EVALUATING POLICE PRESENCE AND POLICE STOPS IN SCHOOLS: OUTCOMES FOR ADOLESCENT MENTAL HEALTH

by

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ABSTRACT

Police and school partnerships have grown exponentially over the past 20 years. However, research examining the impact of school policing has primarily focused on aspects of school safety. The current study extends the literature beyond feelings of safety to consider the mental health outcomes of school policing on adolescents. I examine whether the presence, being stopped, and witnessing stops by police at school are associated with adolescent depression and anxiety symptoms and how school connectedness and race/ethnicity moderate these associations. Data were obtained from the most recent wave of data collection in the Fragile Families and Child Well-Being Study (FFCWS). Participants included 3,346 youth who were, on average, 15 years old. OLS regression analyses were repeated for depression and anxiety symptoms separately and included main effects for each contextual variable. Results indicated that police presence in schools was not significantly associated with depression and anxiety symptoms. In comparison, across all models, being stopped by police and witnessing police stops at school were significantly associated with depression and anxiety symptoms. Simple slope analyses of significant interactions revealed that race/ethnicity moderated associations between police presence, police stops, witnessing police stops at school, and adverse mental health outcomes. Additionally, greater reports of school connectedness moderated associations between being stopped by police at school and depression symptoms.

Keywords: police in schools, stressors, mental health, school connectedness, race

DEDICATION

This thesis is dedicated to my “people” who have supported me through the development of this manuscript. In particular, my family, close friends, cohort, and partner, Ben. To my parents, thank you for your boundless support and love. I am forever grateful for the opportunities and experiences you have given me that have shaped me into who I am today. You have always encouraged me to explore new directions and seek my own destiny. This milestone would not have been possible if not for you both.

LIST OF ABBREVIATIONS AND SYMBOLS

N	Total number of individuals or observations in the sample
α	Cronbach's index of internal consistency
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
B	Unstandardized beta
ß	Standardized beta
F	Fisher's *F* ratio: A ration of two variances
M	Mean: the sum of a set of measurements divided by the number of measurements in the set
SD	Standard deviation: the amount of variation from the mean
<	Less than
=	Equal to

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INTRODUCTION

Youth in the United States have extensive contact with police officers (Hinds, 2008). According to data from the Bureau of Justice Statistics, of the estimated 61.5 million U.S. residents who had contact with police officers in 2018, youth between the ages of 16 and 24 were the most likely to have any contact with police (48.3%). Additionally, youth were more likely to experience multiple encounters with police officers and were involved in 28.6% of police-initiated contacts in 2018 (Harrell & Davis, 2020).

Youths' contact with the police can be initiated by officers or youth (Hurst, 2007). Police-initiated contact is typically considered involuntary contact. Police may stop youth due to a range of reasons. According to Quinton et al. (2000), police stops are often prompted by suspicions of people's actions, behavior, or appearance. Occasionally, police initiate stops for general conversation, witness seeking, or intervening in incidents (Quinton et al., 2000). In comparison, youth-initiated contact is typically considered voluntary. This type of contact is less likely, with the Bureau of Justice Statistics reporting that only 17.6% of youth brought about contact with police officers in 2018, compared to 41.1% of adults (Harrell & Davis, 2020). If youth do contact the police, it typically involves a youth reporting a crime, requesting assistance, or asking for minor requests (Hurst, 2007).

A large body of literature suggests that interactions between police officers and youth are often influenced by a range of factors (Wolf, 2014). Some of these factors include youths' frequent use of public spaces, perceived involvement in delinquent activities, age, and school-based police programs (Brunson & Pegram, 2018; Hirschi & Gottfredson, 2017; Owens, 2016).

Specifically, over the past twenty years, police presence in schools has grown exponentially in the United States. The first reported occurrence of a police officer stationed in an American school was in Flint, Michigan, in the 1950s (Weiler & Cray, 2011). Police officers working in school settings in the 1950s prioritized ensuring safety and security on school premises (McKenna & White, 2017; Weiler & Cray, 2011). However, by the 1980s, their duties shifted, and they took a more active role in the schools in which they were stationed. School police officers not only maintained safety and security in and around the school but began educating students on a variety of criminal justice-related topics (McKenna & White, 2017). By the 1990s, there was increased public fear surrounding school-based crime, violence, and substance use (Congressional Research Service [CRS], 2017). Also, an increase in school shootings (such as the Westside school shooting and Columbine school shooting) escalated the public's fear regarding the safety of children in school (Brent & Wilson, 2018).

As a result of increases in school shootings, government officials sought to expand school safety measures through the Safe Schools Act of 1994 and the U.S. Department of Justice's Community Oriented Policing Services (COPS) program (Brent & Wilson, 2018; Brown, 2006). Efforts of these programs included implementing law enforcement officers in U.S. schools full-time (McKenna & White, 2017). Today, it is common for police officers to be stationed in U.S. schools (Na & Gottfredson, 2011). Unfortunately, school police officers are not required to register with any database, and police departments are not required to report how many of their officers work in school settings. Additionally, school systems are not required to report how many police officers they use in their schools (National Center for Education Statistics [NCES], 2020). Due to these guidelines, the exact number of school police officers is unknown in the United States. Nonetheless, the National Association of School Resource Officers (NASRO)

estimated that between 14,000 and 20,000 school police officers work in U.S. public schools. This estimation is based on the number of police officers NASRO has reportedly trained, and the Department of Justice data (NCES, 2020). Furthermore, the National Center for Education Statistics (2020) reported that 58% of U.S. public schools had either a sworn police officer or school resource officer stationed during the 2017 and 2018 school years. According to Theriot (2013), police officers stationed in schools are commissioned to maintain law and order while serving as visible, central figures at their schools. In addition, school police officers assist in developing school policies that address crime, reduce crime in and around the school, train students in crime awareness, educate students on violence and safety, and address disorder problems among students (CRS, 2017). However, the duties of school police officers vary across communities in the United States (Theriot, 2013), as do the outcomes of their presence.

Although current policy was based on assumptions that police presence in schools would result in increased safety and perceptions of safety, research has not consistently supported this contention. In fact, some research suggests that their presence might create a more unsafe atmosphere (Bachman et al., 2010; Booren & Handy, 2009; Jackson, 2002; Theriot & Orme, 2014). However, this research has yet to be extended beyond feelings of safety to consider impacts on mental health symptoms among young people. Moreover, although research has shown deleterious consequences of direct and vicarious police encounters with police on youth mental health (Harrell & Davis, 2020; Hinds, 2008; Turney, 2020), little research has examined these associations within the school context or how other features of youths' environment might influence these associations.

There are opportunities to build upon this literature by examining the effects of school policing on youth mental health within the school context. Specifically, this study builds on the

growing literature that describes youth mental health outcomes of police and youth involvement. Accordingly, there are three goals of this study. First, I examine if the presence of police in schools is associated with adolescent depression and anxiety symptoms, particularly for those who have been stopped or have witnessed stops made by the police at school. Second, I examine if school connectedness moderates the associations between police presence, police stops, witnessing police stops in school, and youth depression and anxiety symptoms. Third, I investigate if youth race/ethnicity moderates the association between school policing and depression and anxiety symptoms.

LITERATURE REVIEW

Policing in the School Context

School and police partnerships are not a newfound policy in the United States. However, research examining encounters between police and youth at school is insufficient. According to Marin and Brown (2008), adolescents spend most of their time in school or at school-related activities. Although the primary purpose of school is to promote academic development, the school context is broader than a vessel for academic achievement (Marin & Brown, 2008). Research has repeatedly demonstrated the interconnectedness of the school environment and how this context can impact adolescent health, safety, and social development (Dukes & Stein, 2001; Marin & Brown, 2008). Thus, experiences in schools represent salient and primary contexts for youth development, including adverse mental health outcomes (Chapman et al., 2006). With the growth of school and police partnerships in the United States, school police officers are often tasked with addressing students' mental health concerns (Theriot, 2013). As a result, law enforcement partnerships with schools are often students' first (and sometimes only) contact for mental health support services (Chapman et al., 2006). Accordingly, police officers in schools may have a significant impact on adolescent depression and anxiety symptoms.

According to Jones et al. (2007), a safe school environment is required for effective learning. As previously discussed, school and government officials have implemented programs in U.S. schools to improve the safety and well-being of students, such as the Safe Schools Act of 1994 and the COPS programs, which both implemented police presence in schools (Brent & Wilson, 2018; Brown, 2006). More specifically, the primary duties of school police officers

include being visible, central figures of the school and mentors of safe, responsible behavior to the student body and staff (Theriot, 2013). However, research examining school police officers' roles in promoting safe schools has produced inconsistent results. For example, some studies have found that the presence of school police officers increases students' feelings of safety (Brown & Benedict, 2005; Kupchik & Bracy, 2009). Additionally, a portion of this literature suggests that most students believe that school police officers do well at keeping students safe (Bosworth et al., 2011; Brown, 2006); although, these claims are generally reported by White males who also endorse greater school connectedness and more positive attitudes toward law enforcement (Theriot & Orme, 2014). Furthermore, although most students generally report satisfaction with their school police officers, overall, they do not believe police aid in reducing school crime (Kupchik & Bracy, 2009).

In comparison, a large body of the literature suggests that school police officers have no influence on students' perceptions of school safety (Booren & Handy, 2009) and that their presence might actually create a more unsafe atmosphere (Bachman et al., 2010; Jackson, 2002). Moreover, there is evidence that Black and more victimized students feel less safe due to police in school (Theriot & Orme, 2014). Regardless of interactions with school police, some students also report that police are not essential in making schools safe (Booren & Handy, 2009) and that their presence increases fear of potentially being victimized (Bachman et al., 2010). Together, these findings underscore the need to better understand youths' experiences of policing in schools and to consider how these experiences might vary according to the race or ethnicity of students. Moreover, it is important for research to expand beyond measures of school safety.

Adolescent Mental Health

Adolescence is a period of rapid development in which hormones, the body, and the mind undergo many changes. These significant changes make adolescents more vulnerable to mental health problems (Blakemore, 2019). As a result, many mental disorders, such as anxiety and depression, first appear during this life stage. The emergence of anxiety in adolescence is prevalent, with McCarthy (2019) reporting that nearly one in three adolescents between the ages of 13 and 18 experienced an anxiety disorder. Between 2007 and 2012, anxiety disorders increased by 20% amongst adolescents. By 2016, 4.4 million adolescents reported having anxiety problems, and 1.9 million had concurrent problems with depression (Ghandour et al., 2019).

Anxiety symptoms also frequently precede depression in adolescence (Beesdo et al., 2007). Depressive episodes that occur during adolescence are usually first episodes, and nearly one in every ten children experience a major depressive episode before their fourteenth birthday (Davey et al., 2008). According to data collected by the National Institute of Mental Health (2017), approximately 3.2 million adolescents aged 12 to 17 in the U.S. had at least one major depressive episode in 2017. The prevalence was higher among adolescent females (20%) and adolescents of two or more races (16.9%) (The National Institute of Mental Health [NIMH], 2017). During adolescence, hormonal changes are likely to account for at least part of the emergence of anxiety and depression. However, deviations in typical adolescent development alongside psychosocial (e.g., school, relationships) and/or biological factors (e.g., genetics, family history of mental health) can also impact the emergence (Paus et al., 2008).

The Stress Process Model and School Policing

For decades, the stress process model (see Figure 1, page 59; Pearlin et al., 1981) has provided a theoretical foundation for researching the effects of stressors on mental health

(Aneshensel & Mitchell, 2014). There are three main components of the stress process model: the sources of stress, the manifestations of stress, and intervening factors (Pearlin et al., 1981). According to this model, stressors are conceptualized as major life events, chronic strains, daily hassles, or traumatic events (Aneshensel & Mitchell, 2014) that include elements of threat, demands, or constraints which arouse various internal physiological responses (Wheaton et al., 2013). Stressors may also refer to situations or challenges that interrupt an individual's daily life (Aneshensel & Mitchell, 2014). Typical responses to stressors include feeling threatened, overwhelmed, and frustrated (Wheaton et al., 2013). These responses are not inherently substandard, as they activate a fight-or-flight biological process designed to protect the body from danger (Aneshensel & Wheaton, 2014). However, when stressors become chronic (i.e., persistent over time) and the fight-or-flight process is overworked (Aneshensel & Mitchell, 2014; Selye, 1936), responses to stressors may culminate into various outcomes, including depression and anxiety symptoms (Karlamangla et al., 2002; Wheaton et al., 2013).

In comparison to other life stages, adolescents report a greater number of stressors in their daily lives (Bethune, 2014). Moreover, research demonstrates a link between adolescent stress and several aspects of mental health (Compas et al., 1993; Sheth et al., 2017), including increases in depression and anxiety symptoms (Anyan & Hjemdal, 2016). In this study, I conceptualize the presence of police in schools as a modern-day stressor for many adolescents. One reason for this is the history of many police and school partnerships expeditiously emerging across the United States in the late 1990s due to traumatic events occurring on academic campuses, such as school shootings (Krueger, 2010; Turner & Beneke, 2019). For example, in 1999, a mass shooting at Columbine High School in Littleton, Colorado, was the twelfth in a series of school shootings committed by students between 1996 and 1999 and resulted in the

murders of twelve students and one teacher (Krueger, 2010). At the time, Columbine was the deadliest school shooting in U.S. history. However, 231 fatal school shootings have occurred across the U.S. since the Columbine school shooting, and the total number increases each year (Blad & Will, 2020; Vigderman & Turner, 2021). Thus, for many students, police presence in schools might be symbolic of the potential for school violence. Likewise, some research examining school policing policies argues that police officers might instill a more unsafe atmosphere at school for some students (Bachman et al., 2010; Booren & Handy, 2009; Jackson et al., 2019), as their presence could serve as a daily reminder of the potential for traumatic events (i.e., school shootings). This persistent stressor could manifest into greater depression and anxiety symptoms among adolescents.

Although police presence alone could induce stress, direct interactions with school police officers might also contribute to heightened symptoms of depression and anxiety. More frequent police stops have been associated with mental health disorders throughout adolescence and adulthood (McGue & Iacono, 2008; Sutherland & Shepherd, 2001), including PTSD, anxiety, and depression symptoms (Geller et al., 2014). Therefore, being stopped by the police might represent a salient stressor in the school context for adolescents, especially if the stop results in body searches, physical violence, or unfair treatment (Turney, 2020). Although the current study does not examine the content of police and youth interactions, previous research indicates that during police stops, adolescents have reported being subjected to harsh language, racial slurs, and handcuffing (Geller & Fagan, 2019). In accordance with the stress process model, being stopped by the police at school might represent a traumatic event for some adolescents, resulting in increased depression and anxiety symptoms.

Moreover, in addition to direct interactions with police in schools, witnessing students being stopped by police might impact youth. Specifically, the stress process model indicates that stressors are contagious across individuals (Pearlin, 1989; Turney, 2014), such that the stress of being stopped by a police officer in school might proliferate from adolescents who experience the stops personally to adolescents who are vicariously witnessing the stops. Witnessing a family member, close friend, or stranger stopped by the police is a distinct stressor that can negatively impact youth (Baćak & Nowotny, 2018; McFarland et al., 2019; Thoits, 2010). Previous research suggests that adolescents who do not have personal encounters with the police utilize what they have witnessed during the stops of others to form their opinions and feelings towards law enforcement (Lerman & Weaver, 2013). Witnessing police stops could induce a state of heightened vigilance and fear for some youth (McFarland et al., 2019). Therefore, vicariously witnessing police stops in the school context might also contribute to greater anxiety and depression symptoms.

Across the literature, only a handful of studies have examined the effects of direct and secondary police interactions on adolescent mental health (Geller et al., 2014; McGue & Iacono, 2008; Sutherland & Shepherd, 2001; Turney, 2020). Moreover, missing from the literature, is an examination of these experiences in the school context. Only one study, to my knowledge, has examined the consequences of being stopped by the police at school (Jackson et al., 2019). Using data from the Fragile Families and Child Well-Being study, Jackson et al. (2019) examined the mental health consequences of harsh encounters with police among 918 youth. Findings from their study revealed that being stopped by the police at school was associated with enhanced emotional distress and PTSD symptoms for adolescents who experienced harsh interactions. Additionally, more frequent police stops enhanced these responses (Jackson et al., 2019).

School Connectedness

In addition to the direct effect of stressors on mental health outcomes, the stress process model describes the interplay between potentially stressful experiences and personal and environmental resources that may influence mental health outcomes (Aneshensel & Mitchell, 2014). Specifically, this theory suggests that moderators, such as forms of social support, might weaken the effects of stressors on depression and anxiety symptoms (Aneshensel & Mitchell, 2014). Although examinations of main effects reveal the distinct contribution of stressors and resources on mental health, examining the interplay of these factors can reveal more nuanced relationships and potentially more substantial impacts of stressors on mental health (Aneshensel & Mitchell, 2014). However, factors that may buffer associations between school policing and youth mental health, such as school connectedness, have yet to be examined.

Many bodies of research have identified the notable role of school connectedness as a protective factor for adolescent mental health outcomes (Bond et al., 2007; Marraccini & Brier, 2017; Resnick et al., 1997). School connectedness encompasses the quality of relationships that students experience at school and the extent to which a student feels they belong and are cared for by the school community (McNeely et al., 2002). Feeling connected to the school community becomes critical during adolescence since youth spend more time in the school environment than at home (Goodenow, 1993). Numerous investigations have suggested that difficulties with school connectedness are particularly relevant to adolescent depression and anxiety symptoms (Jacobson & Rowe, 1999; Langille et al., 2015; Loukas et al., 2008; Resnick et al., 1997; Ross et al., 2010; Shochet et al., 2006; Shochet & Smith, 2014; Zhu, 2018). For instance, findings from Resnick et al.'s (1997) early research revealed that school connectedness explained a significant difference in emotional distress among adolescents.

Shochet et al. (2006) examined the association between school connectedness, anxiety symptoms, depressive symptoms, and overall mental health among high school students. Their findings described a strong correlation between concurrent mental health symptoms (particularly depressive symptoms) and difficulties with school connectedness. Additionally, difficulties with school connectedness were associated with future depressive symptoms among participants (Shochet et al., 2006). Subsequent research on school connectedness reported correlations between school connectedness and depressive symptoms across all genders (Jacobson & Rowe, 1999; Langille et al., 2015; Loukas et al., 2008). Using data from the National Longitudinal Study of Adolescent Health, Zhu (2018) investigated the effect of school connectedness on depressive symptoms among adolescents. Findings from this study explained a partially moderating effect between school connectedness and depressive symptoms, with difficulties in school connectedness relating to students' depressive symptoms (Zhu, 2018).

No other study, to my knowledge, has examined how reports of school connectedness might change the association between school policing policies and students' mental health symptoms. However, other studies have examined how school police officers influence students' connectedness to the school. Some of this research suggests that in schools where students are aware of police presence, many adolescents have reported feelings of fear and unsafety due to the possibility of having contact with police (Shannon, 2021). This persistent stressor could manifest into depression and anxiety symptoms and harm students' feelings of connectedness to their school. Additionally, previous studies have indicated that students who have witnessed other students stopped by the police or arrested at school have reported feeling less connected to their school due to the stress and fear of a similar experience happening to them (Theriot & Orme, 2014). In contrast, some researchers have indicated that more frequent, positive

interactions with school police officers create more positive attitudes towards law enforcement and more feelings of safety at school (Theriot, 2013). Based on this evidence, reports of school connectedness may have important implications for the impact of school police interactions on adolescent depression and anxiety symptoms.

Racial Differences

A central assumption of the stress process model is that stressors are influenced by an individual's social structure, status, and roles in society (Pearlin et al., 1981). This theory suggests that racial minorities are more frequently exposed to higher levels of stress due to discrimination, socioeconomic status, and health disparities, which contributes to a greater burden of mental health adversities compared to White individuals (George, 2011; Turney, 2020). Decades of research have broadly shown racial differences in the criminal justice system (Horowitz et al., 2021; McGlynn-Wright et al., 2020). Indeed, a large body of research suggests that police interactions are socially patterned and more frequently experienced by Black and Latinx youth in disadvantaged communities (Rengifo & Pater, 2017; Sugie & Turney, 2017). This racial disparity can be observed within the juvenile and adult justice systems, where Black individuals more than double the population they represent in the general public (National Research Council and Institute of Medicine, 2001). Furthermore, most Black and White individuals have reported that the U.S. justice system treats Blacks less fairly than Whites, whether it be through unfair stops due to their race or ethnicity or hostile interactions with police (Horowitz et al., 2021).

These experiences are mirrored within the school context. A growing body of research suggests racial disparities in policing within school systems (Dumas, 2015; Government Accountability Officer [GAO], 2018; Morris & Perry, 2016). For instance, data collected from

the Government Accountability Office revealed that Black students were disproportionately disciplined through school suspensions or referrals to law enforcement compared to their White peers (GAO, 2018). Additionally, Black students in U.S. schools were arrested at a rate three times higher than White students in 2020. However, Black students did not have higher school misbehavior rates (Gonzalez & Kaesar, 2021).

Given that racially diverse youth (specifically Black and Latinx) in the United States experience more racially motivated contact with police officers (Rengifo & Pater, 2017), being in their presence might induce more feelings of stress, which impacts mental health. Moreover, the stress process perspective suggests that adverse outcomes of police interactions are contagious across individuals, not only impacting the health of those who are stopped, but those who witness the stop as well (Turney, 2014; Turney, 2020). As such, youth of color who witness people close to them being stopped by the police may feel targeted themselves due to their racial/ethnic identity (Anderson, 2012). Therefore, racial/ethnic minority status, within the context of greater risk for police mistreatment and unjustified interactions, may have important implications for the impact of police interactions on youth depression and anxiety symptoms (Geller et al., 2014).

Present Study and Hypotheses

In sum, although policing in schools is a growing phenomenon, only a small portion of the literature on police and youth interactions has focused on investigating the presence of police in schools. Additionally, most of this research only examines how police officers impact student perceptions of safety at school and has infrequently been extended to consider mental health outcomes. This is an important gap in the literature, as the school environment represents a salient context for adolescent development, and research suggests that interactions with police

officers, such as being in their presence, being stopped, or witnessing stops, can negatively impact mental health (Gonzalez & Kaeser, 2021; Piquero et al., 2004). Moreover, contextual factors have not been examined that might moderate these associations. Thus, the present study has three goals.

First, I examine if police presence in schools is associated with adolescent depression and anxiety symptoms. I hypothesize that police presence in schools will be associated with greater depression and anxiety symptoms, particularly for youth who have been stopped or have witnessed stops made by the police at school. Second, I examine if school connectedness moderates the associations between police presence, police stops, witnessing police stops in school, and adolescent depression and anxiety symptoms. I hypothesize that greater school connectedness will buffer the associations between school policing and depression and anxiety symptoms among youth. Finally, I investigate whether these associations may vary by adolescent race/ethnicity. I hypothesize that adolescents' racial and ethnic identities will moderate the associations between school policing and depression and anxiety symptoms. Specifically, I hypothesize that Black/African American, Latinx or Hispanic, and Multi-racial/Other adolescents will exhibit greater depression and anxiety symptoms due to school policing compared to White adolescents.

METHODS

Participants and Procedure

The present study uses data from the Fragile Families and Child Well-Being Study (FFCWS). The FFCWS is a large, longitudinal study that follows nearly 5,000 children born between 1999 and 2000 across the United States. Data were obtained using a multistaged, clustered sampling procedure. First, a stratified random sample of 20 cities was selected using a population of U.S. cities with 200,000 or more residents. The subsequent sampling stage involved selecting 75 hospitals within these cities, followed by a random sample of couples who had just given birth to a child and consented to participate in the study. As a result, the sample includes a large number of families and children with disproportionate exposure to various hardships and risk factors, such as unmarried parents, parental justice involvement, living in low income, and frequent police encounters (Turney & Haskins, 2019). The racial and ethnic demographics of youth in the present study include 554 White only, non-Hispanic; 1,575 Black/African American only, non-Hispanic; 799 Hispanic/Latinx; and 248 Multi-racial/Other individuals.

There have been six waves of data collection in the FFCWS. Interviews with primary caregivers began when the children were born and continued when the children were ages one, three, five, nine, and fifteen. During the most recent wave of data collection, 3,146 youth lived with their biological mother, 257 lived with their biological father, and 177 lived with a primary caregiver (e.g., a grandmother, aunt, sibling, or another adult).

Response rates throughout the study were high. During the first wave of data collection, there were a total of 4,457 participants who took part in Wave 1 (Year One) data collection. Most participants were unmarried mothers (76%), had less than a high school degree (34%), and were predominantly Black/African American (48%). By Wave 6 (Year 15) data collection, a total of 3,595 participants remained in the study. Most participants remained unmarried mothers (76%), had less than a high school degree (32%), and were mostly Black/African American (50%). These statistics demonstrate an insignificant loss of data from attrition over the years of data collection.

During the most recent wave of data collection (Year 15), youth were interviewed during home visits or via telephone for the first time. In the present study, the sample is restricted to youth who participated in the sixth (Year 15) wave of data collection in 2014-2017 and responded (yes *or* no) to having a police officer(s) stationed in their schools (N = 3,346). For questions pertaining to police stops in schools, the sample is further restricted to youth with a police officer or officers regularly stationed at their schools (N = 2,693).

Measures

Police officers in schools

Youth were asked, "is there a police officer or officers regularly stationed at your school?" Response options were coded as *Yes* (coded as 1) or *No* (coded as 0). Amongst the sample, 2,693 out of 3,346 youth reported having a police officer or officers regularly stationed at their school.

Stopped by police at school

Youth were asked, "have you ever been stopped by the police at school?" Response options were coded as *Yes* (coded as 1) or *No* (coded as 0). Amongst the sample of 2,693 youth

who reported having a police officer or officers stationed at their school, 192 adolescents reported being stopped by police at school, and 542 indicated they had never been stopped at school.

Witnessing police stops at school

Youth were asked, "have you ever seen someone stopped by the police in your school?" Response options were coded as *Yes* (coded as 1) or *No* (coded as 0). Responses indicated that 1,399 youth reported seeing someone stopped by the police at their school, while 1,280 youth indicated they had not witnessed a stop made by the police at their school.

Mental health

In the present study, youth mental health is represented by two self-reported measures: depressive (CES-D, Radloff, 1977; α = .76) and anxiety symptoms (BSI 18; Derogatis & Savitz, 2000; α = .76). The CES-D consists of five items drawn from CES-D used in the National Longitudinal Study of Adolescent Health (Wave I) : "I cannot shake off the blues, even with the help from my family and my friends," "I feel sad," "I feel life is not worth living," "I feel depressed," and "I feel happy." Perreira et al. (2005) found these five items to be an improvement over the full 20-item CES-D in cross-cultural comparability (Perreira et al., 2005). Youth responded to these items based on their feelings in the past four weeks on a four-point scale ranging from 0 (*Strongly Agree*) to 3 (*Strongly Disagree*). Items were rescaled to a 1 to 4 scale and appropriate items were reverse coded. Items were then averaged so that higher scores represent greater depressive symptoms.

Anxiety symptoms in the FFCWS were examined using a shorter version of the Brief Symptom Inventory 18 (BSI 18; Derogatis & Savitz, 2000). Thinking about the prior four weeks, youth were asked to indicate their level of agreement with six statements: "I have spells of terror

or panic," "I feel tense or keyed up," "I get suddenly scared for no reason," "I feel nervous or shaky inside," "I feel fearful," and "I feel so restless I can't sit still." Response items ranged from 0 (*Strongly Disagree*) to 3 (*Strongly Agree*). The items were added together to create the Teen Anxiety Scale.

Connectedness at school

Connectedness at school is measured by four items (PSID-CDS-III; Institute for Social Research, 2010; $\alpha = .73$). The connectedness at school scale measures the degree of inclusiveness, closeness, happiness, and safety youth experience at school. Youth indicated their level of agreement with the following items: "I feel close to people at school," "I feel like a part of the school," "I am happy to be at school," and "I feel safe at school." Response items ranged from 1 (*Strongly Agree*) to 4 (*Strongly Disagree*). Items were reverse scored and averaged so that higher scores represented greater school connectedness.

Race and ethnicity

Youth were asked to self-identify their race and ethnicity for the first time. Youth were asked, "what is your race or ethnicity?" and provided open-ended responses. Their responses were coded into a series of dummy variables by the FFCWS to provide as much information without releasing identifiable information of the participants. The teen's open-ended responses were coded into the six established U.S. Census categories for race and ethnicity, based on the 1997 Office of Management and Budget (OMB) standard categories. These categories are coded as: White only, non-Hispanic (1), Black/African American only, non-Hispanic (2), Hispanic/Latino (3), Other only, non-Hispanic (4), and Multi-racial, non-Hispanic (5).

Race and ethnicity categories were recoded as: White, non-Hispanic (1), Black/African American (2), Hispanic/Latinx (3), and Multi-racial/Other (4).

Data Analysis

First, descriptive statistics, including means, standard deviations, and correlations, were examined among the total sample of adolescents in SPSS Statistics Software (Version 27). Next, statistical analysis was carried out using Ordinary Least-Squares (OLS) based on multivariate regression analysis in SPSS. OLS regression is a mathematical, analytical technique that predicts the associations between one or more independent variables and a dependent variable (Mahanty et al., 2020). In the current study, OLS regression was utilized to examine the associations between the presence of police in schools, being stopped by police in schools, witnessing police stops in schools, and depression and anxiety symptoms. Further, school connectedness and race/ethnicity were examined as moderators of these associations. Several OLS regressions were conducted using a stepwise approach.

In the first models, depression and anxiety symptoms were regressed on police presence in schools (depression and anxiety were examined in separate models). Main effects for school connectedness and race/ethnicity variables were also examined. Two interaction terms were created between police presence in schools, school connectedness, and race/ethnicity to examine whether school connectedness and race/ethnicity moderated these associations. The continuous variable (school connectedness) was centered prior to conducting regression analyses.

In succeeding models, the sample was restricted to adolescents who indicated a police officer(s) was consistently stationed in their schools. Among this restricted sample, depression and anxiety symptoms were regressed on: (1) being stopped by police at school and (2) witnessing police stops at school. Being stopped by police and witnessing police stops at school were examined in separate models, as were depression and anxiety symptoms. Main effects for school connectedness and race/ethnicity variables were also examined. Finally, interaction terms

were created among being stopped and witnessing stops, school connectedness, and race/ethnicity to examine whether school connectedness and race/ethnicity moderated associations.

All significant interactions were probed in PROCESS (Hayes, 2012), a macro that conducts observed-variable mediation, moderation, and conditional process analysis (Hayes, 2018). PROCESS is widely utilized for estimating two and three-way interactions in moderation models along with simple slope and regions of significance for probing interactions (Hayes, 2018) in SPSS.

RESULTS

Descriptive Statistics

Means, standard deviations, and correlations for the study variables are presented in Table 1 (see page 61). A Pearson's correlation with a *p*-value of 0.05 was used to assess the relationships between the study variables. Table 1 shows a significant positive correlation between school policing variables (police presence, police stops, and witnessing police stops in school) and depression and anxiety symptoms. Conversely, school connectedness was significantly negatively correlated with school policing variables. Further, race/ethnicity were significantly correlated with the school policing variables.

Of particular interest, the relationship between adolescent race/ethnicity and being stopped by police at school was examined to consider racial disparities in police stops (see Figure 2, page 60). Among the 192 adolescents who reported being stopped by the police at school, 101 were Black/African American, 36 Hispanic/Latinx, and 21 Multi-racial/Other compared to only 19 White adolescents. Though youth of color reported *more* police stops at school compared to White youth, a chi-square test revealed no statistically significant association between race/ethnicity and being stopped by police at school ($p = 0.13$). Additionally, a one-way ANOVA revealed a marginally significant difference between police stops among White and Multi-racial/Other adolescents ($p = 0.08$).

Police Presence at School and Adolescent Mental Health

First, I tested the hypotheses that police presence in schools is associated with greater depression and anxiety symptoms and that school connectedness and race/ethnicity moderate

these associations. The results from the OLS regressions examining these associations are depicted in Tables 2 and 3 (see pages 62-63). The analyses revealed that police presence in schools was not significantly associated with depression (B = 0.01, $ß$ = 0.00, p = 0.83) or anxiety (B = -0.04, $ß$ = -0.03, p = 0.16) symptoms. Main effects for school connectedness indicated that reports of greater school connectedness were associated with fewer depression (B = -0.37, $ß$ = -0.35, p < .001) and anxiety (B = -0.26, $ß$ = -0.23, p < .001) symptoms. However, the interaction between police presence and school connectedness was not statistically significant for depression (F(3, 3,333) = 157.41, p = 0.89) or anxiety (F(3, 3,334) = 62.43, p = 0.69) symptoms, revealing that school connectedness did not moderate associations between the presence of police in schools and depression or anxiety symptoms.

Furthermore, the interaction between police presence and race/ethnicity was statistically significant for depression (F(3, 3,169) = 2.64, p = 0.05) and anxiety (F(3, 3,170) = 3.07, p = 0.02) symptoms. Tests of simple slopes were conducted to probe this interaction and revealed that police presence in schools was significantly associated with greater depression symptoms for Multi-racial/Other (p = 0.00) youth and greater anxiety symptoms for Black/African American (p = 0.00) youth.

Being Stopped by Police at School and Adolescent Mental Health

Second, I examined the hypotheses that being stopped by the police at school was associated with greater depression and anxiety symptoms and that school connectedness and race/ethnicity moderate these associations. The results from the OLS regressions examining these associations are depicted in Tables 4 and 5 (see pages 64-65). The analyses revealed that being stopped by police at school was significantly associated with greater depression (B = 0.10, $ß$ = 0.08, p = 0.04), but not anxiety (B = 0.05, $ß$ = 0.04, p = 0.34) symptoms. Additionally, the

interaction between being stopped by the police at school and school connectedness was statistically significant for depression ($F(3, 730) = 39.18$, $p < .001$) and anxiety ($F(3, 730) = 24.46$, $p < .001$) symptoms. Tests of simple slopes were conducted to probe this interaction and revealed that for youth scoring +1SD above the mean, being stopped by police at school was significantly associated with greater anxiety symptoms for participants with *greater* reports of school connectedness ($p = 0.04$). However, probing did not reveal significant differences for depression symptoms ($p = 0.57$).

In comparison, the interaction between being stopped by the police at school and race/ethnicity was statistically significant for depression ($F(3, 694) = 3.22$, $p = 0.04$), but not anxiety ($F(3, 694) = 0.71$, $p = 0.79$) symptoms. Tests of simple slopes revealed that for Black/African American ($p = 0.05$) and Hispanic/Latinx ($p = 0.01$) youth, being stopped by police at school was associated with greater depression symptoms.

Witnessing Police Stops at School and Adolescent Mental Health

Finally, I examined the hypotheses that witnessing police stops in school was associated with greater depression and anxiety symptoms and that school connectedness and race/ethnicity moderate these associations. The results from the OLS regressions examining these associations are depicted in Tables 6 and 7 (see pages 66-67). The analyses revealed that witnessing police stops in school was significantly associated with greater depression ($B = 0.13$, $ß = 0.11$, $p < .001$) and anxiety ($B = 0.15$, $ß = 0.11$, $p < .001$) symptoms. However, the interaction between witnessing police stops and school connectedness was not statistically significant for depression ($F(3, 2{,}674) = 129.57$, $p = 0.38$) or anxiety ($F(3, 2{,}675) = 55.65$, $p = 0.30$) symptoms, indicating that school connectedness did not moderate associations between witnessing police stops in school and depression or anxiety symptoms.

Comparatively, the interaction between witnessing police stops in school and race/ethnicity was statistically significant for depression ($F(3, 2{,}553) = 15.68$, $p < .001$) and anxiety ($F(3, 2{,}554) = 16.18$, $p < .001$) symptoms, revealing that race/ethnicity moderated associations between witnessing police stops in school and depression and anxiety symptoms. Tests of simple slopes were conducted to probe this interaction and revealed that witnessing police stops in school was significantly associated with greater depression symptoms for Multi-racial/Other ($p = .057$) youth. In addition, witnessing police stops in school was significantly associated with greater anxiety symptoms for White ($p = 0.00$), Black/African American ($p = 0.00$), and Hispanic/Latinx ($p = 0.01$) youth.

DISCUSSION

Across the United States, approximately 67% of high school students have a police officer stationed in their schools each day. This percentage is even higher (90%) in predominately Black and Latinx schools (Lindsay et al., 2018). However, very few studies have examined the effects of school policing on students, and most of the available literature has focused on perceptions of school safety. Moreover, previous research on this topic has yet to examine how these effects may vary by the characteristics of the school environment or individual student traits. The present study sought to expand the literature on school policing by examining adolescent mental health outcomes. Specifically, this study investigated whether the presence of police in schools, being stopped by police in schools, and witnessing police stops in schools impacted adolescent depression and anxiety symptoms using data from Wave 6 (Year 15) of the FFCWS. Additionally, I examined if reports of school connectedness and race/ethnicity moderated these associations.

First, I hypothesized that the presence of police in schools is associated with greater depression and anxiety symptoms; however, the analyses did not support this hypothesis. This finding might simply reflect the significant variation in perceptions of school police officers that has been documented throughout the literature. Specifically, some findings demonstrate that adolescents view their school police officers as mentors (Connery, 2020; Theriot, 2013) who do well in keeping students safe (Bosworth et al., 2011; Theriot & Orme, 2014). There is also some evidence suggesting that youth tend to view their school police officers more positively than police in the general public (Hopkins, 1994; Hopkins et al., 1992) due to positive interactions

that occur within the school environment (Darling-Hammond & DePaoli, 2020). Since school-based police officers often assist with students' behavioral and mental health needs (Canady et al., 2012), many adolescents could also view their school police as sources of support.

In contrast, other studies find that students who attend schools with regularly stationed police have reported more negative views of the police than youth who attend schools without police presence (Hopkins, 1994; Hopkins et al., 1992). These beliefs could stem from negative interactions between students and school police officers, such as witnessing the discipline of classmates or experiencing them personally. Students have also reported that school police officers do not increase students' perceptions of school safety (Booren & Handy, 2009), and their presence can create a more unsafe atmosphere (Bachman et al., 2010; Kupchik & Bracy, 2009). Thus, it is possible that the relationship between police presence in schools and youth mental health may be dependent on youths' feelings about, and perceptions of, their school police. Framed within the stress process model (Pearlin et al., 1981), these findings suggest that the presence of police in schools alone is not a significant stressor that negatively impacts youths' mental health. However, these main effects do not account for individual youth traits (such as race/ethnicity) that could change these outcomes. Together, these findings point to the need for future research to consider greater nuance in the effect of police presence in schools on youth mental health, such as the roles that are assumed by the officer or the quality of their relationships with students.

In addition to police presence, I examined direct and vicarious police contact in schools. I hypothesized that being stopped by the police and witnessing police stops in schools is associated with greater depression and anxiety symptoms among adolescents. The results indicated that participants who were stopped by the police at school reported greater depression

symptoms, supporting my hypothesis. This finding is congruent with previous observations that suggest that experiences of involuntary police stops are significantly associated with increased depression symptoms among adolescents (Turney, 2020). Moreover, previous research underscores the importance of examining these associations within the school context, finding that higher levels of emotional distress follow police stops in school compared to stops at other locations (Jackson et al., 2019). Consistent with the stress process model, the results support the conceptualization of police stops in school as salient stressors and potentially a traumatic event, contributing to greater youth depression symptoms (Aneshensel & Mitchell, 2014).

Furthermore, consistent with my hypothesis, adolescents who witnessed police stops at school also reported greater depression and anxiety symptoms. These findings provide evidence consistent with the stress process model that witnessing stops by police may incur vicarious stress or trauma that results from a contagion of stress across individuals (Pearlin, 1989; Turney, 2014). Expressly, framed with the stress process perspective, my findings suggest that stress responses (i.e., depression or anxiety symptoms) might proliferate from those who experience the stressor to those who witness the stressor. Collectively, the mental health consequences of witnessing police stops among adolescents are largely overlooked in the literature. However, findings from the present study are also consistent with a handful of recent research investigating vicarious adolescent and police encounters. For example, Turney (2020) reported that witnessing police stops in the general public was significantly associated with depression symptoms for adolescents. Moreover, other studies have indicated that adolescents who have witnessed police stops experience at least one form of emotional distress, with feelings of sadness being the most common form of distress (Jackson et al., 2019). Nevertheless, to my knowledge, no prior study has examined the consequences of witnessing police stops at school. Therefore, this study makes

a crucial contribution to existing literature by illuminating how one student's personal experience with school police officers can have negative implications on the entire student body.

This study also examined the potential moderating role of school connectedness. I hypothesized that greater reports of school connectedness would buffer the associations between police presence in schools, being stopped by police at school, witnessing police stops at school, and adolescent depression and anxiety symptoms. The results indicated that school connectedness did not moderate associations between the presence of police at school and depression and anxiety symptoms. These findings further underscore that the outcomes of police presence in schools may depend more on the qualities of the school police officer or their relationships with students, rather than the effect of their presence on the student body as a whole.

In comparison, analyses revealed that school connectedness was a significant moderator of associations between being stopped by police at school and depression and anxiety symptoms. Although school connectedness was identified as a significant moderator, police stops at school were not statistically significant with depression symptoms for youth with lower reports of school connectedness. However, contrary to expectations, the results indicated that being stopped by the police at school was associated with greater anxiety symptoms for youth reporting *greater* school connectedness. After police stops, youth have reported that the negative consequences on their reputation were more harmful (Bryant-Davis et al., 2017; Sewell & Jefferson, 2016) than the initial terror of the police stop. Within the school context, youth stopped by police have reported being socially stigmatized by peers after the event (Jackson et al., 2019). This stigma may result from the public nature of the event (Jackson et al., 2019) in the school environment, a space that is supposed to be safe and nurturing for students (Connery, 2020). Within a more

connected school, in which students are bonded with their peers and school staff members (Goodenow, 1993), the experience of a police stop at school could feel particularly public for students. Moreover, given that delinquent behaviors among students are less common when school connectedness is high (Monahan et al., 2010), others could view police stops in highly connected schools as a failure to meet conventional social standards (Brick et al., 2009; Esbensen et al., 2011). Subsequently, students may fear being stereotyped as delinquent or criminal by their peers who witness the stop at school. Thus, being stopped by police at school may be particularly embarrassing for students in a highly connected school and could create strong feelings of inferiority (Gilbert & Irons, 2009), self-consciousness, humiliation, and shame (Wiley, 2012). Although embarrassment is associated with a range of adverse consequences for youth (Mills, 2005), it is particularly related to increases in anxiety (Cavalera & Pepe, 2014).

Additionally, these findings emphasize that students' relationships with school police officers might significantly impact their mental health. Previous research on school connectedness has highlighted the critical role of relationships between students and school staff members in maintaining belonginess at school. The literature illustrates that as many as 40% to 60% of students become disengaged from school by the time they are in high school (Blum, 2005). One cause of this disengagement is the lack of connection between students and school staff members. Students with strong relationships with teachers and school administrators are more likely to be connected to their school (Blum, 2005). These relationships can be nurtured by creating a caring, transparent, and fair school environment (Blum, 2005). However, not just teachers and school administrators create these important connections. Other staff members, such as school police officers, are essential in the dynamic of school connectedness. Thus, the findings suggest that student reports of school connectedness can change the relationship

between being stopped by police at school and mental health outcomes. That is, only when school connectedness is high for students (i.e., they feel supported by school staff and have meaningful relationships), the experience of a police stop at school is a significant stressor that results in greater depression symptoms.

Finally, based on the broad history of racial disparities in policing throughout the United States, this study examined how associations might vary across race/ethnicity. I hypothesized that racial/ethnic status moderates associations between police presence in schools, being stopped by police in schools, witnessing police stops in schools, and depression and anxiety symptoms. Specifically, I hypothesized that Black/African American, Hispanic/Latinx, and Multi-racial/Other youth would exhibit greater depression and anxiety symptoms due to school policing compared to White youth. The findings indicated that race/ethnicity status moderated the associations between police presence, police stops, and witnessing police stops at school and adverse mental health symptoms. Respectively, police presence was associated with greater depression symptoms for Multi-racial/Other youth and more anxiety symptoms for Black/African American youth. Additionally, being stopped by police at school was associated with greater depression symptoms for Black/African American and Hispanic/Latinx youth. Finally, witnessing police stops in school was associated with greater depression symptoms for Multi-racial/Other youth and greater anxiety symptoms for White, Black/African American, and Hispanic/Latinx youth. The stress process model (Pearlin et al., 1981) suggests that racial/ethnic minorities are exposed to higher levels of stress more frequently due to racial discrimination (Aneshensel & Mitchell, 2014; Turney, 2020). Consequently, people of color face a greater burden of mental health adversities than White individuals (Turney, 2020), such as increases in depression and anxiety symptoms. The findings of this study are in line with this perspective,

suggesting that the presence and interactions with police in schools disproportionally affects the mental health of youth of color.

These findings might also reflect the vast, complicated history of racial disparities and biases throughout the criminal justice system. Evidence of these disparities are well documented across the literature, drawing attention to the higher rates of police stops and long-term incarceration among racial/ethnic minorities compared to White individuals (Hetey & Eberhardt, 2018; Hinton et al., 2019). For decades, scholars have attempted to investigate unintentional and unconscious racial biases about people of color in the United States. Tests of implicit biases have shown that the general public holds negative associations about people of color and suspects them of criminality (Blair et al., 2013; Ghandnoosh & Lewis, 2014; Greenwald et al., 1998). These biases have also been documented among police officers and judges and are believed to reach *all* corners of the criminal justice system (Ghandnoosh & Lewis, 2014).

A facet of the racial disparities and biases within the criminal justice system is reflected in the history of police presence throughout communities in the United States. The literature suggests that increased police presence raises the risk of being caught for committing a crime (Zhao et al., 2002). Therefore, there is a perception that the presence of police would deter individuals from committing crimes. However, there is a historical disparity in efforts to increase police presence throughout communities across the United States. Notably, increases in police presence can be seen throughout low-income, urban neighborhoods with predominately people of color as opposed to predominately White neighborhoods (Goffman 2014), implying that people of color act more criminally than their White counterparts. Because of this constant presence, scholars suggest that minority youth have learned to shape their lives around police presence in their neighborhoods. Specifically, these youth have developed intricate techniques to

evade or avoid the constant presence of police (Goffman, 2014). Therefore, in school settings, the presence of police could shift the focus from academics and supporting students to over disciplining and criminalizing them (Connery, 2020). Within this context, for many students of color, the presence of police in schools can cause trauma given their experiences with law enforcement in their communities (Callard, 2021).

Moreover, similar to neighborhood allocation, law enforcement officers are disproportionately placed in schools serving primarily racial/ethnic students compared to schools serving mostly White populations (Fulks et al., 2020). Numerous studies have shown that the presence of police is associated with higher rates of discipline, such as suspensions, expulsions, and arrests (Fisher & Hennessy, 2015; Turner & Beneke, 2019). Across the nation, minority youth are subjected to these disciplinary practices at school more frequently than their White peers. The literature has consistently demonstrated that these disparities in discipline are not the consequences of differences in rates or types of misbehavior by students of color but are caused by racial and cultural biases (Advancement Project, 2018; Kutsyuruba et al., 2015). For example, Latinx students with a stationed school police officer were six times more likely to be arrested at school than White youth (Iverson et al., 2015). Additionally, Black youth, particularly males, have received harsher penalties and longer school suspensions for the same misbehavior as their White peers, suggesting that implicit biases influence Black youth disciplinary decisions (Kupchik & Ward, 2013; Mowen & Brent, 2016). Some racial/ethnic diverse adolescents have also reported feeling that the police are stationed in schools to protect the schools from *them* (Advancement Project, 2018).

Furthermore, in a statewide survey of school police officers in Delaware, 77% of officers reported arresting students to “simply calm them down.” In the same survey, 55% of school

police officers reported arresting students for minor offenses because “teachers wanted the arrest to occur” (Wolf, 2014). Therefore, police presence in schools might not only contribute to the criminalization of students but increases the potential to escalate disciplinary issues (even minor ones) into arrestable offenses (Curran et al., 2019) through involuntary police stops. Framed within the stress process perspective, adverse outcomes of police interactions are contagious across individuals, not only impacting the health of those who experience stops by those who witness them as well (Turney, 2014). When youth of color witness people stopped by the police, they often feel that the stop is unjustified due to racial/ethnic targeting (Anderson, 2012). Given that youth of color experience more racially motivated disciplinary practices at school, observing the discipline or arrests of their classmates, may produce fear that their own disturbances could result in similar consequences due to the stigma of their perceived racial criminality.

IMPLICATIONS

The implications of this study are widespread and can impact the way researchers, school officials, and policymakers view school and police partnerships. Findings from this study contribute to the literature on school policing while supporting previous research that highlights the negative mental health consequences of adolescent and police-related contact.

First, the present study makes an important contribution to the existing literature on the effects of school policing strategies on students' mental health by underlining the potential for increases in depression and anxiety symptoms among adolescents with regularly stationed police officer(s) in their schools. In addition, the current study highlights the relationship between being stopped by police at school, witnessing police stops at school, and adolescent depression and anxiety symptoms. Several policy implications directly stem from these results. For example, the employment of school police officers may also necessitate continued and increased funding of school counselors and social workers who could provide mental health screenings and offer counseling care to students after a police stop to address distressing emotions (Keys et al., 1998). Moreover, results from this study suggest that this care should be extended to youth who witness these stops and underscores that the effects of witnessing police stops at school on adolescent mental health should not be underestimated by school officials or policymakers. The experience of witnessing police stops at school should be considered a potentially traumatic event that can result in greater depression and anxiety symptoms for *all* youth. Though the role of school police is to act as embodiments of safety on school campuses, this assumption ignores the harmful, negative encounters that youth of color have often previously experienced with police in their

communities (Connery, 2020). Accordingly, school policymakers should actively address the potential mental health outcomes of school police presence, particularly among adolescents of color who are more vulnerable to police interactions.

Second, findings from this study could shed light on existing and future policies regarding school and police partnerships. Despite the growth of these partnerships, there is very little federal policy specifying the roles and duties of school police officers (Connery, 2020). As a result, federal-level data collection on school and police partnerships is severely lacking since school police are not required to register with any national database, and police departments do not have to report how many of their officers' work in school systems (Canady et al., 2012). The failure to collect this data has created difficulties in monitoring the work of school police officers and has led to only a small body of research investigating the effects of school and police partnerships on students (primarily focusing on their impact on school safety). Therefore, findings from this study assert the need for research on school and police partnerships to expand beyond safety measures to understand better how these partnerships impact students' mental health outcomes. As the literature broadens, it is possible that school policing practices and policies should be revisited in order to avoid harmful policing and patrolling in schools and promote positive relationships with school officers. Considering the growth of school and police partnerships in recent years, a systematic evaluation of patrolling and stopping strategies as a required element of training for school police officers could be beneficial (Ko et al., 2008). In addition, equipping school police officers with conflict resolution skills and developmentally sensitive knowledge on the period of adolescence (Jackson et al., 2019) could be useful to minimize the adverse mental health consequences of police and youth encounters at school (Cohen & Piquero, 2009).

LIMITATIONS

This study makes several important contributions, which are strengthened by its large and diverse sample; however, this study is not without limitations. First, the FFCWS data primarily consists of youth born in urban areas. Therefore, these findings might not be generalizable beyond urban-born children. However, these results speak to a particularly relevant population since proactive policing tactics (such as police stops at school) are even more prominent in lower-income, urban school systems (Jackson et al., 2019; Lindsay et al., 2018). Second, this study employed a cross-sectional design, prohibiting the ability to make causal inferences. For instance, it is possible that youth with prior histories of mental health disorders exhibited adverse behaviors at school that resulted in disciplinary stops by the police. Alternatively, there is potential that youth displayed mental health symptoms weeks, months, or years after being stopped or witnessing stops at school. Though the school policing variables in the FFCWS are only available for the most recent wave of data collection (Wave 6, Year 15), there is potential that future research could examine these findings longitudinally in upcoming waves of the FFCWS. Third, although this study design provided the ability to investigate a large, heterogeneous population, it did not adjust for an array of individual characteristics, such as prior mental health history, delinquency, or parental criminal justice involvement. These characteristics could help explain differences in depression and anxiety symptoms due to police presence, police stops, and witnessing police stops at school.

Finally, the school policing variables in this study were binary (i.e., yes or no responses). The data did not indicate the number of police stops youth had experienced at school, the age at

which the stop(s) occurred at school, or the intrusiveness of these stops at school. Previous research has suggested that individual characteristics of police stops can produce varying mental health outcomes for youth who experience these stops (Jackson et al., 2019). Therefore, more in-depth information on these police and youth interactions might have aided in analyses. Future research should address these limitations by controlling for pre-existing individual differences among adolescents and measuring the specific features of police stops at school to build on the present results.

CONCLUSIONS

Schools are meant to foster health, safety, and academic achievement while creating a sense of security and support for students (Marin & Brown, 2008). In view of the upsurge of police and school partnerships, the importance of studying the effects of their practices on student mental health is increasingly urgent to ensure psychological well-being among youth in the United States. The present study is one of the first to document the associations between school policing practices and adolescent mental health. Explicitly, findings from this study suggest that direct and vicarious police encounters at school are significant stressors for youth with harmful mental health consequences. Additionally, evidence from this study indicates that school connectedness and race/ethnicity moderate these relationships. Being stopped by the police at school is a direct stressor associated with greater depression symptoms among adolescents who personally experience this police-related contact. This stressor is also vicarious, affecting depression and anxiety symptoms among youth who witness these police stops at school.

Discoveries from the present study begin to fill the gap in the existing literature on school policing, which has historically focused on student perceptions of safety. These findings demonstrate that policing in schools affects student mental health, especially for students of color. Moreover, these discoveries underline the need for evidence-based approaches or alternatives to school policing that are grounded in child development, relationship building, and restorative justice to address school safety concerns in a way that protects the well-being and human rights of *all* students. The increasing presence of police in schools has been motivated by federal funding initiatives and fears of school shootings. Despite the intentions of school and police partnerships

to promote safety, these findings suggest that future policy might need to consider how this objective may come at the expense of some students' overall mental health.

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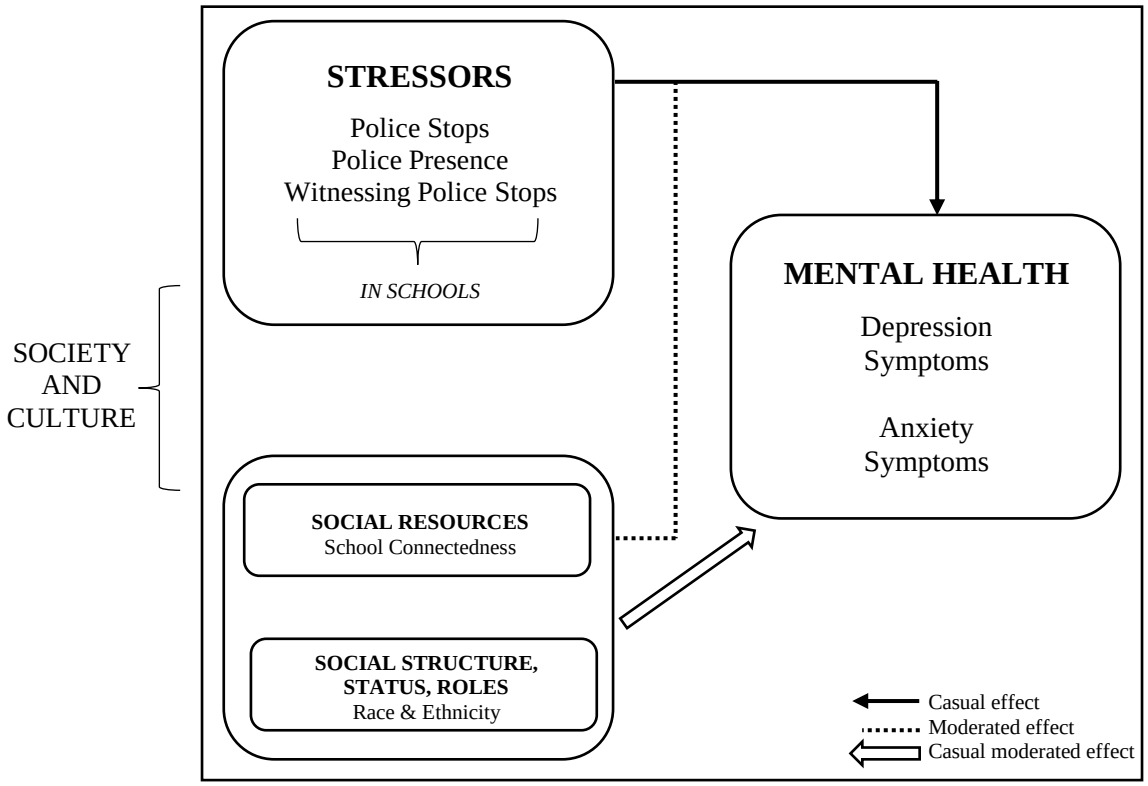
Figure 1. The Stress Process Model



Based on Aneshensel & Mitchell (2014); Pearlin et al. (1981)

Figure 2. School Policing by Race/Ethnicity

Variable		White, non-Hispanic	Black/African American	Hispanic/Latinx	Multi-racial/Other	*Total*
Police officer(s) regularly stationed in your school?	*Yes*	440 (79%)	1,276 (81%)	659 (82%)	194 (78%)	2,569
	No	114 (21%)	299 (19%)	140 (18%)	54 (22%)	607
	Total	554	1,575	799	248	3,176
Have you ever been stopped by a police officer at school?	*Yes*	19 (19%)	101 (25%)	36 (27%)	21 (36%)	177
	No	82 (81%)	303 (75%)	98 (73%)	38 (64%)	521
	Total	101	404	134	59	698
Have you ever seen someone stopped by the police at school?	*Yes*	228 (52%)	682 (54%)	328 (50%)	98 (51%)	1,336
	No	210 (48%)	589 (46%)	328 (50%)	95 (49%)	1,222
	Total	438	1,271	656	193	2,558

Table 1. Means, Standard Deviations, Sample Sizes, and Pearson Correlations

#	*Variable*	1	2	3	4	5	6	7
1	Police officer(s) in school							
2	Stopped by police at school	.10**						
3	Seen someone stopped by police at school	.15**	.21**					
4	Depression	.00	.09**	.11**				
5	Anxiety	-.03	.04	.11**	.65**			
6	School connectedness	-.02	-.12**	-.12**	-.35**	-.23**		
7	Race/ethnicity	.01	.09**	-.02	.04*	.02	.00	
	M	1.80	.24	1.48	1.59	1.81	3.44	2.23
	SD	.40	.43	.50	.60	.65	.57	.83
	N	3,346	892	3,326	3,337	3,338	3,346	3,176

Note. *M*, *SD*, and *N* are used to represent mean, standard deviation, and sample size, respectively. * indicates $p < .05$, ** indicates $p < .01$

Table 2. Police Presence, School Connectedness, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Police presence	0.01	0.00	0.83	0.00	1(3,335)	0.05	-0.04	-0.03	0.16	0.00	1(3,336)	2.02
2	Police presence	-0.01	-0.01	0.76	0.12	2(3,334)	236.17	-0.05	-0.03	0.07	0.05	2(3,335)	93.59
	School connectedness	-0.37	-0.35	0.00**				-0.26	-0.23	0.00**			
3	Police presence	-0.01	-0.01	0.76	0.12	3(3,333)	157.41	-0.05	-0.03	0.07	0.05	3(3,334)	62.43
	School connectedness	-0.38	-0.36	0.00**				-0.30	-0.26	0.00**			
Int.	Police presence * School connectedness	0.01	0.01	0.89				0.02	0.03	0.69			

Note. * indicates $p < .05$, ** indicates $p < .001$

Table 3. Police Presence, Race/Ethnicity, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Police presence	0.01	0.00	0.83	0.00	1(3,171)	0.04	-0.04	-0.03	0.16	0.00	1(3,172)	1.92
2	Police presence	0.01	0.00	0.85	0.00	2(3,170)	2.02	-0.04	-0.03	0.16	0.00	2(3,171)	1.78
	Race/ethnicity	0.03	0.04	0.05*				0.02	0.02	0.20			
3	Police presence	0.01	0.00	0.83	0.00	3(3,169)	2.64	-0.04	-0.02	0.17	0.00	3(3,170)	3.07
	Race/ethnicity	-0.06	-0.08	0.20				-0.09	-0.12	0.06			
Int.	Police presence * Race/ethnicity	0.04	0.12	0.05*				0.05	0.14	0.02*			

Note. * indicates $p < .05$, ** indicates $p < .001$

Table 4. Police Stops, School Connectedness, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Stopped by police	0.10	0.08	0.04*	0.01	1(732)	4.27	0.05	0.04	0.34	0.00	1(732)	0.92
2	Stopped by police	0.05	0.04	0.30	0.12	2(731)	51.63	0.01	0.01	0.80	0.05	2(731)	19.70
	School connectedness	-0.36	-0.35	0.00**				-0.26	-0.23	0.00**			
3	Stopped by police	0.09	0.07	0.06	0.14	3(730)	39.18	0.09	0.06	0.09	0.09	3(730)	24.46
	School connectedness	-0.73	-0.69	0.00**				-0.90	-0.80	0.00**			
Int.	Stopped by police * School connectedness	0.26	0.37	0.00**				0.45	0.61	0.00**			

Note. * indicates $p < .05$, ** indicates $p < .001$

Table 5. Police Stops, Race/Ethnicity, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Stopped by police	0.10	0.08	0.04*	0.01	1(696)	4.06	0.05	0.04	0.35	0.00	1(696)	0.87
2	Stopped by police	0.10	0.07	0.06	0.01	2(695)	2.73	0.05	0.03	0.40	0.00	2(695)	1.03
	Race/ethnicity	0.03	0.05	0.24				0.03	0.04	0.28			
3	Stopped by police	-0.20	-0.15	0.20	0.01	3(694)	3.22	0.00	0.00	0.98	0.00	3(694)	0.71
	Race/ethnicity	-0.13	-0.18	0.13				0.01	0.01	0.92			
Int.	Stopped by police * Race/ethnicity	0.13	0.33	0.04*				0.02	0.04	0.79			

Note. * indicates $p < .05$, ** indicates $p < .001$

Table 6. Witnessing Police Stops, School Connectedness, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Witnessing police stops	0.13	0.11	0.00**	0.01	1(2,676)	30.68	0.15	0.11	0.00**	0.01	1(2,677)	34.04
2	Witnessing police stops	0.08	0.07	0.00**	0.13	2(2,675)	193.98	0.11	0.09	0.00**	0.06	2(2,676)	82.93
	School connectedness	-0.36	-0.34	0.00**				-0.24	-0.22	0.00**			
3	Witnessing police stops	0.08	0.07	0.00**	0.13	3(2,674)	129.57	0.11	0.09	0.00**	0.06	3(2,675)	55.65
	School connectedness	-0.31	-0.29	0.00**				-0.18	-0.15	0.01*			
Int.	Witnessing police stops * School connectedness	-0.03	-0.05	0.38				-0.05	-0.06	0.30			

Note. * indicates $p < .05$, ** indicates $p < .001$

Table 7. Witnessing Police Stops, Race/Ethnicity, and Mental Health

		Depression						*Anxiety*					
Model	*Variable*	*B*	*ß*	*p*	R^2	*df*	*F*	*B*	*ß*	*p*	R^2	*df*	*F*
1	Witnessing police stops	0.13	0.11	0.00**	0.01	1(2,555)	29.29	0.15	0.11	0.00**	0.01	1(2,556)	32.50
2	Witnessing police stops	0.13	0.11	0.00**	0.01	2(2,554)	18.31	0.15	0.11	0.00**	0.02	2(2,555)	19.06
	Race/ethnicity	0.04	0.05	0.01*				0.04	0.05	0.02*			
3	Witnessing police stops	0.34	0.28	0.00**	0.02	3(2,553)	15.68	0.37	0.28	0.00**	0.02	3(2,554)	16.18
	Race/ethnicity	0.18	0.24	0.00**				0.19	0.24	0.00**			
Int.	Witnessing police stops * Race/ethnicity	-0.09	-0.26	0.00**				-0.10	-0.26	0.00**			

Note. * indicates $p < .05$, ** indicates $p < .001$