

## **11 Transition to Adulthood**

### **Linking Late-Adolescent Lifestyles to Family and Work Status in the Mid-Twenties**

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The transition to adulthood should no longer be conceptualized as a pre-determined passage from one social institution to another, like school to workplace or singlehood to marriage (Andres, 1999). There is a need for new perspectives that look more broadly at the transition to adulthood, taking into account the multiple contexts that affect and are affected by the transition, and a broader definition of successfully reaching "adulthood." Such a perspective requires a focus on patterns of functioning across multiple domains (i.e., school, family, peers, dating, and work roles) as well as on continuity and change across time. We consider the transition to adulthood to be a continuous process grounded in the daily choices youth make regarding the focusing of their energies across the multiple social contexts of family, friends, school, work, and romance. We believe that the level and quality of functioning in each of these contexts during adolescence have implications for the skills and the educational, occupational, and familial plans that youth acquire and then act out. We explore these fundamental propositions using a person-centered analytical approach.

#### **Primary Domains of Functioning During Late Adolescence**

Most psychologists point to family, school, work, romantic relationships, peers, and extracurricular activities as critical contexts of development (Brown, 1990; Eccles, Barber, Stone, & Templeton, 2002; Elder & Conger, 2000; Jessor, 1993; Larson, 2000). Despite major changes in the nature of parent-child relationships during the transition to adulthood, the overall quality of the natal family relationship is critical (Barber & Olsen, 1997; Buchanan, Eccles, & Becker, 1992; Collins, 1990). Parents' involvement in

their adolescent children's academic, social, and sports activities remains a strong predictor of the adolescents' subsequent interest and success (Eccles, 1994), as well their well-being (Roberts & Bengtson, 1996). Similarly, the successful navigation of secondary school is critical to the successful transition to adulthood. Disengagement from school can seriously reduce an adolescent's chance of obtaining a well-paying job in the future (Entwisle, 1990; Finn, 1989; Roeser, Eccles, & Sameroff, 1998). Disengagement is also linked to other indicators of less than optimal development during the adolescent years.

In the United States, part-time employment during adolescence has become an integral piece of the relatively unstructured transition from education to work (Mortimer & Johnson, 1999). Like school engagement, experiences in the labor market also relate to subsequent educational attainment, peer networks, and family formation. Controversy about the advisability of work during the high school years continues. On the one hand, too much work (i.e., more than twenty hours a week), particularly in low-quality jobs, can undermine school achievement and encourage the taking on of adult roles and responsibilities without adequate coping skills, which sometimes leads to increased involvement in problem behaviors (Finch, Mortimer, & Ryu, 1997; Steinberg & Dornbusch, 1991). On the other hand, experiences in the workplace can provide excellent opportunities to develop skills and social connections linked to success in the labor market (Finch et al., 1997; Mortimer, Finch, Shanahan, & Ryu, 1992). Adolescents who are stably employed for a limited number of hours (i.e., fewer than twenty hours a week) achieve more postsecondary education than those with more or no labor-force participation during high school (Mortimer & Johnson, 1998).

In addition to paid work, many adolescents have chores and unpaid responsibilities within the family (Elder & Conger, 2000; Grusec, Goodnow, & Cohen, 1996). Research shows that developmentally appropriate chores have a wide range of benefits, ranging from acquiring sound work habits to developing a sense of helping others and having responsibility for the welfare of others to a sense of agency and an appreciation of the needs and feeling of others (Grusec et al., 1996).

Experiences with peers and in the peer culture more generally comprise another key part of the transition into adulthood (Csikszentmihalyi & Larson, 1984). By the end of high school, both males and females rate their relationship with their best friend as more important than any other relationship, including those with family members, romantic partners, and school adults (Brown, Dolcini, & Leventhal, 1997). For most adolescents,

these ties are positive and support a smooth transition to adult patterns of social relationships. For some adolescents, however, peer acceptance and activities become more important than academic achievement or family ties, which can lead to a decline in academic performance and involvement in behaviors that can compromise the transition to adulthood (Fulgini, Eccles, Barber, & Clements, 2001).

A fifth domain, romantic partnerships, becomes increasingly important during adolescence and the transition to adulthood as shifts in friendships are accompanied by new orientations toward romance and sexual activity (Brown et al., 1997). Involvement in high-quality romantic relationships in late adolescence and early adulthood is related to greater mental health and physical well-being for both sexes, as well as high-quality intimate relationships in adulthood (Dimitrovsky, Schapira-Beck, & Itskowitz, 1994; Moeller & Stattin, 2001; Werner & Smith, 1992). Much less is known about the characteristics and outcomes of early marriage and cohabitation. Working-class life trajectories and early maturation are both associated with earlier romantic partnering, whereas more middle-class trajectories and higher education are associated with later commitments to romantic partnerships (Eccles et al., 2002).

In summary, there is strong evidence that the quality of functioning in each domain during adolescence has consequences for the quality of young people's transition to adulthood. Little is known, however, about how patterns of functioning across these domains relate to pathways into adulthood. Providing such information is our goal.

### **Functioning Across Domains in Late Adolescence**

Baltes's (1997) Selection, Optimization, and Compensation Model (SOC Model) of development provides a general theoretical framework for understanding the process of developmental regulation across domains of functioning and across the life span, including a well-defined structure for operationalizing components of an individual's interaction within the context. These components include (1) selection of goals and preferences within constraints (e.g., goal systems or hierarchies and goal commitment); (2) optimization of goal-relevant means (e.g., effort and energy); and (3) compensation for counteracting decline in goal-relevant means (Baltes, 1997). The SOC Model has been applied most often to aging populations, but several studies with younger populations show its flexibility and usefulness for understanding the transition to adulthood (Freund & Baltes, 2002; Wiese, Freund, & Baltes, 2000, 2002).

Within the SOC Model conceptualization, adolescents who focus their investment of attention and resources on a more narrow range of contexts – in other words, those who select and optimize fewer contexts – would have the resources to excel in those contexts. Those who fail to select but instead attempt to optimize all domains would fail to master any of those domains.

Conversely, Arnett's (2000) conceptualization of the transition to adulthood is that of extended postadolescence. Arnett argued that these "emerging adulthood" years are "the most volitional years of life" for most people and that, having left the dependency of adolescence but not yet having entered the relative stability of adulthood, emerging adulthood is a time of exploring ever-more-complex options and "trying on" life roles in love, work, and worldviews. Thus, emerging adolescents may be best served by investing positively in as many domains as possible while continuing to explore adult-identity possibilities. Although we may agree that many distinct, complicated life changes and decisions coalesce in the transition to adulthood, it may be untrue to assume that such a protracted trying-on period between adolescence and adulthood exists for the majority of non-privileged, non-college-bound youth.

### **What Indicates the Transition to Adulthood?**

Researchers use a wide range of criteria to define a successful transition to adulthood. Some used successful employment as a marker (Heinz, 1999; Shanahan, 2000); others focused on marriage and relationship patterns (Clarkberg, Stolzenberg, & Waite, 1995; Larson, 2000). Osgood et al. (2005) listed the five major role domains of young adulthood as romantic relationships, residence, parenthood, employment, and education. In this study, we focus on five indicators of the transition to adulthood: educational attainment, employment, income, relationship status, and parenthood.

Trajectories in each domain are likely to be influenced by the demographic characteristics of individuals. Csikszentmihalyi & Schneider (2000) found that gender, race, and ethnicity make little difference in the path a young person takes one year after leaving high school. Social class, however, was strongly related to postsecondary education (Csikszentmihalyi & Schneider, 2000). Regardless of gender, race, ethnicity, or social class, adolescents expect to work, marry, have children, and retire at age sixty-five (Csikszentmihalyi & Schneider, 2000). In this chapter, we assess the relationship of demographic characteristics, educational and occupational attainment, income, relationship status, and parenthood across the transition to adulthood. Finally, because high self-esteem and low depressive affect

(Eccles et al., 2002; Harter, Waters, & Whitesell, 1998; Way & Pahl, 2001) are important predictors of a successful transition to adulthood, we include indicators of both in our analyses to control for the extent to which the link between patterns of late-adolescent functions across the five domains and the transition to adulthood is primarily a consequence of mental health.

## **Hypotheses**

Research on adolescence points to family, school, work, romantic relationships, and peers as five critical domains of development that influence the transition to adulthood. We hypothesize that these domains work together to describe specific clusters of adolescents, which are indicators of developmental trajectories as defined by positive engagement in a selection of developmental contexts. We also hypothesize that these clusters are related to psychological functioning and trajectories through the transition to adulthood. In addition, contrary to a strict interpretation of Arnett's notion of emerging adulthood (2000) or a strict interpretation of Baltes's SOC Model (1997), we hypothesize that many different patterns of positive engagement in adolescence – both broadly and narrowly focused – are beneficial for the transition to adulthood.

## **Method**

In order to test our hypotheses, we first measure competency in five domains of late adolescence, then do a cluster analysis of positive functioning across those five domains, and then measure outcomes of work and education as well as family outcomes.

### **Description of Larger Study and Sample**

The data in this study are from the Michigan Study of Adolescent Life Transitions (MSALT) dataset (Barber & Eccles, 1999). A detailed discussion on methods and procedures of the entire sample and data collection is on the MSALT Web site (Gender and Achievement Research Program, 2003). The majority of the participants (87 percent) are white and from working- or middle-class families in small communities in Southeast Michigan. At Time 1, in 1990, participants were high school seniors ( $N = 1,384$ ); these adolescents were followed as they made the transition to adulthood. In 1996, mailed questionnaires were used to gather follow-up data. In this study, we only used data from the 895 participants with complete data at the ages of eighteen and twenty-five. As with all longitudinal studies,

**Table 11.1.** Correlations of Measures of Engagement in Five Late-Adolescent Social Contexts

		Work	School	Peers	Family	Dating
Work	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	1,211				
School	Pearson Correlation	-0.002	1			
	Sig. (2-tailed)	0.939				
	N	1,045	1,596			
Peers	Pearson Correlation	0.074	0.183	1		
	Sig. (2-tailed)	0.018	0.000			
	N	1,021	1,193	1,251		
Family	Pearson Correlation	0.048	0.139	0.169	1	
	Sig. (2-tailed)	0.145	0.000	0.000		
	N	941	1,005	996	1,006	
Dating	Pearson Correlation	0.024	0.058	0.082	0.214	1
	Sig. (2-tailed)	0.467	0.067	0.008	0.000	
	N	956	1,009	1,044	933	1,048

missing data and attrition were a concern. Two issues may have biased the sample: (1) because participants were required to have data for each of the domain measures included in the cluster analysis, participants missing more than half of the variables in any particular domain were not included in the analysis; and (2) participant attrition occurred unevenly throughout the sample, skewing longitudinal samples toward the better-functioning participants. Despite these concerns, the 895 participants included in the analysis nearly mirrored the broader sample in terms of gender (53 percent female in total population; 58 percent female in analyzed population), race (13 percent minority in total population; 9 percent minority in analyzed population), and mother's education level (32 percent had at least a college degree in total population; 29 percent had at least a college degree in analyzed population). The missing participants were more likely to be minority males with a college-educated mother.

## Measures

All scales except grade-point average (GPA) were taken from youth self-report questionnaires (Table 11.1 shows correlations between domains).

### Measuring Competence in the Five Domains at Age Eighteen

The domain scores are aggregates of multiple scales. Each domain score was calculated using the following three steps: (1) each scale was averaged

allowing for 33 percent missing items; (2) z-scores were created for each scale; and (3) z-scores of scales were averaged to obtain a final domain score.

**Work Domain.** Two scales were used to measure positive engagement in the work domain. A positive part-time job was defined as one that allows the adolescent to learn new skills in a supportive environment ( $\alpha = 0.71$ ). This three-item Likert-scale included items such as “I can learn new skills at my job (1 = not at all true; 7 = very true)”. A positive chore experience at home was defined as feeling valued and counted on for one’s work in the home ( $\alpha = 0.78$ ). This two-item Likert-scale included items such as “If I did not do my chores, it would be very difficult for my family (1 = strongly disagree; 7 = strongly agree).”

**School Domain.** Positive school engagement was assessed by achievement (overall GPA obtained from school records) and school enjoyment (a self-report enjoyment scale,  $\alpha = 0.82$ , with two items: “How much do you like school this year? [1 = not at all; 7 = very much]”).

**Peer Domain.** Positive engagement in the peer domain was defined as choosing peers that support good decision making (i.e., the Socially Supportive Peer Group Scale,  $\alpha = 0.77$ ), choosing peers who are not antisocial or delinquent (i.e., the Anti-Social Peer Group Scale,  $\alpha = 0.80$ ), and not succumbing to negative peer influences ( $\alpha = 0.68$ ). The Socially Supportive Peer Group Scale consisted of five Likert-scale items, including “My friends encourage me to make the right choices (1 = never true; 7 = always true).” The Anti-Social Peer Group Scale was reverse-coded to indicate a desirable non-anti-social peer group and consisted of seven Likert-scale items, including: “What percentage of your friends does the following: Regularly use drugs (1 = none; 3 = half; 5 = all).” Negative peer influence was measured with four items from the Extreme Peer Focus Scale (Fulgini et al., 2001), including: “It’s okay to break parents’ rules to keep your friends (1 = never; 7 = always).” These items were reverse-coded.

**Family Domain.** Positive engagement in the family environment was indicated by measures of connectedness, appropriate expressions of autonomy, and lack of parental psychological control. Connectedness and autonomy were assessed with three items in the Connection with Family scale ( $\alpha = 0.76$ ), including “Our family enjoys doing things together (1 = never true; 7 = always true).” Lack of psychological control was assessed with

six items from the Lack of Parental Psychological Control scale ( $\alpha = 0.82$ ), including "My parents encourage me to give my ideas and opinions even if we might disagree (1 = never true; 7 = always true)" (Barber & Olsen, 1997).

**Dating Domain.** For an adolescent to be positively engaged in exploring the dating domain, he or she must first have experiences in this domain, either with a quality partner or through active dating. We defined a competent "dater" as one who either has (1) no steady partner but an active dating life, or (2) a steady partner of whom one's parents approve. These characteristics were assessed using three variables: "How often do you go out on dates without other couples or friends? (1 = never; 3 = very often)"; "Are you currently going out with only one person? (1 = no; 2 = yes)"; and "How much do your parents approve of this person? (1 = not very much; 3 = very much)." Although parents may not always make correct judgments about partner quality, parental approval is an important indicator of a quality partner, and it was the only variable in this wave of the dataset that allowed for such a partner-quality assessment. Positive engagement in the dating domain was scored as a dichotomous variable (1 = quality experience; 2 = no quality experience). An adolescent with a steady partner was scored "1" only if he or she indicated approving parents with a "2" or "3" score. An adolescent without a steady partner was scored "1" only if he or she indicated active dating with a "2" or "3" score.

### **Gender and Mother's Educational Attainment**

Gender was measured by self-report with self-reported "sex" (female = 1; male = 2). Family socioeconomic status (SES), based on adolescents' reports of their mother's highest education level, was dichotomized into two levels (low = high school or less; high = some college or more) (Müller & Shavit, 1998).

### **Psychological Variables**

Measured at ages eighteen and twenty-five, self-esteem and depressive affect were both means of three 7-point Likert scale items. The self-esteem items included "How often do you feel good about yourself?" and "How often do you feel satisfied with yourself the way you are?" ( $\alpha_{\text{age18}} = 0.81$ ;  $\alpha_{\text{age25}} = 0.83$ ). The depressed-mood scale included items such as "How often do you feel difficulties are piling up so high they can't be overcome?" These items were reverse-coded to assess low depressive affect ( $\alpha_{\text{age18}} = 0.73$ ;  $\alpha_{\text{age25}} = 0.73$ ).



### **Education and Work Outcomes**

All status variable data at age twenty-five were obtained from mailed, self-report questionnaires. Educational Attainment was measured with the question, "What is the last year of school you have completed?" College-Major Choice was asked of those participants who attended college with the question, "What is your first major?" The response was coded as either Math/Engineering/Physical Science, Allied Medicine, Skilled Labor, Business, Social Sciences, Education, or Humanities. Career Choice was measured with the question, "Currently, what is your main job or occupation?" The response was coded as Retail/Clerical (Pink Collar; e.g., hotel clerk, sales), Blue Collar (e.g., steel worker, truck driver), Human Services (White Collar; e.g., hairdresser, health aid), Management/Administrative (White Collar; e.g., foreman, bookkeeper), or Advanced Degree Required (e.g., engineer, doctor). Household Income was assessed with the question, "Please indicate your total household income (1 = less than \$5,000; 3 = between \$10,000 and \$19,000; 5 = between \$30,000 and \$39,000; 7 = more than \$50,000)."

### **Family Outcomes**

Relationship status at age twenty-five was measured with a single item asking participants to indicate "I am married"; "I am living with someone in a steady, marriage-like relationship"; "I am not living with him or her, but I have a steady, romantic relationship with one person"; or "None of the above." We combined the married and cohabitating categories. Perceived Likelihood of Marriage was measured with one item: "How likely is it that you will get married? (1 = not likely at all; 7 = very likely)." Pregnancy history was measured with the question, "Have you (or your partner) ever been pregnant? (1 = yes; 2 = no)." Perceived Likelihood of Having Children was measured with one item: "How likely is it that you will have children? (1 = not likely at all; 7 = very likely)."

### **Analyses**

To better understand how patterns of positive engagement in late adolescence are related to trajectories of development across the transition to adulthood, we used three types of analyses. First, we used person-centered cluster analysis to differentiate profiles of competence across the five adolescent domains assessed at Time 1. We used the Ward agglomeration procedure to increase the variance between groups and decrease the variance within groups, thus creating clusters with more clearly differentiated profiles

(Blashfield & Aldenderfer, 1978). We used the Euclidian metric method to calculate the distance matrix because the correlations across domains are quite small (i.e., less than 0.22). We selected the five-cluster solution because it created the most theoretically coherent groups. More clusters split meaningful groups into less theoretically interesting subgroups, and fewer clusters created profiles that were too large and amorphous to be meaningful.

Following the cluster analysis, we used analyses of variance (ANOVA) and chi-square analyses to assess the relation of cluster membership to (1) initial demographic characteristics, (2) psychological variables at both waves, and (3) adulthood status variables six years later. We used Tukey post-hoc analyses to find significant mean differences between the cluster scores on psychological measures.

## Results

First, we report results of the cluster analyses and the relationship between cluster membership and psychological well-being. Next, we report results demonstrating the relationship between cluster membership and work and education outcomes, including college attainment and career choice, and family outcomes, including marriage and children.

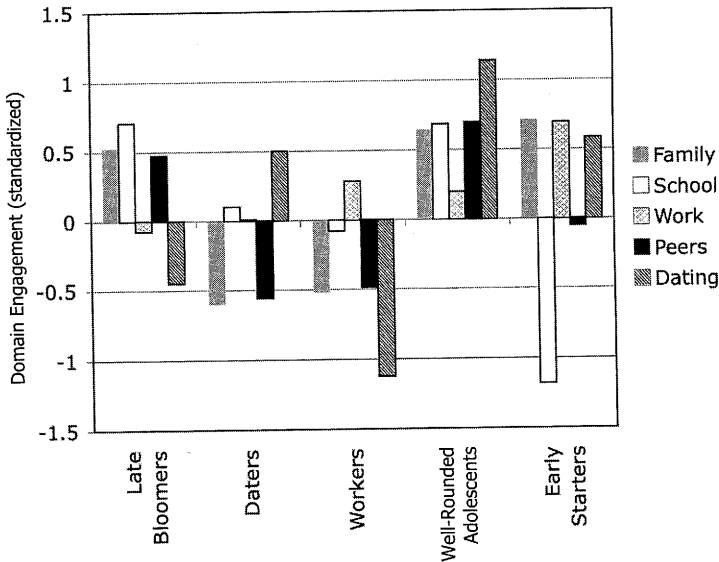
### Derivation and Replication of Profiles of Competence

Using Ward cluster analysis on age eighteen data, we identified five distinct profiles of competence across the five domains (Figure 11.1 and Table 11.2). We used ANOVA with these competence indicators to describe each of the five profiles. Early Starters ( $N = 81$ ) were disengaged from school but had positive scores in the more "adult" domains of work and dating, as well as in the family domain. Late Bloomers ( $N = 193$ ) had high scores in the school, family, and peers domains but were not yet very involved in the dating and work domains. Well-Rounded Adolescents ( $N = 169$ ) had high scores in the four domains except work, in which they were only slightly above average. Workers ( $N = 232$ ) showed high levels of engagement only in the work domain; they had very low scores in the dating domain and below-average scores in the family and peers domains. Finally, Daters ( $N = 220$ ) had high scores in the dating domain and below-average scores in the family and peers domains.

To confirm the cluster solution, we used a subsample procedure, randomly selecting a two-thirds subsample of 547 subjects and re-running the Ward procedure, resulting in closely comparable clusters. The resulting subsample clusters were significantly associated with the original cluster

**Table 11.2.** Measures of Engagement in Late-Adolescent Social Contexts for Each Cluster

Clusters		Social Contexts				
		Family	School	Work	Peers	Dating
Late Bloomers	Mean	0.527	0.705	-0.073	0.474	-0.448
	N	193	193	193	193	193
	SD	0.680	0.600	0.850	0.746	0.604
Daters	Mean	-0.598	0.099	0.008	-0.558	0.498
	N	220	220	220	220	220
	SD	0.944	0.754	0.867	0.779	0.647
Workers	Mean	-0.520	-0.078	0.279	-0.485	-1.121
	N	232	232	232	232	232
	SD	0.862	0.917	0.908	0.895	0.371
Well-Rounded Adolescents	Mean	0.646	0.683	0.195	0.696	1.139
	N	169	169	169	169	169
	SD	0.769	0.536	1.05	0.662	0.225
Early Starters	Mean	0.711	-1.18	0.691	-0.050	0.583
	N	81	81	81	81	81
	SD	0.608	0.643	0.862	0.736	0.771
Totals	Mean	0.018	0.178	0.158	-0.034	0.003
	N	895	895	895	895	895
	SD	0.998	0.905	0.934	0.939	0.993



**Figure 11.1.** Cluster Analysis of Engagement Across Five Late-Adolescent Social Contexts.

solution,  $\chi^2(16, N = 547) = 750.84, p = 0.00$ , confirming its stability and replicability.

### **Cluster Demographics**

We used ANOVA to examine the relationship of gender and Mother's Educational Attainment with the age eighteen life domains that were assessed with continuous scales: family, school, peers, and work. Scores in both the family and peers domains were significantly associated with gender:  $F(1, 563) = 8.07, p = 0.005$ , and  $F(1, 563) = 85.63, p = 0.000$ , respectively. Females had higher scores than males in the family (Female  $M = 0.08, SD = 1.05$ ; Male  $M = -0.06, SD = 0.93$ ) and peers domains (Female  $M = 0.24, SD = 0.87$ ; Males  $M = -0.41, SD = 0.91$ ). Neither Mother's Educational Attainment nor any of the interactions between Mother's Educational Attainment and gender were significantly associated with any of the domains.

Next, we used a series of chi-square analyses and ANOVA to explore the relationships of each competence cluster with gender. Gender was significantly associated with cluster membership,  $\chi^2(4, N = 895) = 30.33, p = 0.00$ . Females were overrepresented in the Well-Rounded Adolescents (Standardized Residual [ $R$ ] = 22.8) and Early Starter ( $R = 7.4$ ) groups; males were overrepresented in the Worker ( $R = 12.5$ ) and Dater ( $R = 24.6$ ) groups. Late Bloomers were evenly divided between the sexes. Mother's Educational Attainment was not significantly related to cluster membership  $\chi^2(4, N = 895) = 6.89, p = 0.55$ .

### **Assessing the Relationships of Cluster-Group Membership to Psychological Functioning**

We used ANOVA to explore the relationships of cluster-group membership with both self-esteem and depressive affect at ages eighteen and twenty-five. Interaction effects of gender and Mother's Educational Attainment with each cluster were also assessed. Cluster membership was associated with psychological functioning at ages eighteen and twenty-five (Table 11.3 lists means and standard deviations for psychological variables by each domain). Late Bloomers and Well-Rounded Adolescents had significantly better psychological functioning than Daters and Workers at age eighteen. Six years later, Late Bloomers and Well-Rounded Adolescents continued to report the highest levels of psychological functioning.

### **Exploring the Relationships of Cluster-Group Membership to Educational and Occupational Outcomes**

We used chi-square analysis and ANOVA to assess the relationship of age eighteen cluster membership to age twenty-five Educational Attainment,

**Table 11.3.** Measures of Psychological Well-Being for Each Cluster

Clusters		Depressive Affect Age 18	Self-Esteem Age 18	Depressive Affect Age 25	Self-Esteem Age 25
Late Bloomers	Mean	4.78 <sup>b,c</sup>	5.07 <sup>b,c,d</sup>	4.94 <sup>c</sup>	5.01
	N	193	193	136	136
	SD	1.10	1.08	1.11	1.21
Daters	Mean	4.26 <sup>a,d</sup>	4.70 <sup>a,d</sup>	4.72	4.79
	N	220	220	132	132
	SD	1.24	1.120	0.96	1.07
Workers	Mean	4.22 <sup>a,d</sup>	4.55 <sup>a,d</sup>	4.55 <sup>a,d</sup>	4.65 <sup>d</sup>
	N	232	232	129	129
	SD	1.23	1.27	0.97	1.09
Well-Rounded Adolescents	Mean	4.81 <sup>b,c</sup>	5.49 <sup>a,b,c,e</sup>	4.94 <sup>c</sup>	5.07 <sup>c</sup>
	N	168	168	121	121
	SD	1.03	1.17	1.06	1.18
Early Starters	Mean	4.44	4.89 <sup>d</sup>	4.57	4.68
	N	81	81	37	37
	SD	1.30	1.46	1.06	1.28
Totals	Mean	4.48	4.91	4.77	4.86
	N	894	894	555	555
	SD	1.20	1.26	1.04	1.16

Notes: Superscripts indicate significant differences with <sup>a</sup> = Late Bloomers; <sup>b</sup> = Daters; <sup>c</sup> = Workers; <sup>d</sup> = Well-Rounded Adolescents; <sup>e</sup> = Early Starters, as indicated by Tukey Post-Hoc analysis.

College-Major Choice, Occupation Choice, and Income. A significant relationship emerged between cluster membership and Educational Attainment at age twenty-five for women,  $\chi^2_{\text{female}}(20, N = 381) = 40.99, p = 0.004$  but not for men. Late Bloomers were overrepresented among graduate students ( $R = 3.0$ ). Workers were overrepresented among those who stopped their education with a high school diploma ( $R = 1.9$ ). Early Starters were marginally underrepresented among those who had completed any graduate school by age twenty-five ( $R = -1.7$ ). It is interesting that there were no cluster differences in obtaining a bachelor's degree.

A significant relationship also emerged between cluster membership and College-Major Choice at age twenty-five for women,  $\chi^2_{\text{female}}(24, N = 277) = 35.76, p = 0.058$ , but not for men,  $\chi^2_{\text{male}}(24, N = 157) = 24.92, p = 0.410$ . Recall that these analyses were conducted for only those participants who were or had been in college. The significant difference for women was within the social sciences: Late Bloomers were marginally less likely than expected to major in social sciences ( $R = -1.6$ ), whereas Daters were more likely than expected to choose a social science major ( $R = 2.7$ ). Additionally, Well-Rounded Adolescents were more likely than expected to have a skilled-labor major ( $R = 2.2$ ).

A significant relationship emerged between cluster membership and Occupation Choice at age twenty-five for women,  $\chi^2_{\text{female}}(16, N = 341) = 28.78, p = 0.025$ , and a trend emerged for men,  $\chi^2_{\text{male}}(16, N = 224) = 24.94, p = 0.071$ . Late Bloomers of both genders were overrepresented in Advanced Degree Required occupations ( $R_{\text{female}} = 3.1; R_{\text{male}} = 2.7$ ). Among the males, Late Bloomers were less likely than expected to be in a Blue Collar job ( $R = -2.1$ ), whereas Early Starters were more likely than expected to be in a Blue Collar job ( $R = 1.7$ ). Among the females, Daters were marginally less likely than expected to be in an Advanced Degree Required job ( $R = -1.7$ ).

At age twenty-five, cluster membership was not significantly related to total household income,  $F(4, 537) = 1.09, p = 0.36$ .

### Exploring Relationships Between Cluster Membership and Family Outcomes

A significant relationship existed between cluster membership and relationship status at age twenty-five,  $\chi^2(8, N = 659) = 25.4, p = 0.001$ . The most striking findings were differences between Early Starters and Late Bloomers. As expected, Late Bloomers were significantly underrepresented in the married or cohabitating status category ( $R = -2.0$ ). In addition, the Well-Rounded Adolescents were underrepresented among the singles ( $R = -2.6$ ).

Of all the contexts, the impact of high school dating on the transition to adulthood should be particularly likely to differ by gender and Mother's Educational Attainment because SES differences in gender roles in male-female romantic relationships are especially impervious to historical changes in gender-role identities (Moen & Orrange, 2002). Therefore, we conducted chi-square analyses for each gender and for gender by Mother's Educational Attainment categories. Adult relationship status and high school cluster membership were significantly related only for women with less-educated mothers,  $\chi^2(8, N = 135) = 18.09, p = 0.02$ . As expected, Early Starter women with low Mother's Educational Attainment were more likely than expected to be married or cohabitating ( $R = 1.8$ ). Daters were overrepresented in the singles category ( $R = 2.1$ ).

A significant relationship between cluster membership and Perceived Likelihood of Marriage also existed at age twenty-five for women,  $F = 2.68(4), p = 0.040$ , but not for men,  $F = 1.60(4), p = 1.832$ . Among the women, Well-Rounded Adolescents ( $M = 5.57$ ), Early Starters ( $M = 5.47$ ), and Late Bloomers ( $M = 5.40$ ) reported a higher Perceived Likelihood of Marriage than Workers ( $M = 4.95$ ) or Daters ( $M = 4.59$ ).

Finally, a significant relationship between cluster membership and Perceived Likelihood of Having Children existed at age twenty-five for women,  $F = 2.27(4)$ ,  $p = 0.064$ , but not for men,  $F = 1.35(4)$ ,  $p = 0.253$ . Among the women, Well-Rounded Adolescents ( $M = 5.55$ ), Early Starters ( $M = 5.56$ ), and Late Bloomers ( $M = 5.45$ ) reported higher Perceived Likelihood of Having Children than Workers ( $M = 4.27$ ) or Daters ( $M = 4.12$ ). It is interesting that there were no significant cluster differences in the likelihood of having had a child due to the fact that so few youth in any of the clusters had already become a parent.

## Discussion

In our study, we had two main hypotheses: (1) it would be possible to identify theoretically meaningful clusters of engagement in the five key domains of functioning at age eighteen; and (2) membership in these clusters would relate meaningfully to work and family status in the mid-twenties. The results confirmed these basic hypotheses. Clearly, individuals can be clustered according to their functioning across the five critical domains of late adolescence: school, family, peers, dating, and work roles. Five theoretically meaningful clusters emerged, and each cluster represented a unique pattern of functioning. One group, labeled Well-Rounded Adolescents, excelled in all five domains. This group also reported the highest levels of psychological functioning at both time points. It is interesting that there was no evidence of members of this group having any particularly unique pathways into adulthood; they did not stand out in any of the adult-status categories assessed. Thus, this group may best represent the transitional process that Arnett (2000) called emerging adulthood.

The other four groups showed more differentiated patterns of functioning at Time 1 (i.e., senior year in high school). These patterns are consistent with Baltes's (1997) SOC theory. Two of the clusters, Early Starters and Late Bloomers, represent positive but different types of SOC patterns. Although Late Bloomers reported slightly higher psychological well-being at both time points, the differences were not significant and both groups reported quite positive levels. As seniors, Early Starters seemed to have moved beyond the more "adolescent" lifestyle domains of peers and school and were investing their energy in the more "adult" domains of work and dating. At age twenty-five, the lower SES females in this cluster were particularly likely to be married or cohabitating and the males were particularly likely to be employed full time in blue-collar, skilled occupations. For both females and males, these youth appear to have transitioned into adulthood along an

easily identified and positive pathway – a pathway characterized by early movement into the labor market and early family formation. This pathway is reminiscent of the traditional working-class pattern.

In contrast, as seniors, Late Bloomers were primarily invested in the school, natal family, and peers domains, optimizing their success in these domains; they were not yet very involved in either work or dating. It is not surprising that at age twenty-five, the females in this group were particularly unlikely to be married or cohabitating, and both the males and females were most likely to be in graduate school. Again, both the males and females appear to have transitioned into adulthood along an easily identified and positive pathway – a pathway characterized by strong investments in their educational capital at the expense of investments in marriage and moving directly into the labor market. This group, then, also illustrates what Arnett (2000) called emerging adulthood.

In contrast to these more positive pathways, the remaining two clusters appear to be more problematic at both time points. Both Workers and Daters excelled in only one domain and had low scores in two or three of the other domains, particularly peers and family relationships. They also reported the lowest levels of psychological well-being at both time points and the lowest levels of success in the school domain at Time 1. Workers seemed to be a particularly problematic pathway, showing the least-well-functioning pattern at both time points. It is likely that difficulties at home undermined the developmental progress of both groups (Sameroff et al., 1998). The fact that neither cluster has a strongly supportive, pro-social peer network is likely to have compounded the difficulties.

### **Cluster Membership and Academic and Work Transitions**

As expected, Late Bloomers stayed in school the longest and comprised the only group in which most individuals had earned a bachelor's degree by age twenty-five. In addition, of those who had completed college and entered the workforce, Late Bloomers also were overrepresented in the Advanced Degree Required occupations and underrepresented in blue-collar jobs. Clearly, they had been on an academically oriented track since high school and had laid the foundation for a professional track – investing extensively in their own psychological capital rather than romantic relationships. Again, it seems that lifestyle paths established by adolescents in high school predict lifestyle choices during the transition to adulthood.

Somewhat to our surprise, the groups did not differ in total household income at age twenty-five. This likely reflects the fact that individuals with



the most earning potential are just entering the labor force, whereas Early Starters are well established in a skilled-labor career trajectory. As a result, income streams have not yet become fully differentiated. However, because educational attainment is a good predictor of lifetime income (Müller & Shavit, 1998), we can expect income levels among clusters to differentiate as participants continue the transition to adulthood.

### **Cluster Membership and Family Transitions**

The women in the Late Bloomer cluster were the least likely to be married or cohabitating. Late Bloomer women but not Late Bloomer men were also far more likely than expected to obtain some post-baccalaureate education, as well as having high expectations for future marriage and parenthood. This result supports the conclusion that women in the Late Bloomer cluster were focused on investing in their own psychological capital during their early twenties.

Although Well-Rounded Adolescent and Late Bloomer women were the least likely to be married or cohabitating at age twenty-five, both groups were above the mean at Time 2 in their expectations of marriage in the future. Early Starters who had already shown a propensity toward marriage at age twenty-five were also above the mean in their expectation of getting married. In contrast, although Workers and Daters had begun to invest in adult domains at age eighteen, they were below the mean in their expectation of getting married in the future at age twenty-five. These two groups also reported the lowest expectation of having children. Perhaps the expectation of marriage and family in the future is an indication of optimism. Therefore, whereas both Workers and Daters had invested in adult domains at the end of high school, this "choice" did not indicate maturity or choice of lifestyle track but rather that they were unable to build or find a supportive developmental environment and thus invested in the only positive environments available to them. In the case of both Daters and Workers, there was neither a diversification of supportive contexts nor a lack of balance between social and vocational investments.

These lifestyle choices and environmental supports undoubtedly were related to earlier choices in adolescence and childhood and the environments in which the individuals developed. Compared with other groups, Daters and Workers reported lower feelings of well-being. When some supports are failing, an individual can be buttressed by compensatory relationships—that is, a person or context that compensates for other failing contexts, thus fostering resiliency. Daters and Workers focused on only one context in

high school, which did not allow for a healthy diversification of family and occupational development through the transition to work and family.

By focusing on the groups that made positive transitions to work and family, we can see that different lifestyle patterns established in high school can lead to quite different and yet equally positive trajectories to young adulthood. Late Bloomers and Well-Rounded Adolescents reported high well-being in high school. Early Starters were at the mean of well-being. Through the transition to adulthood, both Late Bloomers and Well-Rounded Adolescents maintained their high well-being, whereas Early Starters declined slightly. Nonetheless, in terms of making normative transitions to the work and family domains, all three groups established patterns that served them well in terms of a pattern of choreographed transitions. Many Well-Rounded Adolescents and Late Bloomers earned bachelor's and advanced degrees; although they expected to be married and have children, few were as of yet. In contrast, at age twenty-five, Early Starters were far less likely to have earned a bachelor's or more advanced college degree; they were more likely to be in a blue-collar job that did not require such a degree, and they were likely to be married. Each of these educational choices, when viewed in conjunction with family choices, makes sense for the groups' trajectories. We can conclude that our call for a broader definition of successfully transitioning into adulthood is important to understand the full range of positive developmental choices. The notion of emerging adulthood, which runs parallel to our Well-Rounded Adolescent cluster, was a successful pattern for those individuals who chose it. Likewise, the Late Bloomer and Early Starter patterns – which are closer to patterns of successful investment prescribed by the SOC Model – were also successful for those individuals. Although patterns of limited, undiversified investment did not lead to a successful transition, no one lifestyle pattern is the “right” pattern.

It would be interesting to follow up with these clusters to determine whether those who were married with children earlier are happier in middle age when their children are grown and on their own than those who chose to postpone marriage and childbearing and might be involved in stressful, later-life childrearing.

Although cluster analyses allow for an important, revealing, person-centered view of trajectories through the transition to adulthood, such methods are exploratory in nature. Clustering allows us to see patterns and ascertain a more nuanced understanding of how individuals construct their lives. However, we should be careful not to interpret the resulting clusters as a standard typology. Rather, they are examples of participant groupings that allow us to test our hypotheses regarding the link

between such patterns of functioning in late adolescence, however described, and family and work outcomes in young adulthood. Our analyses call for a continued exploration of how patterns of positive investment across many domains before a transition continue to shape lives after the transition.

However, we can draw policy recommendations from the present data that we believe are broadly useful. It seems clear that adolescents who invest all positive resources in one domain, failing to diversify at all, have not built a sufficiently sturdy foundation to support a successful transition to adulthood. That stated, we do not conclude that any specialization is negative; in fact, those late adolescents who specialize in a few select domains demonstrated distinct and positive transition trajectories. The selection of domains in which late adolescents choose to invest is important for later trajectories. For example, those who wish to complete a high level of education may do well to postpone serious dating in high school. In general, late adolescents should be encouraged to "try on" roles available to them while also considering how those choices will impact their longer-term future transition to adulthood.

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