



The Role of Empowerment-Based Protective Factors on Substance Use Among Youth of Color

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Abstract

Youth of color continue to be disproportionately affected by the consequences of engaging in high rates of daily substance use. Racial-ethnic minority adolescents are often viewed through a deficit lens. There is limited research that examines the strengths of these young people and their communities as a prevention strategy to lower rates of drug use. Using an empowerment-based framework, this study examines the role of intrapersonal and cognitive psychological empowerment, community civic engagement, and ethnic identity on 30-day drug use among a sample of youth of color ($N=383$; 53.1% Female; 75% Hispanic), between 14 and 18 years of age, from a northeastern urban community. Structural equation modeling was used to test indirect and direct associations between constructs. Results revealed that both intrapersonal and cognitive psychological empowerment were associated with lower rates of 30-day substance use mediated by ethnic identity and community civic engagement. Findings from this study contribute to the social work field by highlighting the importance of strengths-based approaches to improving health outcomes and decreasing risky behaviors such as drug use among youth of color.

Keywords Cognitive empowerment · Intrapersonal empowerment · Ethnic identity · Civic engagement · 30-day substance use

Over the past five-years, substance use among adolescents between the ages of 10 and 18 years has been rising (Office of the National Drug Control Policy, 2017), with more than one million adolescents diagnosed with a substance use disorder in 2016 (Substance Abuse and Mental Health Services Administration [SAMHSA], 2017). Recent reports have shown increased rates of both illicit drug use and alcohol use among adolescents in the United States (National Institute on Drug Abuse [NIDA], 2019). Youth of color, defined in this paper as African American/Black and Hispanic/

Latinx youth (NIDA, 2019), are specifically at-risk of using drugs and alcohol and disproportionately affected, when compared to their White non-Hispanic counterparts. For instance, alcohol continues to be the most widely used substance among high-school-aged youth, followed closely by marijuana (NIDA, 2019). While Hispanic/Latinx adolescents represent only 22.8% of the total U.S. adolescent population (U.S. Census Bureau, 2020), 31.3% used alcohol during the past 30-days (i.e., this measurement of 30-day use being a convention used by federal agencies to assess recent alcohol, drug, and tobacco use), and 23.4% smoked marijuana during the past 30-days (Kann et al., 2014). Equally distressing, African American/Black adolescents represent 14% of the total U.S. adolescent population (U.S. Census Bureau, 2020), yet, 20.8% used alcohol during the past 30-days, and 25.3% smoked marijuana during the past 30-days (Kann et al., 2014). These findings are worrying given that youth of color living in urban communities often progress from use to dependence faster and experience a longer duration of use (Keyes et al., 2015).

Longitudinal studies have also shown the detrimental impact of substance use on racial and ethnic minority youth. For instance, the extant research has provided evidence on

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the impact of substance use as it relates to legal and interpersonal problems (Witbrodt, Mulia, Zembore, & Kerr, 2014), arrest and incarceration (Ramchand, Pacula, & Iguchi, 2006), unemployment (Beverly, Castro, & Opara, 2019) and long-term health effects (Volkow, Baler, Compton, & Weiss, 2014). Guerrero, Marsh, Khachikian, Amaro, and Vega (2013) specifically found that racial-ethnic minority young adults experienced more long-term negative health outcomes related to substance use when compared to their non-racial/ethnic minority counterparts. Yet, some studies have shown that while increases in use are notably higher for adolescents of color when compared to non-Hispanic White youth, there is a decrease after age 30 (Chen & Jacobson, 2012). This contrasts with White non-Hispanic youth, where use either maintains or increases (Chen & Jacobson, 2012). Nonetheless, when considering the ecological circumstances burdening youth of color, this group of young people are more at-risk for use and abuse.

The previously discussed findings indicate that racial and ethnic minority adolescents are negatively impacted by substance use and often experience greater long-term negative effects. Furthermore, youth of color are subjected to disparities related to access to prevention-intervention programming and quality prevention-intervention services, amplifying negative outcomes (Baum & Fisher, 2014; Halpern, Barker, & Mollard, 2000). Young people of color living in urban neighborhoods are also labeled as “at-risk” and viewed through a deficit lens (Lardier, 2019; Opara, Rivera Rodas, Lardier, Garcia-Reid, & Reid, 2019). This perspective is in opposition to viewing youth of color as capable of engaging in prevention programming that not only limits drug and alcohol use, but focuses on empowering these young people to facilitate systemic social change in their own community—i.e., specific to drug and alcohol use (Christens, 2019). Emancipatory approaches to prevention are needed that focus on critical awareness, ethnic identity development, and empowerment (Lardier, 2019; Reid, Forenza, Lardier, & Garcia-Reid, 2017). Such approaches may both mitigate substance use and allow youth to bring about social change in their community; therefore, contributing to the larger sociopolitical environment and being actors of change.

Taken together, youth who feel more empowered and are critically aware of social issues in their communities have higher levels of ethnic identity, more likely to engage in their community toward social change, as well as experience lower rates of drug and alcohol use (Christens, 2019; Lardier, 2019; Sanchez, Whittaker, Hamilton, & Arango, 2017). The current study builds upon such research, and highlights the importance of critical sociopolitical awareness and empowerment (e.g., intrapersonal psychological empowerment) as contributors to one’s ethnic group identity and civic engagement (Christens & Peterson, 2012; Lardier,

2018; Lardier, 2019; Peterson, 2014). This study also examines the ways in which these mechanisms may reduce drug and alcohol use, which remains understudied.

Literature Review

Empowerment and Empowerment Theory

Empowerment theory is a useful framework for understanding the processes and outcomes to prevent substance use (Christens & Peterson, 2012; Lardier, 2019). An empowerment framing contrasts with a prevention orientation to community problems. A prevention framework “implies experts fixing the independent variables to make the dependent variables come out right” (Rappaport, 1981, p. 16). However, empowerment recognizes the capabilities that exist among individuals, groups, organizations, and communities, and how societal barriers are in place that hinder growth (Christens, 2019; Rappaport, 1981). Discussions on empowerment theory have further elaborated that empowerment is developed through culturally focused groups, activities, and contexts, as well as “enhancing wellness instead of fixing problems, identifying strengths instead of cataloging ‘risk’ factors, and searching for environmental influences, instead of blaming victims” (Zimmerman, 2000, p. 44).

Empowerment is identified among three interdependent subcategories at the community, organizational, and psychological levels. Empowerment positions the ways individuals may engage in community-based activities toward social change, and in-directly experience greater social group connection (e.g., ethnic group identity and attachment) (Christens, 2019; Zimmerman, 2000) and reductions in negative outcome behaviors including substance use (Christens & Peterson, 2012; Lardier, 2019; Opara et al., 2019). As Rappaport (1987) argued, through this lens, empowerment is understood as a multilevel, relational construct where change at one level becomes intertwined with other levels. Empowerment has been largely tested and theorized at the psychological level.

Psychological empowerment though sometimes defined as an intrapsychic concept, is accurately a psychosocial variable among relational latent constructs at the intrapersonal, interactional (cognitive), and behavioral-levels (Christens, 2019; Zimmerman, 2000). Psychological empowerment has been broadly examined through the intrapersonal component of psychological empowerment. Intrapersonal psychological empowerment is defined as perceptions of control and self-efficacy in the sociopolitical domain (Zimmerman, 1995, 2000). This has been measured through sociopolitical control (SPC) and the SPC scale (SPCS) (Zimmerman & Zahniser, 1991). The SPCS is operationalized through two latent constructs: *leadership*—i.e., skills and confidence to engage

in leadership activities within the community or organizational contexts—and *policy control*—i.e., the perception one is competent and capable of influencing decisions in the community organizational contexts (Zimmerman & Zahniser, 1991). The SPCS has been tested among various groups, including youth through the SPCS for Youth (SPCS-Y), as well as being examined as a process (Ozer & Schotland, 2011), outcome (Christens & Peterson, 2012; Lardier, 2018), and indicator of wellness (Eisman et al., 2016; Lardier, 2019). Less research has examined the cognitive or interactional component of psychological empowerment.

Cognitive psychological empowerment is defined as critical awareness and understanding of the sociopolitical systems that allow individuals, groups, organizations, and the community to act strategically to limit social injustice and inequality (Perkins & Zimmerman, 1995; Zimmerman, 2000). Speer (2000) discussed that under this logic, a critical understanding of the social system might lead to more effective critical action. Further, more cognitively empowered individuals are arguably more apt to challenge social injustices and inequality (Speer, 2000; Speer & Peterson, 2000), as well as social determinants of health when related to prevention-intervention science (Christens, 2019; Woodall, Warwick-Booth, & Cross, 2012). Scholars have outlined three dimensions of cognitive psychological empowerment: (1) *Knowledge of the source of power*: understanding that systemic social change occurs through collective action; (2) *Nature of power*: understanding how social power operates and an awareness of power; and (3) *Instruments of power*: understanding common instruments of power including the ability to reward and punish, gatekeeping and agenda-setting, and the ability to shape beliefs and ideology (Speer & Hughey, 1995; Speer, Peterson, Christens, & Reid, 2019). Through these dimensions, a deeper and more critical social analysis develops that focuses on combatting social inequality and enacting sociopolitical change (Lardier, Barrios, Garcia-Reid, & Reid, 2019).

Despite the importance of this construct within the broader nomological psychological empowerment network, and theoretically within the realm of prevention-intervention science, limited research has been conducted that has examined this construct, particularly among youth of color (Lardier, Garcia-Reid, et al., 2019; Speer et al., 2019). The Cognitive Empowerment Scale (CES), which has been used to measure cognitive psychological empowerment, has only more recently been tested among youth. For instance, Speer et al. (2019) tested an adapted version of the CES among youth and supported the three-dimensional factor structure. Most recently, Lardier, Opara, Garcia-Reid, and Reid (2020) tested the original iteration of the CES and supported the factor structure of this scale among youth of color. While both studies provide support for the use of the CES among youth, additional research is needed. Furthermore, research

is needed that examines cognitive psychological empowerment among youth in various socioecological contexts.

Intrapersonal and Cognitive Psychological Empowerment: Associations with Ethnic Identity and Community Civic Engagement

Individuals of color in lower socioeconomic social positions tend to experience greater cognitive psychological empowerment, are more aware of social injustices, and are likely to engage as a leader in sociopolitical change, or experience greater intrapersonal psychological empowerment (Christens, Collura, & Tahir et al., 2013; Christens, Peterson, Reid, & Garcia-Reid, 2013; Christens, Byrd, Peterson, & Lardier, 2018). Recent research, while limited, has supported the association critical awareness of social inequalities—i.e., examined through cognitive psychological empowerment—has with leadership and policy control—i.e., dimensions of intrapersonal psychological empowerment (Christens et al., 2018; Lardier, Garcia-Reid, et al., 2019; Lardier, Barrios, et al., 2019). In addition, critically aware community members of color tend to experience greater community belongingness, civic engagement, and a social justice orientation (Christens et al., 2018). In a recent grouping of studies, Lardier and colleagues further supported these findings and identified independently the association both intrapersonal and cognitive psychological empowerment had with both ethnic identity and community civic engagement (Lardier, Garcia-Reid, et al., 2019; Lardier, Barrios, et al., 2019), as well as the negative association intrapersonal psychological empowerment had with 30-day substance use among young people of color (Lardier, 2018); however, both intrapersonal and cognitive psychological empowerment have not been examined together on 30-day substance use among adolescents of color.

Social action and civic engagement can be a basis for group membership, solidarity, and ethnic identity development (Carmen et al., 2015; Christens et al., 2018; Gutiérrez, 1995; Lardier, Barrios, et al., 2019). Gutiérrez (1989; 1995) highlighted that the lives of marginalized communities of color intersect in terms of history, culture, and context, which shapes their ethnic identification, solidarity, collective efficacy, and culture. Ethnic identity is, therefore, defined as an individual's perceptions, cognitions, and emotions relating to how one relates to their ethnic and cultural awareness (Phinney, 1989, 1996). Ethnic identity development is an important developmental process for youth of color (Rivas-Drake et al., 2014) whose lives intersect with social inequality and disconnection (Watts, Diemer, & Voight, 2011; Watts & Hipolito-Delgado, 2015). Identity development can be seen as a complicated construct, because those who belong to ethnic groups that have been historically marginalized may have difficulty

developing a positive sense of self (Candelario, 2007). It is also difficult to parse ethnic and racial identity given the historical circumstances of marginalized groups being both ethnic and racial in nature (Candelario, 2007).

Positive ethnic-racial group identity development among youth of color has been associated with socio-political engagement and action against social injustices (Carmen et al., 2015; Gutiérrez, 1995; Lardier, Barrios, et al., 2019; Rivas-Drake et al., 2014). Further, youth ethnic group identity has been linked with not only empowerment, but also community belongingness and civic participation (Lardier, Garcia-Reid, et al., 2019; Lardier, Garcia-Reid, & Reid, 2018; Opara et al., 2019), as well as lower rates of drug and alcohol use (Lardier, 2019). Christens et al. (2018) specifically noted that “cultural group connection, solidarity, and ethnic identity may enhance one’s sense of group critical consciousness and hope... [which] may not only motivate these youth to act but also to develop and/or maintain a sense of hopefulness” (p. 1658). Conceptualizations in both Critical Race Theory and Intersectionality Theory (Hill-Collins & Bilge, 2016) also support that individuals within marginalized social positions often have a greater connection to their ethnic-racial group and are more critically aware of inequality, as well as being driven to enact social change—i.e., a means of both “survival” and the need to fight against hierarchy and power (Cerezo, McWhirter, Peña, Valdez, & Bustos, 2014; Gutiérrez, 1989).

Similarly, community civic engagement has occupied an important role in developmental science and in the life-course trajectories of adolescents of color (Blevins, LeCompte & Wells, 2016). Community civic participation is defined for this study as “individual and collective actions designed to identify and address issues” of public health (Ballard & Syme, 2016, p. 203) and social injustices (Lardier, Barrios, et al., 2019). Some identify community civic engagement as the *behavioral* component of psychological empowerment (Speer & Peterson, 2000) and as the active participation in the community, wherein citizens are empowered to regain control over conditions affecting their lives (Christens, Peterson, & Speer, 2011). Various activities are recognized within the scope of community civic engagement, such as writing a letter to a newspaper (Christens, 2019) or improving the physical condition of the environment (e.g., community beautification projects) (Zeldin, Gauley, Krauss, Kornbluh, & Collura, 2017). However, youth of color may be more inclined to participate in events generated through cultural locations such as religious organizations, or cultural and artistic expression—e.g., poetry, rap, and other forms of music (Ginwright, 2015; Jagers, Lozada, Rivas-Drake, & Guillaume, 2017). This may be due to as Baldrige (2019) notes, these locations being historically important cultural hubs of safety, support, and social action.

Civically engaged youth are a force of social change around the world (Sukarieh & Tannock, 2014). Research among adolescents of color support the notion that the confluence of positive community civic participatory experiences shape behavior and perceptions (Zimmerman, 2000). Recent studies further indicate that community civic engagement is associated with community belongingness, as well as ethnic group identity, intrapersonal psychological empowerment (Lardier, 2018), prosocial community activities (e.g., participation in substance use prevention programming; Reid et al., 2017), and engagement in less substance-using behaviors (Lardier, 2019). Wray-Lake et al. (2018) specifically identified that young people of color with higher community involvement felt greater social responsibility and community connection. In fact, access to opportunities for community civic engagement has been associated with adolescent health, wellness, and educational success (Ballard, Hoyt, & Puchucki, 2019).

Empowerment, Ethnic Identity and Civic Engagement: The Association with 30-day Substance Use

Studies have independently examined the association between intrapersonal and cognitive psychological empowerment, and ethnic identity, community civic engagement, and 30-day substance use. These studies suggest that greater perceived intrapersonal psychological empowerment is positively associated with youth ethnic identity and community civic engagement (Lardier, 2018; Lardier, Reid, Garcia-Reid, et al., 2018; Opara et al., 2019), but also negatively connected to youth drug and alcohol use (Lardier, Garcia-Reid, et al., 2018, Lardier, Reid, et al., 2018; Lardier, 2019). Less research has examined the cognitive component of psychological empowerment in relation to ethnic identity, civic engagement, and more specifically, substance use (Lardier, Barrios, et al., 2019).

Empowerment has been positioned as a mechanism of health promotion and wellness, as well as community civic engagement and action among youth (Becker, Guenther-Grey, & Raj, 1998; Christens, 2019; Minkler, 2012). Over the past 10 years, researchers have examined the role of empowerment on adolescent developmental outcomes including substance use (Christens & Peterson, 2012; Christens, Peterson, Reid, & Garcia-Reid, 2013; Lardier, 2019). Recent studies have shown a negative association between youth empowerment and drug and alcohol use, through mechanisms such as ethnic identity (Lardier, 2019; Opara et al., 2019) and community civic engagement (Christens & Peterson, 2012; Christens, Collura, et al., 2013, Christens, Peterson, et al., 2013). For instance, Christens, Peterson, et al. (2013) found that youth with higher composite scores of intrapersonal psychological empowerment were

both involved in more community activities and less likely to report substance-using behaviors. More recently, Lardier, Garcia-Reid, et al., (2018) identified among youth of color that those adolescents with higher composite scores of intrapersonal psychological empowerment and ethnic identity reported lower mean responses on 30-day substance use. In a separate study, community civic engagement and ethnic identity were negatively associated with 30-day substance use, through intrapersonal psychological empowerment (Lardier, 2019). Such findings emphasize the important role of empowerment within the scope of adolescent development.

Despite such work, there is limited research examining the role of cognitive psychological empowerment on 30-day substance use. There is evidence to hypothesize that cognitive psychological empowerment may be negatively associated with drug and alcohol use among youth of color. Theoretically, cognitive psychological empowerment, as well as other constructs of empowerment, has been aligned with Critical Consciousness (Christens et al., 2018; Christens, Winn, & Duke, 2016). Critical consciousness consists of three dimensions: (1) *Critical reflection* which is defined as the ability to critically read social conditions; (2) *Sociopolitical efficacy*, which is defined as those feelings of efficacy to effect change; and (3) *Critical action* defined as actual participation in these efforts in the educational, political, and community domains (Godfrey & Grayman, 2014). Critical consciousness has been associated with positive developmental outcomes including academic achievement among minority youth (Kwon, 2013; Ramos-Zayas, 2003) and agency and action to resist stereotypes, challenge inequities, and persevere in school among Hispanic/Latinx

youth (McWhirter & McWhirter, 2016). Studies have also identified that being critically aware of such socially oppressive concerns and having the perceived ability to engage in actual change-efforts has been associated with reductions in drug and alcohol abuse (Windsor et al., 2014), and improvements in individual's overall mental wellness (Zimmerman, Ramirez-Valles, & Maton, 1999). Similarly, Hatcher et al. (2011) noted that outcomes associated with substance use (e.g., intimate partner violence, sexual risk behavior) had been linked with critical consciousness.

Purpose

Research is needed to further uncover the association between intrapersonal and cognitive psychological empowerment (Lardier et al., 2020), as well as the association both intrapersonal and cognitive psychological empowerment have with ethnic identity, community civic engagement, and drug and alcohol use (Christens, 2019; Lardier, 2018, 2019). The specific role of empowerment in reducing youth substance use, particularly cognitive psychological empowerment, remains vaguely understood (Christens, 2019; Lardier, 2019). Based on the existing research we hypothesize (see Fig. 1) that:

H1 Intrapersonal and cognitive psychological empowerment will have a direct positive association with both ethnic identity and community civic engagement.

H2 Intrapersonal and cognitive psychological empowerment will have an indirect negative association through

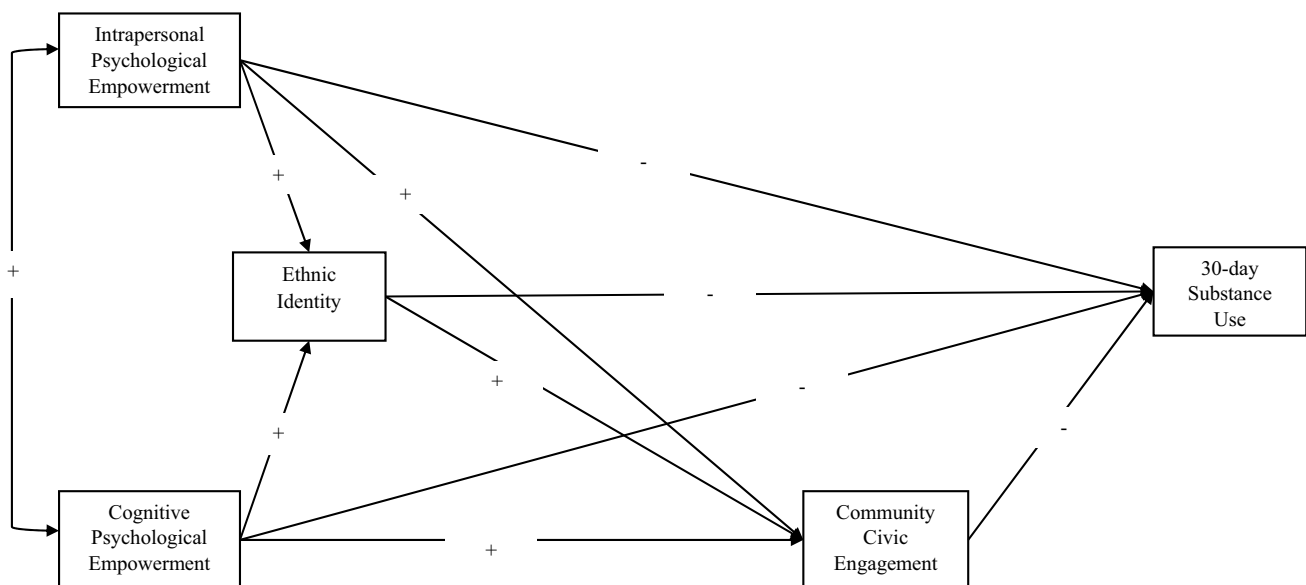


Fig. 1 Hypothesized model predicting 30-day substance use among youth of color

both ethnic identity and community civic engagement with 30-day substance use.

H3 Ethnic identity and community civic engagement will have a direct negative association with 30-day substance use.

Methods

Sample and Design

As part of a Center for Substance Abuse Prevention (CSAP), Minority AIDS Initiative (MAI) grant, these data were gathered from a northeastern U.S. urban school district. A convenience sample of 383 students were recruited through their high school's physical education and health classes. The majority of students identified as Hispanic/Latinx (75%), with the next largest demographic group identifying as Black/African American (24.3%). A nearly equal proportion of students identified as male (46.9%) and female (53.1%), with 50.6% between 13 and 15 years of age and 49.4% between 16 and 18 years of age.

Students ranged from grades 9 through 12, with 29.2% in 9th grade, 45.7% in 10th grade, 6% in 11th grade, and 19.1% in 12th grade. Most students identified as Hispanic/Latinx (75%), with the next largest demographic group identifying as Black/African American (24.3%). A nearly equal proportion of students identified as male (46.9%) and female (53.1%), with 50.6% between 13 and 15 years of age and 49.4% between 16 and 18 years of age.

Measurement

The student questionnaire was a 120-question, paper, pencil-based survey that assessed various outcome behaviors based on measures from the Youth Risk Behavioral Surveillance Survey (YRBSS; e.g., 30-day substance use, sexually risky behavior; Kann et al., 2014). The survey also assessed intrapersonal psychological empowerment, cognitive

psychological empowerment, community civic engagement, social justice orientation, and ethnic identity. Five measures were included in the current analysis. Refer to Table 1 for descriptive statistics, associated alpha levels (Cronbach's α), and a correlation matrix.

Cognitive Psychological Empowerment

Speer and Peterson (2000) developed the CES, a 14-item measure to examine cognitive psychological empowerment (sample items: The only way I can improve [city name] is by working with other community members and students; Adults with power such as politicians reward students and community members that work for changes that these adults want to have happen; Those with power can get most community members and students to believe what the powerful want.). Through principal components factor analyses, Speer and Peterson (2000) confirmed that the measure for cognitive psychological empowerment encompassed three subscales: *power through relationships* (Cronbach's $\alpha = .72$; $M = 18.47$, $SD = 3.83$), *nature of problem/political functioning* (Cronbach's $\alpha = .78$; $M = 16.69$, $SD = 4.24$), and *shaping ideologies* (Cronbach's $\alpha = .77$; $M = 14.44$, $SD = 2.77$). Rodrigues et al. (2018) tested the factor structure of the entire psychological empowerment construct among 861 Portuguese youth. These authors similarly found that the overall CE scale: Cronbach's $\alpha = .81$; $M = 18.47$, $SD = 3.83$) encompassed the same three broad sub-scales of *power through relationships* (Cronbach's $\alpha = .78$), *nature of problem/political functioning* (Cronbach's $\alpha = .76$) and *shaping ideologies* (Cronbach's $\alpha = .87$). For the current study, the four-item measure of power through relationships (Cronbach's $\alpha = .81$; $M = 3.99$, $SD = .85$), the four-item measure of nature of power/political functioning (Cronbach's $\alpha = .73$; $M = 3.67$, $SD = .83$), and the six-item measure of shaping ideologies (Cronbach's $\alpha = .81$; $M = 3.62$, $SD = .77$) were combined (Cronbach's $\alpha = .89$; $M = 3.75$, $SD = .68$). Most recently, Lardier et al. (2020) tested the factor structure of the CES among youth of color and, similar to Speer and

Table 1 Descriptive statistics and correlation matrix of main analytic variables (N=383)

	1	2	3	4	5	6
1. Intrapersonal psychological empowerment	–	.27**	.12**	.10*	–.20*	–.04
2. Cognitive psychological empowerment		–	.13**	.11*	–.05	–.01
3. Ethnic identity			–	.14**	–.10*	.06
4. Community civic engagement				–	–.11*	–.02
5. 30-day substance Use					–	.35**
6. Gender (female = 1)						–
Mean (SD)	3.30 (.62)	3.75 (.68)	3.62 (.85)	3.18 (1.20)	.61 (1.48)	–
Cronbach's alpha	.89	.89	.85	.80	.90	–

* $p < .05$, ** $p < .01$

Peterson (2000), found support for the multidimensionality of the CES as a three factor model; no differences were noted between African American/Black and Hispanic/Latinx youth. Participants responded using a five-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Intrapersonal Psychological Empowerment

Intrapersonal psychological empowerment was measured through the 17-item *Sociopolitical Control Scale for Youth* (SPCS-Y) (Lardier, Reid, et al., 2018; Peterson, Peterson, Agre, Christens, & Morton, 2011), using a five-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Through confirmatory factor analysis, Peterson et al. (2011) illustrated and confirmed the 17-item SPCS-Y as a two-factor measure that examined *leadership competence* (Cronbach's $\alpha = .81$) and *policy control* (Cronbach's $\alpha = .85$). For the current study, the eight-item measure of *leadership competence* (sample items: I am a leader in groups. I can usually organize people to get things done; Cronbach's $\alpha = .82$; $M = 3.42$, $SD = .71$) and the nine-item measure for *policy control* (sample items: My friends and I can really understand what's going on with my community or school. There are many ways for me to have a say in what my community or school does; Cronbach's $\alpha = .81$; $M = 3.20$, $SD = .69$) were combined. The overall scale had a mean score of 3.30 ($SD = .62$; Cronbach's $\alpha = .89$).

Community Civic Participation

Community civic participation is a self-report, five-item measure derived from the *Student Survey of Risk and Protective Factors/Community Participation scale* (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002). This measure assessed participation in community activities (sample item: How often do you go to meetings/engage in activities in your community?), using a four-point Likert scale ranging from *never* (1) to *almost every day* (4). Speer and Peterson (2000) demonstrated support for the reliability of this scale, and through Confirmatory Factor Analysis (CFA) identified a single underlying participation scale. Scores were combined, and the overall scale had a mean score of 3.18 ($SD = 1.20$; Cronbach's $\alpha = .80$).

Ethnic Identity

Ethnic identity was measured using a six-item scale developed by the federal funding agency (sample items: I have spent time trying to figure out more about my ethnic group. I participate in cultural practices of my own ethnic group.). Youth participants responded to each item on a four-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Confirmatory factor analysis was undertaken to

establish support for the factor structure of this ethnic identity scale, developed by CSAP. Accepted indicators of model fit were assessed: Chi Square (χ^2) test, Comparative Fit Index (CFI), Goodness of fit indices (GFI), and Root Mean Square Error of Approximation (RMSEA) (West, Taylor, & Wei, 2012). Non-significant χ^2 values indicate an acceptable model fit. Second, higher values (i.e., greater than .95) on the Comparative Fit Index and Goodness of Fit Index, and smaller RMSEA (i.e., less than .08) are desirable. Last, RMSEA that are $\leq .05$ = good fit, $.05-.08$ = acceptable fit and $.08-.10$ = unacceptable fit (West et al., 2012).

Results indicate that this six-item scale had adequate model-to-data fit ($\chi^2 = 7.72$ [5], $p = .17$; CFI = .99; TLI = .98; GFI = .99; RMSEA = .03 [90% CI .00, .05]), supporting that these questions loaded onto a single ethnic identity latent variable, or that one factor was extracted and explained 81% of the variance. Scores were averaged and combined, and the overall scale had a mean score of 3.62 ($SD = .85$; Cronbach's $\alpha = .80$). Prior studies using validated ethnic identity measures (i.e., Multigroup Ethnic Identity Measure) have demonstrated similar levels of internal consistency and validity that range from .71 to .92 and showed useful and important findings (e.g., Phinney & Ong, 2007).

30-day Substance Use

Thirty-day substance use (sample item: During the past month, on how many days did you smoke marijuana?; During the past month, on how many days did you use cocaine/crack?; During the past month, on how many days did you use an inhalant [e.g., spray paint] to get high?; During the past month, on how many days did you use prescription medications without a doctor's permission?) and *smoking habits* (sample item: During the past month, on how many days did you smoke cigarettes? During the past month, on how many days did you smoke cigars/cigarillos/black and mild cigars? During the past month, on how many days did you smoke from an electronic cigarette?) were assessed using a 14-item measure based on questions from the YRBSS (Kann et al., 2014). Response options ranged from *0 days* (0) to *all 30 days* (6). Consistent with previous research within the empowerment literature, a mean was calculated (e.g., Garcia-Reid et al., 2013; Lardier, 2019; Opara et al., 2019). Responses ranged from 1.00 to 6.00, with 6.00 representing the use of substances during all 30 days previous to being surveyed. The overall scale had a mean score of .61 ($SD = 1.48$; Cronbach's $\alpha = .90$). This is not atypical when considered alongside previous investigations that identified lower overall mean responses and still showed significant findings (Lardier, Opara, et al., 2019; Lardier, 2019; Opara et al., 2019). Data were also highly skewed (4.09) and leptokurtic (14.73). It is not uncommon for youth to over- or under-report certain behaviors on more sensitive questions

(Podsakoff, MacKenzie, & Podsakoff, 2012). Transformation procedures were not employed due to analyses being conducted in AMOS SEM software, which examines the covariance matrix through maximum likelihood (ML) estimations and reduces issues with normality and impact on parameter estimates (Hancock & Liu, 2012).

Data Analysis Plan

Preliminary Analysis

Prior to the main analyses, missing data were examined. Little's MCAR Test was used to assess the level and type of missingness (Little & Rubin, 2014), which revealed that these data were most likely missing completely at random (MCAR) ($\chi^2 = [df=70] 117.88, p = .12$). Numerous missing data techniques are available; however, missing data for this study were handled using ML estimations through AMOS v.23.0 software. Handling missing data through ML estimations addresses the missing data and parameter estimates and estimates the standard error in a single step (Hancock & Liu, 2012). Using AMOS to handle missing data also allows for a theoretically informed direct approach to handling missing data through modeling, as opposed to other imputation methods, which can be designated as indirect (Byrne, 2013).

Following ML estimations for handling missing data, normality, descriptive statistics, alpha level reliabilities (Cronbach's α) and a bivariate correlation matrix were examined. Data appeared to have a relatively normal distribution. No conspicuous outliers were noted. No issues of multicollinearity were noted, with all main analytic variables within the designated parameter ranges for variance inflation factor (VIF; < 10) and tolerance (> 0.2 ; Field, 2013).

Gender, age, Hispanic/Latina(o) identity, and African American/Black identity were examined for inclusion in the path analysis model. Variation was noted between *gender* and 30-day substance use. Gender was retained as a covariate for subsequent analyses.

Main Analytic Procedures

Main analytic procedures were carried out through AMOS SEM software, using path analysis techniques and ML procedures (Arbuckle, 2013). The presented hypothesized path model (see Fig. 1) examined the direct and indirect effect intrapersonal and cognitive psychological empowerment had on 30-day substance use through both ethnic identity and community civic engagement. One of the strengths of conducting mediation analyses in SEM over standard regression methods is that SEM analyses

provide model fit information about the consistency of the hypothesized mediational model to the data and evidence of the plausibility of the causality assumptions made when constructing the mediation model (Gunzler, Chen, Wu, & Zhang, 2013).

Following standard practice, first the Chi square (χ^2) test was assessed, with non-significant χ^2 values providing some evidence of acceptable model-fit. Chi square, however, must be considered in relation to several other fit indices (West et al., 2012). Therefore, the following fit indices were also examined: discrepancy-of-fit ratio (discrepancy/df), with indices less than 2.00 desirable; the Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), and Tucker Lewis Index (TLI), with values that are greater than .95 indicating desirable fit; and the Root Mean Square Error of Approximation (RMSEA), with values that are $\leq .05$ = good fit, $.05-.08$ = acceptable fit, $.08-.10$ = marginal fit, and $> .10$ = poor fit (West et al., 2012). The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) were also examined as indices to compare model fit for non-nested models (West et al., 2012). For BIC, differences larger than 10.00 provide evidence in support of the lower BIC value (West et al., 2012). Regarding AIC, the solution closest to the saturated AIC value is considered as providing a better fit to the data (West et al., 2012).

To further handle issues associated with non-normality in data, Bollen-Stine (Bollen & Stine, 1992) bootstrap approach was employed to handle potential issues of non-normality in data, with 10,000 bootstrap resamples used, which is considered robust (Walker & Smith, 2016). Bollen-Stine bootstrap procedures have been observed as a method of handling nonnormal data, particularly in larger samples (i.e., $N \geq 200$; Walker & Smith, 2016). In addition, Bias-corrected bootstrap confidence intervals were also used to test the significance of the mediational associations through ethnic identity and social justice orientation.

While limitations are present with regard to examining mediation cross-sectionally (Kline, 2015), sensitivity analyses through bias-corrected bootstrap confidence intervals provide more accurate intervals for small samples (Efron & Tibshirani, 1994) and skewed distributions of the indirect effect estimates (Mallinckrodt, Abraham, Wei, & Russell, 2006). Bias-corrected bootstrap confidence intervals also improve the power of the test of the indirect effect (Shrout & Bolger, 2002). A significant indirect effect is present when confidence intervals do not include zero (Hayes, 2009). While an indirect effect may be present, the strength of this effect is often difficult to determine; therefore, the *decompensation of effects* proportions were examined for mediating variables (Ditlevsen, Christensen, Lynch, Damsgaard, & Keiding, 2005).

Results

See Table 1 for the correlation matrix. All main analytic variables were correlated with the exception of cognitive psychological empowerment and community civic engagement, as well as cognitive psychological empowerment and 30-day substance use. See Fig. 2 for over-identified path model, which displays only statistically significant paths and presents standardized beta weights. The over-identified path model showed good overall model fit for the sample data: $\chi^2(11)=9.97, p=.43$; GFI=.99; AGFI=.97; CFI=.99; RMSEA=.03 (95% CI .01, .05), AIC, 43.97 (Saturated = 56.00); BIC, 111.09 (Saturated = 166.54); CMIN/DF = 1.09. Bollen-Stine bootstrapping results showed that the *p* value was greater than .05 (*p* = .49), indicating that the proposed model is consistent with the sample data (Walker & Smith, 2016).

A positive direct association was present between intrapersonal psychological empowerment and ethnic identity (*p* < .01) and a negative direct relationship between intrapersonal psychological empowerment and 30-day substance use identity (*p* < .01). Cognitive psychological empowerment had a direct relationship with ethnic identity (*p* < .01); however, contrary to our hypotheses, no additional direct effects were present. Ethnic identity was negatively associated with 30-day substance use (*p* < .01) and had a positive relationship with community civic engagement (*p* < .01).

Community civic engagement had a negative direct association with 30-day substance use (*p* < .05).

Using bias-corrected bootstrap confidence intervals, the following indirect associations were present through ethnic identity: Intrapersonal psychological empowerment and 30-day substance use (indirect effect = -.03, 95% CIs -.04, -.01, *p* = .05); cognitive psychological empowerment and community civic engagement (indirect effect = .02, 95% CIs .003 to .03, *p* = .03); and cognitive psychological empowerment and 30-day substance use (indirect effect = -.02, 95% CIs -.04 to -.001, *p* = .04). Through community civic engagement an indirect relationship was present between ethnic identity and 30-day substance use (indirect effect = -.03, 95% CIs -.04 to -.003, *p* = .04).

The decomposition of effects, indirect effect proportions indicated that ethnic identity mediated nearly 20% of the effect intrapersonal psychological empowerment had on 30-day substance use, 50% of the effect cognitive psychological empowerment had on community civic engagement, and 50% of the effect cognitive psychological empowerment had on 30-day substance use. Further, community civic engagement mediated 28% of the effect ethnic identity had on 30-day substance. Overall, results provide interesting preliminary evidence for the role of intrapersonal and cognitive psychological empowerment in lessening 30-day substance, particularly when mediated through both ethnic identity and community civic engagement.

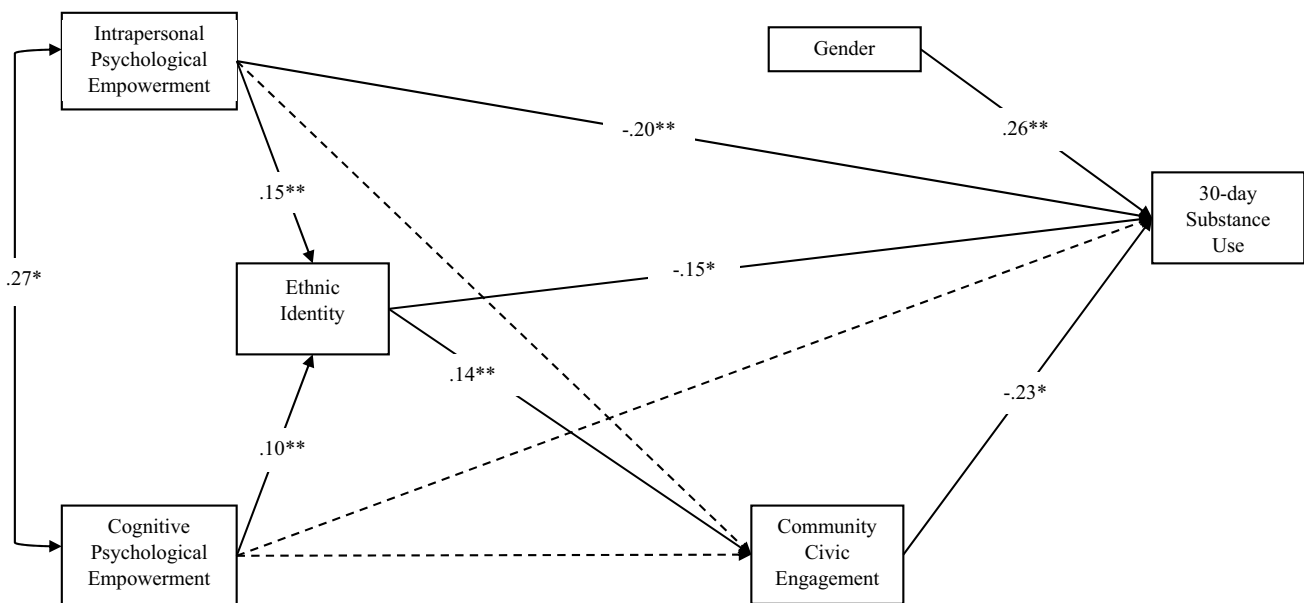


Fig. 2 Over-identified path model predicting 30-day substance use among youth of color (*N*=383). Model fit: $\chi^2(11)=9.97, p=.43$; GFI=.99; AGFI=.97; CFI=.99; RMSEA=.03 (95% CI .01, .05),

AIC, 43.97 (Saturated=56.00); BIC, 111.09 (Saturated=166.54); CMIN/DF=1.09. *p* < .05*, *p* < .01**

Discussion

Youth of color living in urban communities continue to be disproportionately affected by the consequences of substance use. Subjected to limited resources, youth of color living in urban locales often have fewer opportunities to access quality prevention-intervention services. This is due in part to limited funding opportunities and culturally insensitive programs that continue to view youth through a deficit lens as opposed to a strengths-based framework. Empowerment theory and the empowerment-based constructs in this study can, therefore, provide some understanding on protective factors in substance use prevention among youth, as well as consider the ways to promote strengths, ethnic identity, and community civic engagement (Christens et al., 2018; Lardier, 2018, 2019; Lardier, Barrios, et al., 2019). Through this lens, youth and their communities may be visualized as culturally wealthy, with both critical and active community engagement acknowledged as important components of adolescent development, wellness, and prevention from substance use.

These findings are among the first to provide preliminary insight into the connection between aspects of psychological empowerment (e.g., intrapersonal and cognitive) and ethnic identity, as well as the indirect association to community civic engagement and 30-day substance use. Our findings support hypotheses made, revealing that both intrapersonal and cognitive psychological empowerment had a positive association with ethnic identity directly and indirectly connected to both community civic engagement and 30-day substance use. These findings align with previous literature documenting the association between intrapersonal psychological empowerment and ethnic identity (Lardier, 2018; Lardier, Garcia-Reid, et al., 2018, Lardier, Reid, et al. 2018; Lardier, 2019; Opara et al., 2019). Our results add to the literature by identifying an empirical association cognitive psychological empowerment and ethnic identity, which begins to expand our understanding of the full nomological network of the psychological empowerment construct (Lardier, Garcia-Reid, et al., 2019; Lardier, Barrios, et al., 2019).

The connection between empowerment and ethnic identity is based on the premise that youth who feel more empowered have greater positive-regard and connection to their racial, ethnic group, which further motivates action for the betterment of the collective (Hipolito-Delgado & Zion, 2015), as well as survival from harsh social conditions determined primarily by those with power (Gutiérrez, 1995; Speer & Peterson, 2000). Empowerment-based perceptions allow youth to develop a deep connection with important issues impacting their community and racial-ethnic group (Christens, 2019; DeAngelo, Schuster,

& Stebleton, 2016; Lardier, 2018; Lardier, Barrios, et al., 2019; Zeldin, Krauss, Kim, Collura, & Abdullah, 2015). These experiences perhaps reinvigorate their own sense of identity and potential to be actors of social change (Ballard et al., 2019).

Results further support hypotheses and highlight the mediating role of ethnic identity between intrapersonal and cognitive psychological empowerment and both community civic engagement and 30-day substance use. These are noteworthy findings as it further supports the influence of ethnic identity among empowerment constructs, as well as both the growth-enhancing function of ethnic identity on community civic engagement and the buffering effect of ethnic identity on substance use. Practically, these findings align with previous research indicating that individuals experiencing more empowered ways of thinking and feeling (e.g., leadership and the self-efficacy to enact sociopolitical change, as well as a critical awareness of social inequality) may internalize positive perceptions of ethnic identity (Christens et al., 2018; Gutiérrez, 1995; Lardier, Garcia-Reid, et al., 2019; Lardier, 2018; Lardier, Barrios, et al., 2019). Positive internalized perceptions of ethnic identity among youth of color are associated with active civic engagement (Christens, 2019) and less drug and alcohol use (Lardier, 2019). Furthermore, studies among young people involved in their ethnic group report more activism, organizing activities (Conner, 2013) and overall higher academic attainment (Rogers & Terriquez, 2016).

This cascading effect draws attention to the need to provide growth-enhancing opportunities that increase youth's awareness of social inequality, support youth in developing the competency to enact social change, support youth in their racial-ethnic identity development, and in turn engage in social change for their community (Christens, 2019; Lardier, 2018). As prior studies indicate, youth who feel more empowered may be more inclined to enact social change and have greater engagement with their ethnic-racial group (Christens et al., 2018; Lardier, 2018; Lardier, Barrios, et al., 2019), buffering these youth from negative outcome behaviors including drug and alcohol use (Christens & Peterson, 2012; Lardier, 2019). Hence, greater psychological empowerment (i.e., both intrapersonal and cognitive psychological empowerment) may function, through ethnic identity, as an inhibitor of risk behaviors (e.g., substance use; violence) and positively spillover to developmental domains related to sociopolitical change and action. Specific to cognitive psychological empowerment, Ginwright (2015) notes, critical awareness of social inequities (i.e., examined in this study through cognitive psychological empowerment) that create disadvantages and create (and maintain) systems of oppression may allow individuals to both heal from trauma and develop transformational hope which is implicated in youth wellness.

Implications for Social Work Practice

Study findings highlight the role of cognitive and intrapersonal psychological empowerment, ethnic identity, and community civic engagement on substance use among youth of color. Youth substance use remains a significant challenge in the U.S., and often, underlying issues are present that force youth to engage in substance use, as an unhealthy coping mechanism. Often, social work clinicians are at the forefront of community-based work involving substance use and abuse and health disparities, as well as witnessing the impact of substance abuse on youth and their families. Therefore, clinicians and social work researchers are aware of factors that are present among youth of color living in urban communities including barriers, challenges, and adversity they may face on a continuous basis due to structural and systemic inequality. Strengths-based and culturally competent frameworks are the foundation of social work practice. By incorporating strategies that highlight the importance of establishing strong connections with one's ethnicity and racial group, and simultaneously working with youth to engage in social change through therapeutic approaches, can all be profound and relatively simple approaches to reducing substance use among youth of color. The incorporation of this lens in clinical social work would allow for targeted and effective substance abuse prevention programs. Findings encourage clinicians to highlight the strengths within youth of color and their communities as a tool to preventing risk behaviors such as substance use.

Implications for Prevention Programming

The relationships identified heretofore point toward the importance of empowerment in youth of color's developmental trajectories, particularly in promoting ethnic identity and civic engagement and reducing the likelihood of youth engaging in drug and alcohol use. Such findings put into perspective considerations that focus on the importance of empowerment in youth development and as Ginwright et al. (2005) discussed, notions of how to promote capital in poor communities of color that have traditionally identified as "at-risk" and as lacking cultural wealth. This framing puts into focus ways in which to reduce drug and alcohol use among youth and consider youth within the scope of developing and planning prevention-intervention initiatives. This positioning of youth moves away from traditional visualizations of youth in prevention as "tokenized" and allows for more emancipatory roles that both contribute to community and individual wellness.

Empowering community and organizational settings provide participants opportunities for developing a critical awareness and engaging in opportunities of leadership and social change (Christens, 2019). Youth-based community programs should task themselves with providing youth opportunities for social change and activism, particularly around health and wellness, which have been previously identified in both promoting empowerment and overall wellness (Baldrige, 2019; Lardier, Garcia-Reid, et al., 2018). More specifically, connecting youth with ethnically-racially like mentors may augment their own sense of cultural identity (Lardier, Herr, et al., 2018), which has not only been implicated with empowerment but also reductions in drug and alcohol, as well as other risky behaviors (Zeldin et al., 2017). This framing of empowerment and ethnic identity emphasizes these developmental processes as key stress-buffering pathways in promoting youth wellness (Christens, 2019).

Developing paths for youth of color to engage in emancipatory, action-oriented, empowerment-based programs to improve youth development and wellness is critical. This is not to say that empowerment processes alone or in tandem with other mechanisms can fully address intersecting socio-political, economic and health-based forces, and inequalities (Christens et al., 2019). It, however, may put into perspective unjust systems and ways these mechanisms engender action and shift youth problem-behaviors. Christens (2019) argues that collective efficacy and empowerment both appear to promote youth ethnic identity development and action, as well as buffers against negative behaviors. Social workers in community-based organizations can particularly support youth and foster empowerment embedded with cultural values and principles that may allow youth to challenge social structures, engage in social change, and positively affect outcome behaviors including substance use. Social workers may also consider ways in which empowerment can be incorporated into substance use prevention program as both a buffer and an opportunity for youth to engage in outward change specific to preventing the use of drugs and alcohol.

Limitations

Findings from this study are important for extending the youth empowerment and substance abuse prevention-intervention literature; however, results should be considered in light of several limitations. First, findings were drawn from a cross-sectional convenience sample of urban adolescents from a particular location in the northeastern U.S. While cross-sectional research may be important for the design of future longitudinal studies, future research needs to replicate these findings using longitudinal data and unpack the temporal order of these variables and associations. For example,

while substance use was examined as an outcome in this study, it is plausible that both intrapersonal and cognitive empowerment could be examined as outcomes in this study. Moreover, ethnic identity could be a main predictor of both intrapersonal and cognitive empowerment, and in-turn reduces 30-day substance use among youth.

A second limitation and related to cross-sectional data concerns mediation analyses occurring cross-sectionally as opposed to longitudinally. While important mediating results were identified, future research needs to replicate findings using mediation analyses longitudinally. Such analyses would help to uncover developmental processes and further unpack the temporal order of variables over time (Kline, 2015). While one study has examined two waves of data focused on community participation and psychological empowerment, as part of a larger evaluation study (Christens et al., 2011), research is needed that examines empowerment constructs longitudinally.

Third, within-group differences were unexamined for and among African-American/Black and Hispanic/Latinx adolescents. Given the heterogeneity present within these populations, future research should expand upon this limitation and examine within-group differences. This would allow for a nuanced examination of the mechanisms tested in this study and expand our understanding of the empowerment literature.

A final limitation concerns the measurement of psychological empowerment. Although two dimensions of psychological empowerment were examined in this study (i.e., intrapersonal and cognitive psychological empowerment), the CES, which is used to examine cognitive psychological empowerment has not been robustly validated among a sample of youth (exceptions include Lardier et al., 2020; Speer et al., 2019). Though adequate indices of fit were identified in these studies, the lack of validity among diverse youth samples raises questions on the overall validity of the measure. Future research is also urged to further validate the CES among various groups of youth, as well as the entire psychological empowerment nomological structure (exceptions include Rodrigues et al., 2018).

Conclusion

Despite these limitations, this study contributes to the current literature that considers how empowerment and measures of empowerment contribute to the prevention of 30-day substance use among youth of color. Findings from this study display that both intrapersonal and cognitive psychological empowerment were both indirectly associated with lower rates of 30-day substance use through ethnic identity and community civic engagement. Further, intrapersonal psychological empowerment was directly associated with

lower rates of 30-day substance use among youth in this study. These results provide an argument for greater involvement of youth in sociopolitical programs that draw on social change and as Peterson and Reid (2003) discussed, direct prevention-intervention work in the community. Importantly, this study positions empowerment as a way to both involve youth in their community and as a means of prevention—moving away from “risk-focused” research and prevention. Research, prevention practitioners, and social workers alike need to consider ways to empower youth and draw on communal funds of knowledge and wealth that work toward cultivating community and youth partnerships toward prevention.

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Compliance with Ethical Standards

Conflict of interest No potential conflict of interest was reported by the authors. Ijeoma Opara (or second co-author) received funding from the National Institute on Drug Abuse (5T32 DA007233) training grant as a predoctoral fellow. Points of view, opinions, and conclusions in this paper do not necessarily represent the official position of the U.S. Government.

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