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The Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) and Substance Use Among College Students

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Abstract

Transition-to-adulthood themes, or thoughts and feelings about emerging adulthood, have been measured by the Inventory of the Dimensions of Emerging Adulthood (IDEA) and found to be associated with substance use among emerging adults. It has been suggested, however, that the IDEA is lengthy and may not include the most unique and theoretically relevant constructs of emerging adulthood. The Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) was developed as an alternative instrument, but research has yet to determine the relationship between the IDEA-R and substance use among emerging adults (ages 18–25 years). College students completed surveys indicating their identification with transition-to-adulthood themes and substance use. Logistic regression models examined the associations between transition-to-adulthood themes and marijuana use and binge drinking, respectively. Participants who felt emerging adulthood was a time of identity exploration were less likely to report marijuana use, while feelings of experimentation/possibility were positively associated with marijuana use and binge drinking. The IDEA-R may be useful for identifying correlates of substance use among emerging adults. Future research should evaluate the IDEA-R among representative samples of emerging adults to confirm the findings of this study. Health professionals working in substance use prevention may consider targeting the themes of identity exploration and experimentation/possibility in programs intended for emerging adults.

Keywords

emerging adults; young adults; college students; binge drinking; substance use; marijuana use

Emerging adulthood is a period marked by change, experimentation, exploration, and development between the ages of 18 and 25 (Arnett, 2011). It's also the period of time when prevalence of substance use is at its highest (Center for Behavioral Health Statistics and Quality, 2015), potentially curbing crucial development (Arnett, 2005). Reducing substance

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use among this priority population may involve understanding how transition-to-adulthood themes, or the specific thoughts and feelings regarding emerging adulthood, are associated with substance use decisions. Health professionals working in substance use prevention may consider addressing the themes of emerging adulthood in programs intended for 18- to 25-year-olds. These themes have been measured by the Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007), an instrument with six subscales (e.g., Identity Exploration, Experimentation, Instability, Other-Focused, Self-Focused, Feeling In-Between), representing the pillars of emerging adulthood (Arnett, 2000).

The IDEA is gaining popularity and has been found to be associated with marijuana use and binge drinking among emerging adults (Allem, Lisha, Soto, Baezconde-Garbanati, & Unger, 2013; Baggio, Iglesias, Studer, & Gmel, 2015). However, it has been suggested that the IDEA instrument is lengthy consisting of 31 individual items and may not include the most unique and theoretically relevant constructs of emerging adulthood (Lisha et al., 2014). Lisha and colleagues (2014) posited that the subscale “Other-Focused” found in the IDEA is not considered one of the five focal dimensions of emerging adulthood, and proposed the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R), which consists of three transition-to-adulthood themes (e.g., identity exploration, experimentation/possibilities, and independence) and includes 21 individual items. The IDEA-R was argued to more closely reflect the dimensions of primary interest in emerging adulthood and was found to be associated with substance use among continuation high school students (Lisha et al., 2014).

Lisha and colleagues’ (2014) study, however, did not determine if the IDEA-R was associated with substance use among emerging adults—the ideal age-group when using the IDEA-R measure. The present study hopes to inform health professionals by identifying which if any of the themes of the IDEA-R are associated with substance use among emerging adults.

Method

Participants completed surveys for a pilot study on health behaviors among sociodemographically diverse college students attending one of the two colleges in the greater Los Angeles area (Allem, Forster, Neiberger, & Unger, 2015). Campus-wide e-mails were distributed and administrators from each college campus posted flyers and announced the current study on their respective home pages. Students received a description of the study, were informed about confidentiality, and electronically signed consent forms. A web-based survey allowed participants to click on a link on a computer or smart phone and electronically submit responses. The Institutional Review Board (IRB) of the principal investigator’s university approved all procedures.

Measures

Transition-to-adulthood themes were assessed with the IDEA-R (see Lisha et al., 2014, for further details of the measure). The subscales, corresponding reliability coefficient, mean score (*M*), standard deviation (*SD*), and an example question were as follows: Identity

Exploration (Cronbach's $\alpha = .8739$), $M = 3.31$, $SD = 0.51$, for example, "time of finding out who you are?;" Experimentation/Possibilities ($\alpha = .8105$), $M = 3.15$, $SD = 0.54$, for example, "time of many possibilities?;" and Independence ($\alpha = .6156$), $M = 3.11$, $SD = 0.59$, for example, "time of independence?."

Age was coded in years, and gender was coded 1 = *male* or 0 = *female*. When race/ethnicity was included as a covariate in regression models it was coded 1 = *Hispanic or Latino* (the largest racial/ethnic group in the sample) and 0 = *other*. The outcomes of interest were past-month marijuana use and past-month binge drinking (e.g., having five or more drinks of alcohol in a row within a couple of hours) coded 1 = *yes* and 0 = *no*, respectively.

Analysis Plan

Past-month marijuana use and past-month binge drinking were regressed on the subscales of the IDEA-R while controlling for age, gender, and race/ethnicity, respectively. For all analyses, the quantities of interest (probability of marijuana use and binge drinking) were calculated using the estimates from a multivariable analysis by simulation using 1,000 randomly drawn sets of estimates from a sampling distribution with mean equal to the maximum likelihood point estimates, and variance equal to the variance–covariance matrix of the estimates, with covariates held at their mean values (King, Tomz, & Wittenberg, 2000).

Results

Among the participants ($N = 555$), 79% were female and the average age was 22 years ($SD = 2.39$, range 18–26 years). The sample was ethnically diverse with 46% Hispanic/Latino/Latina, 18% non-Hispanic White, 14% other, 12% African American, and 10% multiracial. About 19% of participants reported past-month marijuana use and 36% reported past-month binge drinking. The subscales of IDEA-R contained reasonable internal consistency in the current study with two factor-based subscales having Cronbach's α values above .80 and the third subscales, with only 3 items, have an α of .62.

Several of the IDEA-R subscales were associated with substance use (Table 1). The probability of past-month marijuana use for participants with scores in the 10th percentile on the identity exploration subscale was 26% (95% confidence interval [CI; 18%, 34%]) versus 13% (95% CI [8%, 20%]) for participants with scores in the 90th percentile. In other words, a difference score on the identity exploration subscale going from the 10th to the 90th percentile was associated with a –12% (95% CI [–24%, –1%]) lower probability of past-month marijuana use (Figure 1). The probability of past-month marijuana use for participants with scores in the 10th percentile on the Experimentation/Possibility subscale was 9% (95% CI [6%, 15%]) versus 35% (95% CI [25%, 44%]) for participants with scores in the 90th percentile. The probability of past-month binge drinking for participants with scores in the 10th percentile on the Experimentation/Possibility subscale was 27% (95% CI [20%, 35%]) versus 44% (95% CI [36%, 53%]) for participants with scores in the 90th percentile.

Discussion

To date, this is the only study that has used the IDEA-R in the context of substance use comprising a sample of emerging adults. Prior research that examined the utility of the IDEA-R in identifying correlates of substance use was limited by a sample of high school students (Lisha et al., 2014). In the present study, feeling that emerging adulthood was a time of experimentation/possibility was associated with an increased probability of binge drinking and marijuana use, respectively. Themes of experimentation/possibility have previously been found to be associated with substance use among emerging adults (Allem et al, 2015; Allem, Soto, Baezconde-Garbanati, & Unger, 2015a). Health professionals working in substance use prevention may consider introducing emerging adults to activities (e.g., intramural sports, volunteerism, and internships) that fill their need for experimentation in positive ways. Feeling that emerging adulthood was a time of identity exploration was associated with decreased probability of marijuana use. Emerging adults focused on taking responsibility for oneself and planning for the future may be reluctant to engage in marijuana use as a part of the transition to adulthood. Health professionals may highlight elements of identity exploration, for example, finding out who they are, define themselves and their goals, and decide on their beliefs and values. Emerging adults who are taught to strengthen their sense of identity during this period may be less likely to use substances in the future.

Limitations

Marijuana use and binge drinking were dichotomous outcomes, limiting the understanding of frequency of use. However, past-month measures of substance use are in line with prior research among emerging adults (Allem et al., 2013, 2015a, 2015b). The sample was a convenient sample, predominantly female, and limited to college students who volunteered to participate in the study. Findings may not generalize to emerging adults in other regions of the United States or to those not enrolled in college.

Conclusion

The IDEA-R may be useful for measuring transition-to-adulthood themes and identifying risk and protective factors associated with substance use among emerging adults. The IDEA and IDEA-R do not substantially differ from one another; however, surveys that are shorter, rather than longer, are more likely to be completed. Future research should examine the associations described herein among representative samples of emerging adults especially among samples containing those who attend and do not attend universities. Further understanding of transition-to-adulthood themes among emerging adults may lead to better informed prevention programs that will eventually lead to a decrease in the prevalence of substance use among this target population.

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Figure 1.

The figure shows the difference in estimated probabilities of the past-month marijuana use, and binge drinking, when the 10th and 90th percentile scores from the Revised Inventory of the Dimensions of Emerging Adulthood subscales are included in computations with 95% confidence intervals. All estimates were arrived by use of 1,000 random drawn sets of estimates from each respective coefficient covariance matrix with control variables held at their mean values.

Table 1

The Revised Inventory of the Dimensions of Emerging Adulthood and Substance Use.

IDEA-R Subscales	Marijuana Use ^a	Binge Drinking ^a
Identity exploration	0.50 [0.26, 0.97]	0.87 [0.52, 1.47]
Experimentation	3.23 [1.71, 6.10]	1.63 [1.01, 2.61]
Independence	1.46 [0.88, 2.42]	1.33 [0.88, 2.01]

^aNumbers in cells are odds ratios, with corresponding 95% confidence intervals given in square brackets. All models controlled for age, gender, and ethnicity.