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Black and Latino Adolescents' Self-Regulation: Placing College Preparedness in Context

Christine Pajunar Li-Grining[1], Amanda L. Roy[2], Jinyoung Koh[1], Amanda Boyer[1], Maria Radulescu[1], and Zahra Naqi[1]

Abstract

Students from minoritized backgrounds, who disproportionately face higher poverty rates, are more likely to encounter risk factors, which tend to undermine individuals' broader well-being by compromising self-regulatory processes. Yet, sociocultural theory highlights the presence of minoritized families' cultural wealth. Consistent with a focus on assets, it is notable that college enrollment rates have increased among Black and Latino students in the U.S. Using a mixed methods approach, the current study integrated asset and risk frameworks, in order to advance knowledge on the context of minoritized teens' college preparedness, defined here as making decisions and taking action steps toward college. Participants included low-income, predominantly Black and Latino families with adolescents ($n = 344$). First, drawing from the voices of families, we examined responses to open-ended questions about aspirations, supports, and challenges. Salient themes included social-emotional and social-cultural factors. Indicators of

[1]Loyola University Chicago, IL, USA
[2]University of Illinois at Chicago, USA

Corresponding Author:
Christine Pajunar Li-Grining, Department of Psychology, Loyola University Chicago, 1032 West Sheridan Road, Chicago, IL 60660, USA.
Email: cligrining@luc.edu

cumulative contextual risk and cumulative individual risk were based on the qualitative data. Second, we tested whether the linkage from cumulative risk indices to teens' college preparedness occurred via various dimensions of self-regulation (i.e., lower impulsivity, more cognitive control, and better organization skills), net of background characteristics. Adolescents' organization skills were a significant mediator. Possible next steps for research are discussed.

Keywords
African-Americans, college issues, Latinos, poverty, social development

Over the past two decades, college enrollment rates have increased among Black and Latino students in the U.S. (Coca et al., 2017; McFarland et al., 2019). Yet, there tends to be less educational attainment among Black and Latino individuals compared to White individuals (Hwang & Domina, 2017), and students from minoritized backgrounds disproportionately face higher poverty rates (Fontenot et al., 2018). As such, they are more likely to encounter risks, which tend to undermine individuals' broader well-being by compromising underlying self-regulatory processes (Blair & Raver, 2016). Still, Humphries and Iruka (2017) would caution us against focusing on risk-related gaps. Thus, we turn to sociocultural theory which provides a complementary perspective (Vygotsky, 1978), where groups are viewed as acquiring meaningful, valuable knowledge and skills via everyday activities. For instance, low-income families possess cultural wealth, such as knowledge that conveys a sense of community, memory, and history among families (Yosso, 2005).

The overarching goal of the current study is to integrate asset and risk frameworks in order to advance understanding of minoritized teens' college preparedness, which is defined here as making decisions about college and taking action steps toward college (e.g., college choices, entrance exams, applications, and visits, but not high school nor remedial college coursework; Network for College Success, 2017). These decisions include choosing between attending a community college or 4-year institution, and these steps include asking for help with college applications (Eccles et al., 2004). Based on the voices of minoritized families, we seek to deepen knowledge about the context of college preparedness. More qualitative research on aspirations and supports may help identify additional opportunities to increase college attendance among minoritized teens (Cooper, 2011).

Sociocultural Factors Among Minoritized Families

Existing research on cultural assets, for example, suggests that we widen definitions of parental involvement. Traditional views on parental involvement are limited to parents' engagement at school, although minoritized parents are more likely to partake in home-based engagement (Cooper, 2011; Suizzo et al., 2016). Broad definitions of parental involvement also include holding high aspirations for youth; helping with financial aid applications; and monitoring students' progress and course selection (Gándara et al., 2006). Such examples of parental academic socialization have shaped teens' academic performance and post-high school plans in minoritized communities (Cooper, 2011; Suizzo et al., 2016). Moreover, parental involvement and monitoring is positively related to college enrollment (Hill & Wang, 2015) and educational attainment (Benner et al., 2016). College access programs support the many ways in which Black and Latino parents foster teens' educational pursuits, which include financial and socioemotional support (Chlup et al., 2018; Cooper, 2011; Gándara et al., 2006; Leonard, 2013). However, considerably less is known about minoritized parents' aspirations for adolescents beyond education (Cooper, 2011).

Along with an eye on families' cultural wealth, we must also acknowledge ongoing systemic risks (Gándara et al., 2006). Minoritized families have long demonstrated resilience in the context of inequities, which can hinder educational attainment among Black and Latino teens (Cooper, 2011; Gándara et al., 2006; Tierney & Duncheon, 2015). Sociologists have studied how lacking economic capital (e.g., financial resources), cultural capital (e.g., parents' educational attainment), and social capital (e.g., the benefits of belonging to particular social networks) contributes to the intergenerational transmission of disadvantage (Bourdieu, 1986), especially for Black and Latino students and particularly for males (Keels, 2013; Strayhorn, 2014). Certainly, there are financial barriers to graduating from college (Gándara et al., 2006; Goldrick-Rab et al., 2016). Educational attainment is associated with income (Goldrick-Rab et al., 2016), as well as socioeconomic status (Diemer et al., 2020), class (Johansson & Höjer, 2012), and identifying as first-generation college students (McCarron & Inkelas, 2006). Additionally, knowledge about the college application process and relationships with college alumni can be privy to higher income families, and thus act as gatekeepers that limit social mobility (Cooper, 2011; Tierney & Duncheon, 2015). More specifically, students from low-income households and those who are the first members of their families to attend college tend to face difficulties with taking steps toward college entry and with the decision-making process regarding college (Network for College Success, 2017).

Individual Characteristics and Minoritized Teens' College Preparedness

Having described the sociocultural context for college preparedness, we next turn to the role of individual factors. In the existing literature on the education of Black and Latino adolescents, some scholars have veered away from viewing families as being either collectivistically or individualistically oriented, and from describing relatedness versus autonomy as being important for teens (Cooper, 2011; Isik et al., 2018; Suizzo et al., 2016). Rather, elements of collectivism and relatedness coexist with aspects of individualism and autonomy as Black and Latino adolescents pursue their post-high school plans. This dual focus is congruent with both theory and empirical evidence in the field of developmental psychology. Arnold et al.'s (2012) ecological framework for college readiness focuses on the role of contextual and individual factors. The framework largely centers on the multiple contexts (e.g., family, community, racism) in which Black and Latino students' college pursuits are embedded, but also recognizes the contributions of students' individual characteristics. Thus, in addition to investigating social, cultural, and financial factors, the current study examines how minoritized teens' individual characteristics shape their college preparedness.

Conley's (2010) model of college readiness centers on four "keys" for teens to master: (1) transition awareness, (2) content knowledge, (3) learning skills, and (4) cognitive strategies. With Black and Latino teens being more likely to attend under-resourced schools, it can be difficult to obtain these "keys." Although many educators have improved the "transition awareness" of students by creating a college-going culture in high schools, getting prepared for college may be especially challenging in the context of socioeconomic disadvantage (Gándara et al., 2006; Knight & Marciano, 2013). Due to systemic and institutional inequities, for example, minoritized students tend to have fewer opportunities to take advanced courses and thus acquire content knowledge (Gándara et al., 2006). However, autonomous motivation, goal-setting, identity, and learning skills such as self-efficacy have helped minoritized adolescents succeed despite facing disadvantages (Isik et al., 2018; Suizzo et al., 2016). Indeed, past studies convey that college readiness involves content knowledge and academic skills (e.g., math, writing) as well as factors outside of subject-specific domains (e.g., social skills, goal setting; Farrington et al., 2012; Nagaoka et al., 2013; Network for College Success, 2017). However, we lack knowledge on how various types of individual factors jointly shape the steps adolescents take toward college and their decision making about college.

Self-regulation is a key factor outside of subject-specific domains that has received considerable attention in the developmental literature over the last two decades. We define self-regulation as a multi-dimensional construct that includes lower impulsivity and better executive functioning (EF; Nigg, 2017). More specifically, we view self-regulation in terms of impulsivity, cognitive control, and organization skills. Scholars have characterized teens' self-regulation in terms of a "maturational imbalance" between "impulsive" and "executive" systems (Steinberg & Chein, 2015). Nigg views *impulsivity* as a non-reflective action that involves both bottom-up processes (e.g., spontaneous reactions to desirable situations) and top-down processes (e.g., difficulty with substituting one response for another). Teens' impulsivity undergoes the rapid development of affective processing systems, where they gravitate toward rewards and novelty as they learn to anticipate and evaluate incentives (Steinberg & Chein, 2015).

In contrast to impulsivity, Nigg (2017) conceptualizes executive function as solely consisting of top-down processes. During small windows of time (e.g., minutes), we draw upon *cognitive control* (e.g., short-term memory and focused attention), but during longer periods of time (e.g., hours or longer), we use organizational *skills* (e.g., planning). Both executive function and impulsivity undergo change during adolescence and adulthood, with cognitive-control systems maturing well into adulthood (i.e., 30s), and incentive-processing systems becoming less easily aroused during late adolescence and early adulthood (Steinberg & Chein, 2015). In the words of Conley's (2010) framework, cognitive strategies include organizational skills, and learning skills involve persistence, which refers to resisting immediate rewards.

Greater self-regulatory competence during early childhood has predicted more educational attainment (i.e., college graduation by age 25; McClelland et al., 2013). Furthermore, past studies have noted that greater academic achievement during adolescence is explained by better executive functioning (Samuels et al., 2016). In prior research, scholars have found inattention to be more negatively linked than impulsive behavior to teens' academic achievement (Barriga et al., 2002). Furthermore, prior research indicates that academic behaviors (e.g., the ability to organize materials) and academic perseverance (e.g., delayed gratification) make important contributions to college readiness during adolescence and the transition to adulthood (Farrington et al., 2012; Network for College Success, 2017). Yet, we are not aware of existing research that tests the unique roles of impulsivity, cognitive control, and organizational skills in college preparedness.

Cumulative Risk, Self-Regulation, and College Preparedness

Given the protective role that adolescents' self-regulation potentially plays in their college preparedness, it is important to investigate risk factors that may undermine teens' self-regulatory competence. Both poverty and poverty-related stressors have been found to jeopardize self-regulation among youth (Blair & Raver, 2016). A parsimonious way to capture exposure to multiple poverty-related stressors is to use cumulative risk indices, which have been identified as detrimental to children's and adolescents' well-being (Evans et al., 2013; January et al., 2017). In particular, existing research has documented a negative relation between cumulative risk and executive function during early childhood (e.g., Wade et al., 2018). Furthermore, domain-based indices that group different types of cumulative risk on separate indexes (e.g., residential vs. parents' psychological risk) have explained individual differences in self-regulation among young children (Evans et al., 2013; Li-Grining, 2007). This approach could help pinpoint risk factors that are particularly detrimental during adolescence, but prior studies have not examined whether different types of cumulative risk indexes (e.g., contextual vs. individual) negatively predict teens' self-regulation and college preparedness.

Furthermore, adolescents' self-regulation could explain the link from cumulative risk to their college preparedness. Past studies have identified executive function as a mediator of the positive association between socioeconomic status and children's academic achievement (Crook & Evans, 2014; Nesbitt et al., 2013). Similarly, prior research has found that the link from socioeconomic status to teens' higher academic achievement and lower substance use is explained by behavioral self-control and delay discounting (Farley & Kim-Spoon, 2017). Also, greater emotion dysregulation underlies the positive relation between cumulative risk and adolescents' externalizing and internalizing behavior problems (Kliewer et al., 2017). However, to our knowledge, such mediation models have not used a mixed methods approach that relies on the voices of minoritized families to capture risk exposure. Incorporating qualitative data into quantitative models could enrich our understanding of the ways in which more cumulative risk relates to lower college preparedness among minoritized teens. In particular, we do not know the extent to which impulsivity, cognitive control, and organizational skills explain the link from cumulative risk to teens' college preparedness.

The Current Investigation

Using a mixed methods approach, the present investigation is guided by the following aims. First, given that prior research tends to use relatively narrow

definitions of parental involvement and parents' aspirations for teens, we ground our study in qualitative data to broaden understanding of the context of college preparedness among Black and Latino adolescents. Second, we draw on qualitative data to capture cumulative risk in our quantitative models, and we test the extent to which teens' college preparedness is shaped by different indexes of cumulative risk via multiple underlying self-regulatory processes. Informed by prior research on disadvantage, self-regulation, and education, we expected that indexes of cumulative risk (i.e., contextual vs. individual) would be positively linked to impulsivity, but negatively associated with cognitive control and organization skills. Also, we expected that better cognitive control and organization skills and lower impulsivity would function as protective factors for college preparedness. Lastly, we anticipated that cognitive control, organization skills, and impulsivity would mediate linkages from indexes of cumulative risk to college preparedness.

Method

Participants and Procedure

Data for the current investigation were drawn from a study of 602 low-income, predominantly Black and Latino teens and parents living in Chicago. As preschoolers, the students participated in the *Chicago School Readiness Project*, which was a mental health intervention with a classroom-based, cluster randomized controlled trial (RCT) design that aimed to increase children's school readiness by targeting improvement in their self-regulation (for details, see Raver et al., 2011). The intervention was carried out using two cohorts, with one participating in the 2004 to 2005 academic year and the other participating in the 2005 to 2006 school year. In 2018, a follow-up study ($n = 344$) was conducted with students during adolescence and their parents.

We compared the characteristics of the 344 participants in the current study to those who did not participate in this wave of data collection ($n = 258$), using data on demographic characteristics, self-regulation, and academic skills collected at baseline. Overall, the two groups were similar. However, the current sample was more likely to be African American (69.2% vs. 61.2%), was less likely to be Latino (23.5% vs. 31.4%) and from the first cohort (53.5% vs. 62%), and had slightly higher attention/impulse control scores (2.22 vs. 2.11).

During the follow-up study, parents rated teens' self-regulation (i.e., cognitive control, organizational skills, and impulsivity), and responded to open-ended prompts regarding aspirations, supports, and challenges, and teens

responded to an open-ended question regarding challenges they encountered. Parents and teens reported on adolescents' decisions and action steps toward college. Parents provided information on students' and families' demographic characteristics at baseline. Informed consent was acquired from all participants before they participated in the original study and was obtained in the follow-up study. Approved by institutional review boards, the informed consent process included a description of the study, its goals, voluntary participation, and confidentiality. Data from the follow-up study will be made publicly available at the conclusion of funding from the Institute of Education Sciences.

Regarding the sample, youth were on average 16.57 ($SD = 0.91$) years old, 44.6% were male, and 55.4% were female. In terms of race/ethnicity, 68.2% were African American, 24.7% were Latino, and 7.1% belonged to other racial/ethnic groups that included White, Asian, and biracial students. Most families were headed by a single parent (68.8%), and a substantial percentage of families lived below the poverty line (41.2%). In addition, 21.0% of mothers did not hold a high school degree, and 38.3% of mothers worked less than 10 hours per week. Also, 51% of participants were in the treatment group, and 55.4% were in the first cohort. Mean scores for self-regulation were −.26 ($SD = .25$), −.43 ($SD = .25$), and .19 ($SD = .20$) for cognitive control, organizational skills, and impulsivity, respectively.

Measures

Open-ended questions. Parents were asked five open-ended questions, and teens were asked one open-ended question about problems or challenges that they faced. Prompts for parents addressed: (1) aspirations for their teens' futures, (2) hopes for their teens' post-high school plans in the next 5 years, (3) ways they support their teens' post-high school plans, (4) challenges in general, and (5) challenges with helping teens with their post-high school plans.

Cumulative risk indexes. Following past research (Syed & Azmitia, 2008; Syed et al., 2011), we used a transformative mixed methods design (Creswell & Plano Clark, 2007). Themes identified in Table 6 were used to create domain-based cumulative risk indexes. One cumulative risk index reflected parents' views on contextual challenges and another index captured parents' experiences with teens' individual risk factors. In the first step of this approach, parents' responses to the open-ended prompt regarding challenges were coded into dummy variables (1 = response fit with theme, 0 = responses did not fit with theme) based on the five themes described above. There were two contextual themes: financial capital as well as social and cultural capital.

In addition, there were three individual themes: academic hardship, social and emotional challenges, and difficulty with goal-setting. Next, we summed the contextual dummy variables in order to create a cumulative contextual risk index, which ranged from 0 to 2. Similarly, we summed the individual risk dummy variables in order to create a cumulative individual risk index, which ranged from 0 to 3.

Self-regulation. We used three measures of self-regulation based on parent ratings. More specifically, we conducted confirmatory factor analyses using items from the Behavior Rating Inventory of Executive Function (BRIEF; Gioia et al., 2000) and the Barratt Impulsiveness Scale Version 11 (BIS-11; Patton et al., 1995) that were administered in the follow-up study. Reflecting working memory and inhibitory control, the BRIEF items used a rating scale from 1 (never) to 3 (often). The BIS-11 items (e.g., says things without thinking) employed a metric from 1 (rarely/never) to 4 (almost always/always). Based on results from confirmatory factor analysis, we standardized and aggregated items into three composites. We labeled them with terms consistent with Nigg (2017), who conducted a broad review of self-regulation research in an effort to clarify use of terms in the field. We refer to the aggregates as cognitive control (8 items; $\alpha = .92$), organizational skills (5 items; $\alpha = .84$), and impulsivity (11 items; $\alpha = .90$).

College preparedness. Various aspects of college preparedness were employed as outcomes, which included decisions and action steps toward college enrollment. Decision-making includes the likelihood of attending different types of higher education, choosing where to send college applications, and making decisions on top choices for college. Action steps involve taking college exams, completing college and financial aid applications, visiting colleges, and talking with teachers and school counselors regarding college applications (Conley, 2010; De La Rosa & Tierney, 2014; Gándara et al., 2006).

More specifically, decision-making included two teen-reported items on college plans: "I am likely to attend a 4-year college," and "I am likely to attend a community college," which were answered on a four-point Likert scale (1 = *not at all likely* to 4 = *very likely*). Based on parent reports, nine items were each dummy-coded (1 = *yes*, 0 = *no*) and included: (a) whether teens registered for college exams (i.e., PSAT, SAT, and/or ACT); (b) whether teens completed college exams (i.e., PSAT, SAT, and/or ACT); (c) whether teens asked for help from parents with college applications; (d) whether teens completed the FAFSA form; (e) whether teens decided where to submit college applications; (f) whether teens have decided on a top choice for which

college they would like to attend; (g) whether parents have taken their teens on college visits; (h) whether parents have used online resources on financial aid or the college application process; and (i) whether parents have talked with teachers or counselors or attended seminars on the college application process. The first six dummy variables were summed to create an index score that reflected decisions made and action steps taken by teens, and the last three dummy variables were added to create an index score that indicated action steps taken by parents.

Background characteristics. Since demographic characteristics may be related to teens' self-regulation and college-related outcomes, we included the following covariates. Student age was measured in years, and gender was coded as 1 = male and 0 = female. Race/ethnicity included three groups: Black (omitted), Latino, and White or other race/ethnic group. In addition, we controlled for mothers' education and employment. A dummy variable for educational risk was coded as a 1 if mothers had less than a high school diploma or GED, but having a high school diploma or GED or more was coded as a 0. Additionally, a dummy variable for employment risk was coded as a 1 if mothers worked less than 10 hours per week, but coded as a 0 if they worked 10 hours or more per week. Covariates also included whether households were headed by a single parent, and whether households fell below the poverty line (0 = *household income divided by poverty threshold is* 1 *or greater*, 1 = *household income divided by poverty threshold is below* 1). In addition, we controlled for student-reported grade point averages (GPA). Teens were asked "How would you describe your grades in school" and chose one of the following answers: mostly A's, mostly B's, mostly C's, mostly D's, mostly F's, none of these grades, and not sure. We used a 4-point GPA scale to code letter grade answers (e.g., mostly A's = 4). Lastly, we took into account variables from the original mental health intervention during preschool. We controlled for whether participants attended preschool sites that were randomly assigned to treatment status (0 = *control*, 1 = *treatment*), and whether students participated in the first or second preschool cohort (0 = *second cohort*, 1 = *first cohort*).

Analytic Plan

We used an open-coding analytic process (Strauss & Corbin, 1990) to code the qualitative data into distinct themes. When reviewing responses to the open-ended prompt, we created a memo on concepts and codes that emerged in our work. Next, two trained undergraduate research assistants read each response independently and coded for themes while referring to the memo.

We then discussed emergent themes and finalized a coding scheme by grouping together similar concepts. After open-coding, we conducted thematic analysis (Braun & Clarke, 2006). Based on the final coding scheme, another set of two trained undergraduate research assistants individually coded all responses with the use of NVivo 12. Participants' responses could fit into multiple themes. This process is regarded as the backward analytic method, where researchers apply a coding scheme to the original responses in order to confirm that each theme properly represented the responses.

For the quantitative analyses, we estimated mediation models using a maximum likelihood estimation (ML) in Mplus v. 8.0 in order to investigate the linkage from two types of cumulative risk indexes to teens' college preparation via self-regulation. In path A, cumulative contextual risk and cumulative individual risk were estimated as predictors of cognitive control, organizational skills, and impulsivity. In path B, we tested links from cognitive control, organizational skills, and impulsivity to indicators of college preparedness. We also tested the indirect effects of cumulative risk indexes on teens' college preparation via self-regulation. In other words, these models tested for the unique contributions of cumulative contextual risk, cumulative individual risk, cognitive control, organizational skills, and impulsivity on college preparedness. The Monte Carlo Method for Assessing Mediation (MCMAM) was conducted using 20,000 Monte Carlo replications (Preacher & Selig, 2012). Furthermore, each model controlled for background characteristics, students' GPA, treatment status, and cohort. In addition, we used full information maximum likelihood estimation (FIML). Using FIML enabled us to yield a covariance matrix with all available information from the independent variables. This allowed us to use the entire sample with data on the independent variables (Enders & Bandalos, 2001).

Results

Qualitative Results

On average, teens reported being somewhat likely to attend a 4-year college ($M = 3.34$, $SD = 0.89$) and to attend a community college ($M = 2.46$, $SD = 1.09$). Most adolescents registered for college exams (74.6%) and completed them (57.3%). Less than half of teens (43.9%) made decisions on where to send college applications, over half of adolescents (52.9%) asked their parents for help with college applications, more than a quarter of teens (26.2%) completed the FAFSA form, and over two-fifths (44.6%) decided on a top choice for which college they would like to attend. In addition, over one-third (36.9%) of parents took their teens on college visits, almost one-fifth (18.4%)

of parents used online resources on financial aid or the college application process, and nearly one-half (47.8%) of parents talked with teachers or counselors or attended seminars on the college application process.

Familial assets. There were three prompts that encompassed positive aspects of families' experiences. First, regarding the prompt about parents' aspirations for their teens' futures, 289 participants provided data that could be coded thematically. The remaining 55 parents either did not respond, said "no," or replied "undecided." Table 1 lists descriptions of the five themes that emerged. For example, one theme was academic success, which referred to teens staying in school, graduating from high school, attending college, and obtaining high report card grades. In the second prompt regarding parents hopes for their teens' futures in 5 years, 320 participants provided valid data that could be coded thematically. The other 23 parents did not respond. In Table 2, we provide explanations of the five themes. One example was career success and SES promotion (i.e., teens make progress, or are successful in a career of choice (e.g., military, sports), and have higher socioeconomic status than their parents). In the third prompt, parents were asked about the ways that they support their teens' post-high school plans, 251 participants provided valid responses that could be coded thematically. The rest of the parents ($n = 93$) did not provide answers that could be coded (e.g., no reply, said "no"). Table 3 displays the four themes that emerged. For instance, college specific assistance referred to parents helping teens with applications, attending seminars, talking with school counselors, taking teens on college visits, and talking to family members who have college experience.

In terms of the data on familial assets, Cohen's kappa coefficients (κ) ranged from .50 to .79, which is considered fair to substantial agreement (Fleiss et al., 2003). More specifically, for responses to the prompt regarding parents' aspirations for their teens' futures, the kappa coefficients were .79, .60, .60, .60, and .56 for *academic success, career success and SES promotion, general success, personal growth*, and *physical and psychological well-being*, respectively. The most common answers to this prompt focused on personal growth (35%%, 102/289) and general success (57%, 166/289). For example, one parent's reply was:

> That he continues to reach his goals in education and in life. That he continues to be inspired by learning and sharing on his journey. To be a well-rounded young man with purpose, a thirst for knowledge, and a kind heart to share with others. He is truly a blessing.

Second, answers to the prompt about parents' hopes for teens' futures in the next 5 years resulted in the following kappa coefficients: .75, .72, .54, .52,

Table 1. Description of Themes on Parents' Aspirations for their Teens' Futures ($N = 289$).

Theme	Frequency	Description	Example quote
Academic success	74	Parent hopes that their teen succeeds academically through staying in school, graduating high school, continuing onto higher education, or obtaining high grades.	"For her to finish high school and go off to college, and to take her education more serious."
Career success and SES promotion	80	Parent hopes that their teen works hard and pursues a career of choice (including military or athletic endeavors). The teen may also obtain an increase in socio-economic status through higher levels of pay than one's parents.	"To work hard and be happy in her career choice."
Personal growth	102	Parent hopes their teen has personal growth in the future. This growth manifests through personal achievements such as growing spiritually, becoming independent or showing responsibility. This includes personal achievements such as having a family or contributing to society.	"I definitely want her to have a good head on her shoulder, encourage her to be independent and discipline, responsibility, be empathetic and think about others. . ."
Physical and psychological well-being	48	Parent hopes their teen is physically healthy and psychologically well in the future.	"I want her to be a good person, be happy for what she does for work in life and family. I tell her you have to be happy in what you are doing and you will be happy in life. I just want her to be happy."
General success	166	Parent hopes their teen achieves overall success in their future, follows personal interests, and achieves goals.	"I want [my daughter] to fulfill all of her dreams. Accomplish all the things she set out to do. Do not live in fear. Live not just exist"

Table 2. Description of Themes on Parents' Hopes for their Teens' Future in 5 Years ($N = 320$).

Theme	Frequency	Description	Example quote
Academic success	197	Parent hopes that their teen succeeds academically by staying in school, graduating high school, continuing onto higher education, or obtaining high grades.	"I hope that in five years she would've graduated from whatever institution she chooses and will have transitioned successfully to medical school."
Career success and SES promotion	168	Parent hopes that their teen makes progress or is successful in a career of choice (including military or athletic endeavors). The teen may also obtain an increase in socio-economic status through higher levels of pay than one's parents.	"A career in nursing and good credit."
Personal growth	80	Parent hopes their teen experiences personal growth in the future. This growth manifests through personal achievements such as growing spiritually, becoming independent or showing responsibility. This includes personal achievements such as having a family.	"I hope to be able to see her grow up to be a successful young lady. To be independent and to be able to reach out for help if she needs it to keep her life on track. Be able to one day make her own decisions for herself and get through life."
Physical and psychological well-being	34	Parent hopes their teen is physically and psychologically healthy in the future.	"Hope for her to be happy, with everything she decided to do with herself."
General success	63	Parent hopes their teen achieves overall success in their future.	"I want my daughter to succeed and accomplish all of her goals."

Table 3. Description of Themes on Parents' Supports for Teens' Post-High School Planning ($N = 251$).

Theme	Frequency	Description	Example quote
Financial support	28	Parent provides financial assistance by researching and filling out paperwork for college financial aid, and/or provides funds to cover application fees and other costs.	"We have been trying to weight our option the way we can afford it for college, graduation starting to price everything now, as far as future time will tell."
Socio-emotional support	160	Parent discusses post-high school plans with their teen and gives encouragement and advice relating to academics or more general matters in life.	"We talk intensely and relentlessly on choices in life. She understands time management, prioritizing, financial management, and choosing acquaintances to associate with."
College specific assistance	96	Parent assists teen in the college application process through attending seminars, talking to school counselors, helping with research and applications for colleges, taking teen to visit colleges, and/or talking to family members who have college experience.	"I've helped my daughter in a number of ways. I've helped her manage deadlines. I've reviewed applications. . .we've had multiple conversations about selecting the best college for her."
Current support of student needs	62	Parent assists teen in academic endeavors by assisting with arriving to school on time, encouraging attendance, help with transportation to school and with schoolwork, or providing academic assistance through an outside source (e.g., tutoring).	"I've tried to make sure he keeps up with his studies. If he falls behind he has to work harder for what he's trying to accomplish."

and .50 for *academic success, career success and SES promotion, physical and psychological well-being, personal growth*, and *success in general*, respectively. The most common responses were academic success (62%, 197/320) and career success and SES promotion (52%, 168/320) when parents were asked about the hopes that they held for teens in the near future. For example, in response to this prompt, one parent said:

> I would love for her to have a Bachelor's degree and to be working doing what she is passionate about. For her to be happy with her choices and to find a cause that she could volunteer and make a difference in her community. If not college then I would want her to have completed her cosmetology schooling and to be the best at that career. I hope she is happy, successful, and healthy.

Third, in terms of replies to the question about supports parents provide for their teens' post-high school planning, the kappa coefficients were .63, .60 .59, and .55 for *financial support, socio-emotional support, supporting current schoolwork*, and *college specific assistance*, respectively. Notably, some parents provided a wide range of support to their adolescents (e.g., provide assistance with completion of financial assistance and college applications, support students' current needs, help students manage deadlines). One parent's response was:

> Conversing with her early on about life choices. We visit colleges, her brother talks to her about her grades and what her GPA should look like to attend [Central Midwest] University. She is also taking PSAT prep classes at school and in the summer. She and I will start looking for scholarships that are available for her and we will meet with the school counselor as well.

Of the four types of support that parents provided, the least common was financial support (28/251, 11%), and socioemotional support was the most common (64%, 160/251). For example, one parent told us:

> We have showed great support and encouragement so that he can succeed. We advise him to make the best out of the resources available to him in school or such as his experienced family members. We have disciplined him into achieving the best and doing everything with his best effort.

Familial challenges. In contrast, there were three prompts about negative experiences in families' lives. First, teens were asked about challenges in their lives, and 34 answered the prompt with responses that could be coded thematically. The other 233 adolescents did not provide responses that could be

coded (e.g., did not respond, said "no"). In Table 4, we explain the five themes that were identified, one of which was low financial capital (i.e., financial concerns about paying for their education or providing for themselves after high school). In the second prompt, which inquired about general challenges faced by parents, 56 caregivers answered in ways that could be coded thematically. The remaining 288 caregivers either said "no" or did not respond. We describe the four themes in Table 5. Low social and cultural capital, for example, referred to challenges such as difficulties with connecting to others due to social status related to race, ethnicity, immigration, and neighborhood. In the last prompt, regarding challenges that parents faced while helping their teens with post-high school planning, 194 caregivers gave valid responses that could be coded thematically. Other parents ($n = 150$) did not provide responses that could be coded. The five themes that emerged are explained in Table 6. They included teens' academic hardship, which spoke to teens having a learning disability or having difficulty with academic endeavors.

Across Tables 4 to 6, kappa coefficients ranged from .45 to .83, which is considered fair to substantial agreement (Fleiss et al., 2003). First, when asking about challenges from teens' perspectives, the specific kappa coefficients were .60, .56, .55, .54, and .45 for *socio-emotional difficulty, financial capital, social and cultural capital, difficulty with post-high school planning*, and *academic hardship*, respectively. Some teens revealed to us that they faced more than one type of challenge at a time. The most common challenge was socioemotional (41%, 14/34). For instance, one teen told us:

> I used to struggle with bullying and teasing a lot. This led to mental issues and a drop in my academic success. However, overtime I brought my grades up and decided that I shouldn't focus on people that aren't worth my time and instead focus that energy into something valuable that'll make a good change. Although sometimes I still deal with these issues, I've grown as a person and from experience I know to focus on the important things like school, family, and my personal growth.

Second, responses to the question about general challenges faced by parents resulted in the following kappa coefficients: .83, .77, .60, and .58 for *teens' academic hardship, families' financial capital, families' social and cultural capital*, and *teens' socioemotional challenges*, respectively. Similar to teens' replies to the previous prompt about challenges, when parents were asked about challenges in general, the most common answer spoke to teens' socioemotional challenges (77%, 43/56). One parent, for example, said:

Table 4. Description of Themes on Challenges from Teens' Perspectives ($N = 34$).

Theme	Frequency	Description	Example quote
Low financial capital	6	Teen has financial concerns regarding paying for their education or providing for themselves after high school.	"I want to find a way to take care of myself without being out here doing illegal stuff to get money."
Low social and cultural capital	9	Teen experiences difficulties due to social status relating to education, race, ethnicity, as well as significant family challenges.	"I will be first generation going to college and completing it, so I'm being challenged in many aspects and especially since my parents don't really know what I'm going through currently related to college."
Teens' academic hardship	12	Teen experiences difficulties in succeeding in school due to low academic proficiency or poor mental and physical health.	"I always do poorly on tests, but have always had good grades."
Teens' socio-emotional challenges	14	Teen is unmotivated and faces social obstacles either through a lack of support from others or negative peer influence.	"I suffer from anxiety a lot and sometimes when I get overwhelmed I'll shut down."
Teens' difficulty with post-high school goal-setting	7	Teen is unable to plan for their life after high school due to concerns about adjusting to college, indecision about plans, or disagreement of those plans with family members.	"I'm undecided on whether to go right back to school I would like to sit out and work and save money for things that I need. . ."

Table 5. Description of Themes on Challenges in General from Parents' Perspectives ($N = 56$).

Theme	Frequency	Description	Example quote
Low financial capital	4	Parent has financial concerns regarding paying for their teen's education amongst other living expenses.	"He has friends that come from very wealthy family and he says that he deserves to live like his friends. Wishes for a better life! "
Low social and cultural capital	17	Teen experiences difficulties with lacking guidance, connecting with others due to social status relating to race, ethnicity, as well as significant family challenges and neighborhood of residence.	"Aveces ella le da temor sobre, siente, que el razismo, todo eso le da temor, terrorismo todas esas coas." *"Sometimes she is afraid of, feels, that racism, all that gives fear, terrorism all those things"*
Teens' academic hardship	8	Teen experiences difficulties in succeeding in school due to low academic proficiency, low attendance, and the presence of a learning disability.	"[My daughter] has had an IEP since the 8th grade. She failed the 8th grade and is currently missing credits to be promoted to the grade she should be in. Starting next school year she will be enrolled as a Junior and not Senior."
Teen's socio-emotional challenges	43	Teen is experiencing difficulties social interaction, mental health, and self-esteem. Teen may also be experiencing low motivation and disinterest toward future planning.	"It has been hard for her to get close to others after a fallout with a close friendship with a girl before high school. There was also a situation with a boy which has made her emotional state higher."

Table 6. Description of Themes on Familial Challenges During Post-High School Planning ($N = 194$).

Theme	Frequency	Description	Example quote
Low financial capital	69	Parent does not have enough money to afford college. Teens and parents unaware of the options available to pay for college.	"Only financial challenges exist. I am a single parent and with no college fund account. So we hope to apply for scholarships too. but do not want to depend solely on student loans."
Low social and cultural capital	49	Teens are disadvantaged due to conflict in/lack of social networks or other environmental factors such as family structure and issues related to race, ethnicity, language, and immigration.	"To understand the system. I wasn't born here, neither I went to college here so don't know much."
Teens' academic hardship	38	Teens have a learning disability or have difficulty succeeding in their academic endeavors.	"Mainly her learning disability makes it harder for her to excel in classes therefore having trouble maintaining a good GPA or also scoring well enough on the SAT. Everything is based upon all the high grades and scores."
Teens' socio-emotional experiences	62	Teens lack motivation, emotional support, and/or experience bullying and peer pressure.	"He is not very motivated. I feel like I am always pushing him to make a decision."
Teens' difficulty with goal-setting	29	Teens are unsure of their plans for after high school or have plans that contradict with their caregivers' hopes for the teens' futures.	". . .she is thinking about Cosmetology School, I will support her but I am trying for her to attend a community college first and see if she will then be inspired to continue and receive a Bachelor's degree."

> My son has anxiety and OCD. He is a worrier. He is under the care of a therapist and is getting a psych eval next month. He is introverted and doesn't enjoy being around people, particularly those he does not know. However, when he is around people [he] is very caring and [has a] kind heart.

Lastly, answers to the more specific prompt about challenges that parents faced when supporting their teens' post-high school plans, the kappa coefficients were .77, .67, .64, .64, and .52 for *low financial capital, teens' academic hardship, teens' difficulty with goal setting, low social and cultural capital*, and *teens' social and emotional challenges*, respectively. The least common was difficulty with goal setting (29/194, 15%), and the most common challenge reported by parents regarding post-high school plans was low financial capital (69/194, 36%). Responses revealed that students planned to cover their expenses by working and relying on their parents, scholarships, grants, and loans. One parent told us:

> She will be the first in our family to go to college. She was accepted at her #1 school. . . . However even with the federal Pell grant the tuition is so high. She has been working very hard applying to get scholarships but nothing so far. We are praying very hard it all works out for her. I am very proud of her hard work!

In addition, low social and cultural capital was mentioned in 25% of responses (49/194). For example, one parent said, "The challenges I have faced are mostly about not knowing what to do. Neither my daughter nor I knew what we were doing in the beginning process of applying for schools, so we had to learn together. Finding the time to do this is difficult." Furthermore, subthemes were coded under each theme when possible (see Appendices A, B, C, D, E, and F, which correspond to Tables 1, 2, 3, 4, 5, and 6, respectively).

Quantitative Results

Across the models estimated, organizational skills emerged as a salient factor (see Figure 1). Here, we list unstandardized coefficients with standard errors for paths A and B. In terms of path A predicting self-regulation from risk, cumulative individual risk was negatively related to cognitive control (b=-.10, SE=.02, $p<.001$) and organizational skills (b=-.08, SE=.02, $p<.001$). However, cumulative individual risk was positively associated with impulsivity (b=.08, SE=.02, $p<.001$). Cumulative contextual risk did not predict self-regulation.

Regarding path B, there were positive links from organizational skills to teens' expectation for attending a 4-year college (b=1.84, SE=.70, $p<.01$).

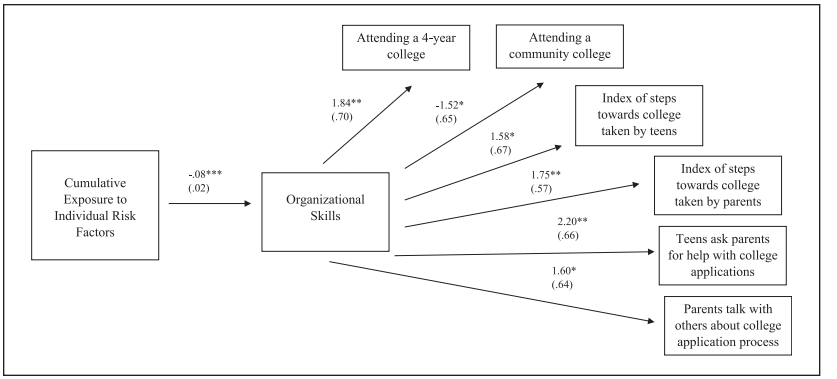

Figure 1. Linkages among cumulative risk, organizational skills, and college preparedness.

Note. Indirect effects were significant for the index on action steps taken by parents ($b = -.14$, $SE = .06$, $p < .05$, 95% CI [−.29, .02]), for attending a 4-year college ($b = -.14$, $SE = .07$, $p < .05$, 95% CI [−.32, .03]), teens asking parents for help with college applications ($b = -.17$, $SE = .07$, $p < .05$, 95% CI [−.36, .01]), and parents talking with others about the college application process ($b = -.13$, $SE = .06$, $p < .05$, 95% CI [−.29, .03]). Findings were significant net of impulsivity, cognitive control, and background variables.

*$p < .05$. **$p < .01$. ***$p < .001$.

However, there was a negative relation between organizational skills and teens' expectations for attending a community college ($b = -1.52$, $SE = .65$, $p < .05$). Furthermore, there were positive linkages from organizational skills to the indexes on steps toward college taken by teens ($b = 1.58$, $SE = .67$; $p < .05$) and by parents ($b = 1.75$, $SE = .57$; $p < .01$). Organizational skills were also related to teens asking parents for help with college applications ($b = 2.20$, $SE = .66$, $p < .01$) and to parents talking with others about the college application process ($b = 1.60$, $SE = .64$, $p < .05$). Impulsivity was negatively linked to teens deciding where to send college applications ($b = -2.16$, $SE = 1.05$, $p < .05$), but impulsivity was positively related to parents taking teens on college visits ($b = .2.02$, $SE = .97$, $p < .05$).

Third, below are unstandardized coefficients, standard errors, and the upper and lower confidence limits for indirect effects that were significant at conventional ($p < .05$) levels. Organizational skills significantly mediated linkages from cumulative exposure to individual risks to the index on action steps taken by parents ($b = -.14$, $SE = .06$, $p < .05$, 95% CI [−.29, .02]). Furthermore, organizational skills emerged as a significant mediator of the relation from cumulative individual risks to teens' expectations to attend at a 4-year college ($b = -.14$, $SE = .07$, $p < .05$, 95% CI [−.32, .03]), to teens

asking parents for help with college applications ($b = -.17$, $SE = .07$, $p < .05$, 95% CI [−.36, .01]), and to parents talking with others about the college application process ($b = -.13$, $SE = .06$, $p < .05$, 95% CI [−.29, .03]). Also, there were several results for path B and several findings for indirect effects that were marginally significant.

Discussion

The current study deepens understanding of the assets and risks present in the lives of low-income, minoritized families as teens prepare for college. Descriptive statistics suggest that adolescents in the present investigation resemble first generation college students, who tend to live in low-income households and to represent Black and Latino families (Bui, 2002). We expand the existing literature in two main ways. First, we detected a wide range of aspirations and supports for teens in low-income, Black and Latino families who tended to face a variety of challenges. Second, we identified a specific dimension of self-regulation—organizational skills—as a protective factor for teens' college preparedness and as a mediator of the linkage between cumulative risk and college preparedness.

Parents' Aspirations and Support for Teens

Starting with our qualitative analyses, findings suggest that parents' overall aspirations for their teens' futures included personal growth (e.g., showing responsibility) and general success (e.g., "accomplish all the things she set out to do"). In contrast, parents' more specific hopes for their adolescents in the next 5 years centered on academic and career success. This latter finding is consistent with the existing literature (Cooper, 2011; Gándara et al., 2006). However, we find that educational aspirations are more specifically held for teens' near future.

Our results further extend past research by capturing aspirations that reflect aspects of adolescent development (e.g., showing responsibility) and psychological functioning (e.g., life satisfaction) that are not necessarily tied to schooling (Cooper, 2011). These findings are congruent with developmental models that take a life course perspective and broadly conceptualize well-being in ways that include life satisfaction and personal growth (Suárez-Orozco et al., 2018). To our knowledge, such themes have not been studied extensively in qualitative research on the college preparedness of Black and Latino adolescents. Still, an exception is that Denner and Guzmán (2006) found that Latina teens set goals for life satisfaction as part of developing the ability to take initiative.

Also, our findings on parents providing a wide range of supports (e.g., regarding current schoolwork, future education plans, financial matters, socioemotional issues) are aligned with existing college readiness programs and efforts to reduce systemic and institutional inequities in college access. This is consistent with existing research on ways that minoritized parents support teens' educational plans (Chlup et al., 2018; Cooper, 2011; Leonard, 2013). For example, the availability of emotional support from family and others, such as friends, mentors, and faculty, has been found to foster college success (Nichols & Islas, 2016), benefit adolescents' self-regulation (Deutsch et al., 2017), and improve college students' mental health (Azmitia et al., 2013). The different forms of assistance that parents offered to their teens is striking given the multiple challenges families described. Still, there was heterogeneity, where not all parents in the present investigation spoke about support. Also, themes regarding adolescents having difficulty with goal setting emerged among parents and teens. They sometimes disagreed about post-high school plans, which might reflect parents' support sometimes feeling like "pushing" (Nichols & Islas, 2016).

Notably, socioemotional factors emerged as the most common theme when asking parents about the supports that they provided to their adolescents while making post-high school plans, and when asking parents and teens about the challenges that they faced. Our broader set of results also highlighted the importance of social relationships and sociocultural awareness in the lived realities of minoritized teens. In addition, for some parents, aspirations for their teens' personal growth involved making contributions to society and giving back to the community. Future research on college preparedness might extend college readiness frameworks to include social and emotional learning (SEL) which recognizes the multi-faceted nature of social and emotional competence (SECs), where aspects include social awareness, relationship skills, responsible decision making, self-management, and self-awareness (Durlak et al., 2015). In particular, new studies on the college preparedness of minoritized adolescents might incorporate the "transformative SEL" framework which involves a commitment to social change and views the development of SECs as vital to collaborative action against injustice (Jagers et al., 2019). Knight and Marciano (2013) have developed culturally responsive college readiness programming that centers an appreciation for and understanding of students' sociocultural backgrounds. Expansion of such programs might be guided by the "transformative SEL" framework.

The Vulnerability and Protective Nature of Teens' Self-Regulation

Having reviewed our qualitative findings, we next shift to our quantitative analyses, which focused on adolescents' self-regulation. Our findings on

cumulative individual risk, organizational skills, and college preparedness extend past studies on cumulative risk and children's executive function to adolescence and specifically to cognitive control, organizational skills, and impulsive behavior (Wade et al., 2018). Furthermore, guided by the qualitative component of our study, our quantitative models included both contextual and individual risk because parents focused on both types of factors. Notably, we found that teens' cumulative experience with academic hardship, socioemotional challenges, and difficulty with goal-setting particularly jeopardized self-regulation, which in turn predicted college preparedness.

Also, our results are congruent with past studies on academic performance (Barriga et al., 2002), where executive function has been a stronger predictor of college readiness than impulsivity. By pinpointing the contribution of organizational skills, the findings noted here add to prior research on the protective roles of overall self-regulation in educational attainment (McClelland et al., 2013) and of broader social and emotional skills in college students' academic achievement and retention (Komarraju et al., 2013; Robbins et al., 2004). Our mediation findings extend Kliewer et al.'s (2017) study on emotion dysregulation and behavior problems to executive function and college preparedness.

Interestingly, adolescents with greater organizational skills were *less* likely to expect to attend community college. Although college students at 2- versus 4-year institutions are similar in terms of GPA and ACT scores (Coca et al., 2017), students at community colleges tend to reflect racial and ethnic minoritized backgrounds, have lower college debt, and are more likely to graduate, compared to four-year university students (Ma & Baum, 2016). Students who transfer from 2- to 4-year colleges tend to acquire "transfer student capital" from family, peers, high school counselors, and community college advisors, who help students foster self-efficacy (Maliszewski Lukszo & Hayes, 2020). Notably, in that past study, students were asked ". . .what resources did you use to plan your transfer process," and the authors found that high school counselors and community college advisors played key roles in helping students plan and organize transfer information. Next steps in research should include examining how assistance with planning and organization may help foster students' self-efficacy.

An exception to the overall pattern of findings above is that teens who displayed *more* impulsive behavior were more likely to attend college visits with their parents. Interestingly, positive risks have been conceptualized as benefiting adolescents' well-being, rather than threatening teens' lives (Ravert & Gomez-Scott, 2015). In the context of living in an under-resourced community, visiting a college campus may be considered as taking a positive risk (DeLuca et al., 2016). Future research on positive risk taking should consider how the meaning of risk may differ across socioeconomic and sociocultural contexts.

The implications of our findings for programs and research should be considered within the context of the limitations of the present investigation. A wide variety of mediators that include social processes, such as interactions with mentors and within networks, should be tested in the future. New research on teens' steps toward college and decision-making regarding college should also draw more data from teens themselves, high school counselors, and other family members. Additionally, upcoming investigations should examine whether our findings hold in larger samples with students from across the income spectrum and from other racial and ethnic groups. Lastly, future studies should include multiple waves and conduct in-depth interviews, which could shed light on cultural differences across racial and ethnic groups.

Regardless, our results contribute to the past literature on self-regulation and college preparedness among Black and Latino adolescents in novel ways. We found that teens' organizational skills predicted their college preparedness, net of impulsive behavior, cognitive control, and background characteristics. Furthermore, adolescents' organizational skills were compromised by the accumulation of academic hardship, social and emotional issues, and difficulties with goal setting. Notably, these individual risk factors were based on voices captured using qualitative methods, which also highlighted a variety of ways that social and emotional matters played roles in minoritized adolescents' college preparedness. Future research on college preparedness among Black and Latino teens might focus on various types of both self-regulation and social emotional competence. Taking a mixed methods approach in such endeavors may be especially informative for college readiness initiatives aimed at further reducing racial and ethnic gaps in higher education.

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ORCID iDs

Christine Pajunar Li-Grining https://orcid.org/0000-0002-1303-5478
Amanda L. Roy https://orcid.org/0000-0001-8652-841X

Supplemental Material

Supplemental material for this article is available online.

References

Arnold, K. D., Lu, E. C., & Armstrong, K. J. (2012). *The ecology of college readiness* (Association for the Study of Higher Education (ASHE) Higher Education Report, Vol. 38, Issue 5). Wiley.

Azmitia, M., Syed, M., & Radmacher, K. (2013). Finding your niche: Identity and emotional support in emerging adults' adjustment to the transition to college. *Journal of Research on Adolescence*, *23*(4), 744–761. https://doi.org/10.1111/jora.12037

Barriga, A. Q., Doran, J. W., Newell, S. B., Morrison, E. M., Barbetti, V., & Dean Robbins, B. (2002). Relationships between problem behaviors and academic achievement in adolescents: The unique role of attention problems. *Journal of Emotional and Behavioral Disorders*, *10*(4), 233–240. https://doi.org/10.1177/10634266020100040501

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of Youth and Adolescence*, *45*(6), 1053–1064.

Blair, C., & Raver, C. C. (2016). Poverty, stress, and brain development: New directions for prevention and intervention. *Academic Pediatrics*, *16*(Suppl. 3), S30–S36. https://doi.org/10.1016/j.acap.2016.01.010

Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bui, K. V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, *36*(1), 3–12.

Chlup, D. T., Gonzalez, E. M., Gonzalez, J. E., Aldape, H. F., Guerra, M., Lagunas, B., Yu, Q., Manzano, H., & Zorn, D. R. (2018). Nuestros Hijos van a la Universidad [Our Sons and daughters are going to College]: Latina parents' perceptions and experiences related to building college readiness, college knowledge, and college access for their children—A qualitative analysis. *Journal of Hispanic Higher Education*, *17*(1), 20–40. https://doi.org/10.1177/1538192716652501

Coca, V. M., Nagaoka, J., & Seeskin, A. (2017). *Patterns of two-year and four-year college enrollment among Chicago Public Schools graduates*. University of Chicago Consortium on School Research.

Conley, D. T. (2010). *College and career ready: Helping all students succeed beyond high school*. Jossey-Bass.

Cooper, C. R. (2011). *Bridging multiple worlds: Cultures, identities, and pathways to college*. Oxford University Press.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. SAGE Publications.

Crook, S. R., & Evans, G. W. (2014). The role of planning skills in the income-achievement gap. *Child Development*, *85*(2), 405–411. https://doi.org/10.1111/cdev.12129

De La Rosa, M., & Tierney, W. (2014). *Breaking through the barriers to college: Empowering low-income communities, schools, and families, for college opportunity and student financial aid*. University of Southern California Center for Higher Education Policy Analysis.

DeLuca, S., Clampet-Lundquist, S., & Edin, K. (2016). *Coming of age in the other America*. Russell SAGE Foundation.

Denner, J., & Guzmán, B. L. (2006). *Latina girls: Voices of adolescent strength in the United States*. New York University Press.

Deutsch, N. L., Reitz-Krueger, C. L., Henneberger, A. K., Futch Ehrlich, V. A., & Lawrence, E. C. (2017). 'It gave me ways to solve problems and ways to talk to people': Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research*, *32*(3), 291–322. https://doi.org/10.1177/0743558416630813

Diemer, M. A., Marchand, A. D., & Mistry, R. S. (2020). Charting how wealth shapes educational pathways from childhood to early adulthood: A developmental process model. *Journal of Youth and Adolescence*, *49*, 1073–1091. https://doi.org/10.1007/s10964-019-01162-4

Durlak, J. A., Weissberg, R. P., Domitrovich, C. E., & Gullotta, T. P. (Eds.). (2015). *Handbook of social and emotional learning: Research and practice*. Guilford.

Eccles, J. S., Vida, M. N., & Barber, B. (2004). The relation of early adolescents' college plans and both academic ability and task-value beliefs to subsequent college enrollment. *The Journal of Early Adolescence*, *24*(1), 63–77. https://doi.org/10.1177/0272431603260919

Enders, C., & Bandalos, D. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling A Multidisciplinary Journal*, *8*, 430–457. https://doi.org/10.1207/S15328007SEM0803_5

Evans, G. W., Li, D., & Whipple, S. S. (2013). Cumulative risk and child development. *Psychological Bulletin*, *139*(6), 1342–1396. https://doi.org/10.1037/a0031808

Farley, J. P., & Kim-Spoon, J. (2017). Parenting and adolescent self-regulation mediate between family socioeconomic status and adolescent adjustment. *The Journal of Early Adolescence*, *37*(4), 502–524. https://doi.org/10.1177/0272431615611253

Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. University of Chicago Consortium on Chicago School Research.

Fleiss, J. L., Levin, B., & Paik, M. C. (2003). *Statistical methods for rates and properties* (3rd ed.). Wiley-Interscience.

Fontenot, K., Semega, J., & Kollar, M. (2018). *Income and poverty in the United States: 2017* (U.S. Census Bureau, Current Population Reports, P60-263). U.S. Government Printing Office.

Gándara, P., Orfield, G., & Horn, C. L. (2006). *Expanding opportunity in higher education: Leveraging promise*. SUNY Press.

Gioia, G. A., Isquith, P. K., Guy, S. C., & Kenworthy, L. (2000). Test review behavior rating inventory of executive function. *Child Neuropsychology*, *6*(3), 235–238. https://doi.org/10.1076/chin.6.3.235.3152

Goldrick-Rab, S., Kelchen, R., Harris, D. N., & Benson, J. (2016). Reducing income inequality in educational attainment: Experimental evidence on the impact of financial aid on college completion. *American Journal of Sociology*, *121*(6), 1762–1817.

Hill, N. E., & Wang, M.-T. (2015). From middle school to college: Developing aspirations, promoting engagement, and indirect pathways from parenting to post high school enrollment. *Developmental Psychology*, *51*(2), 224–235. https://doi.org/10.1037/a0038367

Humphries, M. L., & Iruka, I. U. (2017). Ring the alarm: Moving from educational gaps to educational opportunities for black students. In I. U. Uruka, S. M. Curenton, & T. R. Durden (Eds.), *African American children in early childhood education: Making the case for policy investments in families, schools, and communities* (pp. 15–34). Emerald Publishing Limited.

Hwang, N., & Domina, T. (2017). The links between youth employment and educational attainment across racial groups. *Journal of Research on Adolescence*, *27*(2), 312–327.

Isik, U., Tahir, O. E., Meeter, M., Heymans, M. W., Jansma, E. P., Croiset, G., & Kusurkar, R. A. (2018). Factors influencing academic motivation of ethnic minority students: A review. *Sage Open*, *8*(2), 1–23. https://doi.org/10.1177/2158244018785412

Jagers, R. J., Rivas-Drake, D., & Williams, B. (2019). Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence. *Educational Psychologist*, *54*(3), 162–184. https://doi.org/10.1080/00461520.2019.1623032

January, S. A., Mason, W. A., Savolainen, J., Solomon, S., Chmelka, M. B., Miettunen, J., Veijola, J., Moilanen, I., Taanila, A., & Järvelin, M. R. (2017). Longitudinal pathways from cumulative contextual risk at birth to school functioning in adolescence: Analysis of mediation effects and gender moderation. *Journal of Youth and Adolescence*, *46*(1), 180–196. https://doi.org/10.1007/s10964-016-0560-9

Johansson, H., & Höjer, I. (2012). Education for disadvantaged groups — Structural and individual challenges. *Children and Youth Services Review*, *34*(6), 1135–1142.

Keels, M. (2013). Getting them enrolled is only half the battle: College success as a function of race or ethnicity, gender, and class. *American Journal of Orthopsychiatry*, *83*(2–3), 310–322. https://doi.org/10.1111/ajop.12033

Kliewer, W., Pillay, B. J., Swain, K., Rawatlal, N., Borre, A., Naidu, T., Pillay, L., Govender, T., Geils, C., Jäggi, L., Drazdowski, T. K., Wright, A. W., & Vawda, N. (2017). Cumulative risk, emotion dysregulation, and adjustment in South African youth. *Journal of Child and Family Studies*, *26*(7), 1768–1779. https://doi.org/10.1007/s10826-017-0708-6

Knight, M. G., & Marciano, J. E. (2013). *College-ready: Preparing Black and Latina/o youth for higher education—A culturally relevant approach*. Teachers College Press.

Komarraju, M., Ramsey, A., & Rinella, V. (2013). Cognitive and non-cognitive predictors of college readiness and performance: Role of academic discipline. *Learning and Individual Differences*, *24*, 103–109. https://doi.org/10.1016/j.lindif.2012.12.007

Leonard, J. (2013). Maximizing college readiness for all through parental support. *The School Community Journal*, *23*(1), 183–202.

Li-Grining, C. P. (2007). Effortful control among low-income preschoolers in three cities: Stability, change, and individual differences. *Developmental Psychology*, *43*(1), 208–221. https://doi.org/10.1037/0012-1649.43.1.208

Ma, J., & Baum, S. (2016). *Trends in community colleges: Enrollment, prices, student debt, and completion*. College Board Research: Research Brief. College Board.

Maliszewski Lukszo, C., & Hayes, S. (2020). Facilitating transfer student success: Exploring sources of transfer student capital. *Community College Review*, *48*(1), 31–54. https://doi.org/10.1177/0091552119876017

McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development*, *47*(5), 534–549.

McClelland, M. M., Acock, A. C., Piccinin, A., Rhea, S. A., & Stallings, M. C. (2013). Relations between preschool attention span-persistence and age 25 educational outcomes. *Early Childhood Research Quarterly*, *28*, 314–324. https://doi.org/10.1016/j.ecresq.2012.07.008

McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., & Barmer, A. (2019). *The condition of education 2019* (NCES 2019-144 ed.). U.S. Department of Education, National Center for Education Statistics.

Nagaoka, J., Farrington, C., Roderick, M., Allensworth, E., Keyes, T., Johnson, D., & Beechum, N. (2013). Readiness for college: The role of noncognitive factors and context. *Voices in Urban Education*, *10*, 45–52.

Nesbitt, K. T., Baker-Ward, L., & Willoughby, M. T. (2013). Executive function mediates socio-economic and racial differences in early academic achievement. *Early Childhood Research Quarterly*, *28*(4), 774–783. https://doi.org/10.1016/j.ecresq.2013.07.005

Network for College Success. (2017). *Postsecondary success toolkit*. University of Chicago.

Nichols, L., & Islas, Á. (2016). Pushing and pulling emerging adults through college: College generational status and the influence of parents and others in the first year. *Journal of Adolescent Research*, *31*(1), 59–95. https://doi.org/10.1177/0743558415586255

Nigg, J. T. (2017). Annual research review: On the relations among self-regulation, self-control, executive functioning, effortful control, cognitive control, impulsivity, risk-taking, and inhibition for developmental psychopathology. *Journal of Child Psychology and Psychiatry*, *58*(4), 361–383. https://doi.org/10.1111/jcpp.12675

Patton, J. H., Stanford, M. S., & Barratt, E. S. (1995). Factor structure of the Barratt impulsiveness scale. *Journal of Clinical Psychology*, *51*(6), 768–774. https://doi.org/10.1002/1097-4679(199511)51:6<768::aid-jclp2270510607>3.0.co;2-1

Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, *6*, 77–98. https://doi.org/10.1080/19312458.2012.679848

Raver, C. C., Jones, S. M., Li-Grining, C., Zhai, F., Bub, K., & Pressler, E. (2011). CSRP's impact on low-income preschoolers' pre-academic skills: Self-regulation as a mediating mechanism. *Child Development*, *82*(1), 362–378. https://doi.org/10.1111/j.1467-8624.2010.01561.x

Ravert, R. D., & Gomez-Scott, J. (2015). Why take risks? Four good reasons according to emerging adult college students. *Journal of Adolescent Research*, *30*(5), 565–585. https://doi.org/10.1177/0743558414547099

Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-anal-

ysis. *Psychological Bulletin*, *130*(2), 261–288. https://doi.org/10.1037/0033-2909.130.2.261

Samuels, W. E., Tournaki, N., Blackman, S., & Zilinski, C. (2016). Executive functioning predicts academic achievement in middle school: A four-year longitudinal study. *Educational Research eJournal*, *109*(5), 478–490. https://doi.org/10.1080/00220671.2014.979913

Steinberg, L., & Chein, J. M. (2015). Multiple accounts of adolescent impulsivity. *Proceedings of the National Academy of Sciences of the United States of America*, *112*(29), 8807–8808. https://doi.org/10.1073/pnas.1509732112

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. SAGE Publications.

Strayhorn, T. L. (2014). Modeling the determinants of college readiness for historically underrepresented students at 4-year colleges and universities: A national investigation. *American Behavioral Scientist*, *58*(8), 972–993. https://doi.org/10.1177/0002764213515230

Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist*, *73*(6), 781–796.

Suizzo, M.-A., Jackson, K. M., Pahlke, E., McClain, S., Marroquin, Y., Blondeau, L. A., & Hong, K. (2016). Parents' school satisfaction and academic socialization predict adolescents' autonomous motivation: A mixed-method study of low-income ethnic minority families. *Journal of Adolescent Research*, *31*(3), 343–374. https://doi.org/10.1177/0743558415605617

Syed, M., & Azmitia, M. (2008). A narrative approach to ethnic identity in emerging adulthood: Bringing life to the identity status model. *Developmental Psychology*, *44*(4), 1012–1027. https://doi.org/10.1037/0012-1649.44.4.1012

Syed, M., Juan, M. J. D., & Juang, L. P. (2011). Might the survey be the intervention? Participating in ethnicity-related research as a consciousness-raising experience. *Identity: An International Journal of Theory and Research*, *11*(4), 289–310. https://doi.org/10.1080/15283488.2011.613581

Tierney, W., & Duncheon, J. (2015). *The problem of college readiness*. SUNY Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wade, M., Madigan, S., Plamondon, A., Rodrigues, M., Browne, D., & Jenkins, J. M. (2018). Cumulative psychosocial risk, parental socialization, and child cognitive functioning: A longitudinal cascade model. *Developmental Psychology*, *54*(6), 1038–1050. https://doi.org/10.1037/dev0000493

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, *8*(1), 69–91.

Author Biographies

Christine Pajunar Li-Grining holds a PhD in human development and social policy. Her research interests include risk, resilience, self-regulation, and education, as well as socioeconomic and sociocultural contexts.

Amanda L. Roy received her Ph.D. in community psychology with emphases in developmental psychology and quantitative methods. Her research interests include neighborhood factors, poverty, equity, and the health and well-being of adolescents, including self-regulation.

Jinyoung Koh is an educational psychologist. Her research interests include college success, cultural diversity, and sociocultural contexts.

Amanda Boyer is a graduate student in school psychology, **Maria Radulescu** is a post-baccalaureate research assistant, and **Zahra Naqi** is a doctoral student in developmental psychology. Her research interests include social and emotional development, self-regulation, and culture.