Published in final edited form as:

Alcohol Clin Exp Res. 2012 July ; 36(7): 1212–1218. doi:10.1111/j.1530-0277.2011.01724.x.

Do people who “Mature Out” of drinking see themselves as more mature?

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Abstract

Background—Self-perceptions of adulthood during the 20's and 30's are influenced by role transitions, age-related norms, and character traits, factors that are also associated with alcohol use disorders (AUDs) whose prevalence peaks and subsequently decreases during this time of life. Previous developmental research has found that alcohol misuse in adolescence predicts lower reported maturity whereas alcohol misuse in emerging adulthood is not related to maturity. This study examines how self-perceived maturity (SPM) is affected by AUD status, maturity-related personality characteristics, and role transition variables at ages 25, 29, and 35, and how those relationships change over time.

Methods—Data were drawn from a cohort study of 410 college students ($N = 489$ at baseline). Students were ascertained as first-time freshman at a large, public Midwestern university in the fall of 1987 but were followed up regardless of subsequent enrollment. The data for the current study was drawn from waves 5–7, when participants were, on average, 25, 29, and 35 years of age. Structural equation modeling was used to determine if the relation between the SPM item “I feel mature for my age” and DSM-III alcohol use disorder (AUD) status was moderated by age.

Results—Results suggested that individuals with AUDs are more likely to endorse lower SPM levels compared to their non-diagnosing peers at ages 29 and 35 but not at age 25. In contrast, none of the relations between Conscientiousness, concern about future consequences, role status variables and AUD was moderated by time.

Conclusion—These results suggest that alcohol-related problems may be perceived as more “age appropriate” during the mid-twenties than at later ages in life, and that such developmentally-sensitive aspects of self-concept might be useful in cognitive interventions for young adults.

Keywords

Emerging adulthood; Self-perceived maturity; Alcohol use

Introduction

Identity formation, including self-perceived maturity (SPM), during “emerging adulthood (i.e., the transitional period from adolescence to adulthood; Arnett, 1998) is a long process

that involves development in cognitive, emotional, and behavioral domains (see Arnett & Taber, 1994). Adult role transitions (e.g., marriage, parenthood) have traditionally been considered the defining characteristic of “reaching adulthood” (e.g., Neugarten et al., 1965). Recently, however, scholars have demonstrated that individual qualities, such as dependability and consideration of future outcomes, are more relevant to characterizing adulthood than role transitions. For example, Arnett (2001) showed that approximately 75% of a sample (ranging from approximately age 15 to 45 in age) would view themselves as adults without completing school, starting a career, getting married, or having children. In contrast, various aspects of character, such as “accepting responsibility for your actions” and “deciding on personal beliefs and values independently of parents or other influences” (p. 138) were consistently rated (by multiple age groups) as necessary for considering someone to be “adult” (Arnett, 2001).

Notably, problematic alcohol involvement (i.e., drinking that leads to unwanted consequences and/or alcohol use disorders [AUDs]), normatively increases through late adolescence, peaks in the early 20s, and declines as individuals age (Dawson et al., 2004; Fillmore, 1988; Johnston, O'Malley, & Bachman, 1998). That is, alcohol use and alcohol-related problems become less deviant (i.e., more normative) as individuals transition from adolescence to emerging adulthood and subsequently become more deviant as individuals transition from emerging adulthood to adulthood. This normative decline during the later stages of emerging adulthood has been referred to as *maturing out* (Christo, 1998; Donovan, et al., 1983; Sher & Gotham, 1999; Winick, 1962) and has been linked to constructs related to self-perceived maturity such as adult role transitions (Bachman et al., 2002; Fillmore, 1988; Jessor et al., 1991; Yamaguchi & Kandel, 1985) and conscientiousness (Littlefield et al., 2009; for reviews, see Littlefield & Sher, 2010; Littlefield & Winograd, in press).

Given that the relative deviance of problematic alcohol involvement varies as a function of age, statistical moderation between such involvement and SPM would likely be detected in longitudinal data. Indeed, developmental findings from Chassin and colleagues (Chassin et al., 1999) suggest perceived autonomy (a construct similar to SPM) was lower among heavy drinkers according to collateral reports assessed during adolescence (median age = 12.7). However, during emerging adulthood (median age = 20), heavy drinking was not significantly associated with autonomy, and was *positively* related to self-perceived competency in positive activities. These results suggest that heavy drinking may be perceived to be more maladaptive and less normative in adolescence than young adulthood, when it is both more prevalent and socially acceptable (Chassin et al., 1999). Using a large longitudinal sample serious of male offenders (almost all of the offenses were felonies and only 15% were drug-related) assessed over three year intervals (ranging from age 14 to 17 at first interview) Chassin et al. (2010) recently demonstrated that alcohol use predicted lower levels of perceived maturity six months later. Additionally, long-term decreases in adolescent substance use over the three-year period were associated with significant increases in perceived maturity over the same period. Taken together, these findings suggest alcohol involvement is negatively associated with self-perceived maturity during adolescence, though this association appears to diminish and, then, possibly reverse during the early twenties.

Although constructs related to SPM appear to be negatively correlated with problematic alcohol involvement for adolescents and either uncorrelated or positively correlated for emerging adults, the relation between SPM and alcohol involvement as individuals transition into mid-adulthood (i.e., the period immediately following emerging adulthood – approximately 25–40 years of age) is less clear. By age 30, the majority of individuals who exhibited excessive and problematic alcohol involvement between the ages of 18 and 25 have ceased or significantly reduced their problematic alcohol involvement (Bachman et al.,

2002). Thus, by definition, individuals who have AUDs at age 30 and after are more socially deviant than individuals who diagnosed with AUDs during emerging adulthood. Therefore, the association between AUDs and SPM may reemerge as individuals age out of emerging adulthood. However, to our knowledge, there has yet to be an empirical investigation of this hypothesis.

Clinical Relevance

We believe that understanding the relation between SPM and problematic alcohol involvement could prove to be important clinically. At a general level, it seems likely developmental resolution of alcohol problems would be a more stable outcome if accompanied by SPM. For example, one of the primary strategies in Motivational Interviewing (MI; Miller, 1983; Miller & Rollnick, 2002) for problematic substance involvement is to help the client recognize discrepancies between how the client wants to live his/her life and how he/she is actually living it. Developing the discrepancy between the client's goals and internal beliefs and actual behaviors is thought to facilitate changes in behavior, such as reduced problematic substance involvement. However, according to Miller and Rollnick (2002), it is essential to establish that the "problematic behavior" is actually considered to be discrepant with one's self-perceived goals and beliefs. "To the extent that we are correct in asserting that developing internal discrepancy is a key process in motivational interviewing, the question arises: Discrepancy with what? The answer must be the person's own goals and values. We believe that unless a current 'problem' behavior is in conflict with something the person values more highly, there is no basis for motivational interviewing to work" (Miller & Rollnick, 2002, p. 167). Therefore, improving our understanding of the developmental relation between SPM and AUDs can help inform and improve MI approaches by allowing these approaches to be optimally tailored to specific age groups. Additionally, broader therapeutic interventions such as structured therapy sessions within a cognitive-behavioral therapy (CBT) framework could help clients address a multitude of identity-related issues that may or may not be associated with alcohol use.

In sum, the transition from emerging to young adulthood is marked by identity formation, including changes in SPM. These changes are most likely influenced by role transitions (e.g., getting married/having children, being employed), trait development (e.g., becoming more future oriented, and conscientious), and changes in behavior (e.g., "maturing out" of problematic alcohol involvement). However, the extent to which the relation between AUDs and SPM differs as function of age as individuals transition from the 20's to 30's has yet to be documented. Therefore, the current study will test the extent to which AUDs are related to SPM (roughly at ages 25, 29, and 35) and if this relation significantly varies by age. Further, the relation between SPM and other markers of adulthood, such as adult role obtainment (i.e., marriage/parenthood, employment) and trait development (i.e., future orientation, dependability, reliability, and conscientiousness) will also be tested and compared to the AUD-SPM relation.

Materials and Methods

Participants and Procedure

Data was obtained from a prospective high-risk study on family history of alcoholism (FH) and various correlates of alcohol use and abuse (see Sher et al., 1991 for detailed description of the baseline sample). At baseline, the sample consisted of 489 freshmen (46% male, mean age = 18.2) from a large Midwestern University. Based on criteria discussed below, half (51%) of the respondents were classified as FH positive (FH+). Respondents were prospectively assessed seven times over 16 years (roughly at ages 18, 19, 20, 21, 25, 29, and 35) by both interview and paper-and-pencil questionnaire. In all, over 84% of participants

were retained over the first 11 years of the study, and over 78% were retained through Year 16 (mean age = 34.5). The current study uses Wave 5 (when participants averaged 25 years of age) as the baseline as this is when SPM was first assessed. Four hundred ten participants (84% of age 18 baseline) completed all Wave 5 baseline assessments.

Measures

Alcohol Use Disorder—Past-year diagnoses of alcohol use disorders (i.e., alcohol abuse and dependence) were assessed by trained interviewers at ages 25, 29, and 35 using criteria from the Diagnostic Interview Schedule (DIS) version IIIA (Robins et al, 1988), the DIS Version III-R (Robins et al., 1989) and the DIS Version-IV (Robins et al., 1997) at age 35. To maintain comparability across assessment periods, AUD (past year abuse and/or dependence) was assessed using diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (*3rd edition*; DSM-III: American Psychiatric Association, 1980). AUD was positively coded if the responder diagnosed for alcohol abuse and/or dependence in the past 12 months. It should be noted that in the DSM-III, the cardinal feature of dependence is physiological dependence, as indicated by the requirement for either tolerance or withdrawal symptoms (Hasin, McCloud, & Endicott, 1996; Rounsaville & Kranzler, 1991). Unless noted otherwise, AUD refers to a DSM-III diagnosis of alcohol abuse or dependence.

Self-perceived Maturity—The Conscientiousness subscale from the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1989), and a Future Consequences subscale from the Future Orientation Inventory (Strathman et al., 1994) were used in the current study to assess traits theoretically linked to maturity. The Conscientiousness subscale ($\alpha = .84, .82$, and $.83$ at ages 25, 29, and 35) consisted of 12 items targeting participants' tendency to show self-discipline, act dutifully, and engage in planned rather than spontaneous behavior. The Future Consequences subscale ($\alpha = .69, .67$, and $.64$ at ages 25, 29, and 35) consisted of four questions aimed to assess the extent that one considers distant versus immediate consequences of potential behaviors. Response options on both scales ranged from “Strongly Disagree” = 0, to “Strongly Agree” = 4. For both the Conscientiousness and Future Consequences items, higher scores were indicative of more conscientiousness and a greater orientation to future consequences, respectively.

At waves 5, 6, and 7 (roughly corresponding to ages 25, 29, and 35), participants responded to the item “I feel mature for my age”. Response options ranged from “0 =Strongly disagree” to “4 =Strongly agree.”; participants who reported “Disagree” or “Strongly Disagree” were coded “0,” participants who responded “Neither agree nor disagree” were coded “1,” and participants who responded “Agree” or “Strongly Agree” were coded as “2.” This trichotomization was done to simplify the analyses, add power, and to create qualitatively distinct groups of participants.

Role transitions—At each wave, participants who reported being currently married were coded as “1” whereas participants who were not currently married (including divorcees) were coded “0”. Similarly, participants who reported having children were coded as “1”, participants without children were coded “0”. For Wave 5 (i.e., roughly age 25), participants who responded that they were “Working at a paying job full-time” were coded as “1”, everyone else was coded “0”. At Waves 6 (age 29) or 7 (age 35) participants who reported being employed full-time for at least 6 months of the last year were coded “1”, the remaining participants were coded “0”.

Data Analysis

Is the Relation Between SPM and AUD Moderated by Age?—To test whether age moderated the relation between SPM and AUD, a series of nested models were conducted in Mplus version 6.0 (Muthén and Muthén, 1998–010). Separate models constraining the correlation between SPM and to be the same between ages 25 and 29, and 25 and 35 were compared to unconstrained models that allowed these correlations to be freely estimated and Chi-square difference tests were run to determine if these models were significantly different from one another (i.e., we tested whether the association between SPM and AUD was moderated by time).

Is the Relation Between SPM and Adult Statuses Moderated by Age?—Parallel chi-square difference tests were conducted with the three role transition variables to assess whether the relationship between these variables and SPM significantly varied as a function of age.

Results

Table 1 displays the prevalence of all study constructs at ages 25, 29, and 35 and Table 2 shows the correlations among DSM-III AUD status each wave with the role transition variables and maturity-related scales. Overall rates of AUD declined from age 25 to age 35 whereas marriage and parenthood rates increased. Mean levels of the Future Consequences and Conscientiousness scales remained relatively stable across age (see Table 1). As shown in Table 2, there was virtually no relation between SPM and AUD at age 25 ($r = .09, p = .41$); however, SPM and AUD were significantly related at ages 29 ($r = .31, p < .001$) and 35 ($r = .25, p < .01$). Additionally, marriage was (negatively) associated with AUD at all ages whereas employment and Parental Status were not (see Table 2). Regarding the character maturity traits, Conscientiousness was significantly (negatively) associated with the presence of AUD at each wave (see Table 2). Future Consequence scores were not correlated with AUD status at any wave. Correlations between variables at different waves should also be noted, specifically the significant association between AUD at age 29 and SPM at ages 25 and 35. Additionally, having an AUD at age 25 was positively related to being employed full time at age 35, and Conscientiousness at ages 25 and 35 was significantly associated with SPM at 35 and 25, respectively. Lastly, correlations between SPM and the Conscientiousness and Future Consequences subscales were significant at every age (Future Consequences and SPM: $r = .15 [p < .01], .13 [p < .01], .10 [p = .05]$; Conscientiousness and SPM: $r = .25, .22, .28$ [all $p < .001$]).

Is the Relation Between SPM and AUD Moderated by Age?—Regarding AUD status, Chi-square difference tests revealed that the unconstrained models exhibited significantly better fit than the constrained model comparing ages 25 to 29 $\chi^2 (1, 489) = 4.30, p = .03$, and comparing ages 25 to 35 $\chi^2 (1, 489) = 3.72, p = .05$, providing evidence that SPM is more strongly related to AUD at ages 29 and 35 than at age 25. These analyses as well as those discussed below were adjusted for sex.

Are the Relations Between SPM and Adult Statuses Moderated by Age?—Chi-square difference tests suggested that the respective relations between marital, parental, and employment status and SPM were not moderated by age.

Longitudinal Model of AUD and SPM—In order to examine whether current AUD status and SPM level was a reflection of past AUD diagnosis and/or SPM, we conducted an auto-regressive cross-lagged model with all three time points of both AUD and SPM in the model, which demonstrated excellent fit ($\chi^2 [2, n = 461] = 2.71, p = .26, CFI = 1.00; TLI = .$

98, RMSEA = .02). The estimates suggest that both AUD and SPM show relatively similar patterns of stability across time (e.g., from 25 to 29 the AR path for AUD is $\beta = .22$, $p = .03$, for SPM $\beta = .24$, $p < .01$, and for 29 to 35, the AR path for AUD is $\beta = .60$, $p < .001$, for SPM $\beta = .52$, $p < .001$). Additionally, SPM and AUD at age 25 appear to respectively influence the other construct at age 29 (SPM predicts AUD at age 29, $\beta = .14$, $p = .05$, AUD predicts SPM at age 29, $\beta = .14$, $p = .03$) but not from age 29 to 35 (SPM predicts AUD at age 35, $\beta = .05$, $p = .60$, AUD predicts SPM at age 35, $\beta = -.05$, $p = .60$). Significant estimates of residual change scores between AUD and SPM at both 29 ($\beta = .23$, $p = .02$) and 35 ($\beta = .25$, $p = .04$) demonstrate correlated change between these two variables at these time points.

Replication with DSM-IIIR

In order to test the robustness of these findings across diagnostic systems we measured the associations between SPM and AUD status as outlined by the DSM-IIIR (American Psychiatric Association, 1987) at ages 25, 29, and 35. In contrast to the pattern found using DSM-III AUD diagnostic criteria, DSM-IIIR AUD was significantly associated with SPM at each wave.

Criterion of Alcohol Pathology not Included in the DSM

In addition to DSM-III and DSM-IIIR AUD diagnostic status, two scales indicative of alcohol pathology were tested for their association with SPM. Specifically, a 14 item scale measuring alcohol dependence symptoms (consistent with the alcohol dependence syndrome described by Edwards & Gross, 1976; Sher et al., 1991) demonstrated similar patterns of association to SPM as DSM-III AUD status (at 25 $r = .08$, $p = .09$; at 29 $r = .17$, $p < .001$; at 35 $r = .14$, $p < .01$). Regarding items from this scale, tetrachoric correlations revealed that “blacking out” (i.e., not remembering some or all of the drinking occasion), driving drunk, neglecting obligations for two or more days, and frequency of intoxication all display this pattern of association as well. In contrast, a scale of 13 items related to negative consequences (see Sher et al., 1991; items available upon request) was significantly related to SPM at all three waves (at 25 $r = .11$, $p = .02$; at 29 $r = .21$, $p < .001$; at 35 $r = .16$, $p < .01$), and thus did not demonstrate the same pattern as DSM-III AUD or the dependence items. Items from this scale, such as being rude or obnoxious when drunk, getting into physical or verbal fights, or vomiting demonstrated this same pattern.

Discussion

We found that the relation between DSM-III AUD status and SPM is moderated by age. Combined with the findings from Chassin et al. (1999), these findings suggest that problematic alcohol involvement may be self-perceived as more “age appropriate” in the mid-twenties than during adolescence or mid-adulthood (i.e. late twenties and after). Thus, the mid-twenties may represent a “time-limited window” in which alcohol misuse is *unrelated* to self-perceptions of maturity.

One potential explanation for the differential relationship of AUD and SPM across age is Self-perception Theory (Bem, 1973) which posits that people develop attitudes about themselves by observing their behaviors and concluding what personal attributes must have caused them. For example, individuals who continue to drink heavily and experience alcohol-related problems may, after the age of 25, consider themselves less mature for their age simply because of their participation in these age-inappropriate or non-normative behaviors. Thus, it is possible that identity formation is based largely on the behaviors people engage in, rather than identity predicting behaviors.

Finally, it is worth noting that the SPM item assessed in this study is closely related to the constructs of conscientiousness and the consideration of future consequences (as demonstrated by the large correlations at each age between the SPM item and the Conscientiousness and Future Consequences subscales, respectively). However, the fact that the association between SPM and AUD was moderated by age but the association between AUD and either of the two scales was not suggests that the SPM item provides incremental utility in resolving a key aspect of the relationship between alcohol misuse and adult identity perception over time.

Longitudinal Model of AUD and SPM

Auto-regressive cross-lagged path analyses suggest that both AUD and SPM show relatively similar patterns of stability across time. Additionally, SPM and AUD at age 25 appeared to respectively influence the other construct at age 29, although this pattern does not hold between age 29 and 35. Related to the correlational and Chi-square analyses presented above, the significant estimates of residual change scores between AUD and SPM at both 29 and 35 demonstrate correlated change between these two variables at these time points (see MacKinnon, 2008, for further discussion of residualized change scores). That is, they reflect that those who “mature out” of AUDs at this time are also increasing in SPM, and vice versa.

Reconciliation of Inconsistency across Different Diagnostic Approaches

The discrepant pattern of associations between SPM and DSM-III AUD and DSM-III-R AUD was a curious and unexpected finding. Specifically, positive DSM-III-R AUD status was associated with low SPM at age 25, whereas positive DSM-III AUD status was not. Because these interviews were conducted with the same subjects on the same occasions, the source of the different patterns was assumed to lie within the DSMs' discordant definitions of alcohol dependence; in particular, that the DSM-III requires the presence of physiological symptoms (i.e., tolerance or withdrawal) to diagnose as alcohol dependent, and DSM-III-R dependence maintains an “any three of nine symptoms” diagnostic threshold. Indeed, further investigation revealed that withdrawal symptoms (e.g., being sweaty, anxious, needing a drink first thing in the morning, etc.) maintained the strong relationship with SPM presented earlier (at 25 $r = .01$, $p = .85$, at 29 $r = .30$, $p < .001$, at 35 $r = .26$, $p < .01$, with significant Chi square difference tests of $\chi^2(1, 489) = 6.96$, $p < .01$ between ages 25 and 29, and $\chi^2(1, 489) = 8.66$, $p < .01$ between ages 25 and 35), though tolerance and abuse items did not necessarily demonstrate this pattern. Thus, because withdrawal is one of the two required symptoms for a dependence diagnosis in DSM-III-R, but is not required in the DSM-III, the two diagnostic systems yield different resulting patterns of association with SPM.

The lack of a significant association between severe alcohol withdrawal symptoms and SPM at age 25, combined with the presence of significant associations between these variables at 29 and 35 suggests that there is something about withdrawal symptoms' relatedness to SPM that varies as a function of age. Specifically, emerging adults with clearly non-normative drinking habits (to the point that they experience “the shakes” or have to drink first thing in the morning, for example) are unique in the lack of impact they allow their severe drinking symptoms to have on their adult identity. One potential explanation is that physical health-related symptoms such as trembling or rapid heartbeat may become more salient and concerning as a function of development, resulting in a greater influence of these symptoms on adult identity as one ages. This pattern has been demonstrated in longitudinal studies of cigarette smoking, which found that adults were more likely than adolescents to quit as a result of beliefs about negative health risks (Chassin, Presson, Pitts, & Sherman, 2000), and that values placed on health as an outcome increase in adulthood, perhaps as a result of the acquisition of adult roles (Chassin, Presson, Rose, & Sherman, 2001).

Additionally, the different patterns of association between alcohol dependence and alcohol consequence scales with SPM provides further evidence that not all pathological alcohol-related items are similarly related to adult identity over time. Rather, more severe, dependence-like items appear to be unrelated to SPM at age 25, and arguably less-severe, consequence items are related to lower SPM at that age. Perhaps this is due to consequence items (e.g., getting into fights, being rude or obnoxious, etc) being embedded in a social context and thus perceived as immature to others, whereas dependence symptoms (e.g., withdrawal, blacking out, getting drunk frequently) are more related to physical health risks and personal costs, and likely not as noticeably “immature” to one's self or peers.

Clinical Implications

According to Neugarten, Moore, & Lowe (1965), age-deviant behavior brings with it social and psychological sequelae that cannot be disregarded. In other words, being “off-time” on developmental milestones can contribute to distress. Additionally, more recent empirical examinations (Massoglia & Uggen, 2010) find confirming evidence that people internalize widely shared norms regarding age-appropriateness and delinquency, and that involvement in delinquent activities is incompatible with perceiving one's self as an adult. Taken together with these findings, alcohol misuse may significantly predict feelings of being “off-time,” and thus, in addition to the distress and impairment related to AUDs per se, it would behoove psychologists to place clinical importance on AUD status (in particular physical withdrawal symptoms) for adulthood and growth.

Further, these findings highlight that AUDs may contribute to discrepancies between potentially desired levels of maturity and actual self-perceptions of maturity for those in mid, but not emerging, adulthood. Indeed, the current findings suggest that AUDs relate to SPM whereas some adult role statuses and character traits – the factors hitherto most commonly associated with adulthood – do not. Given the current findings, client-centered approaches such as MI might be bettered by incorporating a practical connection between AUDs and low SPM to facilitate reductions in problematic alcohol involvement. However, interpreted in conjunction with the findings from Chassin et al. (1999), the current results also demonstrate emerging adults (i.e., individuals aged 18–25) may not benefit from such an approach, as SPM and AUD appear to be relatively orthogonal at age 25. Rather, members of this age group who are experiencing identity-related distress may be more likely to benefit from a broader Cognitive-behavioral therapeutic approach that aims to define the client's concrete goals and implement specific and active measures to achieve them. For example, if an emerging adult is feeling “off-time” due to a lack of intimate relationships, a CBT therapist could help the client develop strategies to become more socially engaged and meet potential romantic partners. According to CBT framework, these behaviors might encourage the client to develop more positive and optimistic cognitions regarding the state of his or her intimate relationships. Overall, these findings emphasize the need for developmentally-tailored interventions, especially pertaining to issues of adult identity.

Limitations and Future Directions

Several limitations of the current study should be noted. One limitation is that the sample was initially drawn from first-time college freshmen entering a large university, which limits the ability to generalize findings to noncollege-attending populations. Students in college tend to get more involved in “binge” drinking than their noncollegiate peers (Slutske et al., 2004) and they may have a longer moratorium on engagement in adult roles by virtue of their student status. Although the maturation processes in students and nonstudents may be similar, they may go through them at different times. Furthermore, the sample is predominately White (93%) and because there is considerable variation in the drinking norms associated with various cultures and subcultures in the US, the deviance of alcohol

involvement may vary across demographic strata. Thus, caution should be taken in generalizing these findings to other racial/ethnic groups.

Additionally, it should be noted that this study examined relations between SPM and adult role *statuses*, rather than the level of involvement or the quality of such roles. For example, parental status rather than parental involvement was assessed, and it is possible that the latter (i.e., the degree to which the parent is the primary caregiver) is more strongly (negatively) related to alcohol misuse as well as (positively) related to SPM. Also, some extant research on the relation between romantic relationships and personality development (e.g., Scollon & Diener, 2006) and alcohol involvement (e.g., Kearns-Bodkin & Leonard, 2005; Scollon & Diener, 2006) has focused on relationship satisfaction rather than relationship status. Similar to parental involvement, marital quality could have a greater influence on both alcohol involvement and SPM than status alone.

Regarding clinical importance, a critical next step would be to determine if low SPM reflects an important discrepancy between goals and actual outcomes. As noted in the introduction, unless a problem behavior (e.g., an AUD) is in conflict with something a person values more highly (e.g., SPM), approaches like MI may be ineffective. However, if SPM reflects identity-related distress, clients may be especially motivated to change (perhaps with the help of CBT) their problematic alcohol involvement in order to ameliorate this distress especially during the transition from emerging to young adulthood.

Acknowledgments

This research was supported by NIH grants T32AA013526, K05AA017242, and R01AA13987.

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Table 1

Means of character traits and prevalence of adult role statuses, AUD, and SPM by age

	Means (SD) and Prevalence (%) by Age		
	25	29	35
Future Consequences (mean)	12.59 (2.91) (<i>n</i> =451)	12.52 (2.76) (<i>n</i> =397)	12.90 (2.56) (<i>n</i> =373)
Conscientiousness (mean)	33.47 (6.19) (<i>n</i> =451)	33.92 (5.64) (<i>n</i> =397)	34.08 (5.97) (<i>n</i> =372)
Have children (%)	11.16 (<i>n</i> =51) ^{<i>a,b</i>}	33.85 (<i>n</i> =147) ^{<i>a,c</i>}	63.19 (<i>n</i> =242) ^{<i>b,c</i>}
Are married (%)	33.48 (<i>n</i> =153) ^{<i>a,b</i>}	61.71 (<i>n</i> =253) ^{<i>a,c</i>}	73.11 (<i>n</i> =280) ^{<i>b,c</i>}
Employed full-time (%)	85.21 (<i>n</i> =340) ^{<i>b</i>}	83.61 (<i>n</i> =342) ^{<i>c</i>}	77.28 (<i>n</i> =296) ^{<i>b,c</i>}
Have an AUD (%)	15.97 (<i>n</i> =73)	9.76 (<i>n</i> =40)	11.79 (<i>n</i> =44)
Feel mature for age (SPM) (%)	79.60 (<i>n</i> =359) ^{<i>a</i>}	67.76 (<i>n</i> =269) ^{<i>a</i>}	65.15 (<i>n</i> =243)

Note:

^{*a*} difference between 25 and 29 is significant at $p < .05$;^{*b*} difference between 25 and 35 is significant at $p < .05$;^{*c*} difference between 29 and 35 is significant at $p < .05$

Table 2Correlations among AUD and adult role statuses, character traits, and SPM (Maximum Likelihood $N = 457$)

Role Transitions and Character			
Traits	AUD (age)		
	25	29	35
Future Cons (25)	-.04	-.16**	-.09
Future Cons (29)	-.00	-.09	-.11*
Future Cons (35)	-.08	-.11*	-.06
Conscientiousness (25)	-.14**	-.12*	-.18***
Conscientiousness (29)	-.06	-.17***	-.13*
Conscientiousness (35)	-.18***	-.13*	-.10*
SPM (25)	.09	-.23*	-.25**
SPM (29)	-.25*	-.31**	-.09
SPM (35)	-.18*	-.27**	-.25*
Marital Status (25)	-.14***	-.04	-.04
Marital Status (29)	-.06	-.11*	-.08
Marital Status (35)	-.08	-.14**	-.15**
Employment (25)	-.03	-.07	.02
Employment (29)	.03	.00	-.06
Employment (35)	.17***	-.02	.05
Parental Status (25)	.04	.01	.10*
Parental Status (29)	-.03	-.09	.02
Parental Status (35)	-.05	-.11*	-.03

Note:

Future Cons = Future Consequences subscale; Conscientiousness = Conscientiousness subscale; SPM = I feel mature for my age (trichotomized and reverse scored for ease of interpretability); Marital Status = currently married; Employment = employed full-time; Parental Status = currently have 1 or more children

*
p<.05,

**
p<.01,

p<.001