

Original Article

Diminished Protective Effects of Household Income on Internalizing Symptoms among African American than European American Pre-Adolescents

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Abstract

Aim: To investigate the differential role of race on the effect of household income on pre-adolescents' internalizing symptoms in a national sample of U.S. pre-adolescents. **Methods:** This is a cross-sectional study that used data from the Adolescent Brain Cognitive Development (ABCD) study. Wave 1 ABCD data included 5,913 adolescents between ages 9 and 10 years old. The independent variable was household income. The primary outcome was internalizing symptoms measured by the teacher report of the Brief Problem Monitor (BPM) scale. **Results:** Overall, high household income was associated with lower levels of pre-adolescents internalizing symptoms. Race showed statistically significant interaction with household income on pre-adolescents' internalizing symptoms, controlling for all confounders, indicating weaker protective effect of high household income on internalizing symptoms for African American than European pre-adolescents. **Conclusion:** High household income is a more salient protective factor against internalizing symptoms of socially privileged European American pre-adolescents than of historically marginalized African Americans pre-adolescents. Elimination of internalizing behavioral gaps across racial groups requires more than equalizing socioeconomic status. Future research should study the moderating role of institutional and structural racism experienced by African American families across all income levels. Such research may explain why pre-adolescent African Americans with high household income remain at high risk of internalizing symptoms.

Keywords

race, ethnicity, socioeconomic status, pre-adolescents, behavioral problems, internalizing symptoms

1. Introduction

Race and socioeconomic position (SEP) are two overlapping social determinants of adolescents' behaviors. Compared to non-Hispanic European American, ethnic minority adolescents, particularly African Americans, are at an increased risk of emotional and behavioral problems such as depression, anxiety, substance use, aggression, conduct disorder, and bullying (McLaughlin, Hilt, & Nolen-Hoeksema, 2007). African American adolescents report higher internalizing symptoms compared to European American adolescents (McLaughlin et al., 2007). Some examples of the behavioral risk of African American compared to European American adolescents include increased risk of substance use (Wallace et al., 2009), aggressive behaviors (McLaughlin et al., 2007), conduct disorders (McLaughlin et al., 2007), and poor academic achievement and school drop-out (Bumpus, Umeh, & Harris).

As emotional and behavioral problems operate as a gateway to future economic and health problems later in life (Burchinal et al., 2011; Cohen & Sherman, 2005; Gorey, 2009; Hair, Hanson, Wolfe, & Pollak, 2015), there has been an interest in understanding the joint effects of race and SEP on shaping inequalities in adolescents' internalizing symptoms. Such information on the complexities of race and SEP's effects may enable us to more effectively eliminate or at least reduce subsequent inequalities later in life by reducing adolescents' behavioral inequalities early in life (Burchinal et al., 2011; Cohen & Sherman, 2005; Gorey, 2009; Hair et al., 2015).

There is a very well-established literature on the effects of SEP on adolescents' emotional and behavioral problems (Ahmad, Zulaily, Shahril, Syed Abdullah, & Ahmed, 2018; Merz, Tottenham, & Noble, 2018; Valencia, Tran, Lim, Choi, & Oh, 2019). Among various SEP indicators are the household income, which is one of the most influential social determinants of adolescents' development, behaviors, and health (Alvarado, 2018; Barreto, de Figueiredo, & Giatti, 2013; Hemovich, Lac, & Crano, 2011; Schreier & Chen, 2013). High-income parents report higher levels of parental involvement, support, engagement, and monitoring, all of which have major protective effects on a wide range of adolescents' behavioral risk outcomes (Bouthoorn et al., 2014; Christensen, Schieve, Devine, & Drews-Botsch, 2014; Karlsson, De Neve, & Subramanian, 2018; Madhushanthi, Wimalasekera, Goonewardena, Amarasekara, & Lenora, 2018; Poh et al., 2019). Household income is a robust predictor of a wide range of positive adolescents' behavioral outcomes (Alvarado, 2018; Barreto et al., 2013; Hemovich et al., 2011; Schreier & Chen, 2013). Adolescents from high-income families are less likely to experience various type of stress as well as associated emotional, behavioral, and health problems (Harnett et al., 2019; Schulz et al., 2012; Yelin, Trupin, Bunde, & Yazdany, 2019). In fact, household income may partially explain some of the existing social inequalities and gaps in adolescents' behavioral outcomes between marginalized and privileged groups (Bell, Sacks, Thomas

Tobin, & Thorpe, 2020; Fuentes, Hart-Johnson, & Green, 2007; Kaufman, Cooper, & McGee, 1997; Samuel, Roth, Schwartz, Thorpe, & Glass, 2018). If household income is partially responsible for the existing gaps, then minimum wage policies and earned income tax credit should be regarded as a primary strategy for addressing the social inequalities that we observe between social groups (D. R. Williams, 1999; D. R. Williams, Costa, Odunlami, & Mohammed, 2008).

However, SES indicators such as household income may also operate as a source, rather than a solution to the existing social and behavioral inequalities across diverse demographic groups (Assari, 2019b; Assari, 2020a, 2020b; Assari, Preiser, & Kelly, 2018). As shown by the Marginalization-related Diminished Returns (MDRs) theory (Assari, 2017; Assari, 2018a), a wide range of SEP indicators (Assari, Farokhnia, & Mistry, 2019) particularly household income generate unequal outcomes for population subgroups (Assari, 2018c; Assari, 2018b; Assari, 2018d). As shown by the MDRs (Assari, 2017; Assari, 2018a), any type of social marginalization may reduce SEP indicators' impact on health outcomes. As such, adolescents who are a member of a disadvantaged group show weaker effects of household income on emotional outcomes. This means we observe weaker effects of household income on African American adolescents' than European American adolescents' behavioral and health problems (Assari, Caldwell, & Bazargan, 2019; Assari, M. Farokhnia, et al., 2019; Assari & Mistry, 2018; Assari, M. R., Caldwell, & Bazargan, 2020; Shervin & Ritesh, 2019).

These MDRs are societal as African American and other marginalized groups face more difficulties leveraging the resources and working with social systems to secure measurable and desirable behavioral outcomes. Thus, the availability of SEP indicators does not secure tangible outcomes (Assari, 2017, 2018a, 2018d; Assari, Caldwell, & Mincy, 2018a; Assari, Caldwell, & Zimmerman, 2018; Assari & Hani, 2018). These patterns are well documented for all marginalized groups, namely African American (Assari, 2017; Assari, 2018a; Assari, Caldwell, & Mincy, 2018a; Assari, Caldwell, & Mincy, 2018b; Assari, Thomas, Caldwell, & Mincy, 2018), Hispanic (Assari, 2018e; Assari, 2019; Assari, M. Farokhnia, et al., 2019; Assari & Ritesh, 2019), Asian American (Assari, Boyce, Bazargan, & Caldwell, 2020), Native American (Assari & Bazargan, 2019b), lesbian, gay, and bisexual (LGB) (Assari, 2019a), immigrant (Assari, 2020b), and even marginalized European American (Assari, Boyce, Bazargan, Caldwell, & Zimmerman, 2020) groups. Thus, any deviation from social privilege may reduce the health effects of SEP indicators.

1.1 Aims

In this investigation, we compared African American and European American pre-adolescents for the effects of household income on internalizing symptoms. While high household income may be associated with fewer internalizing symptoms, this protection is expected to be weaker for African American than European American pre-adolescents. The second hypothesis is based on an extensive literature generated by Assari on various SEP resources and behavioral and health outcomes across age groups (Assari, 2017; Assari, 2018a).

2. Materials and Methods

This cross-sectional study was a secondary analysis of existing data. We borrowed data from the Adolescent Brain Cognitive Development (ABCD) study (Alcohol Research: Current Reviews Editorial, 2018; Casey et al., 2018; Karcher, O'Brien, Kandala, & Barch, 2019; Lisdahl et al., 2018; Luciana et al., 2018). The ABCD is a national adolescents' brain development study with large diversity based on race, ethnicity, sex, and SEP (Alcohol Research: Current Reviews Editorial, 2018; Auchter et al., 2018).

Participants were recruited from multiple cities across various states in the US. This sample was enrolled through the US school system, both public and private schools. The recruitment catchment area of the ABCD, which was composed of 21 participating sites, encompasses over 20% of the entire United States population of 9-10-year-old pre-adolescents. The ABCD applied a carefully designed sampling and recruitment process across various sites, described elsewhere (ABCD; Alcohol Research: Current Reviews Editorial, 2018; Asaad & Bjarkam, 2019; Auchter et al., 2018; Beauchaine, 2020; Buscemi et al., 2018; Casey et al., 2018; Dick et al., 2019a, 2019b, 2019c; Exuperio et al., 2019; Feldstein Ewing et al., 2018; Fine et al., 2019; Gray, Schvey, & Tanofsky-Kraff, 2019; Hoffman, Howlett, Breslin, & Dowling, 2018; Lisdahl et al., 2018; Lynch et al., 2019; Michelini et al., 2019; Werneck et al., 2018), to ensure that the sample is random and representative. Such local randomization efforts yielded a final overall ABCD sample that is a close approximation of national sociodemographic factors. These sociodemographic factors include race and ethnicity, age, sex, SEP, and urbanicity. The SEP target in the ABCD has two sources: 1) the American Community Survey (ACS) and 2) annual 3rd and 4th-grade school enrollment. A full description of the ABCD sample and sampling is published here (Garavan et al., 2018). The first is a large-scale survey of approximately 3.5 million households conducted annually by the US Census Bureau. The second data are maintained by the National Center for Education Statistics (NCES), affiliated with the US Department of Education.

2.1 Analytical Sample

This study included 5913, 9-10 years-old American pre-adolescents who had data on the Brief Problem Monitor (BPM) scores (teacher report), race, sex, ethnicity, parental education, household income, and marital status of the family. Pre-adolescents from any racial or ethnic background were included in our analysis.

2.2 Outcomes

Internalizing symptoms. The BPM scale (Achenbach, McConaughy, Ivanova, & Rescorla, 2011; Daniels, Volpe, Fabiano, & Briesch, 2017; Penelo, De la Osa, Navarro, Domènech, & Ezpeleta, 2017; Piper, Gray, Raber, & Birkett, 2014) was used to measure the internalizing symptoms of the pre-adolescents. The BPM can be implemented by the child, parent, or teacher, and is an abbreviated form of the Child Behavior Checklist (CBCL) (Bilenberg, 1999; Bordin et al., 2013; Diler et al., 2009; Dominguez-Lara, 2017; Kaat et al., 2019; Kristensen, Henriksen, & Bilenberg, 2010; Papachristou et al., 2013), developed by the Achenbach System of Empirically Based Assessment (ASEBA). In the

current study, teachers reported the child internalizing symptoms. This short measure takes 1-2 minutes and provides a continuous score that reflects internalizing problems. The BPM scale is a useful screening tool for screening of pre-adolescents internalizing symptoms across settings. Items were 1) Feels worthless or inferior, 2) Too fearful or anxious, 3) Feels too guilty, 4) Self-conscious or easily embarrassed, 5) Unhappy, sad, or depressed, and 6) Worries. Responses were 0 = Not True (as far as you know); 1 = Somewhat True; 2 = Very True. Overall score ranged between 0 and 12, with a higher score indicating more internalizing symptoms (Achenbach et al., 2011; Daniels et al., 2017; Penelo et al., 2017; Piper et al., 2014)

2.3 Independent Variable

Household income. Household income was a nominal variable: Parents were asked, “What is your total combined highest income for the past 12 months? This should include income (before taxes and deductions) from all sources, wages, rent from properties, social security, disability and veteran’s benefits, unemployment benefits, workman”. Responses included less than \$50,000, \$50,000- \$100,000; and \$100,000 +.

2.4 Moderator

Race. Race, a self-identified variable, was a categorical variable: African Americans vs. European Americans (reference group).

2.5 Confounders

Child sex. Child sex was a categorical variable with 1 for males and 0 for females.

Age. Age was a dichotomous measure in months and was reported by parents.

Ethnicity. Ethnicity, a self-identified variable, was a categorical variable: Hispanics vs. non-Hispanics (reference category).

Marital status of the household. Family marital status was a dichotomous variable: married = 1 and not- married = 0.

Highest educational attainment of the parents. Parental education was asked using this item: “What is the highest grade or level of school you have completed or the highest degree you have received?” This variable was a five-level categorical variable: (1) less than high school (reference category), (2) high school / GED, (3) some college, (4) college degree, and (5) graduate+ school.

2.6 Data Analysis

The program Data Analysis and Exploration Portal (DEAP) was utilized for statistical analyses. DEAP is an online analytical tool and is based on the R program. To conduct our multivariable analysis, two mixed-effects model regressions were performed. We used mixed-effect models because observations were nested to individuals, which were nested to families, and then to sites. As a result, we needed to have a random effect and fixed terms to adjust for the sample’s clustering and non-independence. Internalizing symptom score was the outcome. Race was the moderator. Household income, as a categorical variable, was the predictor. All regression models were estimated in the overall/pooled sample. *Model 1*, the main effect model, was estimated in the absence of the household income by race

interaction term. *Model 2 (the interaction model)* added an interaction term between race and household income. These models controlled for ethnicity, age, sex, highest educational attainment of the parents, and family marital status. Regression coefficient (b), and p-values were reported for each parameter. Table 1 summarized the model formulas. We also tested several assumptions before we ran our models that are shown in Figure 1.

Table 1. R Model Formula

Model 1

$\text{bpmt_scr_internal_r} \sim \text{household.income.bl} + \text{race.4level} + \text{sex} + \text{high.educ.bl} + \text{married.bl} + \text{age} + \text{hisp}$

Random: $\sim(1|\text{abcd_site})+(1|\text{rel_family_id})+(1|\text{src_subject_id})$

Model 2

$\text{bpmt_scr_internal_r} \sim \text{household.income.bl} + \text{race.4level} + \text{sex} + \text{high.educ.bl} + \text{married.bl} + \text{age} + \text{hisp} + \text{household.income.bl} * \text{race.4level}$

Random: $\sim(1|\text{abcd_site})+(1|\text{rel_family_id})+(1|\text{src_subject_id})$

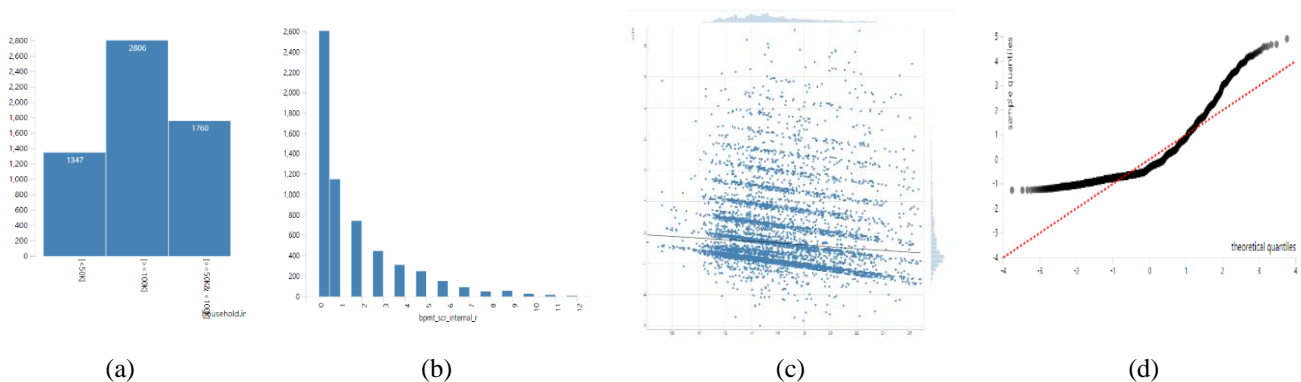


Figure 1. Test of Assumptions for Regression Model. a) Distribution of Our Predictor, b) Distribution of Our Outcome, c) Residuals, and d) Quantiles

2.7 Ethical Aspect

For this study, we used a fully de-identified data set, which is available to the public. As our paper was non-human subject research, this study was exempted from a full review of the Institutional Review Board (IRB). However, the protocol of the main study, the ABCD, was approved by the IRB at the University of California, San Diego (UCSD), and several other institutions. Participants signed consent or assent depending on their age (Auchter et al., 2018).

3. Results

3.1 Descriptives

Table 2 depicts the summary statistics of the pooled/overall sample. The current analysis was performed on 5913, 9-10 years old pre-adolescents from which 51.8% were males, and 48.2% were female. From all, 4216 pre-adolescents (71.3%) were European, 628 were African American (10.6%), 124 were Asian (2.1%), and 945 (16.0%) were other/mixed race.

Table 2. Baseline Data Overall and by Race (n = 5913)

	Level	All	European	African American	Asian	Other/Mixed	p
		5913	4216	628	124	945	
		n (%)	n (%)	n (%)	n (%)	n (%)	
Household Income	<50K	1347 (22.8)	591 (14.0)	396 (63.1)	12 (9.7)	348 (36.8)	< 0.001
	>=100K	2806 (47.5)	2305 (54.7)	90 (14.3)	76 (61.3)	335 (35.4)	
	>=50K<100K	1760 (29.8)	1320 (31.3)	142 (22.6)	36 (29.0)	262 (27.7)	
Parental Education	<HS Diploma	139 (2.4)	57 (1.4)	41 (6.5)	1 (0.8)	40 (4.2)	< 0.001
	HS Diploma/GED	363 (6.1)	148 (3.5)	126 (20.1)	1 (0.8)	88 (9.3)	
	Some College	1366 (23.1)	814 (19.3)	250 (39.8)	7 (5.6)	295 (31.2)	
	Bachelor	1710 (28.9)	1323 (31.4)	108 (17.2)	35 (28.2)	244 (25.8)	
	Post Graduate Degree	2335 (39.5)	1874 (44.4)	103 (16.4)	80 (64.5)	278 (29.4)	
Married Family	No	1508 (25.5)	757 (18.0)	404 (64.3)	13 (10.5)	334 (35.3)	< 0.001
	Yes	4405 (74.5)	3459 (82.0)	224 (35.7)	111 (89.5)	611 (64.7)	
Ethnicity	Non-Hispanic	5060 (85.6)	3727 (88.4)	598 (95.2)	115 (92.7)	620 (65.6)	< 0.001
	Hispanic	853 (14.4)	489 (11.6)	30 (4.8)	9 (7.3)	325 (34.4)	
Sex	Female	2852 (48.2)	2011 (47.7)	319 (50.8)	64 (51.6)	458 (48.5)	0.437
	Male	3061 (51.8)	2205 (52.3)	309 (49.2)	60 (48.4)	487 (51.5)	
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
Age (mean (SD))		122.81 (9.53)	123.18 (9.66)	121.45 (8.97)	122.77 (9.39)	122.06 (9.19)	< 0.001
Internalizing symptoms (mean (SD))		1.60 (2.16)	1.53 (2.06)	2.00 (2.53)	1.02 (1.59)	1.73 (2.37)	< 0.001

3.2 Overall Multivariate Analysis Without Interaction

Table 3 summarizes the results of two linear regression models in the overall (pooled) sample. In *Model 1* (Main Effect Model), we found a protective effect of high household income on our outcome (Table 3 and Figure 2).

Table 3. Summary of Our Regressions with Interaction (n = 5913)

	Estimate	Std. Error	t value	Pr(> t)	sig
Household income >=100K	-0.28387	0.10510	-2.70	0.0069344	**
Household income >=50K<100K	-0.15527	0.09596	-1.62	0.1056933	

** p < 0.01

**Figure 2. Association between Household Income and Children's Internalizing Symptoms Overall (n = 5913)**

3.3 Overall Multivariate Analysis With Interaction

Table 4 provides a summary of the results of a regression model in the overall (pooled) sample. *Model 2* (Interaction Model) showed an interaction term between race and household income on our outcome, suggesting household income's protective effect against internalizing symptoms was weaker for African American than European American adolescents (Table 4 and Figure 3).

Table 4. Summary of Our Regressions with Interaction (n = 5913).

	Estimate	Std. Error	t	p	sig
Household income [>=50K & < 100K]	-0.21198	0.11875	-1.79	0.0743114	#
Household income [>=100K]	-0.37243	0.12215	-3.05	0.0023061	* *
Race [African American]	-0.06746	0.15008	-0.45	0.653087	
Race [Asian]	-0.98298	0.64164	-1.53	0.1255809	
Race [Other/Mixed]	-0.09305	0.15156	-0.61	0.539264	
Household income [>=50K & < 100K] × African American	-0.12957	0.24470	-0.53	0.5964688	
Household income [>=100K] × African American	0.72671	0.28270	2.57	0.0101749	*
Household income [>=50K & < 100K] × Asian	0.65043	0.74774	0.87	0.3844164	
Household income [>=100K] × Asian	0.64907	0.69017	0.94	0.3470228	
Household income [>=50K & < 100K] × Other/Mixed	0.18715	0.21349	0.88	0.3807242	
Household income [>=100K] × Other/Mixed	0.13316	0.19942	0.67	0.5043343	

p < 0.01 * p < 0.05 ** p < 0.01

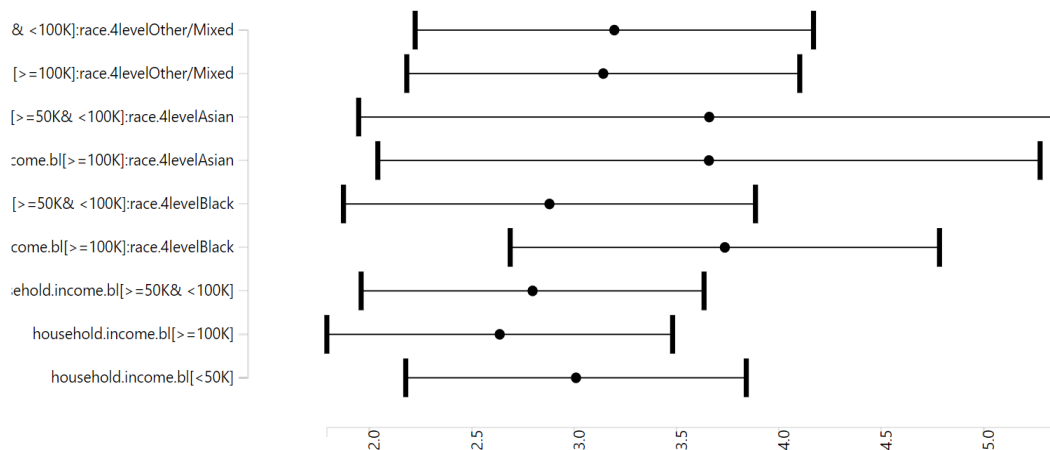


Figure 3. Association between Household Income and Children by Race ($n = 5913$)

4. Discussion

Our first finding showed that high household income is associated with lower internalizing symptoms of American pre-adolescents. Our second finding was that among American pre-adolescents, race may alter the returns of household income, one of the most salient SEP indicators, in terms of reducing the internalizing symptoms of their children. We observe weaker effects of parental income on the behavioral profile of African American than European American pre-adolescents.

Our first results are in line with the literature on social determinants and fundamental cause theories. Our second result can be interpreted in the light of the MDRs. These MDRs can contribute to the trans-generational effects of inequalities. Such MDRs are repeatedly shown across SEP sources, emotional and behavioral outcomes, age groups, and marginalization types (Assari, 2017; Assari, 2018a). MDRs are well documented within individuals as well as families. The results of this paper showed the transgenerational transmission of inequalities happen as a result of MDRs due to pre-adolescents' race.

Our results are similar to multiple studies on MDRs. A recent JAMA paper showed that MDRs of parental educational attainment is systematically weaker for African American and Hispanic adolescents than European American adolescents (Assari, Caldwell, et al., 2019). In that cross-sectional study, among 10,619 adolescents ages 12 to 17 years, parental educational attainment showed differential effects for African American and European American adolescents' psychological distress, aggression, tobacco dependence, school performance, and chronic disease (Assari, Caldwell, et al., 2019). In several additional studies using the Fragile Families and Child Wellbeing Study (FFCWS) data, household income and parental education at birth (born around 1998) have shown stronger effects on a wide range of adolescents outcomes at age 15 for European American than African American adolescents (Assari, 2019b; Assari & Caldwell, 2019a; Assari, Caldwell, & Mincy, 2018a; Assari, Caldwell, & Mincy, 2018b; Assari, Mardani, Maleki, & Bazargan, 2019; Assari, Thomas, et al., 2018). The FFCWS is not a nationally representative sample but a study of economically fragile urban

families which are mostly unwed. These FFCWS studies have shown that household SEP including but not limited to household income at baseline better promote various aspects of the health and well-being of European Americans better than African Americans (Assari, 2019b; Assari & Caldwell, 2019a; Assari, Caldwell, & Mincy, 2018a; Assari, Caldwell, & Mincy, 2018b; Shervin Assari et al., 2019; Assari, Thomas, et al., 2018). Furthermore, other studies have shown that household income and parental education generate greater improvements in school performance for European American than African American adolescents (Assari & Caldwell, 2019b; Assari, Caldwell, et al., 2019) and young adults (Assari, 2019). Finally, some studies have shown that high income may even operate as a risk factor for high internalizing symptoms and depression for African American adolescents (Assari, Gibbons, & Simons, 2018; Assari, Gibbons, & Simons, 2018) and adults (Assari, Lankarani, & Caldwell, 2018).

As suggested by the MDRs theory (Assari, 2017; Assari, 2018a), equal SEP indicators such as household income generate unequal outcomes across racial groups. These differential effects of SEP are documented across age groups, SEP resources, and outcomes (Assari, 2017; Assari, 2018a). The SEP indicators that are generating differential outcomes are not only income (Assari, Caldwell, & Mincy, 2018a) but also parental educational attainment (Assari, Caldwell, et al., 2019), own educational attainment (Assari, Farokhnia, et al., 2019), employment (Assari, 2018b), and marital status (Assari, Caldwell, & Zimmerman, 2018). Finally, these MDRs also exist for adolescents (Assari, Caldwell, & Mincy, 2018a; Assari, Caldwell, & Mincy, 2018b; Assari, Thomas, et al., 2018), adults (Assari, 2018a), and older adults (Assari & Lankarani, 2016).

While most studies have shown MDRs among African Americans (Assari, Thomas, et al., 2018), the same patterns may also exist for Hispanic (Assari, 2018e; Assari, 2019; Assari, Farokhnia, et al., 2019; Shervin & Ritesh, 2019), Asian American (Assari, Boyce, Bazargan, & Caldwell, 2020), Native American (Assari & Bazargan, 2019b), LGBTQ (Assari, 2019a), immigrant, and even marginalized European individuals (Assari, Boyce, Bazargan, Caldwell, et al., 2020). In the US societies, all these marginalizing identities reflect lower access to the resources, worse treatment by the society, as European Americans occupy more prestigious jobs and show a relative privilege compared to all other racial groups, particularly African Americans (Feagin & O'Brien, 2003; Franks, 2013). Any factor that can be a proxy of any type of social privilege may tend to be a source of differential marginal returns of SEP, such as income (Assari, 2018e; Assari, 2019a; Assari, 2019; Assari & Bazargan, 2019a). That means, weaker effects of a wide range of SEP indicators on several outcomes have been documented for many marginalized communities compared to the socially privileged group.

4.1 Implications for Research

We argue that studies on behaviors or development should not merely control for race/ethnicity, class, or SEP. This is particularly true for studies that investigate behavioral, neural, and social correlates of SEP in American adolescents. Most research in this field merely “controls” for the statistical effect of

race, ethnicity, SEP, or class. Researchers should be aware that institutional racism may also moderate the SEP indicators' effect on emotional problems.

5. Conclusions

European families show a larger influence of household income on pre-adolescents' emotional problems than African American families. This means that African American pre-adolescents with low- and high-income families remain at high risk of internalizing symptoms. There is a need to address structural racism and social stratification as a risk factor for poor mental health of African American pre-adolescents that are beyond family SEP indicators. Residential segregation, school segregation, social stratification, systemic racism, and interpersonal discrimination are among suspects that may reduce the protective effects of household income for marginalized groups.

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