and 0 otherwise. Two measures of health are used: number of chronic conditions and self-rated health. Because the checklists of chronic conditions differed in the two studies, only those 12 conditions that were asked in both are included: cancer, heart condition, diabetes, headache/migraine, gall bladder, anxiety, and vascular, pulmonary, orthopedic, urinary, sleep, and digestive problems. Self-rated health in the United States is represented by the answer to the question: "In

general, would you say your physical health is . . . poor, fair, good, very good, or excellent?" In the German sample, the following question is asked: "How would you rate your present health situation?" Response categories were very poor, poor, average, good, and very good. Both variables were recoded into four categories, indicating (very) poor, fair/average, good, or very good/excellent. Higher values represent better health.

Analyses

With use of the pooled sample, ordinary least-squares regression is used to assess the relationship of age identity with each dimension of SWB. Explanatory variables are entered in several steps to assess their unique relationship with SWB, controlling for variables assumed to be causally prior. In the first step, the dichotomous variable indicating nationality is entered. Chronological age, gender, and socioeconomic status are added in the second model. Factors that may be influenced by one's age, gender, and socioeconomic status are entered in the third model: marital and employment status, chronic conditions, and self-rated health. Age identity is entered last to assess whether it contributes to SWB over and above the other factors. Moreover, age identity is argued to be influenced, in part, by one's gender (Pinquart & Sörensen, 2001) and one's socioeconomic status and health (Barrett, 2003; Westerhof et al., 2003).

Interaction effects are computed to assess potential differences between the United States and Germany in the relationship of age identity with SWB, controlling for the other variables. The interaction terms of nationality with the other independent variables (i.e., age, gender, socioeconomic status, marital and employment status, objective and subjective health, and age identity) are entered together into the regression equation. When the interaction between nationality and age identity proved significant, the regression equations were estimated in the United States and Germany separately. *T* tests were carried out to assess the significance of the difference between the regression coefficients (Hardy, 1993).

Missing values were imputed only for income. Respondents who had missing values on one or more of the other variables were excluded from the analyses. Most missing values were obtained on age identity (*N* = 226), chronic conditions (*N* = 276), positive affect (*N* = 197), and negative affect (*N* = 176). One thousand seven hundred thirty-six American and 2,762 German respondents were included in the analyses.

RESULTS

Table 1 presents mean differences between Germans and Americans on all variables used in the analyses. Significant differences are observed for all variables except gender and socioeconomic status. Compared with Germans, Americans report more youthful identities, higher levels of life satisfaction and positive affect, and lower levels of negative affect. They are younger, less likely to be married, and more likely to be working in the paid labor force. They also report fewer chronic conditions and better self-rated health.

Our first expectations concerned the relationship between age identity and SWB, controlling for age, gender, socioeconomic status, marital and employment status, and health. Bivariate analyses indicated that, as predicted, younger age identities are associated with greater life satisfaction and more positive and less negative affect. The correlation coefficients range from .20

to .24 (see Appendix). Age, socioeconomic status, marital and employment status, number of chronic conditions, and subjective health are significantly related to the three dimensions of SWB. Gender is related only to negative affect, with women reporting higher levels than men.

As age identity is significantly associated with all other independent variables, it is necessary to control for these indicators in the analyses of the relationship between age identity and SWB. The regression analysis of life satisfaction on nationality shows that Americans experience higher levels of life satisfaction than Germans (Table 2). The second model reveals that older persons, women, and those with higher socioeconomic status report greater life satisfaction. Model 3 shows that being married and having fewer chronic conditions and better subjective health also are associated with higher life satisfaction. These variables partially mediate the relationship between nationality and life satisfaction; the coefficient for nationality declines by about 30% but remains significant. Post-hoc analyses show that subjective health plays the most important role in mediating the relationship between nationality and life satisfaction. Results also indicate that the coefficient for chronological age increases when marital status and health are added to the equation. Controlling for older respondents' greater likelihood of experiencing widowhood and health declines increases the positive association between chronological age and life satisfaction.

Model 4 reveals that age identity is significantly related to life satisfaction, even when controlling for other factors related to SWB. Those who experience younger identities report higher levels of life satisfaction. The explained variance (adjusted R^2) increases significantly when age identity is added to the model.

Analyses of positive affect show a small, but significant, relationship with nationality; American respondents report higher levels of positive affect than Germans. Higher socioeconomic status, marriage, paid work, fewer chronic conditions, and better subjective health are related to higher levels of positive affect. Similar to the findings for life satisfaction, marital and employment status and health suppress the association between chronological age and positive affect; older respondents report higher levels of positive affect. The variables added in Model 3 also suppress the association between nationality and positive affect. In Model 2, it was found that Germans report significantly lower positive affect than Americans; however, Model 3 indicates that the reverse is true. Post-hoc analyses show that the better subjective health of the Americans is responsible for this reversal. Adding age identity in Model 4 results in a significant increase in explained variance (adjusted R^2). More youthful identities are associated with higher levels of positive affect. In addition, age identity suppresses the association between nationality and positive affect, suggesting that if Germans had the more youthful identities of Americans, they would report even higher levels of positive affect. Age identity mediates the effects of age on positive affects: The coefficient of age declines by about one third.

The analyses of negative affect more or less mirror those of life satisfaction. Americans, older persons, women, and those with higher socioeconomic status, fewer chronic conditions, and better subjective health report lower levels of negative affect. The results also indicate a mediating association such that Americans' lower level of negative affect is partially explained

Table 2. OLS Regression of Subjective Well-Being in Pooled Sample

Variable	Model 1	Model 2	Model 3	Model 4
Life satisfaction				
German	-.259***	-.275***	-.195***	-.184***
Age		.150***	.224***	.206***
Female		.046**	.078***	.072***
Socioeconomic status		.188***	.100***	.097***
Married			.145***	.148***
Employed			.021	.016
Chronic conditions			-.131***	-.125***
Subjective health			.215***	.199***
Age identity ^a				.079***
Adjusted R^2	.067	.105 ^b	.195 ^b	.200 ^b
Positive affect				
German	-.043**	-.042**	.048**	.070***
Age		-.004	.097***	.063***
Female		.007	.037*	.025
Socioeconomic status		.155***	.081***	.075***
Married			.041**	.046**
Employed			.074***	.065***
Chronic conditions			-.187***	-.174***
Subjective health			.164***	.134***
Age identity ^a				.147***
Adjusted R^2	.002	.025 ^b	.105 ^b	.124 ^b
Negative affect				
German	.462***	.479***	.406***	.396***
Age		-.131***	-.221***	-.205***
Female		.096***	.064***	.069***
Socioeconomic status		-.058***	.005	.008
Married			-.019	-.022
Employed			-.026	-.022
Chronic conditions			.284***	.278***
Subjective health			-.107***	-.094***
Age identity ^a				-.067***
Adjusted R^2	.213	.239 ^b	.342 ^b	.346 ^b

Notes: OLS = ordinary least squares. Data in table are standardized coefficients.

^aHigher values represent younger identity.

^bThese data show a significant increase in explained variance (ΔF with $p < .001$).

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

by their better health; with the inclusion of both indicators of health, the coefficient for nationality is reduced by 15%. Health suppresses the association between age and negative affect. Adding age identity significantly increases the explained variance, and younger identities are associated with lower levels of negative affect.

To summarize, identifying with younger ages is associated with better SWB, even when controlling for sociodemographic variables. Furthermore, Germans report less life satisfaction and greater negative affect; however, taking into account their worse subjective health, they report higher levels of positive affect than Americans.

Our second expectation was that age identity is more strongly related to SWB in the United States than in Germany. Including the interactions between nationality and the other independent variables resulted in an increase in explained variance for each of the three measures of SWB. However, only in one case (i.e., negative affect) did the regression weight for age identity differ significantly between the two countries. As Table 3 shows, age

Table 3. OLS Regression of Negative Affect in the United States and Germany

Variable	United States			Germany			<i>t</i>
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	
Chronological age							
age	-.013	.002	-.199***	-.011	.001	-.218***	-0.811
Female	.058	.025	.049*	.099	.019	.098***	-1.992
Socioeconomic status							
status	-.019	.016	-.026	.022	.013	.035	-1.305
Married	-.087	.028	-.067**	.019	.025	.014	-2.861**
Employed	-.047	.032	-.035	-.015	.024	-.015	-0.815
Chronic conditions							
conditions	.126	.007	.396***	.066	.006	.248***	6.500***
Subjective health							
health	-.089	.018	-.121***	-.047	.014	-.073***	-1.898
Age identity ^a	-.009	.002	-.115***	-.003	.002	-.036	-2.657**
Adjusted <i>R</i> ²			.280			.109	

Note: OLS = ordinary least squares.

^aHigher values represent younger identity.

p* < .05; *p* < .01; ****p* < .001.

identity is significantly related to negative affect in the United States but not in Germany. Furthermore, in the United States, marriage and chronic conditions appear to be more strongly related to negative affect than in Germany. Figure 1 illustrates the relationship between age identity and negative affect by nationality. The figure plots the regression equations for Americans and Germans, imputing the mean scores for chronological age, gender, socioeconomic status, marital and employment status, chronic conditions, and subjective health. It can be seen that Americans experience lower levels of negative affect than Germans. Whereas in the United States, those with younger identities (i.e., those with higher scores) experience less negative affect than those with older identities, there is no such relationship among Germans. There are no national differences in the association between age identity and positive measures of SWB (i.e., life satisfaction and positive affect).

DISCUSSION

With use of data on middle-aged and young-old adults in the United States and Germany, this study examined the relationship between age identity and SWB. Its goal was to better integrate age identity into theories of SWB and to empirically assess the derived hypotheses in two nationally representative samples from the United States and Germany. As a self-enhancing positive illusion, age identity was expected to be an important predictor of SWB in cultural contexts in which youth is highly valued. However, drawing on prior work indicating the more youthful identities of Americans compared with Germans (Westerhof et al., 2003), it also was anticipated that the association of age identity with SWB differs in the two countries.

The results of the pooled sample indicate that maintaining a more youthful identity (i.e., a larger discrepancy between actual and subjective age) is associated with higher levels of SWB, even when controlling for chronological age, gender, socioeconomic status, marital and employment status, and objective and subjective health. In the model of positive affect, the relationship with age identity even mediated the effect of actual age. The results are consistent with the argument that feeling younger

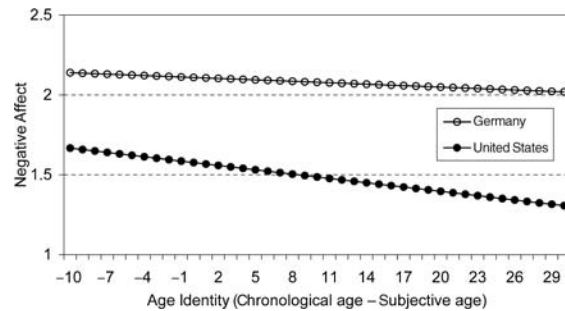


Figure 1. Regression solution for negative affect by age identity in the United States and Germany. Higher values represent younger identity. Nationality means are imputed for chronological age, gender, socioeconomic status, marital and occupational status, chronic conditions, and subjective health.

than one's actual age may function as a positive illusion that promotes SWB.

The expectation that age identity is more strongly related to SWB in the United States than in Germany receives partial support. There is no difference in the association between age identity and SWB with regard to its positive aspects (i.e., life satisfaction and positive affect). These findings suggest that age identity can be considered a positive illusion that enhances positive well-being among middle-aged and older individuals in both countries. However, the relationship between age identity and negative affect holds only among Americans. In other words, the effect of positive illusions regarding one's age appears to be stronger in the United States in the sense that it not only enhances positive well-being but also protects against high levels of negative affect. This finding could be interpreted as an indication that the self-enhancing strategy of identifying with younger ages more effectively promotes SWB in a culture that is more strongly youth oriented.

Another interpretation of this finding would be that self-enhancement, in general, is more important in a more individualistically oriented culture like the United States than in a more collectivist culture like Germany. Our study reveals higher levels of well-being among Americans than Germans and thus replicates previous findings (Diener et al., 1995; Veenhoven, 1993). However, it should be noted that although this relationship held in bivariate and multivariate analyses of life satisfaction and negative affect, the expected pattern was found only in bivariate analyses of positive affect. Models controlling on Germans' worse subjective health reveal higher levels of positive affect among Germans than Americans. A mediating effect for subjective health is found in the models of life satisfaction and negative affect as well. The subjective health experience is better in the United States than in Germany, and it provides a partial explanation for the higher life satisfaction and lower level of negative affect reported by Americans. In another article, we have argued that the better subjective health of the Americans is not a methodologic artifact (Westerhof et al., 2003). Hence, we might conclude that some aspects of self-enhancement are stronger in the United States than in Germany. A high cultural value on well-being, health, and youth apparently provides the context for Americans' greater need for positive illusions.

A number of limitations of our study should be noted. The cross-sectional data limit our ability to determine causal relationships between age identity and SWB. Our models reflect the assumption that age identity influences SWB; however, it is likely that the relationship is bidirectional. Determining causal relationships will require longitudinal data, which are scarce in studies of age identity. Another limitation is introduced by the use of studies that were not designed to be compared. Because the measures were not always identical in the MIDUS and German Aging Survey, this might have influenced the results. We believe that there is no basis for predicting that the American question on subjective age resulted in younger identities than the German question. The affect measures also show some differences in the items and question format. As these may intrude on the relationships between age and affect found in a study (Diener & Suh, 1998), we should be careful in interpreting the cross-cultural differences with regard to the affective dimensions of SWB.

Our study also is limited by the use of a measure of age identity that is rather general; research has shown that people hold multidimensional age identities (Kastenbaum, Derbin, Sabatini, & Artt, 1972; Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001). Similarly, we have not been able to consider other dimensions of successful aging that have been linked with age identity and self-perceptions of aging, like depressive symptoms, other indicators of mental health, physical health, and even mortality (Barak & Stern, 1986; Levy, 2003). Despite these limitations, the use of two nationally representative samples compares favorably with the ad-hoc methods of data collection on which cross-cultural studies on later life have tended to rely (Dasen & Mishra, 2000). Our study suggests that further work on cross-cultural differences is warranted.

Feeling younger than one's chronological age is considered a compensatory strategy (Heckhausen & Schulz, 1998). Even though this strategy is found among aging individuals in the United States as well as in Germany, we now know that it is used in a more exaggerated way in the United States and that its adaptive value is stronger in the U.S.A. than in Germany. Our study not only shows that it is worthwhile to explore whether other adaptation strategies show cross-national differences as well, it also points out that individual adaptation strategies need to be studied in their cultural context. One should be very careful in "exporting" theories developed in one cultural context to another, even among cultures that are commonly thought to belong to the same cultural region. In sum, culture needs to be included more explicitly in gerontological theories and research.

ACKNOWLEDGMENTS

The MIDUS research was supported by the John D. and Catherine T. MacArthur Foundation via its Research Network on Successful Midlife Development (Director, Dr. Orville Gilbert Brim). The German Aging Survey was sponsored by the German Federal Ministry of Family Affairs, Senior Citizens, Women, and Youth. It was carried out at the Department of Psychogerontology at the University of Nijmegen, the Netherlands (Director, Dr. F. Dittmann-Kohli), and the Research Group on Aging and the Life Course at the Free University of Berlin, Germany (Director, Dr. M. Kohli). Data collection was accomplished by Infas-Sozialforschung, Bonn, Germany.

The authors thank Jill Quadagno for her comments on an earlier version of the manuscript.

Address correspondence to Gerben J. Westerhof, Center for Psychogerontology, University of Nijmegen, P.O. Box 9104, 6500HE Nijmegen, the Netherlands. E-mail: g.westerhof@psych.ru.nl

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Received July 30, 2004

Accepted December 8, 2004

Decision Editor: Charles F. Longino, Jr., PhD

APPENDIX

	1	2	3	4	5	6	7	8	9	10	11	12
Nationality	1,000											
Age identity	-.231	1,000										
Age	.119	.101	1,000									
Female	-.018	.063	-.016	1,000								
Socioeconomic status	-.006	.036	-.320	-.151	1,000							
Married	.148	-.077	-.096	-.177	.214	1,000						
Employed	-.239	.047	-.574	-.120	.328	.027	1,000					
Conditions	.128	-.147	.269	.117	-.205	-.048	-.250	1,000				
Subjective health	-.407	.276	-.231	.005	.240	-.008	.304	-.470	1,000			
Life satisfaction	-.259	.213	.057	.020	.134	.108	.065	-.221	.334	1,000		
Positive affect	-.043	.204	-.058	-.015	.155	.060	.127	-.264	.251	.393	1,000	
Negative affect	.462	-.241	-.058	.098	-.033	.038	-.106	.341	-.361	-.416	-.346	1,000

Note: Correlations above .025 are significant ($p < .05$).