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# Positive Affectivity and Lifestyle in Adulthood: Do You Do What You Feel?

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*There is much evidence for the adaptive value of positive affect. Empirical work examining different facets of positive affect and their consequences for psychological adaptation remains sparse, however. This study (young, middle-aged, and older adults; N = 293) investigated the links between two dimensions of positive affect (positive involvement and pleasant affect) and two lifestyles (hedonic and growth related), each indicated by general value orientations, self-reported everyday activities, and activity aspirations. Structural equation models showed that pleasant affect and positive involvement constitute distinct dimensions evincing different age trends and relating differentially to hedonic and growth-related lifestyles. Specifically, pleasant affect, but not positive involvement, was related to a hedonic lifestyle, whereas positive involvement, and not pleasant affect, was associated with a growth-related lifestyle. These findings underline the importance of considering two dimensions of positive affect—pleasant feelings and positive involvement—separately when studying the link between affect and lifestyle.*

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**Keywords:** *positive affect; values; everyday activities; hedonism; growth*

**F**unctional emotion theories have emphasized the adaptive value of discrete emotions and emotional dispositions (e.g., Campos, Campos, & Barrett, 1989; Ekman, 1999; Frijda, 1986; Izard, 1993; Keltner & Gross, 1999; Levenson, 1994). According to these theories, emotions communicate important information to one's self and others, and they help motivate and coordinate one's own and others' behaviors. In this vein, some emotions push us away from certain thoughts, memories, or actions, whereas other emotions make certain thoughts, memories, or actions more likely. On a dispositional level, individual differences in emotion tendencies, which appear early in development (e.g., Goldsmith,

1993), should become related to particular cognitive structures, behavioral tendencies, and motivational dispositions (e.g., Malatesta, 1990).

This view provides the frame for the present study. Using a heterogeneous sample spanning the adult age range, we investigated whether a person's tendency to experience certain positive affective states relates to his or her lifestyle as indicated by general value orientations, everyday activities, and activity aspirations. In addition, we tested the prediction that young, middle-aged, and older adults prefer different lifestyles because of age-related differences in the tendency to experience particular positive affective states.

## *Characteristics and Functions of Positive Affect*

Functional approaches to emotion traditionally have centered on the adaptive value of negative emotions. Negative emotions have been thought to serve the pur-

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pose of reducing a threat or an imbalance between the individual and his or her environment (e.g., Ekman, 1999; Frijda, 1986; Izard, 1993; Levenson, 1994). More specifically, in threatening situations, negative emotions are said to prompt time-tested adaptive behaviors represented by specific action tendencies (e.g., fear creates the urge to escape, disgust creates the urge to expel).

Positive emotions, in contrast, occur in situations that are appraised as safe and that typically do not require a specific course of action. What, then, is the purpose of positive emotions? Recent functional theories of emotion have begun to address this question more explicitly than has been done in the past (e.g., Fredrickson, 1998; Keltner & Haidt, 1999). In her broaden-and-build model of positive emotions, for example, Fredrickson (1998) proposed that in contrast to the narrowing of attention and the specific action tendencies related to negative emotions, positive emotions broaden a person's momentary attentional focus and thought-action repertoire (e.g., Fredrickson, 1998, 2001). According to the broaden-and-build model, "joy produces the urge to play, interest, the urge to explore, contentment, the urge to savor and integrate, and love, a combination of many of these urges" (Fredrickson & Branigan, 2001, p. 144). Over time and as a product of recurrent play, exploration, and integration, positive emotions have the incidental effect of building a person's social, physical, and personal resources (e.g., recurrent exploration increases a person's knowledge base). As we will review in the following, past empirical evidence from different research fields is mostly consistent with the central tenets of the broaden-and-build model.

*Evidence from experimental research on the links between affect, cognition, and behavior.* An extensive body of experimental work has examined the effects of positive affect on various aspects of cognition including decision making, social judgment, and problem solving (for reviews, see Bless & Schwarz, 1999; Bower & Forgas, 2000; Clore, Gasper, & Garvin, 2001; Isen, 1999). In a series of pioneering studies, for example, Isen (1987, 1999) and her associates demonstrated that experimentally induced positive affect (relative to neutral or negative affect) facilitates creative problem solving, cognitive flexibility, and innovation. There is also evidence suggesting that positive affect encourages heuristic information processing that relies considerably on preexisting general knowledge structures. Given that this top-down processing of information requires relatively few resources, it may allow people to go beyond the given data, generate new information, and make creative inferences. In contrast, experimentally induced negative affect has been shown to prompt a more careful and analytical informa-

tion processing style focused on the data at hand, risk aversion, and adherence to established procedures (e.g., Bless & Schwarz, 1999; Bower & Forgas, 2000).

In terms of behavior, positive affect has been shown to promote a readiness to engage with the environment and partake in different activities. For example, people induced to feel positive affect reported greater interest in engaging in different social, leisure, and physical activities (Cunningham, 1988b) and were more likely to initiate conversation with another person (Cunningham, 1988a) than were those in a neutral or negative emotional state. Experiencing positive emotions also increases the likelihood that a person will help others who are in need (Isen, 1987), and it facilitates a cooperative style of negotiation during conflict (Carnevale & Isen, 1986). Other studies have suggested that expressing positive emotions invites approach to others and contributes to rewarding social interactions that build and strengthen social bonds (Keltner & Kring, 1998).

*Evidence from research on individual differences in affective dispositions.* Trait positive affect has been defined as a person's tendency to experience positive affective states across multiple situations and over an extended period of time (e.g., E. Diener, Smith, & Fujita, 1995). It has been found that trait positive affect is significantly associated with values related to life stimulation (i.e., valuing excitement, novelty, and challenge in life), self-direction (i.e., valuing independent thought, exploring, and creativity), and personal achievement (valuing success through demonstrating competence; Sagiv & Schwartz, 2000). People who score high on trait positive affect are also likely to participate in activities related to social affiliation and integration including those that require active participation (e.g., giving a party or going out for a drink) and social responsibility (e.g., having a serious discussion; Watson, Clark, McIntyre, & Hamaker, 1992). There is evidence that trait positive affect has long-term beneficial social consequences (Harker & Keltner, 2001) and can trigger upward spirals toward higher emotional well-being over time by broadening individuals' cognitive perspective on the problems they are grappling with (Fredrickson & Joiner, 2002; Tugade & Fredrickson, 2004).

In sum, past empirical work suggests that positive affect plays an important role in people's thoughts and behaviors. The evidence is largely consistent and suggests that positive affect broadens a person's thought-action repertoire and has beneficial long-term consequences. In terms of cognition, positive affect fosters creative thinking, cognitive flexibility, and innovation. In terms of behavior, positive affect creates an interest in

engaging in different activities and promotes helpful, friendly, and socially responsible behavior. Research on stable individual differences in positive affect has suggested that repeatedly experiencing positive affect leads to positive life outcomes.

*Two Dimensions of Positive Affect:  
Pleasant Affect and Positive Involvement*

Few experimental or survey studies on the links between positive affect and cognitive or behavioral processes have made distinctions between various types of positive affective states. In many measures of positive emotionality, multiple positive emotions are combined into one construct. This is unfortunate given that different positive affective states may influence cognition and behavior quite differently (e.g., Fredrickson, 1998, 2001). In addition, past work on the structure of affective experiences has suggested that there are at least two highly distinct dimensions of positive affectivity, typically labeled *pleasant affect* and *positive affect* (e.g., Watson & Tellegen, 1985; Watson, Wiese, Vaidya, & Tellegen, 1999). According to Watson and his colleagues (Watson & Tellegen, 1985; Watson et al., 1999), these two dimensions of positive affectivity differ in terms of arousal. Pleasant affect is indicated by positive affective states with a relatively low arousal component (e.g., satisfaction, happiness). In contrast, positive affect encompasses positive affective states with high arousal (e.g., interest, inspiration; Watson & Tellegen, 1985). Inspection of the specific feelings that indicate either pleasant affect or positive involvement suggests that these two dimensions may differ in other aspects as well. Pleasant feelings such as satisfaction or happiness seem to require relatively low effort, are often self-centered, and typically are the result of goal achievement rather than goal pursuit. In contrast, positive feelings such as interest or inspiration often are environment centered, process oriented, and more effortful. Given that positive affect is characterized by process-oriented and environment-centered feelings, we relabeled this dimension as positive involvement (see also Kunzmann & Baltes, 2003). Similar classifications of positive affective states have been suggested in work on subjective well-being (e.g., happiness vs. meaning; see McGregor & Little, 1998) and work on emotion (e.g., contentment vs. interest; see Fredrickson, 1998).

In this study, we investigated whether pleasant affect and positive involvement are associated with different lifestyles. People's lifestyles can be determined by the values that they find important (e.g., security, benevolence) and the behaviors they exhibit in pursuit of their values or would exhibit if they had the resources (e.g., saving money, helping people in need; e.g., Horley, Carroll, & Little, 1988).

*Two Lifestyles:  
Valuing and Pursuing Pleasure or Growth*

Values have been defined as cognitive representations of desirable, abstract goals that vary in importance and serve as guiding principles in people's lives (Schwartz, 1992). Similar to needs, motives, and goals, values are believed to motivate actions (e.g., Bardi & Schwartz, 2003). The concept of lifestyle supports the idea of a link between values and actions in that it covers both values and their corresponding purposeful behaviors.

To study the links between positive affect and lifestyle, we focused on two broad lifestyles: a hedonic lifestyle and a growth-related lifestyle. Both ways of life, often labeled hedonism and eudaimonism, have been considered a central part of a good life and optimal functioning (e.g., Kahnemann, Diener, & Schwarz, 1999; Ryff, 1989; Veenhoven, 2003). To date, however, few efforts have been made to interrelate or integrate these two concepts (e.g., Ryan & Deci, 2001).

*The hedonic lifestyle.* People with hedonic lifestyles tend to value enjoyment, material possessions, and entertainment (e.g., Horley et al., 1988; Mitchell, 1984; Schwartz, 1992). Consistent with these values, they are likely to engage in everyday activities that emphasize consumption and pleasure. We also consider the hedonic lifestyle to encompass values and everyday activities related to social approval and intimacy. Social approval and intimacy have been thought to reflect favorable expectations about and benefits from the social environment including love and care from others (Erikson, 1959).

*The growth-related lifestyle.* In contrast, individuals with growth-related lifestyles are more likely to exhibit behaviors that contribute, rather than consume, resources. They tend to consider contributing to the welfare of others as important and are interested in personal development. Growth-related values and activities are related to societal engagement, a concern for others' well-being, and personal growth. Characteristic of a growth-related lifestyle are values that Schwartz and his colleagues (Schwartz, 1992; Schwartz & Bilsky, 1990) have labeled benevolence and universalism.

Our predictions about the links between positive affectivity (i.e., pleasant affect and positive involvement) and two lifestyles (i.e., hedonic and growth related) extend previous research about the functions of positive affectivity in that two different facets of positive affectivity are studied. As discussed above, pleasant feelings such as satisfaction, happiness, or pride are primarily self-centered and evaluative. We predicted that these feelings should promote more passive, consumptive values and activities centering on what the environment has



to offer. In contrast, positive involvement encompasses environment- and process-oriented feelings and should promote more active and prosocial values and activities focused on contributing to the environment.

*Age-Related Differences in Lifestyles:  
The Role of Pleasant Affect and Positive Involvement*

Past research on age trajectories in positive affectivity is inconsistent: Some studies have provided evidence for age-related stability (Gross et al., 1997), others for an age-related increase (Mroczek & Kolarz, 1998), and yet others for an age-related decline (e.g., D. Diener & Suh, 1998; Kunzmann, Little, & Smith, 2000). One explanation for this inconsistency might be that the two dimensions of positive affectivity have different age trajectories and that past studies have measured pleasant affect, positive involvement, or a combination of the two dimensions. On the basis of the present sample, Kunzmann and Baltes (2003) provided first evidence that the two dimensions of positive affectivity evince multidirectional changes in adulthood. In their cross-sectional analysis, age was negatively related to pleasant affect ( $r = -.38$ ) but positively related to positive involvement ( $r = .43$ ).

In this study, we were interested in testing whether these age differences in pleasant affect and positive involvement can explain age differences in lifestyles. Lifespan theories emphasize that people's values and associated purposeful behaviors are at least partly a reflection of changing developmental tasks (e.g., Baltes, 1987; Cantor & Blanton, 1996). According to Erikson (1959), social approval and intimacy are important themes during late adolescence and young adulthood, whereas generosity and ego integrity increase in relative importance in middle and late adulthood. Based on this theory, it is plausible that young adults are more likely to pursue a hedonic lifestyle, whereas middle-aged and older adults are more likely to pursue a growth-related lifestyle.

One factor that may contribute to the explanation of these potential age differences in lifestyles is age-related changes in positive affectivity. Younger adults may prioritize a hedonic lifestyle because they experience pleasant affect more frequently than do older adults. Similarly, older adults may increasingly prioritize a growth-related lifestyle because they are more likely than younger adults to experience feelings of positive involvement.

*The Present Study's Hypotheses*

In this study, we investigated whether the tendency to experience certain positive feelings would predict a person's lifestyle. As a first step, we chose a measurement approach that was domain general and time enduring;

that is, we investigated affective experiences and lifestyle indicators from a dispositional rather than a contextual or state-like perspective. We extended past research on positive affect and its relations to cognition and motivation in three respects.

First, proceeding from the notion that positive affectivity covers two highly distinct dimensions—pleasant affect and positive involvement—we tested whether these two dimensions differentially predict lifestyle. We predicted that pleasant affect (e.g., satisfaction, happiness) would be positively related to a hedonic lifestyle, whereas positive involvement (e.g., interest, inspiration) would be positively related to a growth-related lifestyle.

Second, we assessed the levels of self-reported values, everyday activities, and activity aspirations for both lifestyles. Our prediction was that the differential pattern of relationships between the two dimensions of positive affectivity and the two lifestyles would be generalizable across the three levels of analyses. Specifically, pleasant affect should be positively related to hedonic values, hedonic everyday activities, and hedonic activity aspirations. Feelings of positive involvement should be positively related to growth-related values, growth-related everyday activities, and growth-related activity aspirations.

Third, we tested our predictions about the relations between positive affectivity and lifestyle in a heterogeneous sample of young, middle-aged, and older adults. This allowed us to investigate age differences in pleasant affect and positive involvement as well as in the two lifestyles. Furthermore, we were able to test our prediction that age differences in hedonic and growth-related lifestyles would be at least partly explained by age differences in pleasant affect and positive involvement.

This study was concerned with what people value and prefer doing in their everyday lives rather than what they dislike, try to avoid, or need to grapple with. For this reason, we did not expect that a person's tendency to experience negative affective states (e.g., sadness, fear, or anxiety) would have predictive value. Put differently, we did not assume that negative affect would have the inverse effect of positive affective states. This lack of symmetry has been shown in several research fields. In research on daily hassles and uplifts, for example, it was shown that positive affect, but not negative affect, relates to daily uplifts, whereas negative affect, but not positive affect, relates to daily stressors (Clark & Watson, 1988; see also Isen, 1999). To gain a more comprehensive picture of the links between affective experiences and lifestyle, however, we included negative affect in our analyses and explored its relations to hedonic and growth-related lifestyles in an explorative manner.

## METHOD

This study was part of a larger project that had an additional focus on investigating wisdom-related performance (Kunzmann & Baltes, 2003). Wisdom-related performance was assessed in individual interviews in the first two sessions of this project. Data for the present study came from the third and fourth sessions. In these sessions, participants filled out questionnaires designed to assess social, health, cognitive, and personality characteristics, including affective experiences (Session 3), general value orientations, everyday activities, and activity aspirations (Session 4). The time interval between the third and fourth sessions was, on average, 5.74 months ( $SD = 9.42$  weeks).

*Participants*

The sample consisted of 318 participants from three age groups (young adults, 15-20 years; middle-aged adults, 30-40 years; and older adults, 60-70 years), each stratified by education (high vs. low). Half of the sample was female. Participants were recruited through advertisements in local Berlin newspapers and received DM 110 (approximately US\$50) for their participation. The present analyses were based on only those participants who completed the third and fourth sessions of the study ( $N = 293$ :  $n = 93$  young adults,  $M_{(\text{age})} = 17.64$ ,  $SD = 1.68$ ;  $n = 93$  middle-aged adults,  $M_{(\text{age})} = 35.96$ ,  $SD = 3.41$ ; and  $n = 107$  older adults,  $M_{(\text{age})} = 64.90$ ,  $SD = 3.18$ ).

*Measures*

*Positive affectivity.* Self-reported affective experiences were assessed with an affect adjective list. This list was modeled after the circumplex model of affective experiences developed by Watson and Tellegen (1985). Because of time restrictions, the number of adjectives in this study was limited to 10 positive emotions. The selection of these 10 adjectives was guided by our goal to represent two octants of the circumplex model, pleasant affect and high positive affect, and to include those adjectives that have been used in past research with adult samples (e.g., Carstensen, Pasupathi, Mayr, & Nesselroade, 2000). The 10 positive emotion adjectives used were *exuberant*, *happy*, *proud*, *amused*, *cheerful*, *interested*, *alert*, *inspired*, *attentive*, and *active*. Participants were asked to indicate on a 5-point scale ranging from 1 (*not at all*) to 5 (*very often*) how frequently they had experienced each feeling during the past year.

A previous factor analytic study with the present sample showed that the 10 positive adjectives built two factors, which we labeled Pleasant Affect and Positive Involvement (Kunzmann & Baltes, 2003). Five of the positive adjectives (i.e., *exuberant*, *happy*, *proud*, *amused*, *cheerful*) loaded on one factor (Pleasant Affect) and the

remaining five positive adjectives (i.e., *interested*, *alert*, *inspired*, *attentive*, *active*) loaded on a second factor (Positive Involvement). All adjectives had strong primary loadings on the appropriate factor, and cross-loadings were weak. Cronbach's alphas were satisfactory for Pleasant Affect ( $\alpha = .78$ ) and Positive Involvement ( $\alpha = .76$ ).

For the present structural equation modeling (SEM) analyses, the five adjectives indicating each dimension of positive affectivity were grouped to build three subscales indicating pleasant affect and positive involvement, respectively. Several procedures for collapsing items into subscales have been suggested in the literature (e.g., Kishton & Widaman, 1994). Given that the affect adjectives showed uniformly high loadings on the appropriate factor in our explorative factor analysis and that the Cronbach's alphas for the affective scales were uniformly high, three Pleasant Affect subscales were built by random pairing of the five pleasant affect adjectives, and three Positive Involvement subscales were built by random pairing of the five positive involvement affect adjectives.

*Negative affectivity.* In addition to the 10 positive affective states, we assessed 10 negative affective states using the same affect adjective list and the same instructions (i.e., participants were asked to indicate on a 5-point scale ranging from 1 (*not at all*) to 5 (*very often*) how frequently they had experienced each feeling during the past year. The 10 negative affective states assessed were *angry*, *afraid*, *hostile*, *indifferent*, *ashamed*, *contemptuous*, *apathetic*, *irritable*, *sad*, and *disappointed*.

Our previous factor analysis of the 10 negative adjectives and the 10 positive adjectives (see description above) showed that it was only positive affect that could be broken down into two factors; the 10 negative affective states represented one homogenous factor. Cronbach's alpha for Negative Affect was  $\alpha = .81$ . For the present SEM analyses, the 10 negative affect adjectives were randomly divided into three subscales.

*Lifestyle: Value orientations.* Three hedonic value dimensions (i.e., Pleasurable Life, Intimacy, and Social Approval) and six growth-related value dimensions (Purpose in Life, Modulation, Personal Growth, Life Insight, Well-Being of Friends, and Societal Engagement) were assessed with a self-report questionnaire. The nine value dimensions were each indicated by several specific-value items (for individual items, see Appendix A). Participants indicated from 1 (*extremely unimportant*) to 5 (*extremely important*) the importance of each specific value as a guiding principle in their lives.

Cronbach's alphas for the nine value dimension scales were satisfactorily high: Pleasurable Life ( $\alpha = .82$ ), Intimacy ( $\alpha = .64$ ), Social Approval ( $\alpha = .78$ ), Purpose

in Life ( $\alpha = .78$ ), Modulation ( $\alpha = .82$ ), Personal Growth ( $\alpha = .81$ ), Life Insight ( $\alpha = .76$ ), Well-Being of Friends ( $\alpha = .80$ ), and Societal Engagement ( $\alpha = .88$ ). For the present SEM analyses, Pleasurable Life, Intimacy, and Social Approval were used as indicators of the hedonic value orientation, whereas the remaining six value dimensions served as indicators of the growth-related value orientation.<sup>1</sup>

*Lifestyle: Everyday activities.* Hedonic and growth-related everyday activities were assessed with a self-report questionnaire designed for this study. The two activity dimensions were each indicated by several specific activity items (for individual items, see Appendix B). Participants were asked to indicate on a 5-point scale ranging from 1 (*not at all*) to 5 (*very often*) how frequently they had engaged in each activity during the past year.

Cronbach's alphas for the two activity scales were satisfactorily high: Hedonic Activities ( $\alpha = .79$ ) and Growth-Related Activities ( $\alpha = .78$ ). For the present SEM analyses, we created three subscales for each of the two activity dimensions by randomly pairing the specific items (i.e., for each activity dimension, items were randomly divided into thirds).

*Lifestyle: Activity aspirations.* Two open-ended questions were used to assess participants' activity aspirations—that is, activities they would pursue if they had extra resources in terms of time and money. Specifically, participants were asked to report and give reasons for three activities they would do if they were to win the lottery (Task 1) and if they were given 2 extra hours in their day (Task 2).

Two independent raters coded the six reported activity aspirations (three aspirations per task). Inconsistencies were resolved through consensus discussion with the first author. Coding was based on a system that was developed by the first author for the present purposes and consisted of 10 mutually exclusive categories ( $M_{(\text{Cohen's } \kappa)} = .83$ , range of Cohen's  $\kappa = .79-.88$ ).<sup>2</sup> Three categories reflected hedonic activity aspirations: pleasurable life ( $\kappa = .66$ ), social harmony ( $\kappa = .75$ ), and making new friends ( $\kappa = .82$ ). Growth-related activity aspirations were reflected in the following three categories: life insight ( $\kappa = .86$ ), well-being of friends ( $\kappa = .82$ ), and societal engagement ( $\kappa = .96$ ). Appendix C contains participant-generated examples from each category.

For the present SEM analyses, we created two subscales—one indicated hedonic aspirations, the other growth-related aspirations—by summing up the number of reported activity aspirations reflecting the corresponding categories. Participants reported, on average, 2.34 hedonic aspirations ( $SD = 1.37$ ) and 1.75 growth-related aspirations ( $SD = 1.23$ ).

Consistent with past research (e.g., Bardi & Schwartz, 2003), the present three hedonic indicators of lifestyle were positively interrelated ( $r_{(\text{values-activities})} = .41, p < .01$ ;  $r_{(\text{values-aspirations})} = .16, p < .01$ ;  $r_{(\text{activities-aspirations})} = .21, p < .01$ ), and the same was true for the three growth-related indicators of lifestyle ( $r_{(\text{values-activities})} = .49, p < .01$ ;  $r_{(\text{values-aspirations})} = .31, p < .01$ ;  $r_{(\text{activities-aspirations})} = .39, p < .01$ ).

*Covariates.* Personality traits were assessed with a German short version of the NEO Personality Inventory (NEO-PI; Costa & McCrae, 1985) developed by Borkenau and Ostendorf (1989). This version contains 60 items, 12 per dimension. Because of time limitations, only six items were randomly selected for each of the five dimensions. Using a 5-point response scale ranging from 1 (*not at all true of me*) to 5 (*very true of me*), participants indicated the degree to which each of the items described themselves. The six-item scales showed satisfactory  $\alpha$  reliabilities (Neuroticism:  $\alpha = .74$ ; Extraversion:  $\alpha = .56$ ; Openness:  $\alpha = .44$ ; Agreeableness:  $\alpha = .58$ ; Conscientiousness:  $\alpha = .67$ ).

#### Statistical Analyses

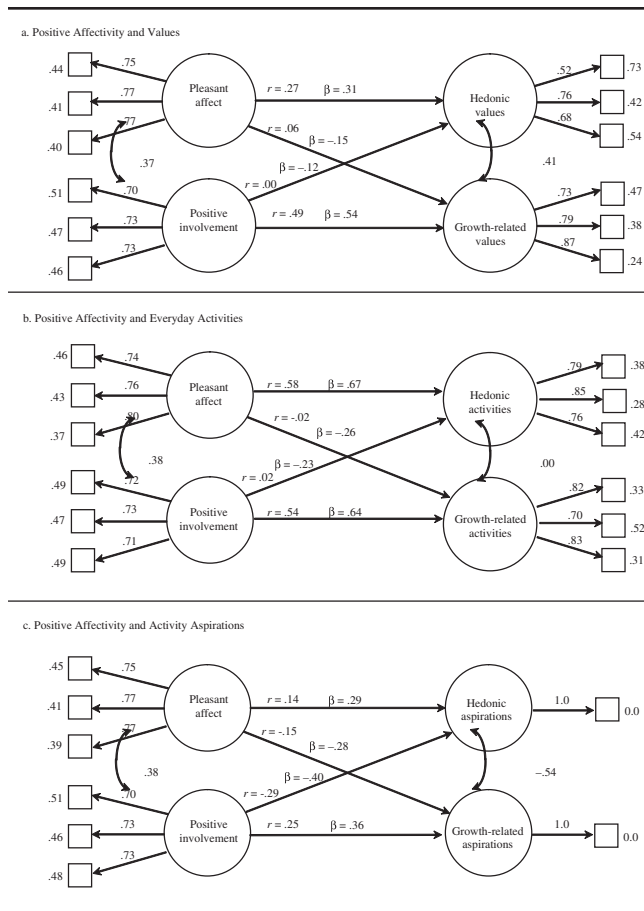
To test our predictions, we employed SEM techniques. Model fit was assessed by the following fit statistics:  $\chi^2$  value with its associated degrees of freedom and probability level, root mean square error of approximation (RMSEA), nonnormed fit index (NNFI), and normed fit index (NFI). Neither the observed nor the latent variables were standardized. Covariance matrices were analyzed by applying the maximum likelihood procedure as a method of parameter estimation.

## RESULTS

### Positive Affectivity and Value Orientations

We specified a four-factor covariance structure model to test our predictions about the relations between the two dimensions of positive affectivity and the hedonic versus growth-related value orientations. All factors were specified as three-indicator factors. Residual variances (i.e., random errors of measurement and uniqueness of the indicators) were specified to be uncorrelated. For purposes of identification, all latent factor variances were fixed to 1.0. The relationships between the four latent factors were specified as  $\psi$  paths. This model showed acceptable fit,  $\chi^2_{(48)} = 92.62$ , RMSEA = .05, NFI = .93, NNFI = .95. As seen in Figure 1, all estimates of factor loadings were reasonable, which is a further indication of an acceptable fit between the hypothesized model and the sample data.

As depicted in Figure 1, pleasant affect and positive involvement constitute two distinct dimensions, which are only moderately correlated ( $r = .37$ ;  $p < .01$ ). A posi-



**Figure 1** Structural equation models of the cross-sectional associations between positive affectivity and three indicators of lifestyles: general value orientations, everyday activities, and activity aspirations.

NOTE: On the measurement level, each model shows unstandardized factor loadings and standardized residual variances of the indicators. Each indicator represents a subscale with several items (for further details, see text).

tive correlation of this size is consistent with earlier research on the structure of affect (Watson et al., 1999). Similarly, there was only a moderate correlation between the two value orientations ( $r = .41; p < .01$ ) thus suggesting that for some people both orientations are important, whereas for others, only one is.

As predicted, pleasant affect was positively associated with the hedonic value orientation ( $r = .27; p < .01$ ) and was not associated with the growth-related value orientation ( $r = .06; ns$ ). Positive involvement was positively associated with the growth-related value orientation ( $r = .49; p < .01$ ) but was not associated with the hedonic value orientation ( $r = .00; ns$ ).

To test the unique effects of pleasant affect and positive involvement on the two value dimensions, we respecified the respective  $\psi$  paths between the factors as  $\beta$  paths. As seen in Figure 1, the association between pleasant affect and the hedonic value orientation and

the association between positive involvement and the growth-related value orientation remained basically unchanged. Interestingly, when controlled for positive involvement, pleasant affect was negatively related to the growth-related value orientation ( $r = -.15; p < .05$ ).

*Analyses of negative affect.* To test the zero-order correlations of negative affect with the positive affect and value dimensions, we specified a SEM that included negative affect as an additional factor indicated by the three subscales described previously. All relations between the latent factors were specified as  $\psi$  paths. This model showed acceptable fit,  $\chi^2_{(80)} = 163.57$ , RMSEA = .05, NFI = .90, NNFI = .93, and the estimates of factor loadings on negative affect were reasonable (.81, .81, and .80, respectively). Negative affect was positively related to the hedonic value orientation ( $r = .15; p < .05$ ), and showed a negative relation to the growth-related value orientation ( $r = -.18; p < .05$ ).

There was a negative correlation between negative affect and positive involvement ( $r = -.38; p < .05$ ), but the relation between negative affect and pleasant affect was nonsignificant ( $r = -.10; p < .05$ ). We also tested the unique effects of the affective dimensions on the two value orientations ( $\psi$  paths between the predictor and outcome factors were respecified as  $\beta$  paths). In this analysis, the relations between negative affect and the two value dimensions became nonsignificant (hedonic:  $\beta = .16$ ; growth-related:  $\beta = .01$ ). The effects of the two dimensions of positive affect on the two value dimensions remained unchanged and significant (see Table 2).

*Analyses of chronological age.* To test the zero-order correlations of age with the four affect and value dimensions, we respecified our original SEM to include chronological age as an additional factor (i.e., age was specified as a single indicator factor). All relations between the latent factors were specified as  $\psi$  paths. The zero-order correlations of age with the remaining factors were supportive of our predictions. As expected, age was positively correlated with positive involvement ( $r = .42; p < .01$ ) and the growth-related value orientation ( $r = .43; p < .01$ ), but it showed negative zero-order correlations with pleasant affect ( $r = -.38; p < .01$ ) and the hedonic value orientation ( $r = -.30; p < .01$ ).

The correlational pattern between the present constructs allowed us to test our predictions that (a) the relationship between age and a hedonic value orientation may be mediated by age differences in pleasant affect and (b) the relationship between age and a growth-related value orientation may be mediated by age differences in positive involvement (Baron & Kenny, 1986). To test the first prediction, age and pleasant affect were allowed to jointly predict the hedonic value orientation. To test the second prediction, age and positive involve-



**TABLE 1: Zero-Order Relations Between the Present Central Constructs and Covariates<sup>a</sup>**

Central Construct	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	Age <sup>b</sup>	Sex <sup>c</sup>
Pleasant affect	-.29**	.57**	.15*	.07	.13*	-.38**	.09
Positive involvement	-.45**	.31**	.23**	.29**	.48**	.42**	-.13*
Negative affect	.65**	-.16*	.00	-.38**	-.35**	-.35**	.05
Hedonic values	.04	.32**	-.05	.16*	.14*	-.30**	-.20**
Growth values	-.25**	.15*	.01	.26**	.44**	.43**	-.11
Hedonic activities	-.01	.38**	.13*	.08	.01	-.45**	-.05
Growth activities	-.24**	.17**	.29	.26**	.25**	.53**	-.14*
Hedonic aspirations	.16**	-.02	-.14*	-.09	-.17**	-.42**	.01
Growth aspirations	-.18*	-.08	.05	.25**	.14**	.53**	-.06

a. The associations between the two dimensions of positive affectivity and the indicators of lifestyle are depicted in Figure 1.

b. Age group (young adults: 15-20 years; middle-aged adults: 30-40 years; older adults: 60-70 years).

c. The response format of the gender variable was 1 (female) and 2 (male).

\* $p < .05$ . \*\* $p < .01$ .

ment were allowed to jointly predict the growth-related value orientation.

The effect of age on the growth-related value orientation was significantly reduced after positive involvement was controlled for ( $\beta_{(1)} = .43$ ;  $\beta_{(2)} = .27$ ;  $\Delta z = 2.39$ ). This finding is consistent with the idea that the age-related increase in growth-related values can be at least partly explained by an increase in the frequency with which people experience feelings of positive involvement (e.g., interest, inspiration, or enthusiasm). In contrast to our second prediction, however, the effect of age on the hedonic value orientation remained unchanged after pleasant affect was controlled for ( $\beta_{(1)} = -.30$ ;  $\beta_{(2)} = -.22$ ;  $\Delta z = 1.55$ ). The effects of the two dimensions of positive affectivity on the two value dimensions remained significant and basically unchanged.

*Covariance analyses: The effects of gender and five personality traits.* As seen in Table 1, gender and the five personality covariates showed significant and meaningful zero-order correlations with the present affective and value dimensions. To test the univariate effects of each covariate, we specified SEMs that included, in addition to pleasant affect and positive involvement, one covariate as a latent factor (i.e., as an alternative predictor of the two value outcomes). Relations between predictor and outcome factors were specified as  $\beta$  paths. As seen in Table 2, the associations between positive affectivity and the two value dimensions remained significant and basically unchanged after the present personality variables were both separately and simultaneously controlled for.<sup>3</sup> There was only one exception: The relationship between pleasant affect and the hedonic value orientation became nonsignificant after extraversion was controlled for. After controlling for gender, we found that the relationships between the two dimensions of positive affectivity and the value orientations remained significant and basically unchanged.

### *Positive Affectivity and Self-Reported Everyday Activities*

To test our predictions about the relations between the two dimensions of positive affectivity and everyday activities, we respecified the four-factor model described above by specifying hedonic versus growth-related activities as two outcome factors, each indicated by three subscales. As in the first set of analyses, residual variances (i.e., random errors of measurement and uniqueness of the indicators) were specified to be uncorrelated, and all latent factor variances were fixed to 1.0. The relationships between the four latent factors were specified as  $\psi$  paths. This model showed acceptable fit,  $\chi^2_{(48)} = 60.29$ , RMSEA = .03, NFI = .96, NNFI = .99. As seen in Figure 1, all estimates of factor loadings were reasonable, which is a further indication of an acceptable fit between the hypothesized model and the sample data.

As predicted, pleasant affect was positively associated with hedonic activities ( $r = .58$ ;  $p < .01$ ) and was unrelated to growth-related activities ( $r = -.02$ ;  $ns$ ). Positive involvement was positively associated with growth-related activities ( $r = .54$ ;  $p < .01$ ) but was unrelated to hedonic activities ( $r = .02$ ;  $ns$ ). To test the unique effects of pleasant affect and positive involvement on the two activity dimensions, we respecified the respective  $\psi$  paths between the factors as  $\beta$  paths. As seen in Figure 1, the association between pleasant affect and hedonic activities and the association between positive involvement and growth-related activities remained basically unchanged. When allowed to jointly predict hedonic and growth-related activities, pleasant affect was negatively related to growth-related activities ( $r = -.26$ ;  $p < .05$ ), and positive involvement was negatively related to hedonic activities ( $r = -.23$ ;  $p < .05$ ).

*Analyses of negative affect.* The model that included negative affect as an additional three-indicator factor

**TABLE 2: Relations Between Two Dimensions of Positive Affectivity and Three Indicators of Lifestyle (Values, Everyday Activities, and Activity Aspirations) When Controlled for Six Covariates**

	<i>Effects of Pleasant Affect on:</i>						<i>Effects of Positive Involvement on:</i>					
	<i>Value</i>		<i>Activity</i>		<i>Aspiration</i>		<i>Value</i>		<i>Activity</i>		<i>Aspiration</i>	
	<i>H</i>	<i>G</i>	<i>H</i>	<i>G</i>	<i>H</i>	<i>G</i>	<i>H</i>	<i>G</i>	<i>H</i>	<i>G</i>	<i>H</i>	<i>G</i>
Neuroticism	.30**	-.15*	.64**	-.27**	.31**	-.30**	-.09	.47**	-.19	.54**	-.37**	.31**
Extraversion	.12	-.19*	-.55**	-.36**	.31**	-.26**	-.15	.49**	-.25*	.54**	-.40**	.36**
Openness	.28**	-.14	.70**	-.27**	.30**	-.28**	-.11	.51**	-.25*	.59**	-.38**	.35**
Agreeableness	.26**	-.14	.58**	-.26*	.29**	-.28**	-.17	.45**	-.26*	.50**	-.40**	.30**
Conscientiousness	.25**	-.13	.59**	-.26*	.29**	-.29**	-.23*	.36**	-.25*	.55**	-.39**	.36**
All <sup>a</sup>	.13	-.03	.41**	-.16*	.16*	-.13*	-.09	.26**	-.07	.32**	-.16*	.13*
Negative affect	.31**	-.15	.67**	-.26**	.29**	-.28**	-.06	.55**	-.21**	.64**	-.39**	.33**
Sex <sup>b</sup>	.30**	-.14	.59**	-.25*	.31**	-.42**	-.16	.48**	-.27**	.53**	-.42**	.36**

NOTE: H = hedonic; G = growth related.

a. Relationships between positive affectivity and lifestyle outcomes when simultaneously controlled for the five personality factors.

b. The response format of the gender variable was 1 (female) and 2 (male).

\* $p < .05$ . \*\* $p < .01$ .

again showed acceptable fit,  $\chi^2_{(80)} = 123.27$ , RMSEA = .04, NFI = .93, NNFI = .97. Negative affect was unrelated to hedonic activities ( $r = .06$ ) and showed a negative relation to the growth-related activities ( $r = -.21$ ;  $p < .01$ ). When controlled for positive involvement and pleasant affect, the effects of negative affect on the two activity dimensions became nonsignificant (hedonic:  $\beta = .05$ ; growth-related:  $\beta = .00$ ). The effects of the two dimensions of positive affect on the two activity dimensions remained unchanged and significant (see Table 2).

*Analyses of chronological age.* The zero-order correlations of age with hedonic and growth-related activities were again supportive of our predictions. Age was positively correlated with growth-related activities ( $r = .53$ ;  $p < .01$ ) and was negatively related to hedonic activities ( $r = -.34$ ;  $p < .01$ ). To test the prediction that the relationship between age and hedonic activities would be mediated by age differences in pleasant affect, age and pleasant affect were allowed to jointly predict hedonic activities. To test the prediction that the relationship between age and growth-related activities would be mediated by age differences in positive involvement, age and positive involvement were allowed to jointly predict growth-related activities.

As predicted, the effect of age on the growth-related activities was significantly reduced after positive involvement was controlled for ( $\beta_{(1)} = .53$ ;  $\beta_{(2)} = .37$ ;  $\Delta z = 2.39$ ). Similarly, the effect of age on hedonic activities was significantly reduced after pleasant affect was controlled for ( $\beta_{(1)} = -.45$ ;  $\beta_{(2)} = -.27$ ;  $\Delta z = 2.69$ ). These findings suggest that age differences in everyday activities (hedonic and growth related) can be partly explained by age-related decreases in pleasant affect and age-related increases in positive involvement. The effects of the two dimensions of positive affectivity on the two activity

dimensions remained significant and basically unchanged.

*Covariance analyses: The effects of gender and five personality traits.* As seen in Table 1, gender and the five personality covariates showed significant and meaningful zero-order correlations with the present everyday-activity dimensions. The associations between positive affectivity and the two activity dimensions remained significant and basically unchanged after we controlled for the present personality variables separately and simultaneously (see Table 2).<sup>3</sup> The relationships between the two dimensions of positive affectivity and the activity dimensions also remained significant and basically unchanged after gender was controlled for.

#### *Positive Affectivity and Activity Aspirations*

To test our predictions about the relations between the two dimensions of positive affectivity and activity aspirations, we specified a third model with hedonic versus growth-related activity aspirations as the two outcome factors. Both activity aspiration factors were specified as single-indicator factors, whereas the two dimensions of positive affectivity were specified as in the previous models (see Figure 1). This third model showed acceptable fit,  $\chi^2_{(16)} = 17.39$ , RMSEA = .01, NFI = .97, NNFI = .99.

As predicted, pleasant affect was positively associated with hedonic activities ( $r = .14$ ;  $p < .01$ ) and positive involvement was positively associated with growth-related activities ( $r = .25$ ;  $p < .01$ ). In contrast to our predictions, however, there were also cross-links, namely, pleasant affect was negatively related to growth-related activity aspirations ( $r = -.15$ ;  $p < .05$ ) and positive involvement was negatively related to hedonic activity aspirations ( $r = -.29$ ;  $p < .01$ ).

To test the unique effects of pleasant affect and positive involvement on the two activity dimensions, we respecified the respective  $\psi$  paths between the factors as  $\beta$  paths. As seen in Figure 1, the association between pleasant affect and hedonic activities and the association between positive involvement and growth-related activities remained basically unchanged and even became somewhat stronger.

*Analyses of negative affect.* The model that included negative affect as an additional three-indicator factor again showed acceptable fit,  $\chi^2_{(36)} = 58.28$ , RMSEA = .04, NFI = .95, NNFI = .97. Negative affect was positively related to hedonic activity aspirations ( $r = .16$ ;  $p < .05$ ) and showed a negative relation to the growth-related activity aspirations ( $r = -.18$ ;  $p < .05$ ). When controlled for positive involvement and pleasant affect, however, the effects of negative affect on the two activity aspiration dimensions became nonsignificant (hedonic:  $\beta = .04$ ; growth-related:  $\beta = -.08$ ). The effects of the two dimensions of positive affect remained unchanged (see Table 2).

*Analyses of chronological age.* The zero-order correlations of age with hedonic and growth-related activity aspirations were again supportive of our predictions. Age was positively related with growth-related activity aspirations ( $r = .47$ ;  $p < .01$ ) and was negatively related to hedonic activity aspirations ( $r = -.42$ ;  $p < .01$ ). To test the prediction that the relationship between age and hedonic activity aspirations would be mediated by age differences in pleasant affect, age and pleasant affect were allowed to jointly predict hedonic activities. To test the prediction that the relationship between age and growth-related activity aspirations would be mediated by age differences in positive involvement, age and positive involvement were allowed to jointly predict growth-related activities.

In contrast to our predictions, after age was controlled for, the effect of pleasant affect on hedonic activity aspirations ( $\beta = .12$ ) and the effect of positive involvement on growth-related activity aspirations ( $\beta = .08$ ) both became nonsignificant. Statistically speaking, the variance component that links the two dimensions of positive affectivity with the two activity aspiration factors is shared by the variance component of age. There was only one significant relationship between positive affectivity and activity aspirations after age was controlled: the negative relationship between positive involvement and hedonic aspirations ( $\beta = -.22$ ). The effects of age on the two activity aspiration factors remained basically unchanged.

*Covariance analyses: The effects of gender and five personality traits.* As seen in Table 1, gender and the five personality covariates showed significant and meaningful zero-order correlations with the present activity aspiration

dimensions. The associations between positive affectivity and the two activity dimensions remained significant after we controlled for the present personality variables separately and simultaneously (see Table 2).<sup>3</sup> The relationships between the two dimensions of positive affectivity and the activity dimensions also remained significant after gender was controlled for.

## DISCUSSION

Consistent with past theoretical and empirical work on positive affect, the present evidence suggests that the tendency to experience positive feelings is related to what people value and do in their everyday lives (e.g., Fredrickson, 1998; Isen, 1987; Keltner & Kring, 1998; Watson et al., 1992). The present study extended previous empirical work examining positive affectivity and its relation to motivational outcomes by examining two dimensions of positive affectivity separately: pleasant affect (e.g., happiness, satisfaction) and positive involvement (e.g., interest, inspiration). As predicted, these two dimensions were relatively independent of one another and were differentially related to lifestyles either representing a hedonic or a growth-related orientation. Pleasant affect, but not positive involvement, was associated with a hedonic lifestyle. Positive involvement, but not pleasant affect, was related to a growth-related lifestyle. This pattern of associations was found for both values and everyday activities. Adults who tended to frequently experience pleasant affect were likely to hold hedonic values (e.g., values related to a pleasurable life, intimacy, and social approval) and pursue related activities in their everyday lives. Similarly, adults who tended to frequently experience feelings of positive involvement considered growth-related values as important (e.g., values related to personal growth, well-being of friends and family, and societal engagement) and reported partaking in activities related to these values. For the most part, the present associations remained unchanged after gender, five personality traits (i.e., neuroticism, extraversion, openness, agreeableness, conscientiousness), and negative affectivity were controlled for.

Pleasant affect and positive involvement were also related to people's activity aspirations—that is, activities that they would pursue if they had extra resources (i.e., a large amount of money or 2 extra hours per day); however, the two dimensions of positive affectivity were not differentially related to hedonic versus growth-related activity aspirations. In other words, people tending to frequently experience pleasant affect were likely to report hedonic aspirations and were unlikely to report growth-related activity aspirations. For people who tended to frequently experience feelings of positive involvement, the opposite was true; they were likely to

mention growth-related aspirations and were unlikely to mention hedonic activity aspirations. The main reason for the lack of differential relationships is that our measures of hedonic and growth-related activity aspirations were not independent. Altogether, a participant could report six activity aspirations, which were coded to reflect mutually exclusive categories. A participant who reported more hedonic activity aspirations had to report fewer growth-related activity aspirations and vice versa.

Another reason for the lack of differential relationships could be that our measure of activity aspirations was more situation specific than our measures of the other two indicators of lifestyle (i.e., value orientations and everyday activities). In any given situation, it is difficult to pursue activities that are both hedonic and growth related. For example, a person can plan to spend his or her money for a vacation or to help others in need. Observing this person over longer time periods and across multiple situations might reveal, however, that he or she pursues both types of activities.

Despite these qualifications, the present evidence clearly suggests that different positive affective states may lead people to value and pursue quite different lifestyles. People who experience positive involvement frequently are likely to hold and pursue values that foster their own and others' productivity and well-being—namely, values related to purpose in life, modulation, personal growth, life insight, well-being of friends, and societal engagement. Pleasant affect, in contrast, seems to be associated with a more passive and self-centered lifestyle focused on consuming rather than contributing.

Researchers who have associated hedonism with superficiality, irresponsible behavior, and distraction from more meaningful activities (e.g., Kasser & Ryan, 1993) may consider our finding that pleasant affect was positively related to a hedonic lifestyle as qualifying the central tenets of the broaden-and-build theory of positive emotions (Fredrickson, 1998). From this point of view, it is at least questionable that a hedonic lifestyle broadens a person's thought-action repertoire and helps build enduring resources.

Adopting a more balanced view, however, one could argue that living a good life most likely involves a coordinated pursuit of multiple values cutting across different lifestyles and is incompatible with a one-sided reliance on either hedonic pleasure or personal and prosocial growth. Given that our data were based on a general, dispositional approach, they do not exclude the possibility that experiencing pleasant affect and pursuing hedonically motivated behaviors could be adaptive in certain situations. Occasionally, prioritizing hedonic pursuits may not create resources but may help people to preserve what they have achieved (see also Fredrickson,

1998). An important avenue for future work is to study the ways in which people coordinate hedonic versus growth-related values and activities over time. Investigating such dynamics will require longitudinal and micro-genetic studies.

#### *Age, Positive Affectivity, and Lifestyle*

As expected, younger adults were more likely to experience pleasant feelings and pursue a hedonic lifestyle, whereas older adults were more likely to experience feelings of positive involvement and pursue a growth-related lifestyle. The associations between age and the present two lifestyles were consistent across three levels: values, everyday activities, and activity aspirations. This pattern of findings is inconsistent with earlier views of aging that state that becoming older is associated with a general flattening of emotions, increased self-centeredness, and little concern for personal growth and the welfare of others (e.g., Cumming & Henry, 1961; Looft, 1972). Corroborating lifespan theories of personality development, our findings suggest that many older people are positively involved with their environment and consider personal growth, as well as the well-being of others, to be important aspects of their lives (e.g., Carstensen & Turk-Charles, 1998; Staudinger & Lindenberger, 2003).

In addition, our evidence suggests that future studies on age differences in positive affect might benefit from a two-dimensional model of positive affect. The inconsistent results of past studies examining the relation between age and positive affect might be because different studies have used different measures of positive affect, some focusing on pleasant affect and others on positive involvement (e.g., D. Diener & Suh, 1998; Mroczek & Kolarz, 1998). On the basis of this study, we would predict an age-related increase in positive affect only if positive affect were measured as positive involvement.

We had thought that age-related differences in positive affectivity could explain the differences between young and older adults' lifestyles; however, the empirical evidence was only partially supportive. Consistent with our predictions were the findings for everyday activities; that is, age-related differences in hedonic and growth-related activities were partly explained by age-related differences in pleasant affect and positive involvement. In other words, older adults may be less likely to pursue hedonic activities because they experience pleasant affect less frequently than young adults. Similarly, they may be more likely to pursue growth-related activities because they experience feelings of positive involvement more frequently than their younger counterparts.

The evidence for values was mixed. Age-related differences in growth-related values were partly due to age-related differences in positive involvement; however, we were not able to explain age-related differences in



hedonic values by age differences in pleasant affect. The difference between young and older adults in hedonic values may be due to factors other than pleasant affect. For example, older adults may be more sensitive to issues related to social desirability (e.g., Stöber, 2001) and therefore may be more unlikely than young adults to report that they value a pleasurable, primarily self-centered life. Our measure of everyday activities might be less biased by a tendency toward socially desirable responses, because our theoretical classification of activities as either hedonic or growth-related was not obvious to the participants. The discrepant findings for more cognitive and activity-related indicators of lifestyle underline the importance of studying the concept of lifestyle on different levels simultaneously (for a similar argument, see Peng, Nisbett, & Wong, 1997).

Despite the limitation that positive affect explained age differences in neither hedonic values nor hedonic and growth-related activity aspirations, the evidence suggests that positive affect plays a role in age-related changes in lifestyles on the level of actual everyday activities. Therefore, positive affect may be an important factor not only in people's choices for certain activities at a given point in time, it may also influence the way people's everyday activities change over the adult years. Future longitudinal research is needed that tests this and related ideas. One prediction would be that a person's everyday activities are particularly sensitive to age-related changes and trigger changes in more cognitive indicators of lifestyle.

#### *Caveats and Directions for Future Research*

The present study extended past work on positive affect by investigating two dimensions of positive affect—pleasant affect and positive involvement—and their differential relationships to two lifestyles. Although the overall pattern of the present findings is encouraging, several limitations of this study need to be considered.

The first limitation is our assessment of positive involvement and pleasant affect as general dispositions. One avenue for future research on the link between positive affect and lifestyles would be to study specific feelings (happiness, interest) and specific behavioral preferences (going to a party or studying) as they occur in various everyday life situations. By repeatedly sampling the same participants over time, for example, one could examine the prediction that specific positive feelings (e.g., interest) would increase the likelihood of some activities (e.g., exploration) and decrease the likelihood of other activities.

It would also be interesting to conduct laboratory studies and examine in a more fine-grained manner the effects of different positive emotions on individuals'

actual preferences and behaviors. As reviewed above, past relevant laboratory work has induced diffuse pleasant feeling states or happiness (e.g., Bless & Schwarz, 1999; Isen, 1999). Based on recent theoretical work on the functions of positive emotions (Fredrickson, 1998, 2001; Lerner & Keltner, 2000) and the present empirical evidence, one would expect that pleasant feelings (happiness, satisfaction) have different effects on behavioral preferences than do feelings of positive involvement (interest, inspiration). An advantage of laboratory research is the possibility of assessing positive emotions on different levels—namely, self-reported feelings, behavioral expressions, or physiological arousal (e.g., Fredrickson & Levenson, 1998). A possible topic for future work would be exploring whether the simultaneous activation of all three components of an emotion would be required to influence a person's behavior.

A second limitation concerns our decision to study only two lifestyles. These two lifestyles are not a representative sample of all the lifestyles people could value and pursue. Future work is needed to determine whether the two facets of positive affect are differentially associated with other lifestyles not assessed in this study (e.g., lifestyles related to security and stability or dominance and power).

In addition, our findings can only be considered as a first step toward understanding how cognitive and behavioral facets of lifestyle interact. Given the limitations of questionnaire approaches to studying everyday activities (e.g., selective memory or interpretative biases), we share the view that experimental research is needed in which people's actual behaviors are observed (e.g., Bardi & Schwartz, 2003). In this study, we hoped to provide a starting point to show that the concept of lifestyle is useful and can be conceptualized in terms of values, everyday activities, and activity aspirations.

A third limitation of this study is that the data were collected during a single measurement period and our study is correlational in nature. Therefore, firm conclusions cannot be made as to the direction of the relationship between positive affect and lifestyle. It may be that positive affect causes a particular lifestyle or that a particular lifestyle leads to experiencing certain positive feelings. A creative combination of experimental and longitudinal designs is needed to appropriately address the issue of causality.

Despite these limitations, the present study is consistent with prominent theories and past experimental work suggesting that positive affect has important consequences for how people think and behave (e.g., Bless & Schwarz, 1999; Fredrickson, 1998; Isen, 1999; Keltner & Kring, 1998). Expanding previous empirical research in this area, we provided evidence that positive affect encompasses two highly distinct dimensions—positive

involvement and pleasant affect—that relate differentially to people’s lifestyles. Whether both lifestyles—hedonic and growth-related—help people to build and preserve their enduring resources is a topic for future research. Our finding that age was related negatively to pleasant affect and a hedonic lifestyle but was positively related to positive involvement and a growth-related lifestyle is consistent with recent lifespan theories emphasizing that becoming older involves not only losses but also gains, particularly in personality functioning (e.g., Staudinger & Lindenberger, 2003). The present study contributes to a growing literature that focuses explicitly on the positive aspects of adulthood and old age (Carstensen & Turk-Charles, 1998).

**APPENDIX A**  
**Items of the Value Questionnaire: Nine Scales<sup>a</sup>**

<i>Dimension</i>	<i>Item</i>
Hedonic	
Pleasurable Life	1. Enjoying life 2. Being well-to-do (e.g., having material possessions) 3. Being able to fulfill my wishes 4. Leading an agreeable life 5. Having a fun and entertaining life 6. Being happy and having fun
Intimacy	1. Feeling that others take care of me 2. Having friends with whom I can talk openly 3. Having friends with whom one can share one’s worries 4. Being able to trust other people
Social Approval	1. Being respected by others 2. Being acknowledged by others 3. Being liked by other people 4. Being loved in my circle of friends and acquaintances
Growth related	
Purpose in Life	1. Having life goals 2. Being able to take control of one’s life course 3. Knowing what one wants in life 4. Being able to stick to things 5. Being goal oriented 6. Being able to work hard
Modulation	1. Being neat and orderly 2. Being able to resist temptation 3. Being sensible 4. Having good control over oneself 5. Being able to fulfill one’s responsibilities 6. Being moderate in one’s actions and feelings
Personal Growth	1. Getting new insights into the course of my life 2. Having an exciting life with many experiences 3. Gathering experiences that broaden my horizons
Growth related	

(continued)

**APPENDIX A (continued)**

Personal Growth	4. Developing myself constantly 5. Having a diverse and varied life 6. Learning something in life
Insight Into Life in General	1. Understanding the world 2. Having a deep understanding of life in general 3. Understanding what life means 4. Having a sense of one’s life 5. Having an interest in the world
Well-Being of Friends and Family	1. Helping colleagues or schoolmates in need 2. Being willing to forgive my friends 3. Helping in the family when I am needed 4. Being fair to my fellow man 5. Being helpful 6. Not thinking only of one’s self but also of others
Societal Engagement	1. Doing something for our society 2. Being active against conflicts and wars 3. Being engaged politically (e.g., joining a party) 4. Helping to protect the environment 5. Helping to preserve the beauty of nature 6. Living in harmony with nature 7. Helping to protect endangered animals and plants 8. Doing something for peace in the world

a. Instruction: For each value, indicate how important it is as a guiding principle in your life. Response scale ranged from 1 (*extremely unimportant*) to 5 (*extremely important*).

**APPENDIX B**  
**Items of the Everyday Activities Questionnaire: Two Scales<sup>a</sup>**

<i>Dimension</i>	<i>Item</i>
Hedonic	1. To do something with friends 2. To visit friends or invite them to my house 3. To buy something nice for myself 4. To make myself comfortable at home 5. To go dancing 6. To listen to music at home 7. To go to restaurants and cafes 8. To make or visit a party 9. To spoil or indulge myself 10. To play board games
Growth Related	1. To do volunteer work or activities 2. To read books 3. To educate myself further 4. To follow the news of TV or radio 5. To be active for the environment 6. To think about political themes 7. To be politically active 8. To read a newspaper 9. To be active for my fellow person 10. To go to museum exhibits

a. Instruction: For each of the following activities, please indicate how often you did these in the last year. Response scale ranged from 1 (*very often*) to 5 (*never*).

**APPENDIX C**  
**Hedonic and Growth-Related Activity Aspirations,**  
**Participant-Generated Statements**

Category	Hedonic Aspirations	
	Money Task	Time Task
Pleasurable life	To buy a house in the South, because I do not like the long winters here	To walk in the forest, because this relaxes me so much
Social harmony	To pay my debts back, because I would have fewer conflicts with my husband	To talk more with my friends, because this is something I cannot do as often because of my work
Making new friends	To buy a big house in which I could live together with other single persons	To take a trip on a ship, because I might meet the woman of my dreams (i.e., rich, beautiful, well-educated)
Category	Growth-Related Aspirations	
	Money Task	Time Task
Life insight	To visit museums around the world, because you cannot learn enough about art	Read classic books, because school has turned me away from that
Well-being of friends	To give part of it to my friend, because she went bankrupt with her gallery and I am afraid that she wants to commit suicide	To visit my neighbor, because she is alone so often and I want to make her a little happier
Societal engagement	To give it to a homeless shelter, because I want to help everybody to have a roof above his head	To engage in politics, because I could do something for my district

**NOTES**

1. The six growth-related value dimensions were randomly divided into thirds to create three indicators for a Growth-Related Value Orientation factor.
2. The present coding system included four additional categories that were not included in this study because they could not be categorized as representing one of the present lifestyles (secure life,  $\kappa = .86$ , range = .82-.89) or because they showed relatively poor reliabilities (e.g., personal success:  $\kappa = .53$ , range = .06-.74; personal growth:  $\kappa = .60$ , range = .43-.79). In addition, one category, social reputation, was excluded because of its low base rate.
3. The reported results are based on the analysis of a partial covariance matrix. This matrix contains the associations between the present central factor's indicators after they were residualized on the five personality factors.

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