Article

Flourishing and Floundering in Emerging Adult College Students

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Abstract

The purpose of this study was to (a) use mixture modeling to identify different groups of emerging adults based on differences in beliefs/attitudes, attributes, and behaviors and (b) examine whether these classes were differentially related to the criteria deemed important for adulthood, levels of identity development (exploration and commitment), and the quality of the parent–child relationship. Participants consisted of 487 undergraduate students (281 women, 206 men, mean age of 20.07 years) in the United States. Results of cross-sectional mixture modeling identified three classes of emerging adults including an *externalizing* group (high levels of drinking, drug use, sexual partners, pornography use, and video game use), a *poorly adjusted* group (high levels of depression, anxiety, drinking, drug use, sexual partners, and low levels of self-worth), and a *well-adjusted* group (high levels of internal regulation of values, religious faith, and low levels of depression, anxiety, drinking, drug use, and violent video game usage).

Keywords

well-being, college, risk taking, prosocial behavior, transitions to adulthood

It is common for the media and others to make broad generalizations regarding groups of individuals. For example, terms such as "Republicans," "Democrats," "the rich," "the poor," "conservative Christians," and "gays and lesbians" are often used in a manner to suggest homogenous groups with very little within-group diversity. Young people of age 18–27 who attend college often fall victim to this type of group labeling. Emerging adults have been categorically referred to as narcissistic, refusing to grow up, and failed adults. Although there certainly are emerging adults who fit the profile of selfish, struggling, and directionless, there are others who are using this period of time for good. Although researchers acknowledge that emerging adults who do not attend college are likely different than those who do (see Hamilton & Hamilton, 2006), the scholarly examination of emerging adulthood by developmental psychologists has not always attempted to capture and explain the within-group variation that exists among emerging adults who do attend college, often making the assumption that they are a relatively homogenous group. Indeed, while there is great diversity of individual experiences in emerging adulthood, few empirical attempts have been made to investigate whether the diversity of individual experiences may be captured in broader typologies of young people in emerging adulthood. Therefore, the purpose of this study was to examine different groups of emerging adults who may be flourishing or floundering during the college years. Specifically, the study attempted to (a) identify different classes of emerging adult college students based on differences in beliefs, attributes, behaviors, and relationships and (b) examine whether or not these classes were differentially related to the criteria emerging adults deem important for adulthood, identity development (exploration and commitment), and the quality of the relationship they have with their parents.

Emerging Adulthood

It is becoming increasingly well known that Arnett's (2000) theory of emerging adulthood identifies features of the development of emerging adults (age 18 to late 20s) including feeling in-between (emerging adults do not see themselves as either adolescents or adults), identity exploration (especially in the areas of work, love, and world views), focus on the self (not self-centered but simply lacking obligations to others), instability (evidenced by changes in direction in residential status, relationships, work, and education), and possibilities (optimism in the potential to steer their lives in any number of desired directions).

While these features may characterize the time period, there most certainly is variation in the extent to which young people manifest these features. For example, some may be more optimistic than others and there may be differences in the extent to which they feel a sense of "in-betweenness." Indeed, researchers have found that some young people feel they have already

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reached adulthood and report being further along in their identity development and in the acquisition of other characteristics they deem requisite for adulthood than are others (Nelson, 2009; Nelson & Barry, 2005). An important aspect of this potential variation is whether or not the differences are so stark as to be able to begin to characterize those young people who may be flourishing from those who may be floundering as they make their way through emerging adulthood.

Flourishing. Consistent with the positive view of this time period captured in emerging adulthood theory (Arnett, 2000, 2004), research points to various beliefs/attitudes, attributes, and behaviors during this period of time that appear to reflect positive adjustment or a sense of flourishing. For example, research shows that for some young people this a time in which they explore and internalize their world beliefs (e.g., religiosity, see Barry, Nelson, Davarya, & Urry, 2010, for a review) and positive values (Padilla-Walker, Barry, Carroll, Madsen, & Nelson, 2008) as well as participate in prosocial behaviors (Barry, Padilla-Walker, Madsen, & Nelson, 2008) and positive media use (Padilla-Walker, Nelson, Carroll, & Jensen, 2010). In other words, participating in adaptive behaviors and internalizing one's beliefs and values appear to be indicative of flourishing during emerging adulthood. For example, using the Internet for positive means (e.g., school, communication) is linked to lower drug use, higher self-perceptions and self-worth, and positive parent–child relationships. Likewise, internalization of one's values and religious faith appears to be associated with indices of well-being. For example, religiosity and spirituality have been related to numerous indices of positive adjustment for emerging adults including healthy attitudes and behaviors and self-esteem (Knox, Langehough, &Walters, 1998; Rew & Wong, 2006; Zullig, Ward, & Horn, 2006), academic and personal–emotional adjustment (Gilliam, Barry, & Bacchus, 2008), and lower levels of antisocial behaviors (Knox et al., 1998) and substance use (e.g., binge drinking, cocaine use; Hamil-Luker, Land, & Blau, 2004; White et al., 2006). Thus, for some individuals having internalized a set of religious beliefs may represent a unique positive path through emerging adulthood. Indeed, the relevant issue is that it appears that indicators of flourishing may include the internalization of a set of beliefs and values as well as participation in fewer risk behaviors and more positive, prosocial behaviors.

Floundering. Just as evidence points to some possible beliefs/attitudes, attributes, and behaviors that might characterize the notion of "flourishing" during emerging adulthood, there is also evidence of "floundering" for some young people. For some individuals the challenges appear to be of an internalizing nature. For example, shy emerging adults appear to struggle with higher levels of anxiety and depression as well as lower self-perceptions (Nelson et al., 2008). For others, it appears that challenges exist in the form of externalizing problems. Heavy drinking, alcohol-related problems, drug use, and risky sexual behaviors (e.g., number of sexual partners, low or improper use of condoms) often reach some of their highest levels during emerging adulthood (e.g., see Bachman, Johnston, O'Malley, & Schulenberg, 1996; Leftkowitz & Gillen, 2006; Schulenberg & Maggs, 2001, for reviews). Furthermore, emerging evidence suggests that these risk behaviors may be linked to still other behaviors that are indicative of risk in emerging adulthood. For example, Padilla-Walker and colleagues (2010) found video game use to be related to greater drug use, drinking behaviors, lower relationship quality with friends and parents, and, for women, lower self-worth and perceived social acceptance. Similarly, acceptance and use of pornography by emerging adults has been linked to risky sexual attitudes and behaviors (e.g., higher number of sexual partners) as well as higher levels of drinking (Carroll et al., 2008).

However, it is important to note that not all emerging adults engage in these risk behaviors. Indeed, participation in risk behaviors is one of those areas in which emerging adults are often discussed as if a homogenous group with "everybody doing it." That just does not appear to be the case. For example, Schulenberg and Maggs (2001) point out that college students (especially those living in fraternities) and males appear to be overrepresented in the groups high in alcohol usages. Likewise, Caspi and colleagues (1997) found that a variety of characteristics (e.g., lower harm avoidance, control, and social closeness as well as higher aggression and negative emotionality) consistently predicted health risk behaviors such as unsafe sex, dangerous driving habits, participation in violent crime, and alcohol abuse. Hence, it is important to distinguish between individuals who may participate in certain risk behaviors, and other possible indicators of floundering, to a greater extent than others.

Current Study

Taken together, there appears to be some potentially negative factors that repeatedly surface in the study of emerging adults. Some appear to present a pattern of externalizing problems (e.g., higher substance use and risky sexual behaviors), while others are indicative of internalizing problems (e.g., depression, anxiety, low self-worth). At the same time, there appears to be indicators of adjustment that repeatedly appear in the study of emerging adulthood including the internalization of religious beliefs and prosocial values, participation in prosocial behaviors, and positive self-worth. While this is not a comprehensive list of either the strengths or challenges experienced by emerging adults, it does reflect the range of beliefs/attitudes, attributes, and behaviors that young people experience. However, despite this great diversity of individual experiences in emerging adulthood, few empirical attempts have been made to investigate whether the diversity of individual experiences may still be captured in broader typologies of individuals in emerging adulthood. Hence, the first purpose of this study was to identify different typologies of emerging adult college students based on differences in beliefs/attitudes, attributes, and behaviors.

Specifically, we drew upon emerging adulthood theory (Arnett, 2000, 2004) to select a variety of variables that capture

unique aspects of this period of life. It should be noted from the outset, however, that we were less concerned about the broader views young people have about the time period (i.e., whether they see it as a time to explore, experiment, etc.) and more concerned with specifics beliefs and behaviors (e.g., experimenting with drugs, exploring beliefs and values) that reflect those unique aspects of the time period.

First, emerging adulthood tends to be a time in which young people see themselves as being in a state of being in-between, or not-yet adults (Arnett, 2000). Researchers have identified some of the criteria that young people feel they need to achieve in order to be an adult. For example, young people and their parents rank criteria in the realm of *relational maturity* as the most important set of criteria needed for adult status (Nelson et al., 2007). These criteria include issues such as accepting responsibility for the consequences of one's actions, becoming less self-oriented and developing greater consideration for others, and establishing a relationship with parents as equals. Likewise, emerging adults and adults alike tend to endorse the need for deciding on personal values and beliefs (e.g., religious, political) independent of others (e.g., parents, peers) as a requisite for adulthood. Drawing upon these criteria in selecting our variables for the current study, we chose to measure prosocial behaviors, religious faith, and internal regulation of values as potential aspects of positive functioning during emerging adulthood.

Likewise, exploration is a unique feature of emerging adulthood (Arnett, 2004) that often includes participation in risk behaviors such as drugs, alcohol, and unprotected sex (Bachman et al., 1996; Leftkowitz & Gillen, 2006; Schulenberg & Maggs, 2001). Indeed, as noted previously, heavy drinking, alcohol-related problems, drug use, and risky sexual behaviors (e.g., number of sexual partners, low or improper use of condoms) often reach some of their highest levels during emerging adulthood (e.g., Bachman et al., 1996; Leftkowitz & Gillen, 2006; Schulenberg & Maggs, 2001). Furthermore, these appear to be important issues to emerging adults, given that young people report that the ability to comply with societal norms in regard to these behaviors is an important aspect of becoming an adult (e.g., Nelson & Barry, 2005; Nelson et al., 2009). Likewise, given that emerging adults have more control over how they spend their time, they often spend it engaged in various aspects of the media (e.g., pornography and video game use; Barry et al., 2010; Carroll et al., 2008; Padilla-Walker et al., 2010) which have also been linked to exploration of identity and risk behaviors. Because high levels of participation (i.e., high levels placing them outside what society might deem compliant with norms) in some of these various behaviors may delineate between those who are flourishing and those who are floundering, we chose to include drinking, drug use, number of sexual partners, pornography use, and video game use as variables in the current study.

Finally, another distinguishing feature of emerging adulthood is instability (Arnett, 2000). Because of the instability of the time period, some individuals may experience heightened levels of self-doubt, anxiety, and depression (e.g., Arnett, 2004; Nelson & Barry, 2005). Indeed, studies have found that depression is rising across college campuses in the United States (e.g., O'Conner, 2001). Therefore, we selected variables that might tap these types of struggles in emerging adulthood. Specifically, we chose to include depression, anxiety, and self-worth to be included in the current study.

In summary, the study attempted to identify different groups, or typologies, of emerging adults based on religious faith, prosocial behaviors, internal regulation of values, drinking, drug use, number of sexual partners, pornography use, video game use, and depression/anxiety. We acknowledge from the outset that this is a limited number of variables, given the large number of all possible factors (whether they be intrapersonal or behavioral) that might contribute to flourishing or floundering in emerging adulthood. However, we believe they represent a variety of beliefs, behaviors, and personal attributes that are consistent with emerging adulthood theory in representing the *types* of variables that may be potential indicators of adjustment (i.e., flourishing) and maladjustment (i.e., floundering). Although it was impossible to determine a priori how many classes this analysis would produce, it was predicted based on existing research that there would be a group that would reflect flourishing (e.g., self-worth, prosocial behaviors) as well as a group that would exhibit characteristics of floundering, with a potential distinction between externalizing (e.g., high alcohol and drug use, risky sexual behaviors) and internalizing (e.g., depression, anxiety, low self-perceptions) problems.

In order to provide an exploratory attempt to see whether these classes may distinguish differences in how young people view the transition to adulthood and how they might be doing in important aspects of development in emerging adulthood (e.g., identity development, establishing a more mature relationship with parents), the second purpose of this study was to examine whether or not these groups were differentially related to the criteria young people deem important for adulthood, identity development (exploration and commitment), and the quality and closeness of relationships with parents. To reiterate, these variables were selected because we thought they represent a particular view about becoming an adult (i.e., criteria necessary for that important transition) and steps being taken toward that transition (e.g., identity development and developing a mature relationship with parents; Arnett, 2004).

Again, the first set of variables was selected because we felt they may be a reflection of what different groups of emerging adults might think about the process of becoming an adult as seen through the criteria they deem important for adulthood. Specifically, work in this area (e.g., Arnett, 2003; Nelson et al., 2007) has documented that contemporary emerging adults tend to view criteria as being necessary for adulthood that center around (a) being independent and self-reliant (e.g., accepting responsibility for the consequences of one's actions, becoming financially independent of parents), (b) being able to form mature relationships (e.g., becoming less self-oriented and developing greater consideration for others), (c) being able to comply with societal norms (e.g., avoiding

drunk driving and committing petty crimes), and (d) being able to provide and care for a family (e.g., becoming capable of caring for children).

It is possible that individuals who are flourishing versus floundering may have different views of what is necessary for adulthood, which may help account for some of their beliefs and behaviors during emerging adulthood. Although specific hypotheses were not possible at the outset of the study because the results of the first research question (i.e., what groups would emerge from mixture modeling) were not known, several general hypotheses were made. First, it was expected that the groups of individuals who would be characterized as flourishing (e.g., engaged in fewer risk behaviors) would rate criteria centering on obeying societal norms as more important for adulthood than their floundering peers (e.g., those who engage in high levels of drug and alcohol use and have numerous sexual partners). Second, it was hypothesized that flourishing individuals (e.g., those who engage in higher levels of prosocial behaviors) would rate as important for adulthood those criteria that reflect greater awareness of the needs of others.

Another proposed indicator of those who are flourishing, or making "progress" toward adulthood, is that an individual has not only engaged in the exploration of his or her identity but has made progress toward identity development (Nelson & Barry, 2005). Thus, we thought it important to examine the extent to which the different groups that emerged may differ in the extent to which they have developed their identity. It was hypothesized generally that those flourishing groups who appeared to be engaged in fewer externalizing and internalizing behaviors/problems would self-report higher levels of identity commitment than their floundering peers.

Finally, given that young people report wanting to establish a relationship with parents as equals (e.g., Arnett, 1998; Nelson & Barry, 2005), we thought it important to examine how the groups may differ in the relationships they have with mothers and fathers, respectively. Given that parents put emphasis on their emerging-adult children complying with societal norms (Nelson et al., 2007), it was expected that those young people who are flourishing (e.g., engaged in more prosocial behaviors and fewer risk behaviors) would have better relationships with their parents.

Method

Participants and Procedure

Participants for this study were drawn from an ongoing study of emerging adults and their parents entitled [Project name masked for blind review]. The sample used in the current study consisted of 487 undergraduate students (58% women, $n = 281$) recruited from five college sites across the United States. The mean age of the sample was 20.07 years ($SD = 1.89$; age ranged from 18 to 26). Seventy-five percent of the participants were European American, 3% were African American, 12% were Asian American, and 11% indicated that they were "mixed/biracial" or of another ethnicity. All of the participants were unmarried, and 90% reported living outside their parents' home in an apartment, house, or dormitory.

Participants completed the [masked for blind review] questionnaire via the Internet (see [masked]). The use of an online data collection protocol facilitated unified data collection across multiple university sites and allowed for the survey to be administered to emerging adults and their parents who were living in separate locations throughout the country. Participants were recruited through faculty's announcement of the study in undergraduate courses. Informed consent was obtained online, and only after consent was given could the participants begin the questionnaires. Each participant was asked to complete a survey battery of 448 items. Most participants were offered course credit or extra credit for their participation. For more information on procedures, please see (author citation).

Measures

Religious faith. Religiosity was assessed using the Santa Clara Strength of Religious Faith Questionnaire (Lewis, Shevlin, McGuckin, & Navratil, 2001), which is a well-established measure that has demonstrated adequate reliability and validity with adolescent and adult populations. Participants responded to 10 items regarding their religious faith, regardless of religious denomination or affiliation (e.g., "My religious faith is extremely important to me," "I look to my faith as providing meaning and purpose in my life") on a Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Items were averaged with higher scores representing higher self-reported religious faith ($\alpha = .98$).

Prosocial behaviors. Prosocial behaviors were assessed using the Prosocial Tendencies Measure (PTM), which has been used in the past with both adolescents and emerging adults and has displayed adequate internal reliability and validity (Carlo, Hausmann, Christiansen, & Randall, 2003; Carlo & Randall, 2002). Although this measure does not assess the frequency of prosocial behaviors directly, it is designed to measure tendencies toward different types of prosocial behaviors and is correlated with global frequency of prosocial behaviors (Carlo & Randall, 2002). This 25-item measure is composed of six subscales (public, emotional, dire, anonymous, altruistic, and compliant) which were combined for the current study, with higher scores indicating higher prosocial tendencies ($\alpha = .85$). For each subscale, participants responded on a scale ranging from 1 (*does not describe me at all*) to 5 (*describes me greatly*). Sample items include, "I tend to help people who are in real crisis or need" and "I often help even if I don't think I will get anything out of helping."

Internal regulation of values. Internal regulation of values was assessed using a 14-item measure adapted from the Prosocial Self-Regulation Questionnaire (Ryan & Connell, 1989). Participants responded to questions regarding kindness, honesty, and fairness values, with 7 items assessing two levels of values

internalization that assess internalized (versus externalized) values regulation: identified ($\alpha = .83$; e.g., "I am kind to others because it feels good to be kind"), and integrated ($\alpha = .80$; e.g., "I am kind to others because it is important to me to be a kind person"). Participants responded to statements on a scale ranging from 1 (*not at all true*) to 4 (*very true*).

Depression and anxiety. Depression and anxiety scores were obtained by reversing the happiness and calmness subscales of The Adult Temperament Scale (Rothbart, Ahadi, & Evans, 2000). Items for depression included sad and blue, hopeless, and depressed; and items for anxiety included worrier, fearful, tense, and nervous. On a 5-point Likert-type scale ranging from 1 (*never*) to 5 (a*lways*), participants responded to how often they would describe themselves in this manner. Cronbach's αs for depression and anxiety in the current study were .85 and .78, respectively, and higher scores represent higher levels of self-reported depression and anxiety.

Self-worth. The Self-Perception Profile for College Students (Neeman & Harter, 1986) was used to assess perceptions of self-worth. Participants rated 6 items ($\alpha = .80$) on a Likert-type scale from 1 (n*ot at all true for me*) to 4 (v*ery true for me*). Sample item includes "I like the kind of person I am."

Risk behaviors. Emerging adults' drinking, drug use, and number of sexual partners were measured using items from the Add Health Questionnaire (www.cpc.unc.edu/addhealth/). For drinking, emerging adults were asked how many days in the past 12 months they drank alcohol and engaged in binge drinking (i.e., 4–5 drinks on one occasion). Because items were correlated ($r = .82$, $p < .001$), responses were averaged, with higher scores indicating more frequent drinking behavior. For drug use, emerging adults were asked how many days in the past 12 months they used marijuana and used other illegal drugs (e.g., cocaine, heroin, crystal meth, and mushrooms). Because items were correlated ($r = .46$, $p < .001$), responses were averaged, with higher scores indicating more frequent drug use. Participants rated the above items on a 6-point Likert-type scale ranging from 0 (*none*) to 5 (*almost every day*). For number of sexual partners, participants were asked open-ended questions on how many sexual partners they had in the past 12 months, and how many sexual partners they had in their lives, and these 2 items were averaged ($r = .70$, $p < .001$).

Pornography use. To assess pornography use, participants answered one question on a 6-point Likert scale ranging from 0 (*none*) to 5 (*every day or almost every day*). The question asked, "During the past 12 months, on how many days did you view pornographic materials (such as magazines, movies, or internet sites)."

Video game use. To assess video game and violent video game use, participants answered two questions on a 6-point Likert-type scale ranging from 0 (*none*) to 5 (*every day or almost every day*). The questions asked, "During the past 12 months, on how many days did you play video games" and "During the past 12 months, on how many days did you play violent video games." Because items were correlated ($r = .80$, $p < .001$), responses were averaged, with higher scores indicating more video game use.

Importance of criteria for adulthood. In order to assess criteria for adulthood, emerging adults were presented with a list of possible criteria for adulthood (e.g., "finishing education," "avoid drunk driving," "purchasing a house"; Arnett, 1997, 2003). Participants were asked to "give your opinion on the *importance* of each of the following in determining whether or not a person has reached adulthood." They could rate each item on a scale of 1 (*not at all important*) to 4 (*very important*). This measure has been commonly used in this population (e.g., Arnett, 1997, 1998, 2003; Nelson & Barry, 2005; Nelson et al., 2008), and the way in which the criteria were grouped into categories in the current study was based upon previous research (in which confirmatory factor analysis was employed) that demonstrated the internal validity of the subscales (Badger, Nelson, & Barry, 2006). The subscales included relational maturity ($\alpha = .63$, 4-items, e.g., become less self-oriented, develop greater consideration for others), role transitions ($\alpha = .80$, 7-items, e.g., financially independent from parents), norm compliance ($\alpha = .82$, 8-items, e.g., avoid becoming drunk), biological/age-related transitions ($\alpha = .79$, 9-items, e.g., reach age 21), and family capacities ($\alpha = .91$, 6-items, become capable of caring for children).

Identity achievement. Identity achievement was assessed using a shortened version of the Ego Identity Process Questionnaire (Balistreri, Busch-Rossnagel, & Geisinger, 1995), which considers 17 statements regarding individuals' exploration and commitment on various aspects of identity (including occupation, religion, values, family, and dating). Participants rated each statement on a 6-point scale, with values ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Scoring was reversed for negatively worded items and items were averaged to create exploration (7 items, $\alpha = .64$, e.g., "I have considered adopting different kinds of religious beliefs") and commitment (10 items, $\alpha = .70$, e.g., "I have definitely decided on the occupation I want to pursue") subscales.

Parent–child relationship. Parent–child relationship quality was assessed using the composite of four subscales (guidance/advice, disclosure, affection, and emotional support) from the Social Provisions Questionnaire (27 items, $\alpha = .95$; Carbery & Buhrmester, 1998). Emerging adults answered questions on a 5-point scale ranging from 1 (*little or none*) to 5 (*the most*). Sample questions include, "How often do you depend on this person for help, advice, or sympathy?" "How much does this person like or love you?" and "How often do you turn to this person for support with personal problems?"

Parental closeness was measured using the Parent–Child Closeness Scale (Buchanan, Maccoby, & Dornbusch, 1991). Emerging adults responded to 9 items assessing paternal and

maternal closeness (18 items total). Sample items include, "How openly do you talk with your (father/mother)?" and "How well does your (father/mother) know what you are really like?" Items were rated on a 5-point scale ranging from 1 (*not at all*) to 5 (*very*). Individual items were averaged for fathers and mothers, respectively, with higher scores representing greater parental closeness. Cronbach's αs for emerging adults' reports of mother and father closeness were .88 and .92, respectively.

Results

Descriptive Statistics

There were less than 5% missing data on any of the variables in the current analysis (exact numbers for each variable are available upon request). Full information maximum likelihood was used in the software package Mplus 6.1 (Muthén & Muthén, 2010) to handle missing data. Prior to the analysis, data were carefully examined for univariate outliers (classified as scores more than three standard deviations above or below the mean). This resulted in dropping four participants, with a final sample of 483. Means and standard deviations of emerging adult characteristics are represented in Table 1. A number of univariate analyses of variance (ANOVAs) were conducted to examine gender differences on these 11 variables. Young women ($M = 4.32$, $SD = .76$) reported higher religious faith ($M = 2.71$, $SD = .95$) and internal regulation of values ($M = 3.56$, $SD = .39$) than did young men ($M = 2.51$, $SD = .91$ and $M = 3.28$, $SD = .49$); young men reported more drinking ($M = 1.90$, $SD = 1.36$) and drug use ($M = .39$, $SD = .78$) than did young women ($M = 1.52$, $SD = 1.14$ and $M = .18$, $SD = .45$); young men reported more pornography ($M = 2.32$, $SD = 1.41$) and video game ($M = 2.34$, $SD = 1.49$) use than did young women ($M = .48$, $SD = .85$ and $M = .51$, $SD = .73$); and young women reported higher levels of anxiety ($M = 2.92$, $SD = .65$) than did young men ($M = 2.76$, $SD = .69$).

Mixture Modeling

Mixture modeling using Mplus 6.1 was carried out to determine whether there was heterogeneity in the current sample based on the 11 characteristics of emerging adults (religious faith, prosocial behavior, internalization of values, depression, anxiety, self-worth, drinking, drug use, video game use, number of sexual partners, and pornography use). Two-, three-, and four-class models were estimated, and a variety of fit statistics were examined, including AIC (Akaike Information Criterion), BIC (Bayesian Information Criterion), SABIC (the sample size adjusted BIC; lower numbers suggest better fit) and LMR (Lo Mendell Rubin, which provides a p value indicating whether the model specified fits better than a model with one fewer class; Tofighi & Enders, 2008). As shown in Table 2, fit statistics suggest a marked improvement when moving from two classes to three but not from three classes to four. In addition, low sample size in one of the classes of the four-class model made interpretation difficult. Closer examination of the four-class solution also suggested that the smallest class ($n = 16$) was merely an extreme set of class two, with slightly higher levels of sexual behavior. Based on fit statistics and these conceptual comparisons, it was determined that a three-class model was the most favorable.

Class membership was then exported from Mplus and the remainder of analyses were conducted in SPSS. This two-step approach was used because it was the most parsimonious way to address the specific research questions. More specifically, given the number of covariates in the current study, it was not practical to perform a one-step model, given our desire for the classification not to be impacted by the covariates (Vermunt, 2010). Once class membership was exported, means for each class were used to graph class differences on the 11 characteristics (see Figure 1). Then, a number of ANOVAs were conducted to determine which emerging adult characteristics were different as a function of class membership (see Table 3). Class 1 (64% of the sample, $n = 310$) will be referred to as *well adjusted* because it consisted of individuals with the highest mean levels of religious faith and internalized values, and the lowest mean levels of drinking, drug use, violent video game use, number of sexual partners, and pornography use. Class 2 (28% of the sample; $n = 134$) will be referred to as *externalizers*, because it consisted of individuals whose mean levels of depression and self-worth did not differ from those in Class 1, but who did have higher levels of drinking, drug use, violent video game use, number of sexual partners, and pornography use than did those in Class 1. Class 3 (8% of the sample; $n = 39$) will be referred to as *poorly adjusted*, because it consisted of individuals who had the lowest mean levels of self-worth and the highest mean levels of depression and anxiety (indicative of internalizing problems) as well as the highest levels of drinking, drug use, and number of sexual partners (all indicative of externalizing problems). Classes 2 and 3 did not differ on their levels of religiosity, internalized values, and video game use; but Class 2 had a higher mean level of pornography use than did Class 3, and Class 1 had a higher mean level of anxiety than did Class 2 (see Table 3).

Differences in Outcome Variables as a Function of Class Membership

As further validation of the distinctions between classes, a number of analyses were conducted to determine whether subject variables (e.g., age, gender, and site) as well as outcomes seen as critical to the period of emerging adulthood (namely, criteria for adulthood, identity development, and parent–child relationships) differed as a function of class membership. First, a number of chi-square analyses were conducted to examine categorical differences in class membership (e.g., gender and site), and these analyses were statistically significant. In regard to gender, $\chi^2(2) = 174.87$, $p < .001$, the well-adjusted class was 80% ($n = 249$) female (odds ratio [OR] = .09; males had the higher coded value), while the externalizing class was 83% ($n = 111$) male (OR = 1.76) and the poorly adjusted class was 77% ($n = 30$) male. The only meaningful pattern of differences as a function of site, $\chi^2(4) = 19.09$, $p < .001$, was that all sites

Table 1. Means and Standard Deviations of Emerging Adult Characteristics by Gender.

	Total *M* (*SD*)	Young Men *M* (*SD*)	Young Women *M* (*SD*)	*F* test
Religious faith	2.63 (.93)	2.51 (.91)	2.71 (.95)	5.65*
Prosocial behavior	2.81 (.49)	2.84 (.51)	2.79 (.47)	1.40
Internal regulation	3.44 (.45)	3.28 (.49)	3.56 (.39)	48.26***
Depression	2.47 (.78)	2.43 (.78)	2.50 (.79)	1.00
Anxiety	2.85 (.67)	2.76 (.69)	2.92 (.65)	7.22**
Self-worth	3.04 (.64)	3.05 (.66)	3.04 (.62)	.09
Drinking	1.67 (1.25)	1.90 (1.36)	1.52 (1.14)	11.16***
Drug use	.27 (.62)	.39 (.78)	.18 (.45)	12.79***
Video game use	1.28 (1.43)	2.34 (1.49)	.51 (.73)	317.86***
Sexual partners	1.95 (3.21)	2.09 (3.78)	1.85 (2.73)	.66
Pornography use	1.25 (1.44)	2.32 (1.41)	.48 (.85)	316.54***

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

Table 2. Relative Model Fit by Number of Classes.

Classes	n	Log likelihood	Entropy	AIC	BIC	SABIC	LMR
2	444, 39	−6,716.74	.99	13,501.48	13,643.60	13,535.68	n/a
3	310, 134, 39	−6,566.20	.91	13,224.39	13,416.67	13,270.67	297.08, $p < .001$
4	125, 303, 16, 39	−6,443.37	.92	13,002.74	13,245.18	13,061.09	242.39, $p = .36$

Note. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; SABIC = Sample Size Adjusted BIC; LMR = Lo Mendell Rubin.

had a higher percentage of individuals in the well-adjusted class, which is likely attributed to the higher number of females in this class and in the sample for each site the remainder of the sites were relatively equally distributed across classes (OR range from 0.57 to 1.02). An ANOVA was also conducted to determine whether the age of the emerging adults differed as a function of class membership, and it was not statistically significant, $F(2, 479) = .28$, ns.

Finally, three multivariate analyses of variance (MANOVAs) were conducted to determine whether key emerging adult outcomes differed as a function of class membership. Class membership and gender were entered as independent variables in order to explore the possibility of gender interactions. The first MANOVA consisted of emerging adults' ratings of the importance of criteria for adulthood (relational maturity, role transitions, norm compliance, biological transitions, and family capacities). Results revealed a significant main effect of class membership, $F(10, 920) = 4.24$, $p < 001$; partial $\eta^2 = .05$, but no main effect of gender and no significant interaction between the two. Three of the five criteria for adulthood were significantly different as a function of class membership (see Table 4). Based on post hoc analyses, it was determined that well-adjusted ($M = 2.98$, $SD = .61$) emerging adults rated norm compliance as more important than did externalizing ($M = 2.71$, $SD = .63$) and poorly adjusted ($M = 2.55$, $SD = .59$) emerging adults (who did not differ from one another); poorly adjusted ($M = 2.52$, $SD = .68$) emerging adults rated age/biological transitions as more important than did well-adjusted ($M = 2.11$, $SD = .65$) and externalizing ($M = 2.18$, $SD = .76$) emerging adults (who did not differ from one another); and well-adjusted ($M = 3.06$, $SD = .70$) emerging adults rated family capacities as more important than did externalizing ($M = 2.85$, $SD = .77$) and poorly adjusted ($M = 2.81$, $SD = .74$) emerging adults (who did not differ from one another).

The second MANOVA consisted of emerging adults' ratings of identity achievement in dimensions of both exploration and commitment. There was a significant main effect of class membership, $F(4, 942) = 9.64$, $p < 001$; partial $\eta^2 = .04$, but not of gender, and the interaction was not significant. Identity commitment but not identity exploration was significantly different as a function of class membership (see Table 4). Based on post hoc analyses, it was determined that well adjusted ($M = 4.25$, $SD = .65$) emerging adults had the highest levels of identity commitment, followed by externalizing ($M = 4.01$, $SD = .67$) and poorly adjusted ($M = 3.57$, $SD = .56$) emerging adults.

The third MANOVA consisted of emerging adults' ratings of the parent–child relationship (overall relationship quality, closeness to mother, and closeness to father). There was a significant main effect of class membership, $F(6, 906) = 2.31$, $p < 05$; partial $\eta^2 = .02$ but not of gender, and the interaction was not significant. Two of the three aspects of the parent–child relationship were significantly different as a function of class membership (see Table 4). Based on post hoc analyses, it was determined that well-adjusted ($M = 3.90$, $SD = .67$) and externalizing ($M = 3.82$, $SD = .75$) emerging adults (who did not differ from one another) had higher levels of relationship quality with parents than did poorly adjusted ($M = 3.43$, $SD = .72$) emerging adults. Well adjusted ($M = 4.24$, $SD = .77$) and externalizing ($M = 4.28$, $SD = .83$) emerging adults (who did not differ from one another) had higher levels of closeness to mother than did poorly adjusted ($M = 3.83$, $SD = .89$) emerging adults. There were no differences in closeness to father as a function of class membership.

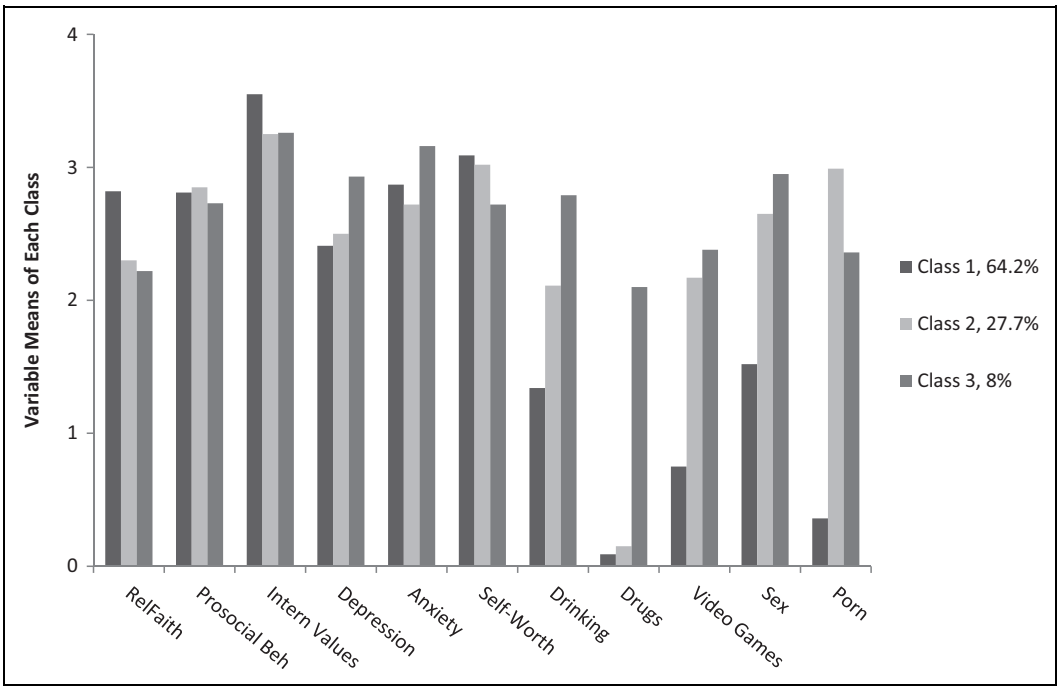

Figure 1. Three-class mixture model for emerging adult characteristics.

Discussion

The purpose of this study was to (a) identify different groups, or typologies, of emerging adult college students based on differences in beliefs, attributes, and behaviors and (b) examine whether or not these groups were differentially related to the criteria emerging adults deem important for adulthood, the level of identity achievement (exploration and commitment) they have reached, and the quality and closeness of relationships with parents. The results suggest that there may indeed be some young people who are flourishing during this period of life while others appear to be struggling. There appear to be some young people who indeed seem to embody the positive aspects of emerging adulthood (e.g., Arnett, 2004). These individuals seem to be able to avoid some of the potential pitfalls of risky experimentation (high levels of binge drinking and drug use) and instability (e.g., depression and anxiety) that characterize emerging adulthood. Although the causal factors driving success during this period cannot be assessed via the cross-sectional and correlational nature of our data, our findings have nevertheless tapped into a complex interconnectedness between a number of external (i.e., behaviors) and internal (e.g., internal regulation of values, self-worth) factors that are working together to promote positive development.

The well-adjusted group also appeared to differ from the other groups in religious faith. Consistent with past research, our findings suggest that religiosity appears to be linked to numerous indices of positive adjustment for a group of individuals in emerging adulthood including healthy attitudes/behaviors and self-esteem (Knox et al., 1998; Rew & Wong, 2006; Zullig et al., 2006), lower levels of antisocial behaviors (Knox et al., 1998) and substance use (e.g., binge drinking, cocaine use; Hamil-Luker et al., 2004; White et al., 2006). Having said that, it should be noted that the well-adjusted group was not necessarily high in religious faith (a mean of 2.83 on a 4-point scale) but simply higher than the other two groups. This is most likely due to the fact that the well-adjusted group was predominantly female and young women are much more likely than young men to incorporate religion into their path through emerging adulthood (e.g., Barry & Nelson, 2005, 2008; Knox et al., 1998; Loewenthal, MacLeod, & Cinnirella, 2001). In sum, the findings should not be taken to suggest that religiosity is necessary for adaptive development in emerging adulthood, but it may suggest that there are multiple ways to flourish and for some who appear to be doing well in emerging adulthood that might include a certain degree of religiosity.

Likewise, it appears that there are different ways in which young people may be struggling in emerging adulthood. On one hand, there appears to be approximately a fourth of young people whose floundering appears to be of an externalizing nature. The group labeled externalizers (28% of the sample) may well be indicative of those emerging adults who are often portrayed in the media as narcissistic, focused only on having fun, and unwilling to grow up. These individuals report high levels of drinking, drug use, and sexual partners, and they spend large amounts of time viewing pornography and playing video games. When compared to their well-adjusted peers, their views of what is important for becoming an adult contain less emphasis on the need to be responsible, care for others, or comply with society's laws and standards. Finally, this group appeared to be somewhat less settled in their identity compared to the well-adjusted group.

These findings raise the question of whether the externalizers are truly at developmental risk or whether the beliefs they have and the behaviors they engage in may be considered the

Table 3. Mean Differences on Emerging Adult Characteristics as a Function of Class.

	Well adjusted *M* (*SD*)	Externalizing *M* (*SD*)	Poorly adjusted *M* (*SD*)	*F* value
Religious faith	2.82 (.93)[a]	2.30 (.86)[b]	2.22 (.72)[b]	20.10***
Prosocial behavior	2.81 (.49)	2.85 (.51)	2.73 (.43)	.256
Internal regulation	3.55 (.42)[a]	3.24 (.46)[b]	3.26 (.43)[b]	28.40***
Depression	2.41 (.77)[a]	2.50 (.70)[a]	2.93 (.97)[b]	7.88***
Anxiety	2.87 (.67 [a]	2.72 (.64)[b]	3.16 (.69)[c]	6.80***
Self-worth	3.09 (.62)[a]	3.02 (.62)[a]	2.72 (.73)[b]	5.94**
Drinking	1.34 (1.11)[a]	2.11 (1.27)[b]	2.79 (1.11)[c]	40.38***
Drug use	.09 (.23)[a]	.15 (.30)[b]	2.10 (.55)[c]	861.06***
Video game use	.75 (1.07)[a]	2.17 (1.50)[b]	2.38 (1.58)[b]	76.61***
Sexual partners	1.52 (2.45)[a]	2.65 (4.35)[b]	2.95 (3.34)[b]	8.07***
Pornography	.36 (.57)[a]	2.99 (.99)[b]	2.36 (1.33)[c]	559.80***

Note. Means with differing letters are significantly different from one another based on LSD post hoc analyses.
*$p < .05$. **$p < .01$. *** $p < .001$.

Table 4. Differences in Outcome Variables as a Function of Class Membership.

	Well-Adjusted *M (SD)*	Externalizing *M (SD)*	Poorly-Adjusted *M (SD)*	
Importance of Criteria:				*F*-test (2, 463)
Relational maturity	3.42 (.43)	3.30 (.54)	3.33 (.48)	2.08
Role transitions	2.56 (.51)	2.41 (.53)	2.49 (.47)	2.42
Norm compliance	2.98 (.61)[a]	2.71 (.63)[b]	2.55 (.59)[b]	9.56***
Biological/age transitions	2.11 (.65)[a]	2.18 (.76)[a]	2.52 (.68)[b]	4.33*
Family capacities	3.06 (.70)[a]	2.85 (.77)[b]	2.81 (.74)[b]	3.32*
Identity Achievement:				*F*-test (2, 477)
Exploration	3.93 (.71)	3.94 (.67)	3.71 (.72)	1.87
Commitment	4.25 (.65)[a]	4.01 (.67)[b]	3.57 (.56)[c]	18.06***
Parent-Child Relationship:				*F*-test (2, 454)
Relationship quality	3.90 (.67)[a]	3.82 (.75)[a]	3.43 (.72)[b]	5.53**
Maternal closeness	4.24 (.77)[a]	4.28 (.83)[a]	3.83 (.89)[b]	3.48*
Paternal closeness	3.85 (1.06)	3.94 (.93)	3.57 (.82)	1.35

Note. Means with differing letters are significantly different from one another based on LSD post hoc analyses.
* $p < .05$, ** $p < .01$, *** $p < .001$.

norm for this age group. It may be that the externalizers are simply focused on what Ravert (2009) refers to as now-or-never behaviors (i.e., behaviors young people engage in because they think they will not be able to do them later in life after they settle down) such as social events, alcohol/tobacco/drug use, relationships (e.g., multiple sexual experiences), and leading a carefree lifestyle (e.g., being lazy, enjoying not having a real job). Based on extant evidence, however, the elevated levels of alcohol, drug, pornography, and video game use would suggest a reason to be concerned (e.g., Bachman et al., 1996; Carroll et al., 2008; Leftkowitz & Gillen, 2006; Padilla-Walker et al., 2010). Indeed, it will be important to longitudinally examine these individuals to see whether their current attitudes and behaviors have long-term consequences that might underscore the risk in which their present maladjustment may place them. For example, it would be important to see whether individuals in this group are more likely to drop out of college, form lasting addictions, or have employment and/or relationship problems.

There also appears to be a small group (8%) of young people whose floundering not only appears to possess high levels (highest of the three groups) of externalizing behaviors (e.g., drinking and drug use) but also problems of an internalizing nature. These young people appear to be depressed, anxious, and have low self-esteem. The distinction between this group and the other floundering group (i.e., externalizers) is particularly notable because the high levels of both externalizing and internalizing problems might suggest that these individuals are struggling with the exploration and related instability typical of the time period. Whereas the externalizers, as suggested previously, may be focused on now-or-never behaviors (Ravert, 2009), and therefore may be not making great strides toward adulthood, there may be something more problematic for the poorly adjusted group. Indeed, whereas the externalizers themselves might not see their behaviors as particularly problematic for this period of their lives, the poorly adjusted group appears to be struggling and to be self-aware of their challenges (i.e., reporting depression and anxiety). The poorly adjusted group of young people may be those for whom the challenges of emerging adulthood are particularly daunting. As noted previously, the present study was unable to ascertain causality but the findings do underscore the need to be concerned about this group of young people who are struggling internally with some facets of life during emerging

adulthood at the same time they are engaged in risk behaviors that have the potential to only make matters worse.

A final note regarding both floundering groups is warranted in regard to gender. It was pointed out previously that women made up 80% of the well-adjusted group. It is no less noteworthy that men made up 83% of the externalizing group and 77% of the poorly adjusted group. That figure ($n = 141$) represents nearly 70% of the entire male sample. From this we start to see a staggering picture that over two thirds of college-age men might be floundering in comparison to the majority of females who might be classified as flourishing. This suggests a rather large percentage of the male sample that are reflective of the college-age males captured in books such as *Guyland* (Kimmel, 2008) who are portrayed as heavily involved in drugs, alcohol, and risky sexual behavior. Although it should be underscored that not all young men are floundering, and many are just floundering in comparison to women, the findings do give reason for concern for many young men. Indeed, taken together, results suggest that there may be two significantly different emerging adulthoods in America's college students—one for males and one for females.

Limitations

As noted previously, a limitation of this study is that the correlational nature of analyses precludes causal inferences. Certainly, it will be important to conduct longitudinal studies to determine factors in childhood and adolescence that might predict flourishing and floundering during emerging adulthood as well as the outcomes for these various groups as they begin to move into adulthood. Another limitation of the study is that participants include only college students. Future work needs to include participants who are not attending a 4-year college or university. Without precluding the possibility that there are positive pathways through emerging adulthood that do not include a college education, there is certainly reason to be concerned that the percentage of young nonstudents who are floundering may be even higher for those who are not pursuing higher education. Indeed, with economies having changed from being based in manufacturing to today being based in information, technology, and services, the need for secondary education is higher than it has ever been (Arnett, in press). Therefore, there is a real need to examine how flourishing or floundering may look for young people not attending college, or for those who may be attending community colleges or trade schools. Finally, we fully recognize that the variables used to form the classes did not even begin to capture all of the possible markers that might contribute to flourishing or floundering in emerging adulthood. There is certainly a need for future work to expand and refine these groups to include other important features, whether they be behavioral, relational, or intrapersonal that might contribute to flourishing or floundering in emerging adulthood.

Summary

The results of this study make several important contributions to our understanding of the heterogeneity that exists in the paths being taken by young people during emerging adulthood. First, it clearly identifies a group of young people who appear to be doing well, even thriving, during a period of life that is frequently characterized in a rather negative light. Indeed, these young people appear to be minimizing participation in potentially harmful activities, making decisions based on an internal set of beliefs and values, progressing in their identity development, and experiencing positive relationships with parents. In a sea of negativity that often surrounds the study and discussion of this period of development, these findings present an important, positive description of a group of young people who appear to be flourishing.

Second, the findings of the present study provide further information regarding floundering behaviors in emerging adulthood. Although the findings are not necessarily novel that point to the prevalence of and problems associated with *high* levels of drinking, drug use, sexual behavior, and gaming, the results give greater clarity to several aspects of floundering. They distinguish between a group who reflects problems of an externalizing nature from one that not only appears to be at risk due to high levels of externalizing behaviors but simultaneously high levels of internalizing problems. Although small in size, this group may be one for whom there may be some concern and to whom greater attention should be given. The findings related to floundering behaviors also give more of a profile, or face, to a portion of emerging adults. The mixture modeling approach employed in our study gives a broader picture suggesting that many young people appear to engage excessively in a number of behaviors. In other words, it suggests that there are not just some young people who drink a lot, or some who play a lot of violent video games, or others who are experimenting with drugs, etc. Instead, the findings convey the extent to which some emerging adults engage in a large number of behaviors that might place them at risk.

Finally, the findings related to gender make a significant contribution to our understanding of flourishing and floundering in emerging adulthood. Specifically, the results add to the growing evidence that there is a rather wide gap, on average, between men and women as they transition to adulthood with many more women thriving and progressing while the majority of their male counterparts struggle.

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