After the Fall of the Berlin Wall: Perceptions and Consequences of Stability and Change Among Middle-Aged and Older East and West Germans

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Objectives. This study empirically tested the self-systems theory of subjective change in light of the rapid change after the fall of the Berlin Wall. The theory predicts that individuals have a tendency to perceive stability and that perceived stability exerts a strong positive effect on subjective well-being. We would expect perceptions of decline and, to a lesser extent, perceptions of improvement to be related to lower levels of subjective well-being.

Methods. Data were from respondents aged 40–85 years who participated in the German Aging Survey. We used measures of well-being and temporal comparisons during the past 10 years (1986–1996).

Results. West Germans reported more stability than East Germans, in particular in the public domain and in older age groups. Compared with perceptions of stability, perceptions of decline were related to less life satisfaction and more negative affect, and perceptions of growth to more negative affect. Temporal comparisons were unrelated to positive affect.

Discussion. Our findings both confirm and reject the self-systems theory of subjective change as it relates to the fall of the Berlin Wall. Studying temporal comparisons is important in understanding the effects of historical events and their timing within an individual life course.

The sudden fall of the Berlin Wall on November 9, 1989, symbolized the end of the Communist era in Germany. Almost 1 year later, on October 3, 1990, the former German Democratic Republic and the Federal Republic of Germany reunited. The end of the Communist era and the reunification of Germany started a process of rapid societal change in both former countries, especially in the eastern part of Germany. A democratic regime and free market economy replaced the authoritarian regime and planned economy. In the first 4 years, 45% of all East German workplaces closed (Pinquart & Silbereisen, 2004). In order to alleviate the economic burden and make new investments in the East German economy possible, the government levied a solidarity tax on West Germans. East Germans were suddenly allowed to travel into the western part of Germany and to visit family whom many had not seen for a very long time.

The personal ramifications of the fall of the Berlin Wall and the reunification process vary according to one’s former country of residence and one’s age. After unification, unemployment rates rose in the western part of Germany to 10.1% and in the eastern part to 16.7% (Statistisches Bundesamt, 1997, p. 91). Individuals who were just approaching retirement age in the former East Germany were extremely likely to be expelled from the labor market either through unemployment or pre-retirement regulations. Labor force participation rates in the former East Germany for 55- to 59 year-old men dropped from 93.7% in 1989 to 47.7% in 1992; for women, from 77.8% to 24.8% (Kohli, 1994). For retired persons, retirement benefits for East Germans became more generous, as the government increased them to make them more equivalent to the standard benefits in the former West Germany.

It is a common assumption that this social change has led to lowered mental health among East Germans. In a study of middle-aged and older persons, Westerhof (2001) found that, six years after reunification, East Germans indeed rated their material situation (employment, finances, and housing) worse, and reported less life satisfaction, than West Germans. However, there were no differences in the evaluation of social relationships between both regions of Germany or in the experience of positive or negative affect. Pinquart and Silbereisen (2004) reviewed other studies and also came to the conclusion that the evidence for lowered well-being in the former East Germany was mixed.

Pinquart and Silbereisen (2004) have criticized the existing studies for their insufficient consideration of (developmental) psychological theories that may be applied to social change. One such theory is the self-systems theory of subjective change (Keyes, 2000; Keyes & Ryff, 2000). Building on theories on self and identity (Albert, 1977; Erikson, 1959; James, 1890/1968), the self-systems theory of subjective change stresses that the experience of stability and continuity is essential to an individual’s well-being. Obviously, the sudden changes after the fall of the Berlin Wall put individuals residing in both former German republics at high risk for experiencing instability. However, it is plausible that the amount and the effect of perceived change may vary by country and by age. The aim of the present article is to provide a theoretical understanding of individual perceptions of continuity and...
change in a unified Germany as well as to add to the theory’s generalizability by applying the model to the unique historical situation created in contemporary Germany. As the effects of the fall of the Wall differed by age group, we will pay particular attention to the timing of the historical transformation process in individual lives (Elder, 1998). We drew data from the German Aging Survey, a representative survey of East and West Germans aged 40–85 years, which was carried out in 1996 (Dittmann-Kohli, Bode, & Westerhof, 2001; Kohli & Künenmund 2000). The survey provides data on temporal comparisons during the past 10 years (1986–1996).

Change Through the Lens of Temporal Comparisons

The self-systems theory of subjective change builds on previous work on temporal comparisons. Albert (1977) coined the concept of temporal comparisons in analogy to Festinger’s (1954) social comparison theory. In Albert’s theory, temporal comparisons are intra-individual comparisons, whereby an individual examines the similarity of some facet of the self in the present in relation to the past (i.e., retrospection). Temporal comparisons indicate whether, and how much, individuals believe they or their lives have changed. The judgments about change are couched in evaluative terms of feeling better or improved, feeling worse or declined, or feeling about the same.

Temporal comparisons have been a rather under-researched phenomenon, although they are important in self-definition and self-evaluation (Albert, 1977; Wilson & Ross, 2000). Temporal comparisons with the past provide individuals with information about how things were and thereby contribute to their knowledge about how they are doing in the present. However, temporal comparisons may also be a result of one’s present self-system. Individuals have to construct temporal comparisons on the basis of their recollections of how things were in the past. These recollections are not independent of their present views of themselves (Wilson & Ross, 2003). Temporal comparisons are therefore informed by objective changes, but they are also subjective constructions of stability and change. For example, studies by McFarland and Alvaro (2000) have shown that self-threatening events result in self-enhancing temporal comparisons of growth by downgrading the past. In gerontology, Atchley’s continuity theory (1989, 1993) has described the construction of subjective or internal continuity in spite of objective external changes.

Temporal Comparisons and Subjective Well-Being

An important question is how temporal comparisons relate to subjective well-being. A number of studies have found mixed evidence for the relationship between temporal comparisons and well-being. Mehlsen, Kirkegaard-Thomsen, Vidiik, Olesen, & Zachariaie (2005) found that better temporal comparisons were related to lower depression during a 1-year period, and McFarland and Alvaro (2000) reported that higher levels of self-improvement were related to more positive subsequent mood reactions. However, Mehlsen and colleagues found no relationship between better temporal comparisons and life satisfaction, whereas Filipp and Buch-Bartos (1994) did. These studies used temporal comparisons as a continuous variable and did not allow for comparisons between individuals who saw themselves as stable and those who saw themselves as improving.

Albert (1977), building on work by classical scholars like James, Erikson, and Allport, postulated that there exists a drive to provide and maintain a sense of enduring self-identity over time. Furthermore, he proposed that people would favor temporal comparisons evidencing personal growth over those that represent decline. In line with these propositions and recent psychological theorizing, the self-systems theory of subjective change (Keyes, 2000) assumes that there are two basic motives in self-management: Self-consistency is the standard of remaining the same person over time, and self-enhancement is the standard of maintaining or increasing one’s positive self-image. Research on self-consistency goes back to balance theory (Heider, 1944) and cognitive dissonance theory (Festinger, 1957) and is at present advocated most strongly in self-verification theory (Swann, Rentfrow, & Guinn, 2003). The self-enhancement motive has inspired a line of research on self-esteem and positive illusions (Taylor & Brown, 1988).

Temporal self-comparison generates information about personal change—namely, whether individuals feel they have remained about the same, have improved (i.e., are “better”), or have declined (i.e., are “worse”). According to the self-systems theory, individuals simultaneously use these self-standards—consistency and enhancement—in order to evaluate the information resulting from temporal comparisons. Furthermore, individuals react to temporal comparisons through the two distinct channels of affect and cognition. That is, individuals have at once feelings toward and thoughts about changes in themselves. Failure to uphold a self-standard leads to negative feelings and negative assessments of one’s life and functioning; success in upholding a self-standard leads to positive feelings and positive assessments of one’s life and functioning.

When individuals perceive themselves as having declined, their well-being will be at its lowest, because perceived decline violates both standards of consistency and enhancement. When individuals perceive themselves as having improved, their feelings and thoughts about themselves will be mixed (i.e., negative and positive). Perceived improvement violates the standards of consistency, resulting in a negative reaction, but it upholds the standard of enhancement, resulting in a positive reaction. According to the self-systems theory, a stable perception (i.e., no change or remaining about the same) is the most beneficial of the outcomes of temporal comparisons, because it upholds the standard of consistency and is neutral with regard to the standard of enhancement.

Researchers have investigated the self-systems theory of change explicitly in two separate studies, each of which employed large, nationally representative samples of U.S. adults. Both studies featured subjective accounts of changes in one’s functioning in the execution of the social roles (spouse, worker, and parent; Study 1: Keyes, 2000) and in domains of life (e.g., work, intimacy, health; Study 2: Keyes & Ryff, 2000) and linked those perceived changes to levels of well-being. The findings from Study 1 strongly supported the self-systems theory of subjective change: Compared with individuals who saw their role functioning as remaining the same over time, individuals who perceived improvements in role functioning reported less positive and more negative emotional well-being. In Study 2, investigators operationalized subjective change by asking respondents whether they functioned worse, better, or about the same 5 years ago in relation to their present
functioning. Levels of dysphoria increased as the amount of perceived improvement and perceived decline increased when compared with individuals who remained the same. Although life satisfaction decreased as perceived declines in functioning increased, levels of life satisfaction were unrelated to perceived improvements.

These findings are in line with the self-systems theory, particularly for affective aspects of well-being, whereas the findings are more mixed with regard to life satisfaction. Because affect and cognition are seen as distinct channels, this permits individuals to sometimes feel one way toward, while thinking another way about, an experience (see, e.g., Swann, Griffin, Predmore, & Gaines, 1987). Life satisfaction involves a cognitive evaluation of the present situation rather than an emotional reaction. It might involve a process of cognitive reappraisal, for example by downgrading the relevance of the past situation for the present or by construing improvement in terms of goal achievement. Emotional reactions to perceived improvements are less prone to such reappraisals.

**Self-Systems Theory of Subjective Change and the Unification of Germany**

Regarding the present study, our first research question was how individuals of different ages in the second half of life in West and East Germany perceived the changes that occurred in different domains of life during the past 10 years. The temporal comparisons (Albert, 1977) and self-systems (Keyes, 2000) theories predict that individuals will strive to perceive stability, but neither theory speaks directly to the issue of whether there will be mediating effects of region of residence (East or West Germany), domains of functioning, or age.

Noack, Kracke, Wild, and Hofer (2001) found that perceptions of macrosocial change among German adolescents and their families reflected actual processes of change at the societal level, although perceptions did not completely mirror objective social change. Because the amount of objective social change has been much greater in eastern than in western Germany, we expected that West Germans would perceive more stability than East Germans.

Studies also suggest that the social changes induced by the fall of the Berlin Wall are greater in the public, civic arena than in the private domain. The impact of the unification has been stronger on transitions that are directly related to the changes in institutional arrangements (such as becoming financially independent) than on more private transitions (such as leaving one’s parental home; Juang, Reitzle, & Silbereisen, 2000). Whereas there were widespread changes in employment and financial situations following reunification, studies of social networks found no evidence for large-scale changes as a result of the transformation processes (Nauk & Schwenk, 2001; Scharf, 1997). Because East Germans have experienced more objective change in the public domain than in the private domain, we further qualified our expectation that West Germans would perceive more stability than East Germans by noting that it would be true for the public domain in particular.

Moreover, the timing of the historical events in the life course is also an important mediator of perceptions of stability (Elder, 1998). The effects of the unification process in the public domains of work and finances, in particular, vary with one’s position in the life course. Older West Germans are the least affected in this domain. The expectation that West Germans would perceive more stability in the public domain than East Germans holds more for older groups than for middle-aged groups.

Our second research question was whether temporal comparisons were related to subjective well-being. The existing studies have shown that there are differential relationships between regional adherence and different dimensions of subjective well-being (Westerhof, 2001). Temporal comparisons are also related differentially to different aspects of subjective well-being (Keyes & Ryff, 2000). In the present study, we examined life satisfaction and positive as well as negative affect as dimensions of subjective well-being. Beginning with the study by Andrews and Withey (1976), there is a widespread consensus that subjective well-being is a multidimensional concept that includes cognitive evaluations of life in general (i.e., life satisfaction) as well as positive and negative affect (Diener, Suh, Lucas, & Smith, 1999). Based on the self-systems theory of subjective change, we expected that perceptions of decline as well as perceptions of improvement would be more strongly related to lower levels of subjective well-being than would perceptions of stability. In line with previous studies, we expected that the relationships would be stronger for emotional well-being than for life satisfaction.

**METHODS**

**Sample**

In the German Aging Survey, conducted in 1996, trained interviewers interviewed independently living persons aged 40–85 years (Dittmann-Kohli et al., 2001). The sample consisted of randomly chosen individuals from the population registers of 290 cities in the Federal Republic of Germany. Researchers stratified the sample by age group (40–54, 55–69, 70–85 years), gender, and residence in the former East or West Germany. Fifty percent of the persons contacted (N = 9,613) were willing to participate (N = 4,838). Interviewers held face-to-face-interviews of about 1.5 hr and asked questions concerning life circumstances in different domains (family and social relationships, work and activities, living arrangements, health, and income) as well as respondents’ evaluations of them. The interviewers left a paper-and-pencil questionnaire (including several psychological scales, attitudinal items, and questions about chronic conditions) with respondents. Respondents filled out the questionnaire on their own, and it was collected later by the interviewer. A total of 4,034 respondents returned the questionnaire (a return rate of 83%). The total response rate was 42% (0.50 × 0.83 = 0.42).

Although the sample was very large, the response rate was rather low. In order to identify possible sample selections, Kohli and Küнемund (2000) conducted a nonresponse analysis. First, they analyzed the main characteristics of the people who refused to participate at all. The response rate was 63%, 56%, and 40% in the respective age groups. Older adults refused to participate in particular because of disability and illness. Also, women generally refused to participate more often than men (53% vs 47%). East Germans were more willing to participate than West Germans (56% vs 48%). Second, they compared the participants who returned the questionnaire after...
being interviewed \((n = 4,034)\) with those who did not return the questionnaire \((n = 804)\). A logistic regression analysis showed that age, gender, educational level, occupational status, subjective health, and marital status explained only 1% of the variance in whether the questionnaire was returned. Hence, respondents who returned the questionnaire did not differ substantially from respondents who did not return it. From these analyses we concluded that, in interpreting the current results, one should keep in mind that the final sample contains an overrepresentation of healthy people in the oldest age group \((70–85\text{ years})\) together with a small overrepresentation of East Germans and men.

As not all respondents were currently living in the part of Germany in which they had lived for most of their lives, we only included in our final sample those respondents who currently lived in the part of Germany (East or West) in which they had mainly lived during the past 40 years \((n_{\text{west}} = 3,052; \ n_{\text{east}} = 1,577)\). As the well-being measures were included in the questionnaire, the sample sizes for analyses including well-being measures were lower \((n_{\text{west}} = 2,517; \ n_{\text{east}} = 1,343)\). We coded respondents who lived in West Germany as 0 and the persons who lived in East Germany as 1.

Table 1 shows the distribution of some of the characteristics of both subsamples. East Germans did not differ from West Germans with regard to age group, gender, employment status, or marital status, but they were better educated. Despite the fact that the groups did not differ in health limitations, West Germans rated their health as somewhat better than did East Germans.

**Measures**

**Temporal comparisons.**—The questions on temporal comparisons concerned the perceptions of stability and change in six domains during the past 10 years. The six domains included partner relationships, family relationships, friendships, work, standard of living, and housing. The five response categories were: much worse, worse, the same, better, and much better. Respondents who were not married or who had never worked were not asked the questions on partner relationships or work. Respondents who had been retired for more than 10 years were asked about their retirement situation instead of their work situation. Respondents who were recently retired were asked about the change from work to retirement.

In a principal component analysis, we found two factors with an eigenvalue exceeding 1.0. The first factor concerned the public domain (work, standard of living, and housing) and the second factor, the private domain of social relationships (partner, family, and friends). The factors explained 45.1% of the variance in total \((\text{first factor} = 24.5\%; \ \text{second factor} = 20.6\%)\). All items had a factor loading of .53 or higher on the corresponding factor and .11 or lower on the other factor. For each factor, we calculated the percentage of domains in which an individual experienced stability, growth, or decline. Besides analyzing the scores for each of the two factors, we calculated the percentage of all six domains in which a respondent reported stability, decline, or growth.

**Subjective well-being.**—We examined three dimensions of subjective well-being that had been identified in prior work: life satisfaction and positive and negative affect (Diener et al., 1999). We used the Satisfaction With Life Scale (Pavot & Diener, 1993) in order to measure life satisfaction. This 5-item scale with a 5-point answering format had good reliability in this sample (Cronbach’s \(\alpha = .86\)). We used the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) in order to measure affect. We asked respondents to rate on a 5-point scale how much of the time during the past month they felt 10 negative affects (e.g., nervous, afraid, and distressed; \(\alpha = .82\)) and 10 positive affects (e.g., interested, excited, and proud; \(\alpha = .87\)). All scales showed good validity in this sample (Westerhof, 2001).

**Control variables.**—We used gender, education, health, marital status, and employment status as controls, as they have been found to be related to subjective well-being (Diener et al., 1999). We coded gender as 1 for women and 0 for men. We used three categories for the educational variable: lower, middle, and higher education. These categories correspond roughly to fewer than 10 years of education, between 10 and 12 years, and more than 12 years. We controlled for marital status in the analyses; we coded the currently married as 1 and the unmarried as 0. We also added a dichotomous variable indicating employment status, with respondents coded 1 if currently working for pay and 0 otherwise. The health limitations variable was a self-reported measure of limitations experienced due to health problems. These were scored as: no limitations due to health, slight hindrance due to health problems, and considerable hindrance due to health problems. We measured subjective health by asking the question, “How would you rate your present health situation?” Response categories were very poor, poor, average, good, and very good. We also used the mean of the evaluation of

<table>
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<th>Variable</th>
<th>West Germans</th>
<th>East Germans</th>
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<td>Age group</td>
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<td>28.5</td>
<td>26.7</td>
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<td>14.6***</td>
</tr>
<tr>
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<td>50.2***</td>
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<td>51.0***</td>
</tr>
<tr>
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<td>32.7***</td>
<td>37.6***</td>
<td>34.4***</td>
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</tr>
<tr>
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<td>66.6</td>
<td>66.8</td>
</tr>
<tr>
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<td>22.7</td>
<td>22.3</td>
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<td>Subjective health</td>
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***\(p < .001\).
the present situation in the six domains as a control variable (Cronbach’s $\alpha = .67$).

**Analyses**

In order to answer the first research question, we carried out a multivariate analysis of variance with repeated measures. We entered as dependent variables the scores for stability, growth, and decline within the private and public domains. We entered region (West vs East Germany) and age group (40–54, 55–69, and 70–85 years) as two factors. We then carried out two-way (Region × Age group) analyses of variance for each orientation in each of the two domains. In order to answer the second research question, we carried out a two-step regression analysis for each of the three dimensions of subjective well-being. In the first step, we entered into the equation region and age, as well as seven control variables (gender, education, health limitations, subjective health, marital status, employment status, present evaluations). In the next step, we entered the summary measures for growth and decline in order to assess whether they contributed to the explanation of subjective well-being. Owing to the large sample sizes, we report only results significant at the $p < .001$ level.

**Results**

The first question concerns the domains in which West and East Germans of different ages perceived stability and change during the past 10 years. We expected that West Germans would perceive more stability than East Germans, in particular among older groups and in the public domain. Figures 1 and 2 present the results. The multivariate analysis of variance with repeated measures showed a significant interaction between region, age group, domain, and orientation of change (i.e., stability, growth, or decline; $F_{4,9214} = 12.7; p < .001$). In other words, West and East Germans of different ages differ in their perceptions of stability, growth, and decline across the private and public domains. Post-hoc analyses of variance revealed the following results.

Individuals mainly perceived stability in the private domain. Across all groups, individuals perceived about as much growth as decline. We found a significant regional difference for perceived decline ($F_{1,4608} = 17.1; p < .001$) and significant age differences for all orientations (stability, $F_{2,4608} = 56.6$; growth, $F_{2,4608} = 51.7$; decline, $F_{2,4608} = 7.7$; all $p$s < .001), but no significant interactions. West Germans perceived less decline in the private domain than East Germans. Older groups in both regions perceived more stability in the private domain than younger groups; they also perceived less growth and somewhat less decline than younger groups.

Individuals perceived much less stability in the public than in the private domain. We found significant regional and age differences for all orientations. West Germans reported more stability ($F_{1,4608} = 615.8; p < .001$), less growth ($F_{1,4608} = 473.3; p < .001$), and less decline ($F_{1,4608} = 21.0; p < .001$) than East Germans. Older persons reported more stability ($F_{2,4608} = 97.0; p < .001$), less growth ($F_{2,4608} = 29.2; p < .001$), and less decline ($F_{2,4608} = 43.2; p < .001$) than younger persons. We also found significant interactions between region and age (stability, $F_{2,4608} = 15.2$; growth, $F_{2,4608} = 51.3$; decline, $F_{2,4608} = 16.6$; all $p$s < .001). Older age groups perceived more stability than younger age groups, but this age difference was greater among West Germans than among East Germans. Among West Germans, older age groups perceived less growth than younger age groups, but there were no age differences among East Germans. West Germans in all age groups perceived the same amount of decline, but older East Germans reported less decline than their younger counterparts.

In sum, West Germans reported more stability and less change than East Germans. Whereas West Germans perceived less decline than East Germans only on the private domain, they perceived more stability and less change than East Germans in the public domain. A further qualification of this finding is that, of all groups, older West Germans perceived the most stability in the public domain. These findings confirmed our first hypothesis. Among West Germans, older persons tended to perceive less growth than younger persons on the public domain; among East Germans, older persons perceived less decline than their younger counterparts.

The second research question concerned the relationship of orientations towards stability, growth, and decline with subjective well-being. We hypothesized that perceptions of decline as well as perceptions of growth would be more strongly related to lower levels of subjective well-being than would perceptions of stability, in particular for emotional well-being. Table 2 reports findings of the regression analyses. The analyses in Step 1 revealed that East Germans reported lower levels
of life satisfaction and equal levels of positive affect and negative affect compared with West Germans (with controls for age, gender, education, health impairments, subjective health, employment status, marital status, and present evaluations). Older persons reported more life satisfaction, as well as less positive and less negative affect, than younger adults. Women reported more negative affect than men.

Temporal comparisons added a significant amount of explained variance for life satisfaction and negative affect. Compared with stability, perceptions of decline were significantly related to lower life satisfaction and higher levels of negative affect. Compared with stability, perception of more growth was also related to higher levels of negative affect. These findings are in line with the self-systems theory of subjective change and with the expectation that perceptions of change would be more strongly related to affect than to life satisfaction. Perceptions of growth were unrelated to life satisfaction and positive affect, and perceptions of decline were also unrelated to positive affect. These findings were not as we had predicted. However, perceptions of improvement were never related to higher levels of well-being than perception of stability.

As we were dealing with a broad sample, we also assessed whether the independent factors had similar effects for East and West Germans, the three age groups (40–54, 55–69, and 70–85 years), as well as men and women. We found no significant interactions. The relationship of perceptions of growth and decline to the three measures of well-being were similar for these different groups.

**Discussion**

This study used the self-systems theory of subjective change in order to better understand the perceptions of change and their relation to subjective well-being in Germany after the transition from Communism. As we had expected, West Germans reported more stability than East Germans, in particular in older age groups in the public domain. In the private domain, all groups perceived more stability than change. In the public domain, West Germans mainly perceived stability, whereas East Germans mainly perceived growth. The historical transformation of the former East Germany made it difficult for East Germans to assert that their life hasn’t changed in the public domain of work, finances, and housing. However, they managed to interpret these changes most often in terms of growth, which is the second best alternative in terms of the self-systems theory of subjective change.

The temporal comparisons across the 10-year period not only encompass the changes as a result of the fall of the Wall, but also include the normal life span changes. Steverink, Westerhof, Bode, and Dittmann-Kohli (2001), using data from the German Aging Study, found that aging is experienced more as physical and social loss and less as continuous growth with increasing age. They found almost no differences between West and East Germans in the experience of aging. Interestingly, this pattern was mirrored in the perceptions of stability and change in the private domain, where similarities between East and West Germans were evident. In the public domain, however, the ratio of growth-to-decline became less positive with age among West Germans. Only among West Germans did the present findings mirror the findings of Steverink and colleagues on the experience of aging. By contrast, among East Germans, perceptions of change became more positive with age. Apparently, the fall of the Wall in East Germany mitigated the normal perceptions of decline with age. These findings strongly support Elder’s (1998) notion of the timing of historical events in the individual life span: East Germans of older ages have profited most from the fall of the Wall, in their own perception.

Temporal comparisons also were related to subjective well-being. Some findings were consistent with the prediction of, and prior studies supporting, the self-systems theory of subjective change (Keyes, 2000; Keyes & Ryff, 2000). As in past studies, persons who reported more declines also reported less satisfaction with life. Adults in both former countries who perceived more improvements did not report any higher satisfaction with life than adults who perceived stability. Moreover, as in prior studies, adults in both former countries who perceived more improvements, such as those who perceived more decline, reported more negative affect than adults who perceived stability. In no instance did we find a positive relationship between perceptions of improvement (as compared with stability) and subjective well-being. This is an important finding, as most studies have used temporal comparisons as a continuous measure from perceiving decline to perceiving growth.

However, perceived declines and growth in both regions did not result in lower positive affect, which does not fit with prior studies of the self-systems theory. This might be a result of the type of social change studied, which was different in the German case (historical transformation) than in the American case (less rapid cultural change). Because the end of the Communist era was a large-scale, unanticipated historical event, individuals may have perceived the changes as beyond their control. Decline and growth would therefore have been attributed externally, and this kind of attribution could make the temporal comparisons less relevant for the experience of positive affect. Another interpretation might be that the changes mirror the findings of Steverink and colleagues on the experience of aging.

Table 2. Ordinary Least Squares Regression of Well-Being (standardized coefficients)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Life Satisfaction</th>
<th>Positive Affects</th>
<th>Negative Affects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
</tr>
<tr>
<td>East German</td>
<td>−0.08***</td>
<td>−0.08***</td>
<td>−0.04</td>
</tr>
<tr>
<td>Age</td>
<td>0.11***</td>
<td>0.09***</td>
<td>−0.13***</td>
</tr>
<tr>
<td>Female</td>
<td>0.04</td>
<td>0.04</td>
<td>0.02</td>
</tr>
<tr>
<td>Education</td>
<td>−0.02</td>
<td>−0.01</td>
<td>0.10***</td>
</tr>
<tr>
<td>Health</td>
<td>−0.07***</td>
<td>−0.06***</td>
<td>−0.07***</td>
</tr>
<tr>
<td>Subjective</td>
<td>−0.14***</td>
<td>−0.14***</td>
<td>−0.12***</td>
</tr>
<tr>
<td>health</td>
<td>−0.02</td>
<td>−0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Married</td>
<td>0.06***</td>
<td>0.06***</td>
<td>0.00</td>
</tr>
<tr>
<td>Present</td>
<td>0.45***</td>
<td>0.39***</td>
<td>−0.19***</td>
</tr>
<tr>
<td>evaluations</td>
<td>0.00</td>
<td>0.02</td>
<td>0.13***</td>
</tr>
<tr>
<td>Growth</td>
<td>0.12***</td>
<td>0.01</td>
<td>0.16</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.31</td>
<td>0.32a</td>
<td>0.16</td>
</tr>
</tbody>
</table>

*p < .001.

+aSignificant increase in explained variance ($\Delta F$, $p < .001$).
brought about by the collapse of communism caused people to expect changes in their lives. Changing institutions could lead people to start envisioning themselves as open to new experiences, such that the perception of change would not be as undesirable. The social context of change would therefore mitigate the undesirable effects of perceived change on positive affect. Negative affect would be less sensitive to such external attributions or readiness for change. Despite the fact that many Germans perceived improvement, they may still have experienced a sense of loss and lack of orientation in the new republic, leading to negative affect. This is also evident in Ostalgia (i.e., feelings of nostalgia for the symbols and structures of the former East German republic [Ost-Deutschland]).

Besides the low response rate, the most important limitation of the present study is that it provides only a cross-sectional snapshot in time. It is therefore possible that the lower levels of life satisfaction among East Germans are not a result of the transformation processes, but existed already before the fall of the Wall (Silbereisen, 2005). We could only study reactions to the transformation process, although another important question is how individuals contributed to social change (Pinquart & Silbereisen, 2004). Furthermore, there are two possible interpretations of the correlation between temporal comparisons and subjective well-being: Does perceived change result in changes in well-being? Or, does level of well-being cause individuals to retrospectively construct accounts of changes that explain their current state of well-being? Another limitation is that there was no biographical information on the experience of hardships (such as unemployment) or good times (such as material gains) as a result of the transformation process. Such biographical information is important in understanding historical effects on an individual’s life course (Elder, 1998). It was not possible to study whether the temporal comparisons were related to the objective social changes. We therefore cannot conclude whether the experiences of stability or change reflect objective change or are somewhat illusory (McFarland & Alvaro, 2000).

A third limitation concerns the measuring of temporal comparisons. Individuals might have perceived changes that they did not see merely as an improvement or a decline, but rather as a mix of both. We could therefore not address individual meanings of continuity in spite of objective changes as discussed, for example, by Atchley (1993).

Despite these limitations, this study showed that the self-systems theory of subjective change can contribute to understanding the effects of the timing of a historical event in the second half of life. Furthermore, the theory adds to the explanation of subjective well-being of middle-aged and older persons in times of historical social change. Although it is commonly assumed that historical events have the strongest impact when they are experienced in adolescence and early adulthood (Baltes, Reese, & Lipsitt, 1980), the present study documents the impact such events can have when experienced in the second half of life. The absence of a relationship between temporal comparisons and positive affect indicates that the historical transformation of Germany has some unique properties and suggests that the self-systems theory does not apply to all kinds of outcomes. We therefore conclude that it is important to consider historical events and their timing within an individual life span in the study of temporal comparisons and their relationship to well-being.

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