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Evaluation of the Psychometric Properties of the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) in a Sample of Continuation High School Students

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Abstract

It is now presumed that youth do not move directly from adolescence to adulthood, but rather pass through a transitional period, "emerging adulthood." The Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) is a self-report instrument developed to examine the attributes of this period. "At-risk" youth appear to enter emerging adulthood developmental tasks at a slightly earlier age than general population youth. In the present study, a 21-item version of the IDEA was administered to a sample of 1676 "at-risk" continuation (alternative) high school students in Southern California. Principal component factor analysis with orthogonal rotation revealed three factors the authors labeled "Identity Exploration," "Experimentation/Possibilities," and "Independence." Overall, the measure demonstrated high internal consistency. Construct validity analyses indicated that the measure was correlated with demographics, risk behaviors, and psychological measures. The authors conclude that the IDEA-R is a useful instrument for measuring emerging adulthood in at-risk populations.

Keywords

emerging adulthood; continuation high school; at-risk youth; inventory of the dimensions of emerging adulthood (IDEA); psychometrics

Emerging adulthood, the developmental period between adolescence and young adulthood, is a distinct period demographically, subjectively, and in terms of identity exploration (Arnett, 2000). In the course of this life transition, roughly between 18 and 25 years of age among college bound general population youth, individuals achieve relative autonomy from guardians, such as parents, and experience shifts in social roles and normative expectations for their behavior. Emerging adults are typically free from the dependency that characterized

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childhood (e.g., parents and teachers), yet are not burdened with the responsibilities of adulthood. This freedom allows emerging adults the opportunity to explore diverse potential life directions. During this period, more than any other stage of life, the near-future is uncertain, and individuals are making a variety of life decisions in terms of their education, work, romance, and worldviews (Arnett & Tanner, 2006).

Proposed Dimensions of Emerging Adulthood

Five distinct dimensions of emerging adulthood have been proposed (Arnett, 2004a, 2004b): the age of identity explorations; the age of feeling in-between; the age of possibilities; the self-focused age; and the age of instability. The "psychological moratorium" first described by Erik Erikson (1968, 1994) of *identity explorations* is widely accepted and now thought to take place during the emerging adulthood period. Most emerging adults no longer feel like adolescents, but do not yet consider themselves having reached adulthood (Arnett, 2004b); thus, they find themselves *feeling in-between*. While emerging adults are often pessimistic about the future of our society, they are extremely optimistic about their own goals, prospective mates, and job opportunities, and are experiencing an *age of possibilities* (Arnett, 2004a; Hornblower, 1997). Individuals during this period are typically *self-focused* (Arnett, 2004b) as they no longer have parents' or teachers' rules they must obey, nor do they have typical adult obligations (such as marriage and children). The last dimension of emerging adulthood is less auspicious; it refers to the contradiction that lies with the excitement of exploring life's options, and paradoxically the fear that such a great number of possibilities elicits. Arnett refers to this as the *age of instability*.

How has Emerging Adulthood been Measured?

Emerging adulthood (Arnett, 2000, 2004a, 2004b) has been measured in various ways since Arnett first coined the term. Some researchers have defined this phase of life simply in terms of age (Chassin, Pitts, & Prost, 2002; Luyckx, Goossens, & Soenens, 2006; Shulman & Ben-Artzi, 2003); however, this approach might be limited due to variations in maturity, schooling, and other factors. That is, using only age to define emerging adulthood does not necessarily account for the variation among individuals during this time, or the fact that the time period of emerging adulthood might not be the same for every individual. Studying emerging adulthood in such a way does not allow one to determine how deeply the individual is entrenched in this period; accordingly, an age-focused approach might miss key developmental differences between individuals. For example, at-risk youth tend to enter emerging adulthood developmental tasks earlier than general college bound youth (Sussman, 2010). However this population might be ignored if emerging adulthood was examined solely using a predefined semiarbitrary age range.

Others have looked at life developmental milestones to determine whether an individual has reached adulthood (Griffin, 1993; McRobbie, 1991; Stam, Hartman, Deurloo, Groothoff, & Grootenhuis, 2006). Typical markers of entrance into adult status include such events as establishing a stable residence, completing school, and marriage or a long-term stable commitment to a significant other. It is often assumed that the transition from adolescence to adulthood is linear. However, instead of conceptualizing adolescence as a static

classification that individuals outgrow, it is possible to think of it as a growth process that shapes individuals during their lives, perhaps involving several iterations including gradually accepting responsibility for the self, making independent decisions, and becoming financially independent (Arnett, 1998, 2004a, 2004b; Facio, Resett, Micocci, & Mistrorigo, 2007). Approximately 40–60% of youth exhibit a normative transition to young adulthood (Krohn, Lizotte, & Perez, 1997). While many at-risk youth have reached some of these milestones (e.g., marriage, having a child) as teenagers, in general, they will not have reached the long-term stability that characterizes young adulthood and thus find themselves experiencing emerging adulthood developmental tasks.

Some have used or adapted measures such as the Erikson Psychosocial Inventory scale (Rosenthal, Gurney, & Moore, 1981) as a global multidimensional construct composed of indicators of autonomy, identity, industry, initiative, and intimacy, all of which have been regarded as requirements for a successful transition to adulthood. However, this scale was built using Erikson's developmental stages (Erikson, 1950, 1959), where a clear resolution of conflicts is necessary to transition into the subsequent stage of development. Specifically, the scale was designed to determine whether respondents have resolved conflicts associated with the first six psychological stages developed by Erikson, and thus does not directly capture emerging adulthood (Burns & Dunlop, 1998).

Others have utilized self-reports of whether or not persons consider themselves to be an adult (Mayseless & Scharf, 2003). Such self-report data have been useful in better defining what adulthood means subjectively to individuals. For example, one study (Arnett, 1997) had youth respond to a series of 40 items and indicate whether these items were or were not "necessary for adulthood." This study found that the top criteria for reaching adulthood emphasized individualism such as, "accepting responsibility for the consequences of your actions," "decide on own beliefs and values independently of parents or other influences," and "establish a relationship with parents as an equal adult." One Israeli study (Mayseless & Scharf, 2003) used a similar procedure where participants indicated the extent to which each of 47 items was considered necessary for the individual to be considered an adult. This study demonstrated that respondents regarded psychological attributes (i.e., accepting responsibility, deciding on personal beliefs by oneself, and forming equal-adult relationships with parents) as being the most important markers of self-reports of having reached adulthood. While these studies are valuable foundational investigations to determine the subjective factors that individuals find salient for the transition to adulthood, they do not describe the psychosocial issues or processes that are involved as individuals transition through emerging adulthood (Arnett, 1997). Only recently have people looked at a measure developed to directly tap the psychosocial issues associated with emerging adulthood, the Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007).

Previous Research on the IDEA

Arnett, Reifman, and colleagues developed the IDEA to assess the five dimensions that they hypothesize to characterize the emerging adulthood developmental period. To our knowledge, the IDEA (Reifman et al., 2007) is the only measure to examine the issues/

processes of emerging adulthood, as opposed to markers of transition to adulthood. The IDEA was designed for a population aged approximately 18–25 years and was first validated in a sample of predominantly White female undergraduates enrolled in a university in Texas and their noncollege acquaintances (Reifman et al., 2007). Factor analysis conducted in this original study indicated six factors. The factors included the five dimensions of emerging adulthood identified by Arnett; however, because self and other focus loaded on two different factors, this led to a six-factor solution. The internal consistency of each subscale was strong, with αs between .70 and .85 for each subscale. The authors also found that test–retest reliability ranged from .64 to .76 (1-month interval), with the exception of .37 for the *feeling in-between* subscale.

In the second study to evaluate the psychometric characteristics of the IDEA (Atak & Çok, 2008), researchers translated the 31-item measure to Turkish and administered it to a sample of high school and university students in Turkey. Exploratory factor analysis (EFA; principal components analysis followed by varimax rotation) revealed a three-factor structure rather than the six-factor structure found in the original evaluation of the measure (Reifman et al., 2007). Eleven items were dropped from the original set of 31 items. The authors named the three factors “Negativity/Instability,” “Exploration/Feeling in between,” and “”Experimentation/Self focused.” Test–retest reliability coefficients were .78 for the first factor, .76 for the second, .82 for the third, and .81 for the total scale. The split-half reliability coefficients were also acceptable; the first half Spearman– Brown reliability coefficient was .58, the second half’s was .65, and the full scale’s.69. Convergent validity was examined by investigating correlations with other constructs.

We located only two other nonpeer-reviewed studies that included the IDEA; one was a thesis that used a single subscale (Musante, 2010) and the other was a dissertation that used 5 items (Herrera, 2009). Musante (2010) used only the *Negativity/Instability* subscale as she was interested in studying family predictors of negative instability in adopted emerging adults. Herrera (2009) used 5 items from three subscales (feeling in between, experimentation, and identity exploration) as demographic items to demonstrate that the sample was indeed experiencing emerging adulthood.

Present Study

Given the limited generalizability of the few psychometric studies of the IDEA, it is important to examine the reliability and validity of the scale in other population subgroups.

The current study provides a psychometric evaluation of the IDEA-R in a predominantly Latino sample of “at-risk” older adolescents. The aims of the study were to (1) investigate differences in how the emerging adulthood period is experienced by a predominantly Latino population; (2) explore the reliability of the emerging adulthood construct in a non-White population; (3) examine the factor structure of the IDEA-R, and (4) explore the predictive validity of the IDEA-R by examining relations of each factor with variables that might indicate emerging adulthood transitions, such as demographic characteristics, risk behaviors, and indicators of psychological maturation.

Emerging Adulthood Among At-Risk Youth

The study population for the current study was youth enrolled in continuation high schools in Southern California. Outside of California, these schools are sometimes called “alternative” or “community” schools, which serve students who have left their regular high school generally because of excessive truancy, poor academic performance, drug use, violence, other illegal activity, or disruptive behavior. These students often follow “nonnormative” trajectories from adolescence through emerging adulthood. While some researchers may believe that at-risk youth experience a truncated development (Kandel, Simcha-Fagan, & Davies, 1986; Newcomb & Bentler, 1988), bypass emerging adulthood altogether, and transition directly from adolescence to adulthood, we do not believe this is evident with at-risk youth, at least in the United States. If this were true, we would expect continuation high school youth to exhibit characteristics of young adulthood. For example, young adults would likely have a stable job course and a stable personal life, be focused on others rather than the self. In addition, these youth should feel that they are accepting responsibility for the self, making independent decisions, and are financially self-sufficient. However, continuation high school students tend to take on part- or full-time employment as part of an interim course, desiring additional education, tend to rely on others for economic support, feel a sense of being in-between, and are developing their ability to make independent decisions, consistent with an emerging adulthood developmental period (Sussman, 2010). In addition, these at-risk youth are more likely to smoke cigarettes and use drugs and alcohol than the general youth population (Sussman, 2010). Also, by 21 years of age, 40% of them have children, yet most still live with their parents (Rohrbach, Sussman, Dent, & Sun, 2005; Sussman, 2010). Thus, continuation high school youth evidently enter the period of emerging adulthood earlier than those in more normative trajectories. To our knowledge, this is the first study of emerging adulthood in a continuation high school sample.

Method

Selection Criteria and Participants

Students were recruited from 24 continuation high schools in Southern California as part of a larger drug abuse prevention trial (Sussman, Sun, Rohrbach, & Spruijt-Metz, 2011). Schools were recruited as a convenience sample based on student ethnicity, number of students, and proximity to project headquarters. At least two classrooms in each school were selected to participate. Students from the selected classrooms were first asked to complete student information sheet (SIS) that included their parent’s names, phone number, and student signature. Students over 18 years of age filled out the forms on their own and were consented at that time. Students under the age of 18 were asked to bring parent consent forms home. If no parent consent form was returned, the information on the student assent forms was used to call homes and get verbal parent consent. If verbal consent was obtained, students were asked to fill out the SIS at the pretest. For any others that did not have SIS sheets filled out, we attempted to get the information at pretest from the student.

Of the 2,397 students enrolled in the selected classes, 1,694 (70.7%) were consented to participate in the study. Of these, 1,676 students completed the pretest survey. A close-

ended, self-report questionnaire was administered to students at pretest. If a student was absent during the data collection day, an absentee packet was left with instructions. The university's Institutional Review Board approved all study procedures.

The present sample consisted of youth aged an average of 16.8 years (*SD* = .90, *range* = 14–21) who were majority male (57.8%). While emerging adulthood is generally a categorization reserved for college bound 18–25 year olds, we believe that emerging adulthood is intended to refer to the roles and issues youth take one (e.g., parenthood, work, feeling in-between), which apply to continuation high school youth. In addition, most of the youth in the present sample are 17 years of age (*N* = 742, 44.26%), relatively fewer are younger than 16 (*N* = 611, 36.46%), and some are 18 and older (*N* = 323, 19.28%). Thus, the sample used in this article, is only slightly younger than typical emerging adulthood samples and should not deter readers.

The sample was 64.3% Latino, 13.3% mixed ethnicity, 11.0% White, 6.3% other ethnicity (not specified), and 5.1% African American. Half lived with both parents, only 17.5% mostly spoke a language other than English at home, and approximately 49.3% and 55.9% of youths' fathers and mothers, respectively, had at least completed high school.

Measures

Emerging adulthood—The original IDEA (Reifman et al., 2007) consists of 31 items; however, the reduced measure used in this study consisted of 21 items chosen to reflect four dimensions of primary interest (J. J. Arnett, personal communication, May 27, 2006): a time of identity exploration, experimentation/possibilities, self-focus, and feeling in-between. Not included were the *other-focus* and *negativity/instability* scales. *Other-focus* is not one of the five focal dimensions of emerging adulthood; rather it is an "extra subscale" that enables investigators to see if low self-focus is correlated with high other-focus (and vice versa). *Negativity/Instability* is one of the focal dimensions, but we eliminated it because is less about where one sees the self in relation to adulthood and more about the accompanying emotions of the transition, and to avoid content overlap with the stress and anxiety measures included in the survey. Thus, the four most unique and theoretically relevant constructs of emerging adulthood were measured.

Using the exact prompt developed by Reifman for the IDEA, respondents were instructed to: "Please think about this time in your life. When we say 'this time,' we mean what is going on now, plus what has gone on in the last few years, plus what you think your life will be like in the next few years. Think about a 5-year period of time, with right now in the middle. For each question below, mark the box that best describes this time in your life. Be sure to put only one check mark per line." Responses were measured on the following 4-point Likert-type scale: 1 (*definitely not*), 2 (*probably not*), 3 (*maybe*), and 4 (*definitely yes*). Five items measured *experimentation/possibilities*, such as "time of many possibilities?" and "time of exploration?" Six items measured being *self-focused*, such as "time of personal freedom?" and "time of independence?" Also, 7 items were used to measure *identity exploration*, such as "time of separating from parents?" and "time of defining yourself?" Finally, 3 items measured *feeling in-between*, such as "time of feeling adult in some ways but not others?" and "time of gradually becoming an adult?" All items were the same as the

original measure except for one from the *self-focus* scale which was changed from "time of self-sufficiency?" to "time of providing for yourself without the help of others?" to make the item easier to understand. See Table 1 for a complete listing of items and proposed subscales.

Demographics and measures regressed on the IDEA-R and its subscales— Various categories of correlates were selected to look at their different relations with the IDEA-R factors. Certain demographic variables (i.e., job status, marital status, parenthood) were selected as they might provide concrete markers of the transition to young adulthood. Control variables included age (in years), gender, and ethnicity (indicator coded as Latino/Hispanic, African American/Black, White/Caucasian, mixed, or other). Participants were also asked their job status (0 = *no job*, 1 = *have a job*), whether they were married (0 = *no*, 1 = *yes*), and whether they were a parent (0 = *no*, 1 = *yes*).

Risk behaviors—Risk behaviors may indicate difficulties with resolving the emerging adulthood process. Past 30-day drug use was assessed for cigarettes, alcohol, marijuana, and hard drugs (cocaine, inhalants, ecstasy, stimulants, or other hard drugs) using 4 items, such as "In the past 30 days, how many days did you smoke cigarettes?" (α = .70).

Engagement coping, stress, and decision-making confidence/avoidance— Other such variables as decision making, stress, and coping were introduced as possible correlates of the IDEA-R processes as indicators of a certain type of psychological maturation. *Engagement coping* was measured using a 6-item scale, with the question stem being "The following are things that people may do when they have a problem at school or at home. Put an 'X' in the box that shows how much you do each thing when you have a problem." Examples of engagement coping included 'I talk to my mother/father' and "I think about the choices before I do anything" (1 = *never* to 5 = *always*; α = .85). *Stress* was measured using a 4-item variation of the Perceived Stress scale (Cohen, 1988; Cohen, Kamarck, & Mermelstein, 1983); one sample item was, "During the last month have you ever been upset because of something that happened unexpectedly" (α = .87). *Decision making* was measured with the decision-making confidence and decision-making avoidance scale (Commendador, 2007; Tuinstra, Van Sonderen, Groothoff, Van den Heuvel, & Post, 2000). The 3-item *decision-making avoidance* scale included 4-point Likert response categories from *never* to *always*. A sample item includes, "When faced with a decision, I go along with what others suggest" (α = .73). Decision-making confidence was measured with a 3-item scale with items such as "I like to make decisions myself" (α = .73).

Statistical Analyses

First, confirmatory factor analysis (CFA) with maximum likelihood was employed to assess how well the data fit the four-factor model using MPlus (Muthén & Muthén, 2007). Each subscale represented a latent variable and each item was an indicator variable. As the CFA indicated poor model fit, as is described below, and because EFA is often used in scale development (Hurley et al., 1997), the internal structure of the IDEA-R was subsequently examined using two complimentary techniques: EFA and an analysis of internal consistency. An EFA analysis was carried out by means of principal component analysis

(PCA). Using the PCA, only factors with eigenvalues >1.0 were retained. Next, the scree plot was visually inspected. This procedure was paired with a varimax (orthogonal) rotation of the factor structure to achieve a simpler structure with greater interpretability. EFA methods use certain "rules of thumb," with factor loading cutoff criteria ranging from .30 to .55, to establish a solid factor loading coefficient (Swisher, Beckstead, & Bebeau, 2004); we used a cutoff value of .40 in this study. Internal consistency was examined by computing Cronbach's α for the entire measure and each subscale.

Regressions (mixed models and logistic) were used to examine associations between subscales while controlling for age, gender, and ethnicity. School (which was the unit of randomization) was considered a random effect. This allows for both the statistical accounting of intraclass correlation within clustered units (school) on computed significance levels, and for generalization of the findings to a larger sample. Items such as demographic, behavioral, and psychosocial variables were considered to explore the construct validity of the IDEA-R in this sample. All analyses other than the CFA were performed using SAS version 9.2 (SAS, 2008).

Results

CFA

The CFA model contained the following specification: (1) four dimensions corresponding to the theoretical model of emerging adulthood (the four factors from Reifman et al., 2007) and (2) 21 observed variables. The model was identified according to appropriate rules for CFA (Bollen, 1989). The chi-square statistic for the model was 1,861 with 183 degrees of freedom ($p < .0001$), suggesting poor model fit. As further indication of poor model fit, the comparative fit index was below .9, and root mean squared error of approximation was above .05.

PCA and Internal Consistency

The PCA indicated three factors. Before orthogonal rotation, Factor 1 accounted for 41.1% of the variance (eigenvalue = 8.64), Factor 2 accounted for 7.1% of the variance (eigenvalue = 1.49), and Factor 3 accounted for 5.4% (eigenvalue = 1.12). After an orthogonal rotation, the three factors showed a less striking difference in eigenvalues (5.10, 3.78, and 2.37). As shown in Table 1, every item loaded above .43 on at least one factor. Only 2 items loaded at .40 or greater on more than one factor: Item 9, "Time of open choices?" on Factors 1 and 2, and Item 12 "Time of focusing on yourself?" on Factors 1 and 3. Factor 1, comprised of 11 items, appears to represent Identity Exploration. Factor 2, containing 7 items, could be described as Experimentation/Possibilities. Factor 3, composed of 3 items, could be described as Independence or Self-Focus. Similarly, visual inspection of the scree test indicated that all three factors should be retained.

The Cronbach's α for the entire IDEA-R was .93 after standardization. Cronbach's α s were computed for each subscale and found to be as follows: Factor 1, .89; Factor 2, .85; and Factor 3, .64.

Interfactor Correlations

As expected, the three factors were highly interrelated, with correlations ranging from .51 to .69 (*p*'s < .0001; see Table 2).

Exploration of Construct Validity of the IDEA-R

In ordinary and logistic regression analyses that controlled for age, gender, and ethnicity, a number of relationships between demographic, health/risk, and psychological variables, on one hand, and the IDEA-R or its subscales, on the other hand, were significant (see Table 3). In the demographic realm, higher scores on the full IDEA-R scale, identity subscale, and experimentation/possibility (E/P) subscale were associated with lower odds of having a job, whereas higher scores on the independence subscale were linked to lower odds of being married or cohabiting. Higher full IDEA-R and E/P scores were associated with greater odds of parenthood. The E/P factor (and to a lesser extent Independence) were related to a variety of health/risk behavior variables. Feeling that one was experiencing a time of experimentation and possibilities was tied to greater cigarette smoking and alcohol and marijuana use. Finally, regarding psychosocial correlates, higher scores on the total IDEA-R and all subscales went along with higher reported stress, engagement coping, and decision-making avoidance (as well as less decision confidence).

Discussion

The aim of the present study was to examine the psychometric properties of the IDEA-R (Reifman et al., 2007) when used in a sample of high-risk, older adolescents. An EFA was conducted that yielded meaningful subscales; three factors accounted for 53.6% of item variance. Three subscales were identified (*identity exploration*, *experimentation/possibilities*, and *independenc*e). It is possible that the differences in scale structure between our study and that of Reifman and colleagues (2007) can be explained by the differences in samples used in the two studies. The original scale was developed for 18–25 year olds and validated in a sample of predominantly White female college students and noncollege, same age, acquaintances (Reifman et al., 2007), whereas the current sample was comprised of continuation high school youth in which the majority group were 17-year-old male Latinos.

There are several reasons why the differences in gender, age, and ethnicity of the participants in the two studies might be important. As the current sample contained a higher percentage of males and somewhat younger participants than in Reifman, Arnett, and Colwell (2007), the current results could potentially reflect students experiencing emerging adulthood a bit differently than an older, predominantly female sample would. However, because continuation high school students have had experiences that go along with emerging/young adulthood (having children, drug use, etc.), it is likely that they would have entered it earlier. Indeed, while emerging adulthood (Arnett & Tanner, 2006) has been described as a theory of development from the late teens through the early 20s, the age guidelines are approximate. Evidence suggests that emerging adulthood is likely experienced as a transitional period in continuation high school youth (Sussman, 2010).

Ethnicity may also explain differences in how emerging adulthood is experienced. Some minority youth may have a stronger sense of interdependence and responsibility to their families than nonminority youth (Arnett & Tanner, 2006). Some minority cultures place more pressure on having their constituents marry and have children at a younger age (Phinney, 1999). While marriage or having children does not necessarily act as an indicator of reaching adulthood (Arnett, 1998), it is possible that these individuals will consider themselves as adults. As such, it is plausible that young people from minority cultures reach typical markers (e.g., marriage, having children) of adulthood earlier and thus experience a shorter period of emerging adulthood. Also, other data indicate that while these youth are relatively likely to have children, they also report not being settled down in terms of education and employment, even at an average of 22 years old (Sussman, 2010). Thus, at-risk youth from minority cultures may have an extended period of emerging adulthood that manifests itself differently from other groups. Much more research is needed to examine this possibility.

A Three-Factor Structure

Scale developers proposed that the IDEA-R measure was composed of four dimensions (Reifman et al., 2007); however, the factor analysis performed for this article suggests that the scale is composed of three subscales (*Identity Exploration, Experimentation/ Possibilities,* and *Independence*) when administered to the study population of late adolescent continuation high school students. Essentially, two subscales (*Identity Exploration* and *Feeling In-Between*) were collapsed into one subscale, newly labeled for the one dimension: *Identity Exploration*. Only 1 item was left out from the original *Identity Exploration* subscale, and 2 items were added from the previously labeled *Self-Focus* scale. The second factor, *Experimentation/Possibilities* remains largely unchanged; 2 items from the *Self-Focused* scale were added to the initial dimension; thus extending it from5 items to 7 items. The third factor represents the main difference between the proposed dimensions (Reifmanet al., 2007) in the current analysis; we labeled this factor *Independence*. It comprises 3 items from two distinct proposed dimensions, *Self-Focused* and *Identity Exploration*. Changes from original subscales can be found in Table 1.

Using the new reduced factor structure, “Independence” (time of independence, providing for oneself, separating from parents) is of particular interest since it differs most from the original proposed dimensions. It is possible that this factor emerged as a direct result of the population studied. The items for this new factor were initially from the original subscales Identity Exploration and Feeling “In-Between.” Continuation high school youth might experience emerging adulthood as a time of Independence more so than mainstream youth. Continuation high school students are in a potentially precarious situation; they have the option either to get their studies back on track, or drop out of school and join the workforce. Graduation rates at continuation high school are significantly lower than rates at regular high school (Sussman, Rohrbach, Skara, & Dent, 2004). It is possible that the “sink or swim” environment of continuation high schools changes the way these youth experience emerging adulthood. These individuals likely are in an in-between stage, already experiencing more independence than their regular school counterparts (Sussman, 2010). Two of the items in the *Independence* scale originated from what was originally labeled the *Self-Focus* scale,

indicating that perhaps continuation high school youth are not mature enough to fully explore and differentiate a sense of self, but they are already experiencing increased independence and making life-defining decisions for themselves (previously referred to as "truncated development" by (Newcomb & Bentler, 1988).

The IDEA-R was found to be internally consistent in the current study, with two factor-based subscales having Cronbach's α values at or above .85 and the third subscales, with only 3 items, having an α of .64. The subscales showed considerable intercorrelations, as was found in the study by Reifman et al. (2007). This finding is consistent with the proposition that while the subscales measure different domains, they all reflect the larger conceptualization of emerging adulthood. However, it is important to use the proposed three-factor structure as it adds considerable information and differentiation between the various domains that compose emerging adulthood (specifically between Factor 2 and the others; see Table 3). For example, being married is associated with a lower level on Factor 1 and Factor 3, but a higher level on Factor 2. Investigators who wish to utilize the Reifman measure to explore emerging adulthood concepts among Latino youth may want to attempt a replication of the scale structure supported by the present analyses. On the topic of marriage and Latinos, an interesting disjunction is noted (Cherlin, 2009) between African Americans and Latinos: "Economically, globalization and automation have sharply reduced the earnings prospects of African Americans without college educations … It's more difficult today for a black man to earn the steady income that is still a requirement for marriage. The job market, however, isn't the whole story: Hispanic young adults are even less likely to have college degrees, and yet their marriage rates are higher" (p. 170).

Although additional work relating the IDEA-R to other measures is clearly needed, these preliminary results are promising. Assuming that scoring high on the emerging adulthood scale indicates that the individual is in the mid of identity exploration/experimenting, being open to possibilities, and finding gradual independence, we can make a number of inferences about a population of continuation high school youth. Scoring low on the IDEA-R could reflect a number of possibilities. For example, it could mean that such individuals have "resolved" emerging adulthood and are living independently (perhaps having reached adulthood sooner than most same-age peers), or it could mean that they have not yet entered emerging adulthood and are currently living at home with their parents. This scoring is suggestive of a nonlinear relation. Of course, with continuation high school youth, the context is different than with college youth, and emerging adulthood could be indicative of a rather different developmental context. For example, getting married among continuation high school youth may indicate experimenting with life options, as opposed to college-educated youth's sequence of marriage being a culminating accomplishment of young-adult development after the attainment of educational and career goals (Settersten Jr & Ray, 2010).

Correlates of the IDEA-R

The regression results provide evidence of construct validity as well as insights into what continuation high school students might be experiencing. Decision-making avoidance, stress, and engagement coping are all positively related to both the full IDEA-R scale and

each individual factor. Higher scores on the full IDEA-R, identity-seeking, and experimentation/possibilities were associated with not yet having a job. Having a job might have a different meaning for continuation high school youth than it does for mainstream high school youth. Perhaps, having a job allows these youth to explore more possibilities through their jobs and to explore the self and what they like. In a sense, the jobs are distractions for momentary gains, thus avoiding long-term and more meaningful goals. As has been previously found in another sample (Sussman, 2010), these youth most likely do not perceive these jobs as careers, and therefore are still situated in emerging adulthood instead of full-fledged adulthood. Decision-making confidence was negatively related to the full IDEA-R, and each subscale, while decision-making avoidance and stress were positively related; thus supporting the concept that emerging adulthood is a period of uncertainty and learning how to develop confidence in how to make decisions that are important for the future. Engagement coping might have been positively related to emerging adulthood because engagement coping involves being active and holding a sense of agency which is part of the maturation process

As previously discussed, marriage was negatively correlated with the independence factor, such that being married meant a lower score on independence. This makes sense as marriage is often associated with a loss of independence since the individual now must not only act for themselves but also take into account another person. The experimentation/possibilities factor was positively related with 30-day substance use (cigarettes, alcohol, and marijuana). Perhaps, youth who score higher on experimentation are experimenting with various substances among other things. (Long, 1998). It is important to note that emerging adulthood is an identifiable stage, separate from college attendance, or exact age range. While, it appears that continuation high school youth experience this stage at a slightly earlier age than their college-bound peers, they still seem to experience emerging adulthood.

Limitations

The present study was not without its limitations. First, as with any psychometric evaluation, replication is necessary. Only cross-sectional data were used, so replication with longitudinal sampling may be helpful to better understand changes on the IDEA-R over time, and the order of precedence between its factors and other variables. Second, several differences in sample characteristics (age, gender, and ethnicity) might explain differences between the original (Reifman et al., 2007) and current psychometric evaluations of the IDEA-R. Third, the present participants were continuation high school students, so the results of this study cannot be generalized outside of this population. Fourth, it might be a limitation that the full IDEA scale with all six subscales was not administered, at least for empirical comparison purposes. Fifth, it could be considered a limitation that the subscales are not completely distinct (some cross loadings); however, this also indicates that the subscales are part of the overarching concept of emerging adulthood. Finally, even though the age range used in this study might be considered a limitation, we believe it can actually be viewed as a strength. We are confident that continuation high school youth and other at-risk youth experience emerging adulthood at an earlier age than normative youth. The overall mean on the IDEA-R (M = 3.04, SD = .89) indeed indicates a sample undergoing emerging adulthood. Thus, studying the IDEA-R in a novel population adds credence not

only to the measure itself but also to the concept of emerging adulthood. That is, that emerging adulthood is a developmental age that applies across youth as opposed to a descriptor of the college experience.

Conclusion

The IDEA-R is a useful and practical instrument for measuring emerging adulthood. The scale possesses acceptable psychometric properties in terms of subscales and internal consistency. To our knowledge, this is the first evaluation of this scale with a population of continuation (alternative) high school students. Evaluating the utility of this measure in such a population is key to expand the utility of this construct in new populations. Thus, this instrument can be applied to research on developmental transitions among at-risk youth. The present psychometric evaluation of the IDEA-R in this diverse at-risk, older adolescent population perhaps suggests a more suitable dimensionality for the measure than originally proposed. Moreover, additional research should investigate the new dimensionality in diverse samples of youth who are in the definitive emerging adulthood period (18–25 years). Finally, future studies should examine test–retest reliability as well as establish the reliability and validity of this scale for other populations.

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Table 1

Principal Component Analysis (PCA) Factor Loadings After Orthogonal Rotation

Derived Factors					
IDEA-R Subscale	**IDEA-R Item (Domain)**	**Factor 1: Identity Exploration**	**Factor 2: Experimentati on/ Possibilities**	**Factor 3: Independence**	***M* (*SD*)**
E/P	1. Time of many possibilities?	0.37	**0.67**	−0.05	3.34 (.78)
E/P	2. Time of exploration?	0.21	**0.79**	0.06	3.28 (.83)
E/P	3. Time of experimentation?	0.09	**0.79**	0.09	3.14 (.89)
E/P	9. Time of open choices?	0.44	**0.49**	0.34	3.47 (.74)
E/P	11. Time of trying new things?	0.24	**0.52**	0.39	3.46 (.75)
SF	4. Time of personal freedom?	0.16	**0.58**	0.4	3.34 (.82)
SF	5. Time of responsibility for yourself?	**0.52**	0.36	0.21	3.63 (.67)
SF	6. Time of optimism?	0.31	**0.60**	0.13	3.12 (.82)
SF	8. Time of independence?	0.38	0.36	**0.53**	3.41 (.83)
SF	12. Time of focusing on yourself?	**0.44**	0.25	0.41	3.36 (.81)
SF	10. Time of providing for yourself without the help of others?	0.29	0.1	**0.67**	3.14 (.91)
IE	7. Time of finding out who you are?	**0.54**	0.37	0.16	3.46 (.81)
IE	13. Time of separating from parents?	0.12	0.04	**0.76**	2.72 (1.01)
IE	14. Time of defining yourself?	**0.59**	0.3	0.37	3.38 (.77)
IE	15. Time of planning for the future?	**0.71**	0.23	0.14	3.63 (.66)
IE	16. Time of seeking a sense of meaning?	**0.69**	0.24	0.19	3.83 (.75)
IE	17. Time of deciding on your own beliefs and values?	**0.71**	0.25	0.2	3.45 (.77)
IE	18. Time of learning to think for yourself?	**0.73**	0.28	0.12	3.64 (.68)
F-IB	19. Time of feeling adult in some ways but not in others?	**0.68**	0.19	0.14	3.47 (.72)
F-IB	20. Time of gradually becoming an adult?	**0.72**	0.14	0.21	3.59 (.68)
F-IB	21. Time of being not sure whether you have reached full adulthood?	**0.43**	0.03	0.24	3.04 (.87)

Note. Item factor loadings >.40 are boldface. If item loaded >.40 on more than one factor, higher loading was boldface.

Four subscales were assessed from the original Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R), abbreviations are as follows: E/P = Experimentation/Possibilities, SF = Self Focused, IE = Identity Exploration, F-IB = Feeing “In-Between.”

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Table 2

Correlations Between Factors

Subscale	Number of Items	Factor 1	Factor 2	Factor 3
Factor 1	11	—		
Factor 2	7	0.69	—	
Factor 3	3	0.61	0.51	—

Note. All correlations were $p < .0001$. Factor 1 = Identity Exploration, Factor 2 = Experimentation/Possibilities, Factor 3 = Independence.

Table 3

Regressions of the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) Full Scale and Subscales With Other Variables

	IDEA-R (Full Scale)		Factor 1 (Identity)		Factor 2 (Experimentation/ Possibilities)		Factor 3 (Independence)	
Variable	**β or Odds Ratio (OR; [95% CI])**	***p***	**β or OR (95% CI)**	***p***	**β or OR (95% CI)**	***p***	**β or OR (95% CI)**	***p***
Job (0 = *no job*, 1 = *job*)	.72 [0.54, 0.96)	<.05	.74 [0.56, 0.91]	<.05	.79 [0.63, 0.99]	<.05	.87 [0.72, 1.10]	0.15
Married (0 = *no*, 1 = *yes or no but living with significant other*)	.84 [0.50, 1.40]	.50	.77 [0.46, 1.3]	.33	1.24 [0.85, 1.81]	.27	.61 [0.42, 0.88]	<.01
Parent (0 = *no*, 1 = *yes*)	1.51 [1.02, 2.25]	<.05	1.33 [0.90, 1.97]	.16	1.82 [1.32, 2.51]	<.001	.86 [0.62, 1.18]	.35
30-day cigarette use (number of days)	.02	.27	.00	.87	.05	<.05	.03	.17
30-day alcohol use	.03	.24	.01	.58	.07	<.01	.06	<.05
30-day marijuana use	.06	<.05	.00	.98	.10	<.0001	.05	<.05
30-day hard drug use	.00	.44	.00	.88	.03	.17	.04	.13
Engagement coping	.24	<.0001	.25	<.0001	.22	<.0001	.07	<.01
Stress	.26	<.0001	.31	<.0001	.10	<.05	.13	<.001
Decision-making confidence	−.26	<.0001	−.26	<.0001	−.19	<.0001	−.09	<.0001
Decision-making avoidence	.14	<.0001	.14	<.0001	.10	<.0001	.07	<.01

Note. All results are controlling for gender, age, and ethnicity

* $p < .05$