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# Influence of Developmental Social Role Transitions on Young Adult Substance Use

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#### **Abstract**

Young adulthood (ages 18–25) is a developmental period characterized by numerous transitions in social roles. This period is also associated with increased risk of substance use and negative-consequences. Changes in developmental social role status can be related to changes in substance use. In this review, we discuss key developmental transitions and social roles associated with young adult substance use, including changes in educational status, employment, intimate partner relationships, friendships, and living status. We include important differences in substance use among groups defined by race, ethnicity, and sexual orientation. We conclude with implications for developmentally tailored prevention/intervention approaches targeting social role transitions associated with at-risk substance use.

#### Introduction

Young adulthood (typically defined as ages 18–25) is associated with increased risk of substance use and related negative consequences [1]. The period from late adolescence to young adulthood is characterized by numerous developmental transitions, including changes in social roles, and is a critical time in the etiology of substance use [2\*\*, 3\*\*, 4]. Researchers have identified five main social role domains in young adulthood: education, living situation, employment, cohabitation/marriage, and parenthood [3, 5]. Changes in substance use can be a function of social role status and context [see 6, 7 for comprehensive reviews). Developmental social role transitions (e.g., changes in a domain such as graduating from college, getting a job, parenthood), and smaller, incremental transitions in domains (e.g., starting/ending relationships, moving in/out of living situations, starting/stopping school) occurring during young adulthood are associated with changes in substance use. Indeed, a recent examination utilizing 24 months of data found motivations for alcohol use and quantity of alcohol use to be associated with changes in monthly social role transitions (specifically starting/ending relationships and starting jobs) [8\*]. This manuscript aims to

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serve as a brief orientation to key developmental transitions and social roles associated with changes in young adult (YA) substance use. We conclude with implications for developmentally tailored prevention/intervention approaches.

# Social Roles and Developmental Transitions Associated with Substance Use

A developmental perspective emphasizes the influence of social roles on substance use during the transition into young adulthood. In this section, we briefly describe key social roles and highlight emerging research for each domain.

#### **Educational Status.**

Research has examined the relationship between education status (i.e., not attending college, 2-year community college students, and 4-year college students) and alcohol and marijuana use. Research suggests that relative to young adults not attending college, those who attend college drink more, have more alcohol-related problems, and are more likely to be diagnosed with an alcohol use disorder during the college years [9–12]. Studies have found the odds of having an alcohol use disorder were 1.25 times higher for college students compared to noncollege peers, and 1.70 times higher for college women compared to non-college women [9, 11]; however, some research has found these differences are no longer significant after accounting for sociodemographic characteristics [11]. Long-term drinking trajectories also appear different for college students relative to non-college students [10, 13–14]. In general, college students report less drinking during high school, sharp increases in alcohol use from ages 18-21, and then declines in use into adulthood whereas non-college students tend to report heavier drinking in high school and are at greater risk of heavy episodic drinking in their late 20s and early 30s. However, a recent study identified that although latent class membership in the two riskiest drinking classes (i.e., frequent drinkers with occasional binging and high-intensity drinkers) were more common among college students than noncollege students, the odds of belonging to either of the two riskiest classes was not significantly different for college and non-college students, suggesting that high-intensity drinking and binge drinking are not unique to college students [12\*].

Increased use of marijuana in high school is consistently associated with decreased college attendance and graduation [13–14]. Among young adults, non-college students tend to report higher rates of marijuana use than their college peers, although when college students begin college, their rates of marijuana use tend to increase [14]. Non-college students are also more likely to smoke cigarettes than college students [15]. A recent study found that among college students, living in a dorm/fraternity/sorority was related to increased marijuana compared to those living with their parents [16]. Recent work also suggests that college students were more likely than their non-college peers to report non-medical use of prescription stimulants [17].

A handful of studies have examined differences in substance use outcomes among 2-year versus 4-year college students. Findings suggest that 2-year college students report less drinking than 4-year college students, but more than non-college students [10, 14, 18–19].

However, one study found that 2-year college students reported greater marijuana use than 4-year college students [19].

#### **Employment Status.**

Most research attributes maturing out of heavy drinking to the attainment of adult social roles and responsibilities and changes in family roles [4, 20]. However, some YA continue to engage in heavy alcohol use in adulthood as they enter the workforce [21–22\*]. Employment status (i.e., not employed; part-time work; full-time work) is an important characteristic of transitions to young adulthood, as YA take on new responsibilities are roles. Both longitudinal and daily-level examinations show YA who work more hours (often defined as 20+ hours a week) are at risk for increased substance use, more likely to be exposed to a drinking peer group, and less likely to perceive disapproval of alcohol use [23– 24]. A recent examination found that, after controlling for education status (i.e., not in school, 2-year students, 4-year students), working full-time was a risk factor for heavy episodic drinking, greater weekly drinking, and greater negative alcohol-related consequences, when compared to YA who were unemployed, and to a lesser extent with YA working part-time [25]. No significant associations for alcohol outcomes were found by education status. Brief alcohol interventions for employees (i.e., intervention is delivered to eligible employees at a specific workplace who meet a predetermined drinking inclusion criteria), regardless of one's education status, have been shown to be a promising approach to improve health and work-related outcomes including increased presenteeism [26].

#### **Intimate Partner Relationship Status.**

Involvement in a romantic relationship, getting married, and having children has been consistently linked with decreased alcohol and drug use [4, 6, 27–28] whereas some more recent studies have found that casual dating and beginning and ending relationships were associated with increased use [8, 15, 29].

Within-person associations between romantic involvement and substance use suggests that adolescent drinking predicts increased subsequent romantic involvement which in turn reduces the likelihood of later problematic drinking [30\*]. In a separate study utilizing monthly data assessing relationship status and drinking, Fleming and colleagues [31\*] identified six relationship patterns among YA. Less drinking was reported by YA who were single or in a relationship whereas more drinking was reported by YA who were single-and-dating, ended-a-relationship, and ended-and-began-a-relationship and especially in months where status changes were reported. Other studies have conducted multilevel modeling to examine dyadic data from YA heterosexual couples, observing positive within-couple associations between dating partners' daily drinks such that when one partner reported more than average daily drinks, their partner also drank more [32].

#### Living situation.

Living situation remains an important factor related to substance use among YA. Students living in dormitories, in fraternities and sororities, or off-campus without parents are more likely overall to use alcohol compared to those YA who continue to live with their family, and a similar trend is seen among those drinking heavily (5 or more drinks per occasion)

[33–35\*]. A recent study found that students living independently off-campus were more likely to use alcohol, marijuana, and other illicit drugs, compared to those living on-campus in residence halls or other university housing [36].

For YA who are living together in dating relationships, the protective effect seen among married couples is not evident, and these individuals are more likely to engage in heavy substance use [33]. A recent study using inverse probability weighting found cohabitation was associated with marijuana use among females, but not males, with no links between cohabitation and heavy drinking [37]. A propensity score analysis found that substance use at ages 19/20 were associated with increased rates of cohabitation at ages 21–30, but reduced rates of marriage and parenthood [38].

#### Friendship.

Other types of transitions, including transitions in friendships, often occur within the context of the social role transitions described above. Changes in friendships are especially salient for the developmental period of young adulthood. For example, changes in living situation and work status are often accompanied by transitions in friendships.

Prospective analyses have found affiliation with deviant peers is a primary influence on the initiation and development of alcohol use, with adolescents and YA adopting similar beliefs and attitudes of their peers that promote alcohol use [39–41]. However, alcohol is also seen as a tool for developing friendships and creating intimacy, which are important personal goals during young adulthood [42–43]. A recent examination detailed the perceived importance of alcohol in facilitating and maintaining friendships [44], with many YA choosing to drink together as a form of relationship-building. As young adulthood is a time of increasing transitions in friendships (e.g., leaving high school friends, making new friends), these findings suggest prevention/intervention strategies could focus on enhancing meaningful peer relationships by supporting low-risk drinking (e.g., a level of intoxication that will foster connect with others yet minimize risk of harming the friendship) or participating in alternative, substance-free activities.

#### **Cultural and Contextual Considerations.**

Substance use patterns vary by culture and context, as well as by social roles. Research on college student alcohol use for diverse racial/ethnic groups has found Latino men who report lower levels of family-orientation are more likely to drink heavily [45\*] and American Indian and Alaska Native students report drinking significantly less alcohol and hold weaker positive expectancies of alcohol use, compared to White students [46]. Male African American college students attending predominately White institutions report significantly greater levels of alcohol consumption and significantly more mental health conditions compared to those attending minority-serving institutions [47]. YA may engage in alcohol use and risky sexual activity as maladaptive attempts to cope with negative interpersonal interactions, environmental stressors, and racially charged discriminatory experiences [48]. For example, in one study African American students who believe their drinking will solicit race-based police bias have greater odds of alcohol abstention [49].

Recent work has also focused on better understanding the relationship between dating and substance use among minority groups. Romantic involvement has been found to be protective against drinking and illicit drug use among gay and lesbian youth, but found to be risk factor for marijuana and illicit drug use among bisexuals [50]. Among Hispanic YA, starting and ending a relationship has been positively associated with substance use (i.e., binge drinking and cigarette and marijuana use) [51]. More research is needed to clarify cultural effects on substance use among these diverse communities to best support targeted interventions.

### Clinical Implications

We encourage researchers to consider the importance of social role transitions in etiological investigations and intervention development. Developmentally-informed interventions could be tailored towards YA living in college dorms (e.g., tailored to those living away from home), employees [26], or 2-year college students [52]. Just-in-time, adaptive interventions [53] could target YA during periods of elevated risk in substance use as they transition in and out of social roles. Adaptive interventions could target YA drinkers who report changes in social role status that places them at-risk for heavy substance use, including a change in romantic relationship status [8\*, 31\*], starting a new job [8\*], or graduating from college and transitioning into full-time employment [21]. Moreover, consideration of cultural norms, variation in substance use norms across cultural groups, and the ways in which relationships may influence substance use within the context of culture must be taken into consideration in the development of intervention and prevention strategies. Understanding these cultural variations remains aspirational, and more research is needed to identify important aspects of substance use behaviors in light of cultural influences on self-construal, as well as the effect of threats of racial discrimination. Substance use does not occur in a silo; considering the developmental context and changes in social roles of health-risk behaviors is imperative for improving our prevention/intervention strategies.

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# Highlights

- Young adulthood is characterized by developmental transitions in social roles
- Changes in social roles are associated with changes in substance use
- Education, employment, relationships, friendships, and living status are discussed
- Research among diverse groups supports the need for improved intervention strategies
- Interventions could target role transitions associated with increased substance use