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The Role of Socialization Contexts on Adolescent Substance Use across Racial and Ethnic Groups

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Abstract

Purpose of Review.—This review summarizes theories and empirical work regarding socialization contexts contributing to substance use across marginalized adolescents. Future directions and recommendations to minimize the perpetuation of racial stereotypes are provided.

Recent Findings.—Neighborhoods high in social cohesion may offset substance use risk. Promoting school connectedness via increased support from teachers and peers could reduce school-based discrimination and enhance feelings of belongingness. The influence of peers on substance use engagement largely differs across racial groups and level of acculturation. Family cultural values emphasizing respect, obedience, and collectivism offer protection from substance use.

Summary.—Despite lower prevalence rates of adolescent substance use within racial/ethnic groups, rates of negative consequences due to substances are far greater compared to White adolescents. Transcultural factors (e.g., strong family ties), as well as culture-specific factors, should be leveraged to delay the onset of substance use and prevent negative sequelae resulting from substance use initiation.

Keywords

adolescence; substance use; race; ethnicity; social contexts

Introduction

Implementing substance use prevention programs nationwide could reduce problematic substance use for 1.5 million adolescents and delay onset by approximately two years

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[1]. Given that substance use initiation typically occurs during adolescence, understanding predictors most salient during this developmental period is critical. In particular, social settings (i.e., neighborhood, school, peer, and family contexts) largely contribute to adolescent substance use initiation [•2]. As such, understanding socialization factors linked to substance use onset represents a public health priority to prevent disorder.

A notable limitation of available research in the social and behavioral sciences brought to light by anthropologist Joseph Henrich and psychologists Steven Heine and Ara Norenzayan is the overrepresentation of White, educated, industrialized, rich, and democratic (WEIRD) samples [3]. Although WEIRD samples make up as much as 80% of research study participants, they only represent 12% of the world's population. Similarly, work on adolescent substance use has similarly focused on WEIRD samples, which limits generalizability to culturally diverse individuals that account for most of the nation's population growth [4]. Between 2005 to 2050 it is expected that the Hispanic/Latina(o) and Asian population will triple in size, and the Black population will double in size [5]. Although the American Indian/Alaskan Native (AIAN) population reflects the second smallest racial/ethnic group in the nation [6], prior work finds that AIAN adolescents exhibit the highest rates of substance use [7]. Accordingly, it is critical to understand socialization factors that are unique to these growing segments of the population.

This review provides current prevalence rates of substances typically initiated during adolescence (i.e., alcohol, nicotine, marijuana), as well as theories and empirical work on socialization contexts most relevant to substance use onset. Future directions and recommendations to avoid inadvertently perpetuating racial stereotypes and adopting deficit viewpoints are also provided. A focus is placed on Black, Hispanic/Latina(o), Asian, and AIAN adolescents given that these are the racial/ethnic groups that have been most widely studied in the field outside of WEIRD samples [4]. We recognize that there is significant heterogeneity within these groups (e.g., country of origin) and these subgroup differences will be highlighted when available. Moreover, we recognize that social exclusion, systemic oppression, and intersectionality of race/ethnicity with other aspects of identity (e.g., religion, sexual and gender orientation) likely contributes to an adolescent's risk for engaging in substance use, but these factors are beyond the scope of the current review.

Prevalence

Prevalence rates of adolescent alcohol, nicotine, and marijuana use are somewhat mixed regarding race/ethnic differences. National epidemiological surveys, such as the Monitoring the Future (MTF) [8] survey, the National Survey on Drug Use and Health (NSDUH) [9], and the Youth Risk Behavior Survey (YRBS) [10] show some similarities, notable differences, as well as critical omissions. Early MTF reports published in 2009 suggested that Hispanic/Latina(o) adolescents may be more likely to initiate substances earlier in development, but that White adolescents have a greater rate of escalation in use following a later age of onset [11]. Yet, some researchers attribute these findings to methodological issues related to school-based sampling and the disproportionate rate of school dropout among Hispanic/Latina(o) students. Namely, Hispanic/Latina(o) adolescents who initiate substance use early may also be more likely to drop out of school due to

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negative consequences associated with use, leading to biased estimates in later substance use escalation rates among this demographic group. More recent MTF and YRBS data showing that Hispanic/Latina(o) adolescents have the highest lifetime rates of alcohol, cigarette, and marijuana use compared to White adolescents reporting the lowest rates and Black adolescents endorsing rates in between these other groups, questions the role of school dropout [12]. Nevertheless, it is noteworthy that the NSDUH, a household-based survey, demonstrates decreasing rates of substance use over time among Hispanic/Latina(o) adolescents and a simultaneous increase in substance use over time among White adolescents [12]. Other researchers suggest that discrepancies found across national epidemiological surveys regarding the relative rate of substance use among Hispanic/Latina(o) adolescents compared to White adolescents may be due in part to whether the adolescent resides in an emerging immigrant community compared to states with more densely populated immigrant communities (e.g., “Big 6” states [i.e., California, Texas, Florida, Illinois, New Jersey, and New York]). Overall, findings indicate that substance use among Hispanic/Latina(o) high school students exceeds that of White adolescents among new growth states but not in the “Big 6” states [12]. A critical omission from most national epidemiological surveys is youth that identify as Asian and AIAN. Several reasons have been offered for the exclusion of these individuals, including low substance use rates [13] and small samples sizes [14], respectively.

Despite inconsistencies across prevalence rates, what has been widely supported is that individuals who have been marginalized because of race or ethnicity suffer disproportionately from physical and social consequences of substance use [15], they are more likely to transition from substance use to substance use disorder (SUD) [16], they are at elevated risk for a chronic course of SUD [17], and yet they have disparate access to care [18], they are more likely to be referred to justice settings than treatment settings [19], they have lower rates of SUD treatment utilization [9], and they have poorer treatment outcomes [20]. Further, prior research suggests that marginalized adolescents are often viewed through a deficit lens, which may also contribute to barriers in service engagement and treatment outcomes [••21]. Given the importance of social settings throughout adolescence, this data highlights the importance of determining how socialization contexts differentially influence health disparity populations to inform more effective prevention programming for adolescent substance use.

Theoretical Frameworks

Multiple theoretical frameworks aid in conceptualizing social factors influential to adolescent substance use, as well as offering possible insight into between-group differences across race/ethnicity. For example, Bronfenbrenner’s [22] Ecological Systems Theory, the Theory of Triadic Influence [TTI; 23], and the Unified Theory of Behavior [UTB; 24] delineate multiple levels of influence over human behavior. The Ecological Systems Theory posits that systems within which an individual exists influences development and behavior. Effectively, cultural beliefs and values (macrosystem) influence more proximal contexts of neighborhood and school (exosystem), as well as family and peers (microsystem), which indirectly or directly influence an adolescent’s behavior, including substance use [25]. For example, localized poverty (macrosystem) may result in neighborhoods characterized by

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residential disadvantage and limited resources [exosystem; 26], which has been associated with affiliating with peers who engage in risk behaviors [microsystem; •27], representing a pathway to elevated adolescent substance use. Similarly, the TTI maintains that behavior is influenced by three streams (i.e., intrapersonal, social, environmental/cultural) and three levels of causation (i.e., ultimate, distal, proximal) [23]. An example of how the environmental stream may influence adolescent substance use might again begin within neighborhoods characterized by residential disadvantage and limited resources (ultimate), where exposure to substance use promoting gangs may impact adolescent values regarding substance use (distal), potentially leading to elevated intentions and decisions to initiate use (proximal). The TTI posits that the intrapersonal and social streams provide influence over health behaviors in a similar, though independent, manner. Relatedly, the UTB states that one's intention to perform a behavior, which is informed by culturally sensitive constructs (e.g., norms, self-concept), is moderated by several factors including environmental constraints [24]. Therefore, exposure to social norms promoting substance use may increase an adolescent's intentions to use. Unique to adolescents who have been marginalized because of race/ethnicity, *acculturation* refers to a process of change through which a person adopts cultural and societal attitudes, norms, and practices of a "receiving culture" while potentially retaining the attitudes, norms, and practices of their culture of origin [28, 29]. Immigrant families often experience greater stress because of the acculturation process. The impact of acculturation on youth substance use is informed by the family stress model [30–32], which predicts that acculturative stress is a source of increased family stress [33], which in turn exacerbates poor family functioning. These theories provide a guiding framework for understanding the interplay between social contexts and cultural factors in the etiology of substance use.

Neighborhood Context

In line with social disorganization theory, systemic concerns, such as poverty, have been found to be strongly associated with deleterious health outcomes, such as adolescent substance use, via neighborhoods characterized by residential disadvantage and limited resources [34]. This may be particularly salient within populations that have been marginalized because of race/ethnicity as these groups are more likely to live in communities characterized by disadvantage [35]. For example, it has been shown that Black adolescents are more likely to live in communities with limited health services [36], while AIAN youth are overrepresented in communities characterized by substandard housing [37]. Meanwhile, Hispanic/Latina(o) and Asian (Southeastern nationality) adolescents living in the United States (U.S.), particularly those who have recently immigrated, often reside in urban ethnic enclaves where affiliation with, and exposure to, community violence through gangs is high [38]. Community stressors, such as limited health services, substandard housing, community violence/gangs which often characterize disadvantaged communities, may promote maladaptive coping motivations, such as substance use [39]. Moreover, liquor stores are present in a markedly higher density in disadvantaged communities [40], as well as neighborhoods primarily populated by residents who have been marginalized because of race/ethnicity [41]. High exposure to alcohol retailers may increase adolescent drinking through increased access and the perception of normalization and social acceptance

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[42]. Yet, existing work regarding the relative influence of neighborhood risk factors on adolescent substance use has provided divergent findings across racial/ethnic populations. For example, it has been found that the neighborhood context is less influential on Black than White adolescents [43] and that AIAN adolescents are relatively resilient to neighborhood risks [44]. The strong neighborhood social cohesion [45] and the availability of prosocial community activities [•27], which often characterize communities high in ethnic homogeneity, may provide partial explanation for such resilience among adolescents who have been marginalized because of race/ethnicity even in the face of high neighborhood disadvantage [34, 38, 46].

School

Like neighborhoods, schools are a social context with which most adolescents regularly interact, thus influencing their choices and behavior, including the use of substances. Importantly, connectedness (e.g., school goals, behavioral engagement, perceptions of support from important others in the school context) is a primary aspect of the school experience and has been shown to significantly influence adolescent substance use [47]. Of note, prior work has found evidence of lowered school connectedness among adolescents who have been marginalized because of race/ethnicity. For example, Liu and colleagues [48] found that teachers and school-based mental health professionals provided less support to Asian adolescents than to peers of other racial/ethnic backgrounds regardless of comparable academic and mental health concerns. Further, AIAN adolescents report greater difficulty forging relationships with teachers and other students [49], while Black adolescents have endorsed feelings of negativity toward school [50] and Hispanic/Latina(o) adolescents often experience school-based ethnic discrimination [51]. As lowered school connectedness has been linked to adolescent substance use [52, 53], these findings provide not only a partial explanation for substance use found among these adolescent populations, but opportunities for prevention through targeted promotion of school connectedness.

Peer Context

Adolescents are increasingly exposed to peers in contexts both inside and outside of school (e.g., extracurriculars). In fact, many theoretical models and empirical work support peer influence as a leading predictor of adolescent substance use [54]. The theory of Racial/Ethnic Differences [55] posits that peers differentially impact racial/ethnic groups especially given that adolescents are most likely to surround themselves with others of the same race/ethnicity [55]. Since adolescents tend to affiliate with individuals of the same race/ethnicity and differences in rates of substance use exist across groups, certain adolescents may be more susceptible to peer influence. Thus, it is important to understand how peers impact substance use among adolescents given their salience during this developmental stage.

Prior research indicates that Black adolescents start using substances at a later age and less frequently [56]. Moreover, it has been found that Black adolescents are less susceptible to peer influence [57]. Black adolescents may perceive their friendships as less intimate and thus require less peer approval [58], may have caregivers that encourage higher self-esteem and less susceptibility to peer influence [59], or may be more strongly influenced by their

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siblings than friends [57]. Further, Black adolescents are less likely to overestimate the prevalence of substance use among their peers compared to White adolescents [60], which may contribute to decreased use. Lastly, research indicates that peer selection processes may be more relevant for Black adolescents who initiate substance use compared to friendship maintenance [56].

Among Hispanic/Latina(o) adolescents, peer substance use may have a larger effect on substance use than family support. Specifically, U.S.-born Hispanic/Latina(o) adolescents are more likely to associate with peers that engage in use [61]. Prior work finds that peer influence mediates the association between acculturation and substance use for Hispanic/Latina(o) adolescents [62]. Hispanic/Latina(o) adolescents may rely more heavily on normative behaviors among their peers to increase acceptance and become “more American” within the mainstream culture [63].

Asian American adolescents are commonly perceived as not being “at risk” for substance use [64]. This may be because little time is spent with peers outside of school resulting in decreased peer influence [65]. Moreover, Asian American families may have more control over peer relationships, thus minimizing their potential influence on substance use behavior [65]. Yet, the degree to which peers socialize Asian American adolescents to use substances may depend on the length of time spent in the U.S., and their level of affiliation with American peers [65]. As Asian American adolescents become more acculturated, they are more likely to associate with non-Asian peers who may influence their use [66] as a way to gain social acceptance [67]. However, research has found that Asian American adolescents are the least acculturated racial/ethnic group in the U.S. [68].

AIAN adolescents may use substances at higher rates due to greater peer pressure [69]. Namely, this population of adolescents report fear of peer disapproval for not engaging in substance use given that this behavior is perceived to be normative among peers [70]. Prior work has found that AIAN adolescents are more likely to have tried cigarette smoking or to have smoked in the past month given elevated opportunities to use within their peer network [71]. Moreover, peer influence was the strongest predictor of self-reported substance use compared to other social contexts [72]. Further, compared to non-AIAN samples, AIAN adolescents who use substances may be more likely to engage with peers who also use and place less value on school and family contexts [73].

Parent Context

Parents likely influence an adolescent’s substance use through several transcultural factors, including their own substance use, attitudes towards use, parental monitoring activities and knowledge, and family cohesion [•2, 74]. The degree to which parental and familial factors offer protection or risk on an adolescent’s decision to engage in substance use often varies by their intensity, particularly across development as youth negotiate greater autonomy, as well as the family’s cultural background and experiences [75, 76]. Herein, we will refer to the effects of culture-specific factors on adolescent substance use and the degree of effectiveness of established transcultural parenting factors within these populations.

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Cultural Parenting Styles and Values

Cultural values within the parenting context that shape substance use among Hispanic/Latina(o) adolescents may be unique across countries of origin; however, some common themes across cultural values have been identified. One such theme is *respeto*, or respect and obedience toward parents and authority figures. Another common theme is *familismo*, or the focus on the importance of family well-being and reciprocity. Together, these values can manifest in high levels of monitoring and involvement in the lives of adolescents by Hispanic/Latina(o) parents, which is often cited as a protective factor against adolescent substance use [77, 78]. In contrast, Asian American families are often distinguished by high levels of parental control and strong values towards obedience and academic achievement. Parenting pressures may lead to increased stress among Asian American adolescents that in turn contribute to substance use. Parenting styles among AIAN families can vary widely due to the heterogeneity of Native American tribes and cultures. A shared element that has been identified is the emphasis on collectivism and prioritizing the community before the individual. Another is the focus on teaching youth to be self-reliant and responsible for themselves and others from a young age. Of note, AIAN communities have been impacted by intergenerational historical trauma (e.g., forced resettlement, policies prohibiting cultural practices, mandated boarding schools) [79] and continue to experience higher rates of poverty, violence, internalizing disorders, and substance use disorders relative to other marginalized groups [37]. The effectiveness of parenting values and practices in predicting developmental outcomes among AIAN adolescents is, thus, not surprisingly exacerbated by these experiences [37]. In Black families, values of community collectivism, spirituality, and religion underlie parenting behaviors [80]. Families are inclusive of extended family members, family friends, and members of the community, and childrearing happens at a communal level [81].

Cultural Factors

Several culture-specific factors are present at the family-level to influence adolescent substance use outcomes. Consistent with developmental theory, caregivers play a primary role in shaping adolescent's racial and ethnic identity [82]. *Ethnic/racial socialization* is the process by which parents transmit messaging to youth about the significance and meaning of their group identity in order to prepare them for biases and promote pride in their group membership [81]. Strong ethnic/racial identity is a protective factor against cultural experiences uniquely experienced by marginalized youth, such as racism or discrimination, which in turn are risk factors for substance use outcomes. Across groups, racial/ethnic socialization can have a protective effect against substance use. Prior work has found that among Black adolescents, those who reported higher levels of ethnic identity, parental supervision, and parental disapproval of problem behaviors were more likely to disapprove of substance use.

Another factor that plays a role in family dynamics and substance use outcomes is adolescents' *cultural orientation*, or the degree to which adolescents are attuned toward their mainstream and heritage cultures. Of particular consequence for adolescents who have been marginalized because of race/ethnicity is discrepant rates of acculturation between caregivers and children, or *acculturative gaps* [83], which have been linked to smoking

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and substance use [30, 84]. Prior research examining parent-child acculturative gaps among Hispanic/Latina(o) and Asian American families has found direct effects on greater adolescent substance use [85, 86], as well as effects through risk factors such as deteriorated family functioning or parental self-efficacy [83, 86].

Clinical Implications

This review highlights not only the various socialization contexts that can be leveraged within prevention programming, but also aspects that are either transcultural or culture-specific in targeting the reduction of substance use. A transcultural theme is the protective role of family relationships. In particular, *familismo* buffers against stressors, such as those linked with acculturation, to reduce rates of substance use among Hispanic/Latina(o) adolescents [12]. Similarly, parental respect, a characteristic often associated with Asian culture, predicts lower substance use [13]. Familial interdependence and extended family support (i.e., financial assistance, childcare) that align with Black cultural norms are associated with less substance use [87]. Lastly, family and expanded kinship networks in AIAN cultures protect against substance use and related harms [7]. Accordingly, evidence-based parenting and family interventions, such as the Strengthening Families Program (SFP) [88] that include family skill modules (e.g., monitoring, enhancing relationship quality) prevent substance use among adolescents across various racial/ethnic groups [89].

Other transcultural factors that impact susceptibility to maladaptive socialization contexts and contribute to substance use rates are dimensions of ethnic-racial socialization. Namely, adolescents exposed to high cultural socialization (i.e., messages promoting ethnic heritage, pride, cultural traditions) were less likely to use substances. Mechanisms underlying this link include instilling a sense of optimism, increasing self-esteem, and reducing sensitivity to risky neighborhood and peer socialization contexts [87, 90–92]. Yet, other dimensions of ethnic-racial socialization, including promotion of mistrust of other ethnic groups and preparation for bias, were found to increase substance use across racial/ethnic groups via high levels of pessimism, depressive symptomatology, and susceptibility to deviant peers [90]. Thus, implementing youth interventions that incorporate cultural exploration and strategies to overcome racially-related stressors as a substance use prevention strategy, such as keepin' it REAL [93], could have significant utility.

Culture-specific interventions have also received empirical support in preventing substance use onset. For example, Nuestras Familias [94] and Familias Unidas [95] reflect family-based programs that were developed and tested among emerging Hispanic/Latina(o) immigrant communities. These interventions are grounded in a parent empowerment framework to bolster parental self-efficacy when adjusting to life in the U.S. and strengthen culturally specific factors among Hispanic/Latina(o) families that recently immigrated (e.g., differential acculturation, countering racism, addressing structural barriers across systems). Other work has focused on culturally accommodating standard cognitive-behavioral substance use treatment to Hispanic/Latina(o) adolescents across levels of immigration status [96]. Modifications were made to treatment content (e.g., addition of a new module on Ethnic Identify and Adjustment), cultural congruence in module content (e.g., changing hypothetical examples to match situations faced by Hispanic/Latina(o) adolescents), and

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increasing communication between clinicians and caregivers while maintaining the overall theoretical and structural elements of the standard cognitive-behavioral treatment. It is important to note that prior work indicates that highly acculturated Hispanic/Latina(o) adolescents tend to benefit more from substance use interventions compared to adolescents low in acculturation [97].

The Strong African American Families Program [98], a family-centered prevention program, has been demonstrated to increase adolescent protective factors, including low rates of substance use, through the promotion of regulated, communicative home environments (i.e., involved-vigilant parenting, racial socialization, communication about sex, expectations for alcohol use). There are newly emerging programs for culturally-centered AIAN prevention programs that take a community-based participatory research approach, including different versions of the Family Listening/Family Circle Program [99]. This preventative intervention integrates family-strengthening skills, with cultural knowledge, history, values, and practices that are specific to AIAN communities to increase resiliency and delay substance use. Although there has been limited work on substance use preventative interventions specific to Asian adolescents, there is emerging work on the development of web-based mother-daughter programs grounded in family interaction theory that targets relationship quality, conflict, mood, and stress management, as well as building substance use refusal skills [100]. Taken together, few preventative interventions tailored specifically to unique racial/ethnic groups have been developed and tested. Although existing work on culturally informed interventions demonstrate promising effects in reducing rates of substance use among adolescents, there is a critical need for additional empirical support.

Future Directions

Despite significant growth among Black, Hispanic/Latina(o), Asian, and AIAN populations in the U.S., substance use research among these individuals has not grown proportionately. This is problematic as knowledge gleaned from such a large and expanding population is critical to the overall health of our nation. Although there has been increasing interest in understanding early emerging factors that contribute to substance use disparities among marginalized groups, this research is in its infancy and critical limitations and knowledge gaps remain. First, most of this work relies on small sample sizes with insufficient heterogeneity to understand important subgroup differences, such as country of origin, economic status, and acculturation. This may be due in part to a general mistrust of researchers, fear of possible discrimination and exploitation, and constraints on time or financial resources to participate in research among marginalized groups [101]. More studies with ample statistical power to account for youth identifying with multiple ethnic/racial groups and intersectionality with other aspects of identity (e.g., sexual and gender orientation) are necessary. Second, racial/ethnic categories encompass numerous unspecified attributes that may be a proxy for other sociodemographic differences (e.g., education, employment, income) [102]. Assessing transcultural phenomena reflecting underlying processes that relate to ethnic identity (e.g., cultural pride, family- and community-based norms, and values) offers knowledge that lends itself to more translational extensions compared to biologically based groupings. Third, replacing a traditional deficit lens with an empowerment framework emphasizing the capabilities and strengths among adolescents

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from marginalized backgrounds could create more meaningful change in lowering rates of substance use [••21]. Further strength-based and participant-engaged research that prioritizes growth-enhancing opportunities could determine whether these approaches lead to greater reductions in adolescent substance use compared to more expert-driven preventative programming.

Conclusion

Marginalized groups are disproportionately burdened by substance-related problems as reflected in high rates of morbidity, mortality, and adverse social and legal consequences [16, 17, 19]. Substance use and substance use disorders need to be understood through a racialized social system framework. That is, our society is built upon social, political, and economic structures that grant some racial/ethnic groups increased access to resources, opportunities, and political positions compared to other groups [103]. For example, substance use disorder disparities find their antecedents in laws linking substance use, race, and fears of violent crime, including the "War on Drugs." Moreover, substance use research tends to view groups who have been marginalized because of race/ethnicity through a social deficit lens whereby differences are framed as pathological and/or maladaptive [••21]. These biases largely guide study designs and research questions to inadvertently perpetuate this cycle. Yet, prior work as reviewed here demonstrates that most youth that identify as Black, Asian, Hispanic/Latina(o), and AIAN thrive despite these systems of oppression [104]. Accordingly, identifying unique and malleable targets that can be leveraged in intervention programming tailored to specific racial/ethnic groups could have significant utility.

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