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Journal of Adolescent Research 2005; 20; 557
DOI: 10.1177/0743558405274872

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Adolescents’ Implicit Theories of Maturity: 
Ages of Adulthood, Freedom, and Fun

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Conceptions of maturity were explored among 170 adolescents in Grades 7 and 10. Adolescents were asked at what ages (and why) they expected to reach adulthood, experience the most freedom, and have the most fun. Adolescents expected to have fun at an earlier age than they expected freedom or adulthood. The majority of adolescents cited the acquisition of independence as critical to their expectations for the ages of adulthood (71%) and freedom (74%). Some chronological transitions, such as reaching driving age (41%) as well as acquiring independence (41%), were associated with the expected age for fun. Adolescents who felt older than their age and engaged in more problem behaviors but were low on psychosocial maturity, were more likely than other adolescents to cite chronological transitions as indicative of freedom. The importance of these conceptions for guiding adolescents through the transition to adulthood is discussed.

Keywords: psychosocial maturity; implicit theories; transition to adulthood

When adolescents think about growing up or maturing and becoming adults, what do they expect? What developmental markers will signal to them that they have reached adulthood and when do they expect to experience these events? These questions can be answered by exploring adolescents’ implicit theories concerning the transition to adulthood. Implicit theories of development are strong beliefs people have about how personal attributes change over time (Ross, 1989). These theories are implicit in that they are rarely discussed but are often invoked to explain the behavior of others or the self. According to Ross, implicit theories are schemalike knowledge structures that include beliefs about the general stability of a personal attribute.
Adolescents’ Implicit Theories of Maturity

In two studies, Galambos and colleagues (Galambos, Barker, & Tilton-Weaver, 2003a; Tilton-Weaver, Vitunski, & Galambos, 2001) explored adolescents’ implicit theories of maturity. In the first study (Tilton-Weaver et al., 2001), sixth and ninth graders were asked to describe a peer who seemed more grown up than most other kids. Content analysis of the descriptions revealed that the majority of adolescents described a genuinely mature peer (someone who exhibited autonomy, responsibility, and control of emotions; 49%) or a pseudomature peer (someone who engaged in problem behaviors, preferred to hang out with older peers, and looked and acted older; 25%). That is, about half of adolescents viewed grown-up status in the same way psychosocial maturity is defined in the literature (Galambos & Tilton-Weaver, 2000; Greenberger & Steinberg, 1986), and one quarter equated grown-up status with pseudomature behaviors. Pseudomaturity is the appearance of adultlike behavior without the accompaniment of true psychological maturity (Greenberger & Steinberg, 1986); it may be recognized in adolescents who feel more mature, engage in more problem behaviors, and have lower levels of psychological maturity compared to other adolescents their age (Galambos, Barker, & Tilton-Weaver, 2003b; Galambos & Tilton-Weaver, 2000).

In the second study involving the same adolescents, Galambos et al. (2003a) asked participants to describe a peer who seemed more childish than other adolescents their age. The idea was to gain insight into adolescents’ implicit theories of the behaviors antithetical to maturity (i.e., immaturity). In this case, content analysis revealed descriptions of childlike behaviors (age-inappropriate social behavior and lack of independence; 37%), silly or goofy
behaviors (difficulty acting appropriately in serious situations; 33%), and mean or hurtful behaviors (physically and emotionally hurtful; 22%).

Clearly, young adolescents have implicit theories of what constitutes maturity and what does not. The presence of these theories has implications for individual development; implicit theories of maturity may serve to guide adolescents toward behaviors that ought to be acquired as they head toward adulthood, while at the same time, they may steer adolescents away from behaviors that should be left behind (Galambos et al., 2003a). Ironically, if pseudomaturity is seen by some adolescents as indicative of being grown up, then this view may be a recipe for engaging in behaviors that are more an illusion than a fact of maturity. Further insight into adolescents' implicit theories of maturity may be gained by examining research on adolescents' conceptions of the markers of adulthood and their expectations concerning the timing of events and role transitions that are traditionally associated with becoming an adult.

Adolescents' Conceptions of the Markers of Adulthood

Research on conceptions of the transition to adulthood has revealed that subjective markers of maturity (i.e., individual characteristics such as accepting responsibility for one's actions, independently deciding on personal beliefs and values) are more commonly endorsed as necessary criteria for adulthood than are role transitions such as entering full-time employment or getting married (Arnett, 1994, 1998, 2001). This pattern of results has been found for adults in majority and minority American cultures as well as other cultures around the world (Arnett & Galambos, 2003; Facio & Micocci, 2003; Mayseless & Scharf, 2003). It has also been found in adolescents and emerging adults. For example, Arnett (2001) found that accepting responsibility for one's actions was considered necessary for adulthood by 87% of adolescents and 93% of emerging adults. In contrast, only 13% of adolescents and 10% of young adults endorsed marriage as necessary for adulthood. Responses given by college students to open-ended questions about the ways they felt they were and were not adults (Arnett, 1998) and the distinguishing characteristics of adults (Greene, Wheatley, & Aldava, 1992) correspond with these findings. Themes of responsibility and independence were common in responses to both questions.

Adolescents' Expected Timing of the Transition to Adulthood

Traditionally, markers of adulthood have included role transitions such as completion of formal education, gaining full-time employment, leaving
one’s childhood home, marriage, and becoming a parent. Because adolescents’ future transition to adulthood exists in the context of such age-graded developmental tasks (Nurmi, 1993), it is likely that they have implicit theories for their forthcoming transition.

Indeed, research on adolescents’ expectations for the future supports this claim. For example, Greene (1990) asked 10th- and 12th-grade adolescents and college students to describe all of the events that might happen to them in the future and assign ages to those events. For events related to the transition to adulthood, all groups of participants ordered graduating from high school or college, starting a career, marriage, and parenthood chronologically, expecting to graduate at the earliest age and become parents at the latest age. Moreover, older participants cited transitions associated with older ages (starting a career, marriage) more often than younger participants, and there was more variability in the expected ages of these transitions among the older participants. More recently, Crockett and Bingham (2000) found that adolescents ordered transitions chronologically from completing school to obtaining full-time employment and then getting married followed by parenthood. Compared to national averages, however, the timetable for the rural adolescents in this study was accelerated, with earlier expected transitions to work and marriage. These findings correspond to those reviewed by Nurmi (1991), showing that the content and temporal extension of adolescents’ interests and goals do indeed reflect expected life span development.

Individual Differences in Implicit Theories of Maturity: Age, Sex, and Psychosocial Maturity

For older adolescents, thinking about the future extends further into their futures compared to younger adolescents (Nurmi, 1991). This suggests, as does the research by Greene (1990), that it is important to consider age as a factor in adolescents’ implicit theories of the transition to adulthood. Developing understanding of and planning for the future is considered critical for successful transition to adulthood and may be facilitated by gains in problem-solving and abstract thinking skills during the course of adolescence (Eccles, Templeton, Barber, & Stone, 2003). Older adolescents’ understanding of and planning for the future might be different from that of younger adolescents, and the differences might appear in their implicit theories of the transition to adulthood.

What other individual differences are there in adolescents’ implicit theories of maturity? Because sex roles or stereotypes prevalent in one’s culture may influence adolescents’ expectations for their futures (Galambos, 2004; Nurmi, 1991), it is important to explore sex differences in implicit theories of
the transition to adulthood. Studies show that boys and girls differ in terms of the content of their expectations for the future, with girls more oriented toward future family life and boys more oriented toward future material gain (Nurmi, 1991). However, significant gender differences have not been found in studies of conceptions of adulthood (Arnett, 1994). Sex differences may or may not be evident in adolescents’ implicit theories, depending on the content of the theories.

Finally, adolescents’ current psychosocial maturity status may be related to their implicit theories of maturity. Research shows that adolescents can be reliably differentiated on a set of variables defining psychosocial maturity. Galambos and colleagues (Galambos et al., 2003b; Galambos & Tilton-Weaver, 2000) identified three groups of adolescents who displayed different maturity statuses: mature, immature, and pseudomature. Mature adolescents demonstrated above average levels of psychological maturity, average levels of perceived maturity (i.e., subjective age), and below average levels of problem behavior. Immature adolescents were below average in terms of psychological maturity, subjective age, and problem behavior. Pseudomature adolescents demonstrated below average levels of psychological maturity but above average levels of subjective age and problem behavior. Furthermore, pseudomature adolescents’ desired age was greater than mature adolescents’; these adolescents felt older than their peers (i.e., high subjective age) and wanted to be even older. The authors argued that pseudomature adolescents’ elevated involvement in problem behaviors was one way they endeavored to gain the privileges associated with adulthood. Given that implicit theories of maturity are assumed to play a role in guiding adolescents’ development into maturity, it is worth asking to what extent adolescents’ implicit theories are related to their current psychosocial maturity status. For example, when asked how they will know when they have reached adulthood, pseudomature adolescents might be expected to focus more on markers of adultlike behavior (e.g., reaching driving age) whereas mature adolescents might focus more on markers indicating responsibility.

The Current Study

Although we have some understanding of adolescents’ implicit theories of maturity, it is difficult to find a study that has explicitly asked adolescents at what age they expect to reach adulthood and how they will know when they have done so. Moreover, given the importance of establishing autonomy in the transition to adulthood, it is of interest to ask adolescents at what age they expect to have the most freedom and why (Arnett & Galambos, 2003). Finally, we were interested in examining at what age and why at that age ado-
adolescents expected to have the most fun. This was explored because of the possibility that implicit theories of maturity might incorporate a perceived trade-off between acquiring the responsibilities of adulthood and losing some of the fun associated with youth. Research questions guiding the current study were (a) at what ages do adolescents expect to reach adulthood, experience the most freedom, and have the most fun, and why? and (b) are there age, sex, and psychosocial maturity status differences in adolescents’ implicit theories of adulthood, freedom, and fun?

Method

Participants

Participants were from a sample of 170 adolescents (91 girls and 79 boys) who participated in the second wave of a 3-year study designed to examine psychosocial maturity (the Victoria Adolescence Project; VAP). Data were collected from eighty-three 7th graders ($M_{age} = 12$ years, 9 months) and eighty-seven 10th graders ($M_{age} = 15$ years, 10 months). According to the adolescents’ reports, 85% were Caucasian, 8% were Asian, and the remaining 7% were members of other ethnic minorities (e.g., Native Canadian, Indo-Canadian). A total of 78% of adolescents lived with two parents, both biological parents (68%), or one biological parent and one stepparent (10%). According to the adolescents, 71% of mothers and 67% of fathers attended college or university after completing high school. Based on adolescents’ reports of parents’ occupation, employed mothers’ mean socioeconomic status (SES) score on the Blishen, Carroll, and Moore (1987) SES index was 45.65 ($SD = 14.13$), and employed fathers’ mean SES score was 48.47 ($SD = 13.93$). Examples of occupations and the corresponding SES score are as follows: sales clerk = 30.93; secretary = 41.82; civil engineer = 71.70. Most participants were from working-class to middle-class families, although the full range of SES scores was represented (21.37 through 101.32 for mothers and 21.37 through 101.74 for fathers).

Procedure

Wave 2 from the VAP constituted the source of data for the current study because this was the wave in which all of the constructs under investigation were measured. Wave 1 data were collected in the spring of 1998 in the classrooms of 11 public schools (8 elementary and 3 secondary) from 452 adoles-
cents. In all but 2 schools, parents received letters of information and were asked to respond only if they did not wish their adolescents to participate. In the other 2 schools, a signed parental consent form was necessary for adolescents to participate. For each adolescent who participated, $5 was contributed to a class fund. The overall participation rate was 67%.

Wave 2 questionnaires were mailed to participants’ homes 1 year later in the spring of 1999. The Wave 2 participation rate was 40% of those who completed questionnaires at Wave 1. Active informed consent was received from one parent and from each adolescent at Wave 2. Adolescents were paid $15.00 for participation in Wave 2.

The adolescents who remained in the study at Wave 2 were compared to the adolescents who participated only at Wave 1. There were no significant differences between Wave 2 participants and nonparticipants on Wave 1 scores of mothers’ and fathers’ education level, living with two parents, mothers’ and fathers’ SES, or any of the quantitative variables under investigation in the current study.

Measures

Markers of the age of adulthood, freedom, and fun. To gather information about adolescents’ implicit theories of maturity, they were asked about their expectations for reaching adulthood: “How old do you think you will be when you have reached adulthood? How will you know when you have reached adulthood?” Conceptions about the age of freedom were solicited by asking, “Looking ahead to the future, at what ages of your life do you expect to have the most freedom? Why those ages?” Their ideas about fun were assessed by asking, “Looking ahead to the future, at what ages of your life do you expect to have the most fun? Why those ages?” Adolescents were given space in the questionnaire to write down their answers to these questions.

Subjective age. The mean of seven items (Galambos & Tilton-Weaver, 2000; Montepare, Rierdan, Koff, & Stubbs, 1989) measured how old adolescents perceived themselves to be, relative to their chronological age. Items were rated on a scale ranging from 1 (a lot younger than my age) to 7 (a lot older than my age). Sample items for girls (boys’ version in brackets) are “Compared to most girls [boys] my age, most of the time I feel ______; Compared to most girls [boys] my age, most of the time I look ______; My girl [boy] friends act toward me as if I am ______.” Higher scores indicated an older subjective age ($\alpha = .86$).
Problem behavior. The mean of 23 items (Brown, Clasen, & Eicher, 1986; Maggs, Almeida, & Galambos, 1995) (e.g., done something that your parents told you not to do; smoked marijuana; started a fist fight) comprised the problem behavior measure. Adolescents indicated the monthly frequency of these activities on a scale from 1 (never) to 5 (almost every day). Higher scores reflected higher levels of problem behavior ($\alpha = .91$).

Psychosocial maturity. Greenberger and Bond’s (1984) psychosocial maturity inventory assessed psychological maturity in three domains: self-reliance (e.g., when things go wrong for me, it is usually because of something I couldn’t do anything about), identity (e.g., I change the way I feel and act so often that I sometimes wonder who the real me is), and work orientation (e.g., I often leave my homework unfinished if there are a lot of good TV shows on that evening). These subscales were selected because of their high loadings on a single factor (Greenberger & Bond, 1984). Items (10 each for self-reliance and identity and 9 for work orientation) were rated on a scale ranging from 1 (agree strongly) to 4 (disagree strongly). One item was omitted from the original 10-item work orientation measure because of a low item-total correlation. Mean scores were calculated so that higher scores indicated more self-reliance, a more consolidated identity, and stronger work orientation. Alphas for self-reliance, identity, and work orientation were .65, .74, and .68, respectively.

RESULTS

Preliminary Analyses: Maturity Status

Following earlier research (Galambos et al., 2003b; Galambos & Tilton-Weaver, 2000), the subjective age, problem behavior, self-reliance, identity, and work orientation measures for cases with complete data ($n = 166$) for these five measures at Wave 2 of the VAP were submitted to Ward’s (1963) method of cluster analysis, using squared Euclidean distance as the measure of similarity. Average scores were 4.57 ($SD = .76$) for subjective age, 1.39 ($SD = .44$) for problem behavior, and 3.23 ($SD = .43$), 3.28 ($SD = .47$), and 2.90 ($SD = .50$) for self-reliance, identity, and work orientation, respectively. The cluster analysis suggested that a three-cluster solution was most appropriate. Next, a $k$-means cluster analysis was conducted, using seed values obtained from the Ward’s method analysis, to divide the data into three clusters (Aldenderfer & Blashfield, 1984). The three clusters generally replicated those found in earlier research in a different sample (Galambos & Tilton-
Weaver, 2000), as well as in Wave 1 of the VAP (Galambos et al., 2003b). Figure 1 shows the characteristics of these three clusters in the adolescents in the present study. The pseudomature cluster (n = 20) scored above the mean on subjective age, well above the mean on problem behavior, and below the mean on all three measures of psychological maturity. The immature cluster (n = 69) scored below the mean on all five measures. The mature cluster (n = 77) scored just above the mean on subjective age, well above the mean on all three measures of psychological maturity, and below the mean on problem behavior.

**Expected Ages of Adulthood, Freedom, and Fun**

Because some participants did not respond with a single chronological age when asked about the ages they expected to become adults, experience the most freedom, and have the most fun, coding rules were established. If an age range (e.g., 20 to 23) was given, the lower age was used. If the response was given in words (e.g., late 20s) the approximate median age was used (e.g., 28). On average, adolescents expected to reach adulthood around 20 to 21 years of age (M = 20.56, SD = 3.20). Adolescents expected to experience the most freedom around 20 years of age (M = 19.94, SD = 7.16), and the most fun between 17 and 18 years of age (M = 17.49, SD = 4.17). To explore age and sex differences in the expected ages of adulthood, freedom, and fun,
we ran a $2 \times 2$ (Grade $\times$ Sex) repeated measures MANOVA, with the three expected ages as the within-person factor. Maturity status was not included as a between-person factor because of insufficient cell size. There was a significant multivariate within-person effect for expected ages, $F(2, 138) = 29.92$, $p < .05$, partial $\eta^2 = .30$. Pairwise comparisons showed that adolescents expected to reach the age of fun earlier than they expected to reach the age of freedom or adulthood ($p < .05$). A significant main effect of grade was also found, $F(1, 139) = 11.13$, $p < .01$, partial $\eta^2 = .07$. Pairwise comparisons indicated that 7th graders’ averaged expected age (the mean of the ages of adulthood, freedom, and fun; marginal $M = 18.55$, $SE = .36$) was younger than 10th graders’ averaged expected age (marginal $M = 20.17$, $SE = .36$; $p < .05$). These main effects were qualified by a significant interaction between grade and expected ages, $F(2, 138) = 3.11$, $p < .05$, partial $\eta^2 = .04$. This interaction is depicted in Figure 2. To explore this interaction, separate repeated measures analyses were run for 7th graders and 10th graders. For 7th graders, the multivariate within-person effect for expected ages was significant, $F(2, 69) = 38.55$, $p < .05$, partial $\eta^2 = .53$. Pairwise comparisons revealed that 7th graders expected to experience the most fun (marginal $M = 15.96$, $SE = .33$) at an earlier age than they expected to reach adulthood (marginal $M = 19.83$, $SE = .29$; $p < .05$) and acquire freedom (marginal $M = 19.61$, $SE = .84$; $p < .05$); the expected ages for adulthood and freedom did not differ. Likewise, for 10th graders, the multivariate within-person effect for expected ages was significant, $F(2, 70) = 6.01$, $p < .05$, partial $\eta^2 = .15$. Pairwise comparisons
showed that 10th graders expected to experience the most fun (marginal $M = 19.07, SE = .57$) earlier than they expected to reach adulthood (marginal $M = 21.29, SE = .43; p < .05$); the expected age of freedom (marginal $M = 20.11, SE = .70$) did not differ from expected ages for fun and adulthood. There were no significant effects of sex, alone or in interaction.

**Qualitative Analysis of Implicit Theories**

Content analysis was used to explore the descriptions of markers of adulthood, freedom, and fun provided by the adolescents. That is, adolescents’ responses to the questions concerning how they would know when they reached adulthood and why they expected to experience the most freedom and the most fun at certain ages were explored. Two researchers independently derived categories of responses based on a subsample of data (approximately 18% of the responses evenly divided by grade and gender). After analyzing the responses to each of the three questions, the independently derived categories were compared, and through discussion, both researchers agreed on general themes. Through the discussion process, the researchers outlined 15 categories with definitions and examples of the themes each represented. Categories and examples of responses that fell into these categories are presented in Table 1. One researcher coded all responses using this system, analyzing each response for the presence of each of the 15 categories. More than one category could be present in each response. To the adulthood question, 161 adolescents provided responses that could be coded using this system. Two responses were considered not code-able and 7 adolescents did not respond. To the freedom question, 159 adolescents provided code-able responses, 3 were considered not code-able, and 8 did not respond. For fun, 155 adolescents provided code-able responses, 7 were considered not code-able, and 8 did not respond.

To check for reliability, a blind rater coded 25% of the responses. Discussion about unclear responses was held and agreement reached as to how to code these responses. Kappas were calculated for each of the categories for each of the three questions. For the descriptions of adulthood, kappas ranged from 0.69 to 1.00 with a median of 0.92. For the descriptions of freedom the kappas ranged from 0.80 to 1.00 with a median of 1.00. For the descriptions of fun, kappas ranged from 0.77 to 1.00 with a median of 1.00.

The final step in this qualitative analysis involved grouping the 15 categories of responses into higher order categories, or implicit theories, based on Arnett’s (2003) criteria for adulthood. Table 2 displays the five implicit theories under which the 15 subcategories fell as well as the percentage of adolescents whose responses reflected each subcategory and overarching implicit
theory. Of the 15 subcategories, 7 contributed to implicit theories of independence. The majority of adolescents’ responses reflected independence as markers of adulthood (70.8%) and of freedom (73.6%). Approximately 41% of responses cited independence as a marker for fun. Examples of responses included “having independence,” “living on my own,” “you have the ability to do basically anything you want,” “paying bills,” “when I can make responsible decisions with my future in mind,” “decisions are made by me not my parents,” and “my choices are my own.”

Two subcategories of responses were grouped under the implicit theory called role transitions: (a) marriage or family and (b) being out of school. Examples of responses include “married and have kids” and “I won’t be in school.” Only 11% to 17% of adolescents mentioned these types of transitions as indicative of achieving adulthood or of markers of freedom and fun at a particular age. Chronological transitions associated with legal age to drive and buy alcohol (e.g., “you can buy cigarettes, liquors, and get into clubs,” “able to vote, drink, drive, and able to get into raves”) were cited by relatively few adolescents as markers of adulthood and freedom (8.7% and 13.8%, respectively). However, about 40% of adolescents cited a chronological tran-

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples of Markers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living independently</td>
<td>I live on my own; I would have moved out</td>
</tr>
<tr>
<td>Out of school</td>
<td>Out of school; finished high school</td>
</tr>
<tr>
<td>Financial independence</td>
<td>Paying my own bills; have a job</td>
</tr>
<tr>
<td>Act or feel responsible or mature</td>
<td>I’m more mature; you’re responsible</td>
</tr>
<tr>
<td>Treated like an adult</td>
<td>Treated equally as an adult; treated like an adult</td>
</tr>
<tr>
<td>Marriage or family</td>
<td>Married and have kids; plan a family</td>
</tr>
<tr>
<td>Legal age</td>
<td>Go to bars; I can drive; I will be legal</td>
</tr>
<tr>
<td>Physical development</td>
<td>My body would be developed; no changes in my body</td>
</tr>
<tr>
<td>Don’t know, just will</td>
<td>You will just know; I really don’t know</td>
</tr>
<tr>
<td>Not having responsibilities</td>
<td>Not settled down with a family; less responsibility</td>
</tr>
<tr>
<td>Parents no longer have control</td>
<td>Parents will allow me all freedom; can go places without a parent</td>
</tr>
<tr>
<td>Freedom to make decisions</td>
<td>Choices are your own; choose my own lifestyle</td>
</tr>
<tr>
<td>and age</td>
<td>Nonstop party; at the prime of my life</td>
</tr>
<tr>
<td>Retirement</td>
<td>Retired and don’t have to work; I will be retired</td>
</tr>
<tr>
<td>Parental trust</td>
<td>More trust from parents; parents will trust you</td>
</tr>
</tbody>
</table>
position as the reason they expected to have the most fun. Very few adolescents (6.2%) cited biological transitions related to having reached adult proportions (e.g., “no changes in my body”) as indicative of adulthood, and none cited biological reasons behind their expectations for freedom and fun.

The remaining four subcategories of responses did not fit under any of the criteria used by Arnett (2003) and thus are listed separately (“Other”) in Table 2. In terms of markers of freedom, 17.6% of adolescents expected that not having responsibilities (e.g., “not a lot of responsibilities,” “people/society doesn’t expect you to be serious and responsible”) would be associated with increased freedom. In terms of markers of fun, a large minority of adolescents (29%) indicated that exciting and fun things happen at the age they cited. These responses were characterized by very positive language (e.g., “because I would be at the prime of my life,” “wonderful,” “party”). A small percentage of adolescents indicated that they expected to have the most freedom and fun when they retired (1.9% and 1.3%, respectively). Finally, a fair number of adolescents indicated that they did not know or they would

<table>
<thead>
<tr>
<th>Implicit Theory and Subcategories</th>
<th>Adulthood</th>
<th>Freedom</th>
<th>Fun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independencea</td>
<td>70.8</td>
<td>73.6</td>
<td>40.6</td>
</tr>
<tr>
<td>Living independently</td>
<td>18.6</td>
<td>40.9</td>
<td>11.6</td>
</tr>
<tr>
<td>Financial independence</td>
<td>25.5</td>
<td>6.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Act or feel responsible or mature</td>
<td>37.9</td>
<td>3.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Treated like an adult</td>
<td>5.6</td>
<td>1.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Parents no longer have control</td>
<td>0.0</td>
<td>11.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Freedom to make own decisions</td>
<td>5.6</td>
<td>25.2</td>
<td>22.8</td>
</tr>
<tr>
<td>Parental trust</td>
<td>0.0</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Role transitionsa</td>
<td>12.4</td>
<td>10.7</td>
<td>16.8</td>
</tr>
<tr>
<td>Out of school</td>
<td>5.6</td>
<td>10.1</td>
<td>13.5</td>
</tr>
<tr>
<td>Marriage or family</td>
<td>7.5</td>
<td>1.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Chronological transitionsa</td>
<td>8.7</td>
<td>13.8</td>
<td>40.6</td>
</tr>
<tr>
<td>Legal age</td>
<td>6.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Biological transitionsa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical maturation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not having responsibilities</td>
<td>0.0</td>
<td>17.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Fun and exciting experiences or age</td>
<td>0.0</td>
<td>1.9</td>
<td>29.0</td>
</tr>
<tr>
<td>Retirement</td>
<td>0.0</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Don’t know, just will</td>
<td>19.3</td>
<td>8.8</td>
<td>10.3</td>
</tr>
</tbody>
</table>

a. Total percentage of adolescents citing one or more of the subcategories associated with each implicit theory.

TABLE 2 Percentage of Adolescents Describing Specific Implicit Theories for the Markers of Adulthood, Freedom, and Fun
“just know” when they would reach adulthood and experience the most freedom and the most fun (19.3%, 8.8%, 10.3%, respectively).

Age, Sex, and Maturity Status Differences in Implicit Theories

Where frequencies were sufficient and cell sizes permitted, specific implicit theories associated with the ages of adulthood, freedom, and fun were singled out for further analysis. Frequencies allowed the testing of grade, sex, and maturity status differences in these implicit theories: (a) independence as a marker of adulthood; (b) independence, chronological transitions, and having no responsibilities as markers of freedom; and, (c) independence, chronological transitions, and fun or exciting age as markers of fun. These specific implicit theories were coded as absent in the adolescents’ descriptions (0) or present (1). Logistic regression analyses assessed whether grade, sex, and maturity status were related to the presence of a specific implicit theory. Grade, sex, and two contrasts (immature vs. pseudomature; mature vs. pseudomature) were entered together in each of the seven logistic regressions.

Implicit theories of adulthood. With respect to independence as a marker of adulthood, the test of the full model including all indicator variables (grade, sex, and maturity status) was not significant compared to the constant-only model, $\chi^2(4, n = 157) = .56, p > .05$, Nagelkerke $R^2 = .01$. That is, the likelihood of adolescents’ having described independence as a marker of adulthood was unrelated to the indicators as a set.

Implicit theories of freedom. The indicator variables as a set were not significantly related to adolescents’ views of independence as a marker of freedom, $\chi^2(4, n = 155) = 3.53, p > .05$, Nagelkerke $R^2 = .03$. The indicator variables as a set were related to the presence or absence of chronological transition as a marker of freedom, $\chi^2(4, n = 155) = 13.97, p > .05$, Nagelkerke $R^2 = .15$ (see Table 3). Pseudomature adolescents were more likely than both mature and immature adolescents to cite chronological transitions (such as reaching driving age) as associated with the age of freedom. The indicator variables as a set were also related to the presence or absence of no responsibilities as a marker of adulthood, $\chi^2(4, n = 155) = 10.11, p > .05$, Nagelkerke $R^2 = .10$ (see Table 3). Significant grade and gender effects were found (see Table 3). Seventh graders were more likely than 10th graders to expect that having no responsibilities would be associated with freedom. Boys were almost three times as likely as girls to associate freedom with no responsibilities.
Implicit theories of fun. Three logistic regression analyses for markers of fun were tested: independence, chronological transitions, and fun and exciting age. The indicator variables as sets did not significantly predict the presence or absence of independence, \(\chi^2(4, n = 151) = 6.78, p > .05\), Nagelkerke \(R^2 = .06\); chronological transitions, \(\chi^2(4, n = 151) = 7.31, p > .05\), Nagelkerke \(R^2 = .06\); or fun and exciting age, \(\chi^2(4, n = 151) = 4.31, p > .05\), Nagelkerke \(R^2 = .04\), as markers of fun.

**TABLE 3: Logistic Regression Analysis of Grade, Sex, and Maturity Status Effects on the Presence or Absence of Markers of Freedom**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronological transitions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>.52</td>
<td>0.56</td>
<td>1.68</td>
<td>0.56–5.03</td>
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<tr>
<td>Sex</td>
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<td>0.54</td>
<td>0.57</td>
<td>0.20–1.64</td>
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<tr>
<td>Maturity contrast 1*</td>
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<td>0.73</td>
<td>0.15</td>
<td>0.04–0.65</td>
</tr>
<tr>
<td>Maturity contrast 2*</td>
<td>−2.57</td>
<td>0.73</td>
<td>0.08</td>
<td>0.02–0.32</td>
</tr>
<tr>
<td><strong>No responsibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade*</td>
<td>−1.03</td>
<td>0.50</td>
<td>0.36</td>
<td>0.13–0.95</td>
</tr>
<tr>
<td>Sex*</td>
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<td>0.50</td>
<td>2.82</td>
<td>1.06–7.51</td>
</tr>
<tr>
<td>Maturity contrast 1</td>
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<td>1.16</td>
<td>0.30–4.46</td>
</tr>
<tr>
<td>Maturity contrast 2</td>
<td>−.39</td>
<td>0.61</td>
<td>0.68</td>
<td>0.21–2.23</td>
</tr>
</tbody>
</table>

* NOTE: Maturity contrast 1: 0 (Pseudomature), 1 (Immature). Maturity contrast 2: 0 (Pseudomature), 1 (Mature), \(n = 155\).

* *p > .05.

DISCUSSION

The purpose of the current study was to explore adolescents’ implicit theories of maturity: their expectations for becoming adults, experiencing the most freedom, and having the most fun. Our first research question asked at what ages adolescents expected to reach adulthood, experience the most freedom, and have the most fun. On average, adolescents expected to reach adulthood between 20 and 21 years of age, experience the most freedom around 20 years of age, and have the most fun between 17 and 18 years of age. Among 7th graders, the expected age of fun was significantly younger than both the expected ages of freedom and adulthood. Among 10th graders, the expected age of fun was significantly younger than the expected age of adulthood, but not that of freedom. For adolescents in both grades the average expected age of fun was close to that of the next major chronological transition that might
be expected to lead to fun experiences. For the 7th graders, this transition would be turning 16, the legal age to drive. For the 10th graders, this transition would be turning 19, the legal age to buy alcohol. Because this is also the age when many adolescents may move away from home and experience increased freedom, it is not surprising that the age at which 10th graders expected to have the most fun was not significantly different from the age they expected to experience the most freedom.

It is revealing to learn that adolescents expected to experience fun before adulthood. This pattern may indicate that adolescents expect the transition to adulthood to unfold during the course of a few years and that fun might be an early step in that transition. In Arnett’s (2000) theory of emerging adulthood, the transition to adulthood occurs during the period ranging from about 18 to 25 years of age. That 7th graders expected these experiences to occur sooner than 10th graders demonstrates that adolescents may adjust their implicit theories of maturity as they are exposed to new experiences and as their capacity for abstract thinking expands (Eccles et al., 2003). Indeed, older adolescents’ thinking has been found to extend to more distant stages of their life span compared to younger adolescents (Nurmi, 1991).

Adolescents in this sample expected to reach adulthood around age 20. Arnett’s (1998, 2001) research shows, however, that people do not consider themselves to be fully adults until much older ages. For example, among 20 to 29 year olds, only 46% reported that they felt that they had reached adulthood compared to 86% of adults ages 30 to 55 years (Arnett, 2001). Perhaps as adolescents approach the ages at which they expect to reach adulthood, their expectations change in light of new experiences faced during the emerging adulthood period.

Why did adolescents expect to become adults, experience the most freedom, or have the most fun at the ages they indicated? Qualitative analysis of the responses showed that the majority of adolescents (71%) cited independence (e.g., living on one’s own, financial independence, making own decisions) as critical to the age of adulthood, corresponding to implicit theories of adulthood held by older adolescents (Greene et al., 1992). Together, these findings lend qualitative support to Arnett’s quantitative results indicating that subjective criteria are considered the most important markers of adulthood. Furthermore, to our knowledge, this is the first study to explore implicit theories of adulthood in young adolescents, and it shows that their expectations were in line with general cultural expectations for the transition to adulthood (Crockett, 1997; Nurmi, 1993).

Independence was also associated with the age of freedom for a similar proportion of adolescents (73%). However, examination of the subcategories
constituting this implicit theory revealed differences in the types of independence that defined freedom compared to adulthood. More adolescents considered living independently and the freedom to make their own decisions as markers of freedom whereas financial independence, acting responsible, and feeling mature were more often linked with the age of adulthood. Interestingly, 18% of adolescents (primarily boys) indicated that when they expected to be experiencing the most freedom, they did not expect to have responsibilities. Despite the fact that the average ages of adulthood and freedom were not statistically different, some adolescents’ implicit theories of adulthood and freedom seem to suggest that they may expect a brief period of freedom without responsibility before they engage in the responsible behaviors of adulthood. Furthermore, the majority of adolescents who associated independence with the age of fun indicated that living independently and freedom to make one’s own decisions were the reasons they would have the most fun. These expectations for freedom and fun may reflect anticipated identity exploration that will characterize the emerging adulthood period for these adolescents (Arnett, 2000).

Our second research question asked whether implicit theories were related to grade, sex, and current maturity status. As noted by Nurmi (1991), adolescents’ future expectations may be influenced by their developmental and psychological contexts. A significant effect of maturity status was found for chronological transitions as a marker of freedom. Pseudomature adolescents were more likely than both mature and immature adolescents to cite chronological transitions as indicative of freedom. Previous quantitative and qualitative results have shown that pseudomature adolescents desire privileges associated with adulthood without demonstrating appropriate levels of responsibility and maturity that typically accompany these privileges (Galambos et al., 2003b; Tilton-Weaver et al., 2001). Defining features of the pseudomature status are elevated engagement in problem behavior, an older subjective age, and low levels of psychosocial maturity relative to mature adolescents. It may be that the implicit theories of freedom and fun, in part, motivate pseudomature adolescents to participate in problem behaviors as they strive to achieve the freedom and fun they anticipate for their futures or that they associate with feeling older.

With respect to no responsibility as a marker of freedom, boys were almost three times as likely as girls, and younger adolescents were slightly more likely than older adolescents, to indicate that having no responsibilities would be associated with freedom. Gender and age differences have previously been noted for future-oriented goals and interests (Nurmi, 1991). Per-
haps girls and older adolescents are more apt to understand and accept that
with freedom comes responsibility.

No grade, sex, or maturity status differences were found in adolescents’
beliefs that independence is a marker of adulthood, freedom, or fun. Inde-
pendence was very commonly cited as critical to all three ages. These results
show that establishing independence or autonomy, a major developmental
task of adolescence (Arnett & Galambos, 2003), is important to adolescents
in general and that they hold the widespread conception this is a positive
feature of growing up.

Limitations of the study include moderate to low reliabilities of the
psychosocial maturity measure. Although this measure has been used to
identify maturity status in other samples of adolescents, the low reliabilities
could be improved in future research. Also, a sample that consisted mainly of
White, middle-class, Canadian adolescents from a small city is a limitation.
The small sample size also limited the number of tests that could be per-
formed to examine individual differences in the presence or absence of
implicit theories and likely limited the power to detect such differences.
Future research should address these limitations by exploring adolescents’
implicit theories of maturity in larger, more culturally diverse samples across
time (see Seltzer & Waterman, 1996, and Trempala & Malmberg, 1998, for
examples of cross-cultural differences in future orientation).

Overall, the results of the current study have furthered our understanding
of implicit theories of maturity. A definite strength of this study is the com-
bined use of quantitative and qualitative analyses to explore three implicit
theories of maturity pertaining to the expected ages of adulthood, freedom,
and fun. This merging of methods contributes to the literatures on implicit
theories of maturity and conceptions of adulthood by providing a more com-
plete picture of young adolescents’ expectations for their futures. Implicit
theories are thought to help people interpret stability and change in them-
selves, contributing to their sense of identity over time (Ross, 1989). Future
research might explore whether specific theories lead adolescents to engage
in behaviors that are consistent with their theories and how their theories
change with experience. Considering that emerging adulthood is a period of
variability, exploration, and, for many, uncertainty about whether adulthood
has been reached, implicit theories of maturity held in adolescence may pro-
vide an important foundation of expectations against which one’s under-
standing of the self as an adult is gauged and the transition to adulthood
supported.
REFERENCES


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