

# Individuality in Young and Middle Adulthood: An Autophotographic Study

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Developmental theories and recent examinations of adult self descriptions across the life span (e.g., G. Labouvie-Vief, L. M. Chiodo, L. A. Goguen, M. Diehl & L. Orwoll, 1995a,b) indicate that the self becomes more unique, individualistic, and complex with age. We further examined this developmental trend, using autophotographic essays (words and photos answering the broad question “who are you”) obtained from 844 adults (ages 18–54). The essays were rated for levels of individuality or richness of self-depiction. That is, the photo essays were used as a medium for operationalizing self-construals that are uniquely creative, abstract, self-reflective, and multidimensional. The photo essays of middle-aged participants reflected more individuality than did those of younger participants. Correspondingly, we observed more photographs of achievement themes, religious sentiments, working, creative products, and negative affect in the middle-age photo essays but fewer photos of self-smiling, others smiling, alcohol, athletics, and music. Results provide further evidence for greater uniqueness, interiority, and seriousness of purpose—all suggestive of individuality—in adulthood.

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**KEY WORDS:** autophotography; individuality; middle adulthood; creativity.

While difficult to operationalize, *individuality* is often used to describe the uniqueness and irreplaceability of a person (e.g., see Brody & Ehrlichman, 1998; Ghiselli, 1960; Mumford, Stokes, & Owens, 1990). Although in using the term, most authors assume that all people are unique and therefore possess individuality, few would argue that all are equally individualistic; some persons rarely, if ever, express or do something that is unique, but at the opposite extreme some embrace creativity and individuality as a life value. It has been proposed that individuality increases with age as reflected by a move towards more self-reflection or interiority, inner direction, and individuation (Erikson, 1982; Jung, 1933; Labouvie-Vief, 1994; Loevinger, 1976; Neugarten, 1976). Cognitive developmental researchers have proposed that the increased cognitive complexity that accompanies adult-

hood also results in a change in the representation of the self (Labouvie-Vief, Chiodo et al., 1995; Labouvie-Vief, Diehl, Chiodo, & Coyle, 1995). Although there have been few attempts to empirically demonstrate it, these factors may contribute to individual differences in individuality with age.

In studies of self-representation across the life span, Labouvie-Vief and her colleagues (Labouvie-Vief, Chiodo, et al., 1995; Labouvie-Vief, Diehl, et al., 1995) have found evidence that adults move from self-representations that are poorly differentiated, relatively static, and conventional or normative to ones that reflect more unique individuality, sense of self that is not tied to significant others and one that is characterized by unique traits and a complex psychological history. As proposed by Labouvie-Vief (1994), people show increasingly complex notions of the self and other with age (e.g., roles, traits, interpersonal relationships, activities, interests, and physical descriptions). Using open-ended responses to the prompt to write about yourself, these notions of self can be scaled into five levels of self-representation; they range from

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the concrete-presystem “low” end, where there is no reference to inner psychological process, up to the dynamic-subjective “high” end, where the focus is on “becoming and emergence.” An examination of self-representations in adolescents, middle-aged, and older adults revealed that scores were highest for middle-aged adults, and were related to cognitive and personality dimensions (Labouvie-Vief, Chiodo, et al., 1995a).

Although based on a different research tradition, this study takes the Labouvie-Vief research as an important model for studying the development of sense of self in adulthood. More specifically, we attempt to answer a similar research question with a different method—autophotography or the taking of pictures to tell who one is—which has most often been used to study individual differences other than age (e.g., personality variables, personal orientations). Although the method of autophotography has been used most within social-personality psychology, the old but still-popular “Twenty Statements Test” or “Who are you?” method (Bugental & Zelen, 1950; Kuhn & McPartland, 1954) seems to be a methodological parent to both autophotography and Labouvie-Vief’s self-representation task. This and the similarity between our scaling of individuality–richness of self-depiction and levels of self-representation direct our attention to these developmental questions.

We have defined *individuality* (originally called richness of self-depiction) as creativity applied to self and operationalized it by a variation on Ziller’s (1990) autophotographic method (Dollinger & Clancy, 1993; Dollinger & Clancy Dollinger, 1997; Dollinger, Preston, O’Brien, & DiLalla, 1996). In these studies, participants were invited to take or select 20 photos that, when accompanied by verbal descriptions, present “who you are.” Ziller has used this method by coding objective content—what he termed “orientations”—among such diverse groups as counseling clients, delinquent and nondelinquent teens, impoverished Mexican children, older Japanese and Americans, shy persons, those confined to wheelchairs, and others (e.g., Combs & Ziller, 1977; Okura, Ziller, & Osawa, 1985–86; Ziller & Lewis, 1981; Ziller & Rorer, 1985). Although we have also used objective content coding, our primary measure is a overall rating of individuality or richness of self-depiction, patterned after Amabile’s consensual assessment technique for rating creative products (Amabile, 1982). This approach has found wide acceptance among creativity researchers (e.g., Hennessey, 1994; Koestner, Walker, & Fichman, 1999). Initially

we used a 5-point scale anchored at the two endpoints (see Method section) with an assumed midpoint of “3” (Dollinger & Clancy, 1993). On the basis of those initial findings, we refined the scale by (a) denoting level “2” as normative because it occurred most frequently and (b) descriptively identifying those participants for whom raters—without discussion—achieved near perfect consensus (Dollinger & Clancy Dollinger, 1997). Using this “prototype” group, we were able to characterize Level 1 photo essays as commonplace and one-dimensional; Level 2 as focused on the “outer” world of social roles and relationships; Level 3 as beginning to show photos more representational of “inner” traits and qualities; Level 4 as quite representational of inner traits and somewhat creative/unique in the process; and Level 5 as showing a very creative self that is unlike any other. Although independently derived, our five levels are quite similar to the dimension described by Labouvie-Vief et al. (Labouvie-Vief, Chiodo, et al., 1995; Labouvie-Vief, Diehl, et al., 1995) for rating self- and other-representations.

The most individualistic photo essayists portray themselves in rich and differentiated ways. They often use metaphors and sometimes poetry to depict aspects of their inner self. They seem to be self-aware, perhaps even self-critical, and are more concerned with inner realities than outer perceptions. Indeed they have fewer cares than most people about “fitting into” society and have little interest in what they regard as superficial public images (Dollinger et al., 1996; Dollinger, Cook, & Robinson, 1999). However, they are universalistic in orientation toward people. The least individualistic photo essayists present almost interchangeable one-dimensional portraits of the self—portraits that sometimes appear as “every-person’s family album” and sometimes as an implicit statement that “physical pleasures *are* my life.”

Considered from several developmental standpoints, individualists are persons who have or are continuing to grapple with identity issues (Berzonsky, 1989; Erikson, 1963; Marcia, 1966). This is seen in their preference for information-seeking over a group- or family-dependent normative orientation to “finding” themselves (Dollinger & Clancy Dollinger, 1997). Thus, identity-foreclosed persons are usually the least individualistic photo essayists. So too, individualists tend to emphasize personal identity over social or collective identities (Cheek, 1989). In other words, they seek to define themselves, for example, by their ideas, dreams, and imagination rather than be defined by their social behavior or by the groups with which they associate (Dollinger et al., 1996). It is also noteworthy

that individualists disavow superficial qualities like appearance, possessions, age, or gender in their sense of identity (Dollinger et al., 1996). They also score higher on level of ego development (Dollinger et al., 1996, Study 2) and show a trend toward higher moral development level (Kilman-LaMartina, 1996).

In terms of the five-factor model of personality (John, 1990; Wiggins, 1996), the most replicable personality correlate of individuality is openness to experience (Dollinger et al., 1996; Dollinger & Clancy, 1993; Dollinger & Clancy Dollinger, 1997; Dollinger, Ross, & Preston, 2002). According to McCrae and Costa (1997), "openness is seen in the breadth, depth and permeability of consciousness, and in the recurrent need to enlarge and examine experience (p. 826)." Those who are said to be open are imaginative, intellectually curious persons who prefer variety and newness in their lives and generally think in independent- and liberal-minded ways. Related findings in the present research program indicated that individualistic persons make more unconventional word associations and that they possess more permeable boundaries, together implying more divergent and creative thought (Dollinger, Robinson, & Ross, 1999). They also take a broader perspective in terms of their interests, their inclusive approach to others, their imagined futures (Dollinger, Robinson et al., 1999), and they have greater curiosity and intellectual interests (Dollinger et al., 2002). All of these correlates are suggestive of the importance of openness in individuality.

As Ziller noted, photo essays can be studied for both content and process (Amerikaner, Schauble, & Ziller, 1980). Although our research program has mainly concerned what they called the process level (and measured by the individuality rating), we have routinely coded each photo of the photo essays for about 20 content codes (e.g., self-with-others, achievement, religion). As a supplementary analysis in the present research, we examined the data for age trends in content that might corroborate or more fully describe any observed trends in individuality. These analyses are justified by findings in our initial research on a previous data set (Clancy & Dollinger, 1993), where we found several age correlates of content, notably that the category of religion was positively associated with age.

In sum, given that individuality relates to several identity-development processes and to experiential openness, it is reasonable to hypothesize that greater individuality in middle than younger adulthood. Data were collected over the last 6 years of a 10-year pro-

gram of research examining personality and identity. The major purpose of this study was to examine the relations between age and individuality from late adolescence to middle adulthood, as operationalized by photographic essays. Data were collected originally to study a variety of research questions (Dollinger, Cook et al., 1996, 2002; Dollinger & Clancy Dollinger, 1997; Dollinger et al., 1998) but no analyses have addressed age trends in the samples presently studied. On the basis of the findings of Labouvie-Vief, Chiodo, et al. (1995), we expected to find greater evidence of individuality in middle-aged than younger adults.

## METHOD

### Participants

This study included 844 participants (68% female), ranging in age from 18 to 54,  $M = 22.8$  years. Divided by marital status, 86% were single-never married, 10.5% married, and 3.5% divorced. Participants voluntarily completed photo essays and questionnaire measures as two of eight optional independent projects that could earn credit in undergraduate psychology courses. Nearly 90% of the participants completed the questionnaire option (from which demographic data for this study were obtained) and about 50% completed photo essays. Those who completed both projects were participants for the present purposes. Participants gave informed consent, and in conjunction with their courses, received feedback on questionnaire material. They received a brief feedback on their photo essays when these were returned at the end of the semester.

### Photo Essay Procedure

In keeping with Ziller's (1990) procedure, we invited participants to take, or have someone else take, photos that answered the broad question "who are you?" We modified Ziller's basic instructions by inviting participants to use 20 photos, rather than 12, and to provide written commentary. We added an elaboration that answered participants' most commonly asked questions:

By way of example, you can choose to portray your typical everyday environments and your current lifestyle; you could portray how you are unique (like no other person) and how you are like some

or all others; you could show the traits or personality characteristics that are self-defining; you could depict the personal projects or important life tasks you are working on at present; or you could use your imagination to convey the inner values that you hold dear, the things that are most important to you, or to tell your life story.

Trained raters assigned a single individuality rating to each photo essay. The ratings were based on the overall impression created by the photos and accompanying written commentary. We defined Level 1 photo essays as those that were “concrete, unimaginative, commonplace in selection of photos, repetitive in content (one-dimensional) and in general portrayed a superficial conception of self.” Such photo essays could, in effect, be exchanged with any like-rated essay without loss of meaning. Thus, they were indicative of very low individuality. We denoted Level 2 as statistically “typical” and such essays included a focus on the “outer” self, for example, the self as filling multiple roles in life such as family member, student, employee, and friend. While portraying more differentiation than Level 1, they include many commonly seen photos or themes (for our samples) so they do not depict much individuality. Levels 3 and 4 showed more self reflection, use of metaphor, and construal of self as possessing internal traits, with Levels 4 and 5 showing these qualities plus a more pronounced creative, self-defining sense of self. We defined Level 5 photo essays as ones that were “abstract, creative, multidimensional, self-reflective, and aesthetically-sensitive.” Such photo essays were very rich in meaning and not-at-all interchangeable. Table I presents detailed examples of the descriptions and kinds of photos at the five levels.

Following Amabile's (1983) consensual assessment method, we computed a coefficient alpha as a measure of reliability. (Note that all raters viewed all photo essays.) In the first two waves of this sample (see Dollinger et al., 1996), four raters of photographic individuality achieved intercorrelations (Pearson  $r$ s) ranging from .59 to .75, with an overall Cronbach alpha reliability of .89. In waves 3 and 4 (see Dollinger & Clancy Dollinger, 1997) four raters intercorrelated between .60 and .79 with an overall alpha reliability of .91. In waves 5 and 6 of the sample (see Dollinger, Cook, et al., 1999), five raters achieved intercorrelations ranging from .66 to .79 with an overall alpha reliability of .92. In waves 7 and 8 (unpublished data), individuality ratings by four raters intercorrelated between  $r = .59$  and .88 with an overall alpha reliability of .90. Overall for the entire sample, 14 different indi-

viduals judged the individuality/richness of photo essays, and reliabilities of these ratings ranged from .89 to .92. Because of the difference in number of raters, the basic datum was the mean rather than sum of ratings. Across 844 participants, the individuality rating averaged 2.16 with a standard deviation of 0.84.

We also examined objective content codes reflecting social relatedness and other orientations. Over time, we have included a number of different interpersonal categories (e.g., children, significant others), but five particular codes consistently had high loadings on the first principal component of these interpersonal codes and thus reflect very interpersonally focused, socially connected photo essays. These five codes were number of photos of *self-with-others*, *self smiling*, *others smiling*, *people touching*, and *groups* (four or more in foreground). Twelve other content codes were examined and each was the number of photos out of 20 that met the content definition. These included: *alcohol* (usually seen in the presence of beer but also in other alcohol containers, or brand insignia displayed on clothing or posters); *religion* (sacred places, objects, and activities); *athletics* (as participant or observer); *achievement* (studying, graduation, diplomas); *work* (full- or part-time jobs depicted); *books* (favorite books shown in foreground); *music* (instruments or favorite music); *career* (photos depicting hoped-for careers); *nature* (explicit focus on natural beauty, not coded for incidental depictions unless nature is mentioned in commentary); *creative products* (depicting art, crafts, or performances of which one is proud); *black-and-white* (commonly used for artistic effect, occasionally older photos); and *negative affect* (commentary clarifies undesirable aspect of self, e.g., photo of one's Prozac). Each photo was examined for these content codes and tallies kept for their frequency of occurrence, then prorated to a standard 20 photo set. (Across the entire sample, 68% had precisely 20 photos and 89% had between 18 and 22 photos; overall  $M = 20.5$  photos,  $SD = 2.7$ .)  $N$ s varied for the objective codes as not all of these were collected in all samples. Two coders overlapped on approximately 30% of the protocols for each sample. Intercorrelation between coders on the content codes yielded a median  $r = .88$ , range = .56–.99.

## RESULTS

For the data analyses, participants were grouped into seven age categories, with roughly 5-year

**Table I.** Individuality Rating Scale

| Level | Denoted as . . .  | Examples  |
|-------|---|---|
| 1     | Concrete, unimaginative, or dull style, commonplace and prosaic photos, repetitive content  | Many photos of people especially smiling people making them like family albums, single themes conveyed (e.g., self-as-partier; self in different rooms of apartment); sophomoric humor (e.g., tongues exposed to show “wild and crazy” attitude); emphasis on possessions (e.g., cars) or body (e.g., self sleeping) without self-explorations or meanings attached to this; sometimes conveys unarticulated theme “I am my pleasures”  |
| 2     | Typical or normative  | Self shown in greater variety of roles: (e.g., student, employee, daughter, boyfriend) and as having a variety of likes and dislikes; athletics and pet photos are common (but not definitive); self-satisfaction is common (e.g., pride upon earning diploma in high school or junior college) whereas self-criticism is rare; “possessions” accompanied by more self-realization (e.g., “I can be materialistic”); conventional religious feelings are depicted (e.g., church membership)   |
| 3     | No description  | Similar to Level 2 but shows greater focus on self as possessing inner traits, at least in several photo-descriptions; first signs of creativity but in sex-role stereotypic ways (e.g., cake-decorating, wood-carving) and in just a few photos; first sign of representational or metaphoric photos to convey traits or personal qualities, again just in a few photos. Levels 3–5 show greater engagement in the arts (e.g., drama, painting), interest in science (e.g., Einstein as hero, comments on the Internet) and in general, greater curiosity about ideas  |
| 4     | No description  | Representational photos are common, including woman’s stuffed bear prompts childhood memories, comments about relationships or need for security; photo of basketball hoop signifies reaching for high goals in life; photo of nothing (black) signifies “being in the dark too often in my life”; bottle of Prozac to show one’s struggle with depression. More integration shown, using multiple photos linked by a theme or story, e.g., “a good example of my characteristic duality—sometimes I’m messy (photo on left side of page) but other times I’m very clean or orderly (right)—I’m very unpredictable.” Or photo of ex-boyfriend, currently in prison juxtaposed with photo of roommate’s newborn in hospital—showing her tendency to pick men “who are bad for me” and implying that “I will never have my own child.” Photo-essayists at this level convey themes of self-discovery, self-exploration of feelings (rather than simple likes/dislikes), focus on life as a story/experience to understand and appreciate: “life carries on—I see it as a path and one that I usually walk alone” or “who knows what the future will hold but I am eager to find out.” Greater valuing of nature, the outdoors, and “quietness” is shown at this level. Greater valuing of creativity also evident but less creativity is evidenced than at Level 5; individualistic religious views are more common for levels 4 and 5 (e.g., seeing God in nature) |
| 5     | Abstract, metaphoric with many photos having “deeper” meanings; imaginative; creative interpretation of the task; aesthetic sensibility shown; self-expressive; self-reflective; interesting variety of themes and photos | The photo essay itself is a very creative and valued product, implying considerable investment of self; or artistic poetry is common at this level; considerable self-insight is evident in creative ways: one woman depicted her discovery of a lesbian identity after two unsuccessful marriages—by portraying herself with half of her face behind a fishbowl, she showed the feeling of growing up in a small town. In two photos she juxtaposed images of self pulling a rope in opposite directions to convey her inner conflict as she begins each new “adventure” in living. Portraying himself sitting next to a campus fountain, a young man noted “a lot of the time I feel like I am sitting still while the world is passing me by—I’m pretty slow-paced in my relationships and most people aren’t used to that it seems.” Along with a photo of himself looking out a window, he wrote, “I have often found myself dreaming about what could have been or what could be.” In another, he superimposed a ghostlike shot of a woman in the background and commented “I feel like there is a barrier that is preventing me from a real relationship.” These illustrate the quality rather than quantity of level 5 photos; the quality is pervasive in such photo essays, not limited to just 2 or 3 photo/descriptions   |

*Note.* The denoted descriptions (Levels 1 and 5) were used in the original research and labeled as a scale of “richness” (Dollinger & Clancy, 1993) after which Level 2 was denoted as typical and after which the examples of levels were derived by identifying those photo essays rated at each step with near perfect agreement by raters. At this point, we renamed the rating scale “individuality.”

**Table II.** Mean Individuality Scores by Age Group

| Group | Age range | Mean age | N   | Individuality |      |
|-------|-----------|----------|-----|---------------|------|
|       |           |          |     | M             | SD   |
| 20    | 18–22     | 20.4     | 604 | 2.09          | 0.81 |
| 25    | 23–27     | 24.0     | 146 | 2.16          | 0.89 |
| 30    | 28–32     | 29.8     | 35  | 2.39          | 0.80 |
| 35    | 33–37     | 35.3     | 19  | 2.59          | 0.79 |
| 40    | 38–42     | 39.9     | 22  | 2.80          | 1.01 |
| 45    | 43–47     | 45.1     | 11  | 2.60          | 0.79 |
| 50    | 48–54     | 51.3     | 7   | 2.50          | 0.73 |

Note. The overall *M* (and *SD*) for individuality ratings was 2.16 (0.84), *N* = 844.

intervals from age 20 to 50. Because this was a college student sample of convenience, we obviously obtained a very large number of traditional-age college students. However, by pooling samples over 6 years of data collection, we obtained a total of 240 participants between ages 23 and 54. Thus, about 30% of the sample was older than the typical college student.

As shown in Table II, individuality scores for these seven groups ranged from the “typical” level for those about 20 and 25 years of age, but increased to a moderately individualistic level among those in their late thirties and forties. These data were subjected to a least squares unequal *N* analysis of variance with age group and gender as independent variables. Gender had minimal influence, with men and women averaging 2.2 and 2.1 respectively. However, the age group effect was quite robust,  $F(6, 837) = 4.66$ ,  $p < .001$ . To determine the point at which the age increase “mattered,” a series of orthogonal contrasts were conducted comparing a given age group with all older participants, starting with the 20-year-old group, then the 25-year-old group, and so on, for each older group. The first two contrasts (with  $df = 1, 837$ ) were significant ( $F = 19.8$  and  $12.0$ , both  $p < .001$ ) indicating the differences in individuality scores were most pronounced at the late twenties. Other contrasts were nonsignificant ( $F$ s = 1.6, 0.0, 0.9, and 0.8).

Inspection of these data raise the question of whether the slight drop from the 40- through 45- to 50-year age group is meaningful and whether the age increase is mainly attributable to the 40-year age group. Two post hoc contrasts addressed this. The first compared the 20- and 25-year age groups with the 45 and 50 age groups. The data suggest that this difference (which did not include the peak among age group 40) was significant,  $F(1, 837) = 4.14$ ,  $p < .05$ . Second, a contrast between the 40- and 50-year age groups was nonsignificant,  $F(1, 837) = 0.72$ . In sum, the data sug-

gest that the age differences from age 20 to age 50 are significant and that the slight drop from age 40 to 50 is not.

We estimated the magnitude of the age effect in two ways. First a simple zero-order correlation between chronological age and individuality score yielded  $r = .17$ ,  $p < .001$ , indicating a small effect. However, based on the orthogonal contrasts (above), a comparison of those in groups 20 and 25 with those in groups 30–50 yielded a moderate effect in standard deviation units,  $d = .54$ . Thus, the effect size is small to moderate.

### Supplementary Findings

Next we examined age differences in the content codes. Because of the smaller numbers of participants for many of these variables, we used two orthogonal and one nonorthogonal contrast to consider age trends. The first contrast considered the linear trend by weighting the two oldest groups (45, 50) as +1, weighting the two youngest groups (20, 25) as −1 and the other groups as 0. Orthogonal to this, we tested for a curvilinear trend by weighting the two youngest and two oldest groups as −3 and the three middle groups as +4. Results of these two contrasts are shown in Table III. In general, the curvilinear effect (V or inverted-V trends) were not pronounced. The only significant effect (for black-and-white photos) could have been an artifact, because older participants' who included childhood photos may have depended on noncolor technology:  $M$ s = 0.14, 0.11 and 0.73 for the three groups. However, the linear contrasts point to reliable cross-sectional increases into middle age in the categories of achievement and creative photos, as well as reliable decreases in self-smiling and alcohol.

Because the orthogonal contrasts failed to identify differences from the overall ANOVA (i.e., for religion and working), we conducted one supplementary nonorthogonal contrast between our large group of 20-year-olds (what might be called typical or traditional college students) and all older participants. These contrasts showed substantial differences in religious photos,  $F(1, 837) = 7.8$ ,  $p < .01$ ,  $M_{20} = 0.31$ ,  $M_{\text{older}} = 0.43$ , and working,  $F(1, 679) = 18.1$ ,  $p < .001$ ,  $M_{20} = 0.27$ ,  $M_{\text{older}} = 0.70$ . Similar contrasts for the other codes supported the linear age effect for self-smiling, alcohol, achievement, black-and-white, and creative photos. They also revealed significant contrasts between 20-year-olds and older participants

**Table III.** Age Group Contrasts in Supplementary Photo Codes: *F* Ratios and Means

| Code                     | Overall<br><i>F</i> ratio | Contrast<br><i>F</i> Ratios |       | Means for<br>age groups |       |       |
|--------------------------|---------------------------|-----------------------------|-------|-------------------------|-------|-------|
|                          |                           | C1                          | C2    | 20–25                   | 30–40 | 45–50 |
| Self-smiling             | 2.18*                     | 4.00*                       | 0.18  | 8.41                    | 6.83  | 6.17  |
| Others-smiling           | 1.74                      | 1.62                        | 0.35  | 7.02                    | 6.49  | 5.57  |
| People touching          | 1.74                      | 0.16                        | 0.06  | 5.11                    | 4.84  | 4.48  |
| Groups (four<br>or more) | 0.42                      | 0.08                        | 0.54  | 2.15                    | 2.40  | 2.31  |
| Self with others         | 0.71                      | 1.34                        | 0.47  | 7.06                    | 6.77  | 5.72  |
| Alcohol                  | 3.68**                    | 7.32**                      | 0.31  | 1.64                    | 0.73  | 0.21  |
| Religion                 | 3.18**                    | 2.57                        | 0.32  | 0.31                    | 0.54  | 0.74  |
| Achievement              | 1.73                      | 5.16*                       | 1.15  | 0.88                    | 1.05  | 1.39  |
| Work                     | 6.70***                   | 0.82                        | 1.63  | 0.35                    | 0.75  | 0.83  |
| Black-and-white          | 1.86                      | 9.26**                      | 6.10* | 0.14                    | 0.11  | 0.73  |
| Athletics                | 1.42                      | 3.62                        | 0.05  | 1.31                    | 0.90  | 0.53  |
| Books                    | 0.38                      | 0.34                        | 1.02  | 0.25                    | 0.18  | 0.27  |
| Music                    | 0.85                      | 1.68                        | 0.01  | 0.34                    | 0.22  | 0.12  |
| Creative                 | 5.78***                   | 6.44**                      | 0.32  | 0.16                    | 0.36  | 0.52  |
| Nature                   | 0.59                      | 0.00                        | 0.60  | 0.75                    | 0.88  | 0.69  |
| Career                   | 0.94                      | 0.00                        | 0.98  | 0.13                    | 0.13  | 0.09  |
| Negative affect          | 1.77                      | 0.86                        | 2.22  | 0.39                    | 0.39  | 0.79  |

Note. C1 represents the linear effect of age whereas C2 represents a curvilinear (V or inverted-V shape effect). Denominator degrees of freedom for *F*s were 837 for self-smiling, others-smiling, people touching, groups, self-with-others, alcohol and religion; 679 for athletics, achievement, working, black-and-white, books, and music; 469 for creative and nature; and 340 for career and negative photos.

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

for others smiling,  $F(1, 837) = 6.3$ ,  $p < .05$ ,  $M_{20} = 7.21$ ,  $M_{older} = 6.26$ ; athletics,  $F(1, 679) = 7.6$ ,  $p < .01$ ,  $M_{20} = 1.33$ ,  $M_{older} = 1.07$ ; music,  $F(1, 679) = 4.5$ ,  $p < .05$ ,  $M_{20} = 0.35$ ,  $M_{older} = 0.27$ ; and negative affect,  $F(1, 340) = 4.7$ ,  $p < .05$ ,  $M_{20} = 0.40$ ,  $M_{older} = 0.53$ .

As a final supplementary analysis, chronological age was regressed on the 17 photo codes in a simultaneous regression. This analysis yielded a multiple  $R$  of .39,  $R^2_{adj} = .11$ ,  $F(17, 329) = 3.54$ ,  $p < .001$ . Significant predictors in the model included self-smiling  $\beta = -.23$ ,  $p < .01$ ; alcohol  $\beta = -.12$ ,  $p < .05$ ; religion  $\beta = .11$ ,  $p < .05$ ; working  $\beta = .14$ ,  $p < .01$ ; and creative products  $\beta = .17$ ,  $p < .01$ .

Together with the individuality results, these findings imply that younger traditional-college aged participants depicted themselves in simplistic or superficial ways emphasizing themselves (and often their friends) smiling, as well as the parties and “good times” with which alcohol is associated. Older participants were more likely to depict themselves in serious, meaning-making pursuits such as working, achievement, religion, and creativity.

## DISCUSSION

The present results demonstrated age differences in individuality (or richness of self-depiction) among college students from their early twenties to their early fifties. The differences imply—but as a cross-sectional study do not demonstrate—growth of individuality from young to middle adulthood. These differences conceptually replicate research by Labouvie-Vief et al. (1995a,b) on self-representations across the life span, and support predictions based on developmental theory. Supplementary results showed age group differences in photo codes reflecting orientations toward positive affect (self- and others-smiling) and leisure time use (alcohol and parties, athletics, music) versus. purposive or meaning-making activity (achievement, religion, creativity, work). We consider the implications of these findings for research on self-representation, their developmental implications, and then discuss limitations and possible future directions.

### Individuality and Self-Representation

Labouvie-Vief et al. (1995) concluded that self-representations can be ordered along levels of complexity, and that variation in these levels progress from adolescence to later life. At the lowest levels, the self is relatively undifferentiated from social groups. At higher levels (and among older participants), the self appears more as an internal structure relating systematically to institutional ideals and standards and capable of examining (transcending) institutional constraints. Thus, at higher levels the self can integrate its own multifaceted and sometimes contradictory tendencies. Our findings of age differences in individuality are very compatible with the theorizing and conclusions of Labouvie-Vief. This correspondence is noteworthy because our task and scaling of individuality started from an empirical point-of-departure rather than developmental theory: we attempted to measure and characterize the wide variation in the richness of autophotographic essays. Like Labouvie-Vief et al. (1995), our lowest level consists of an undifferentiated and simplistic view of the self as embedded, usually contentedly, in social or family groups. One level higher—and typical for our samples—is slightly more differentiation into multiple roles in life but with little integration of roles or perception of self as transcending roles. Participants at the next level begin to comment on traits and values that transcend

roles, and then at still higher levels portray their individuality in a wide range of creative, self-reflective, and integrative ways. Like Labouvie-Vief et al. (1995), these levels vary from late adolescence to middle adulthood. The similarity of our findings is all the more noteworthy in view of differences in the task (words alone vs. words stimulated by photos) and scaling (digitizing and rating each thought unit vs. focusing on the essay as a whole).

The external correlates of self-representation and photo-based individuality bear some similarities and some differences. The most replicable correlate of individuality is the “big-five” factor known as openness to experience or intellect (Dollinger et al., 1996, 2002; Dollinger & Clancy, 1993). Given the meaning of this factor (McCrae & Costa, 1997), our findings are compatible with the major correlates of self-representation, namely ego development and crystallized intelligence, plus the CPI factor composed of flexibility and achievement via independence (Labouvie-Vief et al., 1995). One major difference exists, however. Whereas self-representation related to *less* depression (among older adults), we have consistently found that individuality relates to more neuroticism and lower self-esteem (Dollinger et al., 1996; Dollinger & Clancy, 1993), and greater likelihood of therapy experience plus greater expected future emotional distress (Dollinger, Cook, et al., 1999; Dollinger, Robinson, et al., 1999). These discrepancies may be resolved if we recall the age ranges involved: our samples are primarily aged 18–24 whereas Labouvie-Vief’s finding for depression occurred for her older sample (age 46–85). Future research should consider not only the relationship between individuality and self-representations but also the possibility that such qualities relate to distress in one’s younger years (perhaps because one is “out of step” with peers), but relates to well-being in older years because it suggests a richer more interesting “inner life.”

### Developmental Implications

The present results are consistent with a number of developmental theories that propose a growth in the complexity of personality. Considering psychodynamic theories first, Jung and Erikson offered a number of conceptual categories that fit with the present findings. Of particular relevance is Jung’s notion of individuation as a middle-of-life focus. According to Jung (1933, 1940, 1959), midlife presents opportunities to explore and integrate unconscious motives, to

integrate opposites or dualisms in the self—in effect to establish dialogues between diverse aspects of self. Dealing with archetypal symbols and stories, and using artistic or “active imagination,” one must inherently connect with his or her creativity, at least unconsciously. The implied developmental trend in our data is consistent with such an idea, although we must acknowledge that the greatest age group “jump” in our data (about age 30) seems younger than Jung’s focus.

With his suggestion of successively broader contexts of relations and psychosocial issues—and the revisiting of past issues in light of newer resolutions—Erikson’s (1963, 1982) theory would expect greater self-complexity over time; and possibly some degree of creativity might be associated with the psychosocial issue of generativity at least for some individuals. Although our most individualistic photo essays are certainly the most complex, they are also the most self-reflective. In a previous study based on Erikson’s theory, we predicted greater self-focus among those engaged in identity exploration (Dollinger & Clancy Dollinger, 1997). Applied to the present context, this prediction might expect participants who are *younger* rather than older to score higher on individuality. From the present results, it would appear that the increased individuality associated with having explored identity is not lost, but in fact increased with time. This issue also draws attention to an important distinction that must be made in studying individuality photographically, that is, the difference between individuality and self-absorption. Although an occasional participant’s photo essay does create the impression of narcissistic self-absorption, such protocols have a repetitive and unidimensional quality (and apparently without self-realization of this fact) leading to lower rather than higher ratings of individuality. Thus, an Eriksonian perspective is quite compatible with the present findings.

Considering more contemporary theorists, the present findings are consistent with Neugarten’s notion of interiority and Loevinger’s theory of ego development (Loevinger, 1976; Loevinger & Blasi, 1991). Neugarten suggested that “interiority” is a characteristic of middle and older adulthood, and the present findings are very compatible with this notion. Indeed, the term interiority might have been a fitting alternative label for our scale except for the fact that individuality better conveys the implication of creativity (cf. Helson & Roberts, 1992; MacKinnon, 1965).

Loevinger’s conceptual scheme entails a series of increasingly complex levels of ego functioning and



emotion regulation ranging from the impulsive and self-protective, through conformist and conscientious, to individualistic and autonomous levels. Higher levels are characterized by greater differentiation, integration, and self-reflective cognition. Theoretically persons grow in ego development over time and some data suggests this growth into middle adulthood (Westenberg & Gjerde, 1999). Although it is often difficult to find many individualistic and autonomous participants in college samples, our earlier data suggest that photographically based individuality does correlate with ego development (Dollinger et al., 1996).

Whereas the preceding theories focus at least implicitly on inherent organismic process, other development-promoting processes may be relevant as well. In particular, Baltes (1987) proposed that life events can be partitioned into the age- and history-normative (or developmentally predictable from one's age of life) and nonnormative. Extrapolating from this difference, one might expect that persons who have experienced more nonnormative life events will have a higher environmental press toward individuality and uniqueness. We would expect this *if* the person attempted to integrate those nonnormative events. Some of the most distinctive protocols include photos with commentary about how one's life or views of self were changed because of such nonnormative events as the loss of a significant other in an auto accident or to prison, struggles with alcohol addiction, depression, or acceptance of a homosexual identity. If it were possible to scale nonnormative life events, we would expect the number of such events to grow across the years of middle adulthood, and such a trend would be compatible with the present data.

### Limitations and Future Directions

There are several important limitations to this study that deserve attention in further research. First, conclusions about age *changes* are obviously precluded by a cross-sectional design. We can only speculate that the present findings would appear in a longitudinal study and, thus far, we have no longitudinal data on autophotographic essays. However, the prospect of obtaining such data is imaginable because participants seem to find the activity itself very meaningful, and they often treasure the photos and associated memories (Dollinger & Clancy, 1993).

Additional limitations entail the sampling of participants. That is, generalization to a wider age range is

precluded by our limited number of participants over age 50. Expanding the age range here is an important goal for future research. Additionally, the present results are limited by the use of a convenience sample of college students. In defense of the present sample, first, we note that, by virtue of liberal admissions standards, our population of students is remarkably diverse. Moreover, the large number of older students represent one aspect of that diversity, and present opportunities for addressing the research questions presently studied. As already noted, the present findings corroborate those of Labouvie-Vief, and so the use of a college student sample may present greater limitations for age range than for representativeness. It should also be noted that a convenience sample is not necessary for the photographic technique; as demonstrated by Okura et al. (1985–86), autophotography can be used with older adults in various cultures.

In sum, this study showed that, using the creative method of autophotographic essays, middle-aged-adult participants depicted themselves in richer ways than younger adults, showing greater complexity, self-awareness, and aesthetic sensitivity and in so doing also depicted themselves in more serious meaning-making activity. Younger adults depicted themselves in more simplistic and superficial ways emphasizing their positive affect (and often their friends smiling), as well as the parties and “good times” particularly ones in which alcohol is present. Such findings are in keeping with classic theoretical conceptions of integration, interiority, and identity development as well as corroborating contemporary research on self-representations.

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