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Understanding African American High School Students' Attendance Patterns

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Understanding African American Students' Attendance Patterns

A dissertation submitted in partial satisfaction of the

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by

Zachary Wayne Cue., Jr.

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ABSTRACT OF THE DISSERTATION

Understanding African American High School Students' Attendance Patterns

by

Zachary Wayne Cue, Jr.

Doctor of Education

University of California, Los Angeles, 2020

Professor Christina Christie, Co-Chair

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Chronic absenteeism is a growing problem. Students most at-risk for chronic absenteeism are those who display low school engagement, possess a low GPA, perceive a negative school climate, have low parental support or monitoring, and are African American (Bean et al., 2006; Benner & Wang, 2014; Finn, 1989; Skedgell & Kearney, 2018). In fact, African American high school students demonstrate some of the highest rates of chronic absenteeism in the United States, California, and a large urban school district referred to as The District[1] (Chang et al., 2018; *ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). These findings have stimulated the development of national, state, and local interventions aimed at improving absenteeism. However, many of these interventions have been unsuccessful because we do not understand African American students' reasons for absenteeism, let alone the

[1]The pseudonym The District is used to maintain anonymity.

differences in outcome for students who attend school but miss their classes (i.e., are partially absent). These data are essential for developing successful interventions.

The current study filled this gap by conducting statistical analyses of attendance, academic and survey data to identify areas that should be researched further. The goal of the study was to gain insight into a subgroup of African American high school students who were partially absent from school. A quantitative approach was used to describe the distinguishing characteristics of African American high school students who were severely partially absent[2] by comparing them to African American high school students who were chronically absent[3]. Pre-existing data from The District's School Experience Survey (items related to school belonging), attendance records, and grade reports were analyzed using descriptive and inferential statistics (i.e., chi-square test of independence and multiple linear regression) to better describe and distinguish these students.

The results of chi-square analyses indicated that more students within the sample were severely partially absent than chronically absent, and that grade level and school location had a significant association with both attendance patterns. The results of multiple linear regressions showed that when controlling for the effects of full absences and covariates (e.g., gender and grade level), the effects of partial absences on achievement and sense of belonging are the strongest. Additionally, when controlling for the effects of partial absences and covariates (e.g., gender and grade level), the effects of full absences on sense of belonging are not significant. In other words, the effects of severe partial absences on African American high school students'

[2] This study defined severe partial absences as a student being marked present for a portion, but not all, of their classes for at least 15% of the school year.

[3] This study defined chronic absences as a student being marked absent for all of their classes for at least 15% of the school year.

academic achievement and sense of belonging are stronger and more significant than chronic absences. In fact, chronic absences have no significant impact on these students' sense of belonging. In practical terms, African American high school students who attend school but miss their classes may be more at-risk for failing and feeling disconnected from their schools than those who are missing school altogether.

While findings from this study relate to The District, their significance extends to any large urban school district because the observed phenomena of chronic absences and severe partial absences are a national problem. As such, the results of this study call attention to the need for a critical shift in the evaluation of students who are most in need of academic support and interventions. Specifically, these data may help education leaders and policymakers better understand the differences in demographic characteristics, academic achievement and belonging between chronically absent and partially absent African American high school students. More importantly, the data collected within this study may further help education leaders and policymakers to develop effective interventions that will increase African American students' attendance and academic outcomes.

The dissertation of Zachary Wayne Cue, Jr. is approved.

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2020

DEDICATION PAGE

I give this manuscript as a gift to my late mother, Michelle S. Cue. May she rest in peace. Through her life, she taught me what it means to persevere. Without her, my engagement in school, desire to achieve at all, and my drive to pursue higher education would be non-existent. Mom, you will forever be my sunshine, my only sunshine.

With Love,

Your Loving Son

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VITA

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CHAPTER 1: INTRODUCTION

The goal of this study was to understand the attendance patterns of African American high school students enrolled in a large urban school district. Attendance pattern was operationally defined as the severity of full day and partial day absences within the 2018-19 school year. Severity categories were created using the multi-tier system of support model (Skedgell & Kearney, 2018). The patterns of attendance for a sample of 12,004 African American high school students enrolled in The District[4] were distributed by gender (male and female), grade level (freshman, sophomore, junior, and senior), and school location (six regions comprising The District), and those distributions were tested for any significant associations. The patterns of attendance were further tested to determine their estimated effects on academic achievement (i.e., GPA) and sense of belonging (i.e., school connectedness). While findings from this study relate to The District, their significance extends to any large urban school district because the observed phenomena of chronic absences and severe partial absences are a national problem. Therefore, the results of this study will help any district- and school-level leaders and policymakers better understand the differences in academic achievement and belonging between chronically and partially absent African American high school students. More importantly, the data collected within this study will further help education leaders and policymakers to develop interventions that actually increase African American students' attendance and academic outcomes.

[4] The District is a pseudonym used to maintain anonymity. It is one of the largest urban school districts in California and the United States

Background to the Problem

The disparity in academic achievement between racial/ethnic minority and white students has been a major issue within the U.S. educational system. Research has shown that African American students, in particular, are at risk for exhibiting low levels of achievement within schools (Li & Hasan, 2010; Logan et al., 2012). Although data over the last 30 years show improvements for African American students, the gap in achievement persists (Howard, 2010). In 2013, at the twelfth grade level, 16% of African American students were proficient in reading, compared to 47% of white students (National Center for Education Statistics, 2017). The primary factors that influence African American students' achievement in schools include attendance and engagement (Darensbourg & Blake, 2013; Finn, 1989; Goodenow, 1993; Hagburg, 1998; Johnson, 2009; Ladd & Dinella, 2009; Parke & Kanyongo, 2012).

Generally, students who feel as though they are part of their school and value their academic outcomes at their school (i.e., identify with their school) are more likely to maintain a high attendance and grade point average, as well as graduate because they are emotionally or psychologically engaged (Finn, 1989). Students' attendance in and identification with school are forms of behavioral and emotional engagement, respectively (Finn, 1989; Fredricks et al., 2004; Voelkl, 2012). Aligning with this theory, African American students' attendance in school may decline as they become less engaged in school (Benner & Wang, 2014; Darensbourg & Blake, 2013). Research further suggests that students who are chronically absent from school express low feelings of belonging or connectedness to their school (Hendron & Kearney, 2016; Kearney, 2008; Önder, 2017).

Problem Statement

In K-12 schools, average daily attendance (ADA) is calculated by averaging the number of students accounted for by teachers using a data management system (e.g., My Integrated Student Information System or MiSiS). Students can be marked present, tardy, or absent. Although state and federal policies, such as the Education Code and Every Student Succeeds Act, often use the terms truancy and absenteeism interchangeably, the research literature regarding student attendance intentionally distinguishes between the two. Truancy is based on students' unexcused absences, while absenteeism is determined by students' absences regardless of excuse (California Education Code, 2013). The United States Department of Education's Office for Civil Rights defines chronic absenteeism as absenteeism in which students miss at least 10% of the school year, which is approximately 18 of the required 180 days. In most U.S. school districts, students who are marked absent for all of their classes, in a single school day, receive a full day absence (or full absence). However, students who are marked present for a portion, but not all, of their classes receive a partial day absence (or partial absence). Partial absences are not counted towards rates of absenteeism and have seldom been explicitly studied, if at all, within the research literature.

During the 2015-16 school year, 15% of all students were chronically absent in the United States, compared to 12% of all students in California (Chang et al., 2018). However, the U.S. and California rates of chronic absenteeism for African American students was much higher at 19.7%. Within The District, one of the largest urban school districts in California and the US, 21% of African American students were chronically absent (Chang et al., 2018). Since that year, the rate of chronic absenteeism for African American students within The District has increased.

In 2017, The District partnered with Education Resource Strategies (ERS), a non-profit organization aimed at improving resource management within school systems, to collect data around The District's attendance rates. The results of their investigation, which incorporated survey and achievement data, suggested that African American students exhibited the highest rates of chronic absenteeism within The District at 24.1%, while only 14.1% of all students were chronically absent (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Although high schools constituted approximately 10% of schools in The District, they contributed to 25% of the absenteeism. In fact, high schools maintained the highest rates of absenteeism at 17.9% of all students. This exceeded absenteeism rates for neighboring school districts with similar student demographics (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). These data suggest that African American high school students in The District may be the most at-risk for chronic absenteeism.

Recognizing the significance of these data, The District assembled a task force of education experts to examine current programs and to propose a plan of action for future interventions. Two of the task force's recommendations included 1) investigate the impacts of partial day absences on students' absenteeism and 2) implement broad-based and targeted outreach programs, as well as direct interventions for the most at-risk students (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). While The District is currently implementing outreach programs and interventions targeting students at-risk for chronic absenteeism, there has been less focus on students who attend school but miss classes, particularly those with severe partial absences (i.e., partially absent for at least 15% of the school year). Therefore, this research study will address the following questions:

1. Considering districtwide demographic data, what are the characteristics of African American high school students who were chronically and severely partially absent?
    a. Is there an association between gender and chronic absence and partial absence severities?
    b. Is there an association between grade level and chronic absence and partial absence severities?
    c. Is there an association between school location and chronic absence and partial absence severities?
2. Considering districtwide achievement data (e.g., GPA), how do African American high school students who are severely partially absent compare to those who are chronically absent?
3. How do African American high school students' perceptions of school belonging relate, if at all, to their attendance patterns?

Overview of the Research Design

This study utilized a quantitative approach consisting of secondary analysis of pre-existing attendance, academic and survey data within The District pertaining to African American high school students. The data included students' responses on The District's School Experience Survey for items related to school belonging, student demographics (i.e., gender, grade level, and school location), attendance records, and grade reports from the 2018-19 school year. The data were analyzed using descriptive and inferential statistics to better identify and describe African American high school students' patterns of attendance (i.e., full and partial absence severities). Descriptive statistics included frequencies and percentages, while inferential

statistics included chi-square tests and multiple linear regressions. The study's methodology is discussed further in Chapter 3.

Significance

Chronic absenteeism is a growing national problem. Within the past two decades, state and local policies have demonstrated active attempts by researchers, education leaders and policymakers to resolve this issue (Graves et al., 2017; Rodríguez & Conchas, 2009; Sheldon, 2007; Somers & Piliawsky, 2004; Sutphen et al., 2010; Wang & Eccles, 2012; Yampolskaya et al., 2006). The research literature highlights academic achievement and school engagement (e.g., peer relations and student-teacher interactions) as school-related risk factors for this problem (Bridgeland et al., 2006; Hendron & Kearney, 2016). Findings from these studies suggest that high school students with negative experiences related to these factors are most likely to be chronically absent. Skedgell & Kearney (2018) found ethnicity to be an additional key factor. Their findings indicated that African American and Native American secondary students had higher risk probabilities for chronic absenteeism than other ethnic groups within their study (Skedgell & Kearney, 2018). Additionally, the impacts of excessive partial absences must be considered when investigating chronic absenteeism (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Despite our understanding of these risk factors, in The District the rates of chronic absenteeism for African American students have increased. There is a need within The District to better understand the differences, if any, in achievement and belonging between chronically absent and partially absent African American students, particularly those enrolled in high school. This study addressed this significant problem by investigating the attendance patterns of African American high school students enrolled in The District high schools during the 2018-19 school year. The results of this study may inform future

interventions specifically targeting students who are most at-risk for absenteeism (e.g., chronic or partial). The following chapter will explore the vast research literature regarding chronic absenteeism, as well as the few studies that have investigated partial absences (e.g., missing or skipping class).

CHAPTER 2: REVIEW OF LITERATURE

Introduction

As an increasing number of students miss school each year, chronic absenteeism has become a growing national, state, and local problem (Chang et al., 2018). Statistical data indicates that the student group most at-risk for chronic absenteeism is African American high school students, particularly those who are enrolled in The District (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). This disheartening trend of chronic absenteeism is a serious educational issue because it has been linked to lower academic achievement and higher dropout rates (Kearney, 2008), which may exacerbate larger systemic problems such as the achievement gap. Factors that may increase students' risk for chronic absenteeism include, but are not limited to, grade point average (GPA), race/ethnicity, parenting behavior, school climate (Brookmeyer et al., 2006; Hendron & Kearney, 2016) and school engagement (Benner & Wang, 2014; Darensbourg & Blake, 2013; Finn, 1989; Goodenow, 1993; Hagburg, 1998; Johnson, 2009; Kearney, 2008; Ladd & Dinella, 2009; Skedgell & Kearney, 2018). Unfortunately, it remains unknown how these risk factors relate to African American students' attendance in The District, particularly those who are partially absent. The purpose of this study is to statistically analyze data from African American high school students who attend school but miss their classes (i.e., are partially absent). Analysis of this data will enable District leaders, policymakers, and school staff to understand the impacts of this phenomenon on African American students' achievement and engagement, which may be vastly different from students who miss school altogether (i.e., are chronically absent). This knowledge is also essential for designing effective interventions at the district level.

This chapter begins by briefly introducing multiple measures of chronic absenteeism, as well as discussing the general impacts of chronic absenteeism on students' academic achievement and school completion. I then review the common risk factors for chronic absenteeism. Next, national, state and district statistics regarding chronic absenteeism are examined, highlighting the fact that African American students have the highest rates of chronic absenteeism at each level. I then examine successful and unsuccessful interventions aimed at improving African American students' absenteeism. Lastly, I discuss the conceptual framework of the participation-identification model as an approach for examining the relationship between African American high school students' attendance, achievement, and belonging. Notably, this chapter primarily examines research literature regarding chronic absenteeism because few, if any, studies have investigated partial absences. Partial absenteeism is most often researched in regard to teachers and employees (Zavala et al., 2002), rather than students themselves. Indeed, there is a need for understanding the differences, if any, in outcomes for chronically absent and partially absent African American high school students.

Understanding Chronic Absenteeism

Attendance is one of the most important factors influencing students' academic achievement (Balfanz & Byrnes, 2012; Skedgell & Kearney, 2018). Research suggests that students who are chronically absent from school perform at a lower level than those who are not (*Civil Rights Data Collection*, 2014). Understanding the multiple measures for chronic absenteeism is a pre-requisite for fully comprehending the severity of this growing national problem. In general, education policy defines chronic absenteeism as excessive absences from school for any reason other than suspension. States differ on how many absences are considered excessive. For instance, Massachusetts designates students as chronically absent if they have 7 or

more absences within a six-month period (Massachusetts Education Code, 2018). However, in Florida, students are chronically absent if they miss 15 or more days within a 90-day period (Florida Education Code, 2018). In California, students are identified as chronically absent if they miss at least 10% (or 18 days) of the 180-day school year (California Education Code, 2013). To account for the different measures of chronic absenteeism, many researchers have adopted a multi-level framework to delineate between varying levels of severity (Skedgell & Kearney, 2018). The proposed study will define both full absence and partial absence severity using this framework, which is discussed in the following section.

The Impact of Chronic Absenteeism on Student Outcomes

The multi-tiered system of support (or MTSS) model identifies three levels of severity for absenteeism, ranging from nonproblematic to chronic (Skedgell & Kearney, 2018). Within the MTSS model, nonproblematically absent students miss between 1% and 10% of the school year, problematically absent students miss between 10% and 15% of the school year, and chronically absent students are those who miss 15% or more of the school year. Students who miss less than 1% of the school year are not considered to be absentee. Empirical studies focused on problematic and chronic absenteeism have examined the relationship between attendance and academic achievement.

Students who attend school consistently gain higher grades and perform better on standardized assessments than students who do not (*Civil Rights Data Collection*, 2014). In a longitudinal study, ninth graders who missed more than 20% of the school year (i.e., were chronically absent) failed four or more of their classes, compared to zero classes failed for students who missed less than 5% of the school year (i.e., were nonproblematically absent) (Mac Iver & Messel, 2012). Students with high attendance have also been shown to have higher rates

of school completion (Finn, 1989). In a study of 24,000 ninth graders in Chicago, Allensworth and Easton (2007) discovered that students who had no more than four absences in a semester were 24% more likely to graduate in four years than students who had five or more absences. The social outcomes for chronically absent students may be just as grim as the academic outcomes.

Findings from key studies further suggest that chronically absent students are more likely to engage in socially delinquent behaviors, such as substance abuse and vandalism (Henry & Huizinga, 2007; Kearney, 2008). In a brief longitudinal study of over 2,000 adolescent students, Shochet et al. (2006) determined that students who reported less connection to their school environment were more likely to display behavioral problems and psychiatric symptoms. In fact, linear regression analysis indicated that students' school connectedness was also a predictor of their mental health (Shochet et al., 2006). Similar studies indicate that absentee students are also more likely to suffer from psychiatric symptoms such as depression and anxiety (Hendron & Kearney, 2016). Considering the negative outcomes that may occur because of absenteeism, many researchers also examine the factors that put students at risk.

Common Risk Factors of Chronic Absenteeism

There are many risk factors associated with chronic absenteeism. However a majority of these factors can be categorized into four domains: individual, family-based, school-based, and community-based (Teasley, 2004). Within these domains, the most common risk factors relate to GPA and ethnicity (Kearney, 2008; Skedgell & Kearney, 2018), parenting behavior (Bean et al., 2006), school climate (Hendron & Kearney, 2016), and school engagement (Benner & Wang, 2014; Darensbourg & Blake, 2013; Finn, 1989; Goodenow, 1993; Hagburg, 1998; Johnson, 2009; Ladd & Dinella, 2009). Although race/ethnicity is regarded as a risk factor, there are not

different risk factors associated specifically with African American students. Instead, the research literature suggests that African American students are more likely to display the factors mentioned above than other student demographics. The following section will review the common risk factors that empirical studies have shown to be associated with chronic absenteeism, namely GPA, ethnicity, parenting behavior, school climate, and school engagement.

GPA and Ethnicity

African American high school students with low GPAs may be the most at-risk for exhibiting chronic absenteeism. Empirical studies have shown GPA and racial/ethnic background to be associated with chronic absenteeism. In their quantitative study, Skedgell and Kearney (2018) used the MTSS model (discussed at the beginning of this chapter) to predict which severity of absenteeism (i.e., nonproblematic, problematic, and chronic) a student would most likely exhibit. As a result of the study, common risk factors or predictors were identified for each severity of absenteeism. The researchers' model correctly identified 75.2% of participants (n = 316,004 students) who were chronically absent. These predictions were made based on four risk factors: 1) GPA, 2) age, 3) ethnicity and 4) grade level. Sampled students who possessed a low GPA (0.00 to 2.00) were at least 16.5 years of age, African American or Native American, and were in any grade at the secondary level were predicted to be chronically absent. Other studies have identified additional family-related factors.

Parenting Behavior

African American students who have minimal paternal support and behavioral control from either parent may be more at-risk for chronic absenteeism. Parenting behavior, another key risk factor for chronic absenteeism, can be divided into three dimensions of support, behavioral

control, and psychological control (Bean et al., 2006). Support, characterized as acceptance and warmth shown by the parent towards their child, has been related to positive social behaviors in African American adolescents, particularly their academic achievement (Bean et al., 2003). Behavioral control or monitoring has been associated with lower levels of delinquency (e.g., absenteeism) in African American adolescents (Brody, 2003). Conversely, psychological control (e.g., intrusion and manipulation) has been linked to increased levels of delinquency (Bean et al., 2006). Specifically, paternal support and behavioral control, regardless of parent type, are significantly related to lower levels of delinquency in African American adolescents. Additional researchers have explored the impacts of school-related factors on students' absenteeism.

School Climate

Considering that African American students have the highest rates of chronic absenteeism, their interactions and relationships with school staff and peers may be more negative than other student groups. School climate refers to the interpersonal relationships and interactions students have with school staff and peers. Research findings suggest that school climate is positively related to attendance (Brookmeyer et al., 2006). Students who maintain positive relationships and interactions within a school are more likely to attend school than those who are not. Regarding partial absences, Keppens & Spruyt (2019) discovered that class skipping had a strong correlation with school climate; students who missed classes also had a lower sense of connection to their school-conforming peers and teachers. Regarding chronic absenteeism, Hendron & Kearney (2016) examined how school climate relates to the psychiatric symptoms displayed by problematically absent students (i.e., missed between 10%-15% of the school year) in middle school and high school. The researchers discovered that school climate is inversely related to absenteeism severity, as well as anxiety, depression, and other psychiatric

symptoms. These data suggest that students who are the most at risk for chronic absenteeism are those who perceive a negative school climate on their campus. School climate also relates to students' engagement in school (Shochet et al., 2006).

School Engagement

The extent to which a student is engaged in school is a strong predictor of their attendance. Benner & Wang (2014) discovered that shifting attendance trajectories were indicative of increased levels of disengagement in school. The participation-identification model suggests that students who feel as though they belong in a school will attend school more often than those who do not (Finn, 1989). Within this model, full and partial absences can be viewed as negative participation, which may result from a low sense of belonging.

Findings from key empirical studies show a significant relationship between belonging and attendance. Students who feel like they are part of their school and value their academic outcomes at their school (i.e., identify with their school) are more likely to maintain a high attendance and grade point average, as well as graduate because they are emotionally or psychologically engaged (Beekhoven & Dekkers, 2005; Finn, 1989). Students who possess positive attitudes about school exhibit more engagement than peers who do not like school (Fredricks et al., 2004). African American students who are enrolled in schools where they are a majority or have ethnic congruence display higher feelings of belonging, which has a positive influence on attendance (Benner & Graham, 2007; Benner & Wang, 2014). Similarly, regarding partial absences, Geven et al. (2016) discovered that students in Swedish schools with ethnic congruence received social support and belongingness from co-ethnic friends, which contributed to positive school behaviors such as attending class; interestingly, this benefit was shown to be greater for ethnic majority students in integrated schools than ethnic minority students. Despite

our understanding of the impacts of chronic absenteeism on student outcomes and the predictors or risk factors of this problem, national, state, and local rates have been steadily increasing in recent years.

The Rates of Chronic Absenteeism

Attendance is a key predictor of students' graduation (Balfanz & Byrnes, 2012; Finn, 1989; Skedgell & Kearney, 2018). Unfortunately, attendance data shows that a growing number of students are chronically absent. Among these students, African American students display the highest rates of chronic absenteeism. During the 2015-16 school year, 15% of students were chronically absent in the United States, compared to 12% of students in California (Chang et al., 2018). However, both nationally and in California, the rate of chronic absenteeism for African American students was much higher at 19.7%. Within The District, 21% of African American students were chronically absent, which was higher than rates within the state and nation (Chang et al., 2018). In recent years, the rate of chronic absenteeism for African American students within The District has increased.

Trends in The District

Although only 8.4% of students within The District identify as African American, this demographic exhibits the highest rate of chronic absenteeism, particularly those who are in high school ([The District], 2017). In 2017, The District partnered with Education Resource Strategies (ERS), a non-profit organization aimed at improving resource management within school systems, to collect data around The District's attendance rates. The results of their investigation, which incorporated survey and achievement data, suggested that African American students exhibited the highest rates of chronic absenteeism within The District at 24.1%, while only 14.1% of all students were chronically absent (*ERS Report to [The District] Advisory Task*

Force: Attendance Analysis, 2017). Although high schools constituted approximately 10% of schools in The District, they contributed to 25% of the absenteeism. In fact, high schools maintained the highest rates of absenteeism at 17.9% of students. This exceeded absenteeism rates for school districts with similar student demographics, such as a neighboring urban school district that had a rate of 16.1% (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). These data showed that African American high school students in The District are the most at-risk for chronic absenteeism. Throughout the nation, existing interventions are focused on improving these students' absenteeism. Unfortunately, many of these interventions have been unsuccessful in lowering the rates of chronic absenteeism.

Existing Interventions

At the national, state, and local levels, chronic absenteeism has gained major attention. Researchers and education leaders are well aware of this growing problem. As a result, there have been numerous interventions aimed at improving chronic absenteeism (Teasley, 2004). Popular interventions aim to improve students' engagement through Social-Emotional Learning (or SEL) (Wang & Eccles, 2012). Nevertheless, as national, state, and local data show, the problem persists, especially for African American high school students. The following section will discuss the types of interventions that have been implemented to date, as well as explore successful and unsuccessful interventions.

Types of Interventions

Generally, interventions for absenteeism focus on resolving contributing factors from the four domains discussed early in this chapter (i.e., individual, family-based, school-based, and community-based) (Teasley, 2004). Interventions focused on individual and family-based factors attempt to resolve learning and behavioral problems, as well as a lack of parental involvement

(Sutphen et al., 2010). Strategies associated with these types of interventions also include an incentive or contingency management system (e.g., rewards). After an eight-week study, Brooks (2001) discovered that high school students who received rewards via a token economy, as well as behavioral contracts and group meetings, displayed significantly fewer absences than students who did not.

On the other hand, interventions focused on school and community-based factors seek to improve the quality of relationships with school staff and students' experiences in their neighborhoods (Teasley, 2004). These types of interventions use school reorganization and community partnership strategies. Sheldon (2007) found that schools that participated in a community partnership initiative (i.e., National Network of Partnership Schools), which implemented family and community building activities, displayed higher attendance rates than schools that did not participate.

Although there have been a large number of interventions, the problem of absenteeism remains unresolved because empirical evaluation for many of these interventions has been limited and because few interventions employ experimental or group comparison designs (Sutphen et al., 2010). More importantly, even fewer interventions are based on the participants' actual reasons for absenteeism (Graves et al., 2017). The following section will discuss two interventions, individual and community-based, designed to improve absenteeism rates for African American students.

Successful and Unsuccessful Interventions

The following section will examine two existing interventions specifically aimed at improving African American students' chronic absenteeism, Gaining Early Awareness and Readiness Program (GEAR UP) (Yampolskaya et al., 2006) and The Boston Urban Youth

Foundation (BUYF) (Rodríguez & Conchas, 2009). While both interventions were employed in states other than the proposed study, research evaluating their effectiveness provides data showing their impacts on African American attendance. These interventions are significant because they exemplify what works and doesn't work with regard to improving African American students' absenteeism, namely building judgement-free relationships in which they may share their experiences as opposed to assuming the reasons for their absenteeism.

Individual interventions. GEAR UP was an unsuccessful individual intervention designed to improve achievement and reduce truancy/absenteeism for at-risk students at a large urban high school in Florida (Yampolskaya et al., 2006). This was achieved through three types of activities: academic (i.e., tutoring with teachers), behavior-related (i.e., conflict resolution sessions with case managers), and social. Services were provided to all participants, regardless of grade level, in class, after class, on Saturdays, and over the Summer. Evaluation of the intervention consisted of a three-group comparison (i.e., No Participation, Low Participation, and High Participation groups) of 447 participants, 75% of whom were African American. Achievement was measured using grade point average (GPA) and state test scores. Truancy and absenteeism were calculated based on the number of unexcused absences, excluding suspensions. Findings from the evaluation indicate that the average number of unexcused absences increased for participants by 2.3 absences, while the number of unexcused absences for non-participants decreased by 0.1 absences (Yampolskaya et al., 2006). Unfortunately, students who used the behavior-related counseling actually attended school less often than students who did not, an unexpected result of the intervention. While GEAR UP services were intended to have positive outcomes for at-risk students, the students were not consulted regarding the reasons for their absences. At-risk students' perspectives would have richly informed the intervention's

design and could have resulted in a reduction of these students' absenteeism. Additionally, knowing the effects of absenteeism on various factors, such as achievement and belonging, would have better informed the design and implementation of this intervention.

Community-based interventions. BUYF, an intervention that has been shown to reduce absenteeism, is a community-based organization in Boston that provides social-emotional learning interventions designed to improve the educational success of urban and low-income African-American and Latinx students for academic success in secondary schools (Rodríguez & Conchas, 2009). The organization offers three year-round programs: a) School Success Program (SSP), b) Academic Enrichment Center (AEC), and c) College Vision Program (CVP). A key goal of the SSP and CVP is to reduce students' truancy by 70%. Truancy was defined as three or more absences from school. SSP participants are middle school students. Once in high school, these students join the CVP. Case managers in both programs spend a significant amount of time with students in order to address their attendance, as well as any social and psychological factors that may hinder their success. This was achieved through one-on-one sessions (at school and out of school), peer mentoring, social networking events, and college field trips.

A case study of the SSP included observations, six student interviews, and document analysis. The results of the case study suggest that students who participate in the intervention are more engaged in school and motivated to attend school more often. One participant stated, "[BUYF] helped me get back on track, bring my grades up and try to stay in school" (Rodríguez & Conchas, 2009, p. 241). The results also suggest that participants feel as though they matter. Another participant stated, "[BUYF] makes me feel like I am somebody" (p. 229). As Rodríguez & Conchas (2009) note, the success of the intervention is greatly attributable to the BUYF's commitment to connecting the community and the school. By focusing on their relationships

with participants, the BUYF staff were better able to elicit African American students' reasons for their absenteeism. However, the staff was not affiliated with the students' schools. The impact of this intervention would have been far greater if their approach was also utilized by school staff because they have more opportunities to build positive relationships with these students. Intentionally including students with problematic or severe partial absences would have also improved this intervention.

Summary

The success of an intervention aimed at improving African American students' absenteeism is determined by how well it considers the students' diverse perspectives (Graves et al., 2017). It is clear from these two interventions that their successes depended on the quality of interactions between students and staff, which allowed for constructivist dialogue about why they did not attend school. Fundamental to this dialogue is an understanding of the impact chronic and partial absences have on student outcomes. While the former may be widely researched and the focus of most interventions, the latter has yet to be intentionally investigated.

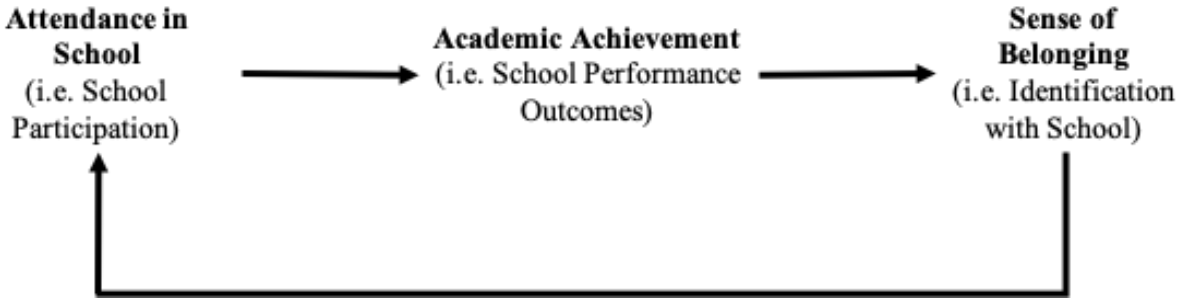
The research literature and education reports clearly identify African American students as the most at-risk for chronic absenteeism. There have been numerous interventions aimed at improving chronic absenteeism for this demographic. Nevertheless, not only has the problem of chronic absenteeism persisted, it has worsened. More importantly, very few, if any, interventions have been aimed explicitly at improving African American students' partial absences (i.e., skipping or missing classes). Most studies do not distinguish between full absences and partial absences. Several interventions have been unsuccessful in improving attendance rates for African American students because their perspectives and experiences have not been investigated, explored, or understood. To be clear, African American students' experiences in schools are

lacking in the research literature and existing interventions for absenteeism. Understanding African American students' reasons for skipping class is also fundamental to resolving this growing national, state, and local problem. However, a significant precursor is understanding the differences between chronic and severe partial absences and their impacts on student outcomes. Accomplishing this task required a framework taking into account the relationship between attendance, achievement and belonging.

The Participation-Identification Model

The goal of the proposed study was to illuminate the differences, if any, between chronically and partially absent African American high school students' outcomes in school. This study will draw on the conceptual frameworks of Finn's (1989) participation-identification model (see Figure 1). According to the participation-identification model, students who feel as though they belong at a school (i.e., identify with the school) will attend more often (i.e., participate). Within this model, school absences (full or partial) are a negative form of participation that may manifest due to low perceptions of belonging.

Figure 1
The Participation-Identification Model (adapted from Finn, 1989)



Within the last century, students' engagement in school has been linked to their academic achievement. Finn's (1989) classic participation-identification model defines student engagement as an interaction between behaviors that enable learning (participation) and emotions towards school (identification). Constructs of participation and identification are behavioral engagement and emotional engagement, respectively. Variables of behavioral engagement are attendance (school and class) and involvement in school activities (e.g., extracurricular and class assignments). Variables of emotional engagement include a sense of belonging (e.g., feeling a part of the school) and valuing (e.g., attitudes towards educational success). Finn (1989) developed the participation-identification model to explain how students' attitudes and behaviors are predictors of their risk for dropping out of school. Fittingly, the model has been used extensively to understand the relationship between engagement, attendance, and achievement in schools. Positive interactions with parents, school staff, and peers, have a positive influence on African American students' perceptions of belonging and, subsequently, their attendance in schools (Whitlock, 2006). For the proposed study, the participation-identification model suggests that chronically absent African American students display low attendance because they possess a low sense of belonging at their schools or within particular classes. This model informed interpretations of the interactions between African American students' attendance, achievement, and belonging,

Summary

We know that chronic absenteeism is a growing problem nationally. In California, the demographic with the highest rate of chronic absenteeism is African American students. In The District, one of the largest urban school districts in California and the nation, African American high school students also have the highest rates of chronic absenteeism. The research literature is

clear on the causes of chronic absenteeism. Students who are the most at-risk for chronic absenteeism are those who display low school engagement, possess a low GPA, perceive a negative school climate, have low parental support or monitoring, and are African American (Bean et al., 2006; Benner & Wang, 2014; Finn, 1989; Skedgell & Kearney, 2018). These findings have even stimulated the development of a litany of interventions aimed at improving absenteeism, particularly for African American students. However, many of these interventions have been unsuccessful because we do not fully understand African American students' reasons for absenteeism, let alone the impacts of partial absences on these students' outcomes in schools. Clearly, the best path to resolving the problem of African American chronic absenteeism is to gain insight into their diverse experiences in schools (Graves et al., 2017), particularly for those who miss their classes (i.e., are partially absent). An important pre-requisite will be to distinguish between full and partial absenteeism, as well as their impacts on students' achievement and belonging in schools. These data are essential for developing successful interventions. The proposed study filled this gap by comparing the effects of chronic and partial absence severities on African American high school students' achievement and belonging within The District. The following chapter will discuss how this was accomplished within the study.

CHAPTER 3: METHODS

Introduction

African American high school students display the highest rates of chronic absenteeism in the U.S., California, and The District (Chang et al., 2018; *ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Despite there being a high volume of existing interventions, most of them fail to improve absenteeism rates, particularly for African American students (Sutphen et al., 2010). This is because few interventions are based on participants' reasons and explanations for skipping school (Graves et al., 2017), and seldom distinguish between full and partial absence severities. While the research literature identifies risk factors for chronically absent students, it is unclear which of these factors, if any, apply to African American students who are partially absent, let alone the impact of partial absence severity on academic achievement and engagement.

Research Questions

The research study will address the following questions:

1. Considering districtwide demographic data, what are the characteristics of African American high school students who were chronically and severely partially absent?
    a. Is there an association between gender and chronic absence and partial absence severities?
    b. Is there an association between grade level and chronic absence and partial absence severities?
    c. Is there an association between school location and chronic absence and partial absence severities?

2. Considering districtwide achievement data (e.g., GPA), how do African American high school students who are severely partially absent compare to those who are chronically absent?
3. How do African American high school students' perceptions of school belonging relate, if at all, to their attendance patterns?

Overview of the Research Design

The goal of the proposed study was to gain insight regarding the differences in achievement and belonging, if any, between chronically absent and partially absent African American high school students enrolled within a large urban school district. The proposed study used a quantitative approach to 1) describe the demographic characteristics of chronically absent and partial absent African American high school students and 2) compare the effects of chronic and severe partial absence severities, if any, on African American high school students' achievement and belonging. Specifically, secondary analysis of pre-existing data from The District's School Experience Survey (items related to school belonging), attendance records, and grade reports was conducted using descriptive and inferential statistics to better identify, describe, and compare outcomes for these students.

Design Rationale

Most studies within the research literature employ a quantitative approach, allowing researchers to develop a list of risk factors for chronic absenteeism, as well as investigate their relationship. However, knowing the risk factors of chronic absenteeism has not been enough to improve attendance and achievement outcomes for African American students. We also need to better understand the differences, if any, between African American students who miss school and those who attend school but miss their classes. More importantly, we need to determine the

effects that full and partial absence severities may have on achievement and engagement for these students. While qualitative methods, such as interviews, would be essential for exploring why these students miss school or class, a quantitative approach is appropriate for determining the relationships between multiple variables, such as attendance and achievement. Secondary analysis of quantitative data is the only method by which any associations of full absence and partial absence severities with academic achievement and belonging may be investigated.

Site Selection

Irrespective of any particular state and school system, high rates of chronic absenteeism and severe partial absenteeism among African American high school students presumably persist within most large urban school districts. Unfortunately, the problem has also been observed within The District. The District is a large urban school district in California with nearly 600,000 students, attending over 1,000 schools, staffed by over 60,000 teachers, administrators, and other personnel ([The District], 2017). Despite having such a large infrastructure of support, the chronic absenteeism rates for African American students are higher than both the state and nation (Chang et al., 2018; *ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Therefore, this study utilized a quantitative approach to analyze pre-existing attendance records, grade reports, and survey data for African American high school students within The District from the 2018-19 school year. These data also included students' demographics (i.e., gender, grade level, and school location).

Sample Selection

Although study participants were not recruited, pre-existing quantitative data for African American high school students within The District was formally requested through their external research division. The sample total was 12,029 students, consisting of all the African American

high school students enrolled in The District. The sample also included students in grades nine through twelve. This study focused on African American high school students because their demographic is the most at-risk for displaying chronic absenteeism (Balfanz & Byrnes, 2012; Bean et al., 2006; Bridgeland et al., 2006; Chang et al., 2018; *ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017; Geven et al., 2016, 2017; Hancock et al., 2018; Hendron & Kearney, 2016; Henry & Huizinga, 2007; Kearney, 2008; Mac Iver & Messel, 2012; Önder, 2017; Skedgell & Kearney, 2018). Notably, few researchers have explored the characteristics for those within this demographic who display partial absences, which may also have strong impacts on students' achievement and engagement. Importantly, the confidentiality of all participants was strictly maintained by replacing all personal identifiers with a linkable randomized code or pseudo-ID, whose key was maintained by The District.

Data Collection

Pre-existing cross-sectional data were collected from The District's division for external research through a formal review and data use agreement. African American high school students' attendance records, grade reports, and School Experience Survey responses from the 2018-19 academic year were collected and analyzed to address all three research questions. All personally identifiable data were made confidential using a pseudo-ID, generated and maintained by the external research division. The pseudo-ID was also used to link all of the collected data. Among the 12,029 cases within the collected data set, 25 cases (0.2%) were missing varying amounts of data (e.g., attendance), so the total data set included 12,004 students. While the survey response rate for all high school students in The District was 74%, only 6,269 African American students within the sample responded to the items of interest. Within the attendance records, three discrete variables were used, Year-To-Date Enrollment Days, Year-to-Date

Absences, and Year-To-Date Partial Presents[5]. Within the grade reports, one continuous variable was used, year-to-date grade point averages (or GPAs) on a 4- or 5-point scale depending on student's course rigor, which was not collected. Within the School Experience Survey, only responses to items related to sense of belonging were used. Demographic data were also collected within the data sources (i.e., attendance records, grade reports, and survey responses). The variables used within the demographic data were dichotomous gender (i.e., male and female), ordinal grade levels (i.e., freshman, sophomore, junior, and senior), and nominal school locations[6] (e.g., Region A).

Data Preparation

Prior to analysis, the attendance data was modified in order to determine the severity of full absences and partial absences for all African American high school students within the sample. Specifically, students' year-to-date absences and year-to-date partial presents were divided by their year-to-date enrollment days, respectively, to determine the full absence rate and partial absence rate for each student. Skedgell & Kearney's (2018) multi-tiered systems of support (or MTSS) model was used to convert these two discrete variables into ordinal variables referred to as full absence severity and partial absence severity. Both variables consisted of four ordinal categories, ranging from not absentee to severe. Table 1 below provides the operational definitions for each severity category.

[5] The District refers to partial absences as partial presents. Both terms are operationally defined as attendance in which students are only marked present for a portion, but not all, of their classes in a single day.

[6] The District is divided into six regions. These regions were referred to as school locations within this study. The region names (e.g., Region A) are pseudonyms used to maintain anonymity.

Table 1
Operational Definitions of Full and Partial Absence Severity Categories

Attendance Pattern	Operational Definitions			
	Absent or partially absent for less than 1% of the school year.	Absent or partially absent from 1-10% of the school year.	Absent or partially absent from 10-15% of the school year.	Absent or partially absent for more than 15% of the school year.
Full Absence Severity	Not Absentee	Nonproblematic	Problematic	Chronic
Partial Absence Severity	Not Partially Absent	Nonproblematic	Problematic	Severe

Ethical Issues

Major ethical issues within this study related to participant anonymity. All personal information regarding the participants and school sites were made confidential. Students' personally identifiable information were made anonymous by The District. Specifically, students were given randomized code identifiers (i.e., a pseudo ID number) that enabled linking students' attendance, achievement, and survey data without identifying who they were. Furthermore, I assigned pseudonyms to school locations (e.g., Region A) and the school district (e.g., The District) to further maintain anonymity.

Reliability and Validity

Issues of reliability and validity primarily related to the School Experience Survey, particularly because only eight items were analyzed within this study. In collaboration with CORE Districts, The District created the 90-item survey for the purpose of gathering meaningful feedback from organizational stakeholders, such as parents and students. Since its inception, the survey has been provided annually in the Fall to parents, teachers, and students at all levels of schooling (e.g., primary school). Schools use the survey results to inform schoolwide policy and

interventions, as well as improve teacher pedagogy. Schools are strongly encouraged to maintain a 100% response rate for staff, students, and parents. However, the high school response rate for the 2018-19 academic year was 74%. Unfortunately, there were no publicly reported technical reports regarding the validity of the School Experience Survey or the reliability of its items. I ran a reliability test for the nine connectedness items analyzed within this study. These items had a high level of internal consistency, as determined by a Cronbach's alpha of .841. Based on the high level of reliability, I computed a composite "belonging" score by summing and averaging students' ratings for the nine items. The score range for the composite was one to five, where one was interpreted as a low connection to school and five was interpreted as a high connection to school.

Summary

African American high school students' attendance records, grade reports, and School Experience Survey responses (for items related to sense of belonging) from the 2018-19 academic year were collected from The District. In total, the data set consisted of 12,004 cases. The first research question was addressed using chi-square tests of independence to distribute attendance records by demographic characteristics (e.g., gender). The second and third research questions were addressed through multiple linear regressions that were run using all three data sources. The following chapter will discuss the results of these analyses.

CHAPTER 4: RESULTS

Introduction

This quantitative study investigated the attendance patterns (i.e., full and partial absence severities) of African American high school students enrolled in The District during the 2018-19 school year. The goal of the study was to use pre-existing data (e.g., attendance records, grade reports, and School Experience Survey results) to compare the relationships between known predictors of chronic absenteeism (e.g., academic achievement and perceptions of belonging) to their relationships, if any, with the partial absences of African American high school students. These potential relationships were explored by merging and analyzing the data in IBM SPSS Statistics. First, attendance and grade reports, as well as demographic data (i.e., gender, grade level, and school location), were used to describe and compare the distributions of full and partial absences by demographic characteristics (e.g., gender). Attendance records and grade reports were linked to investigate the effects of full and partial absences on achievement. Third, survey items measuring sense of belonging were linked with the attendance records to investigate the effects of full and partial absences on engagement. All statistical analyses were conducted at the 95% confidence level.

In this chapter, I review the participation-identification model used to interpret the results. I then use descriptive statistics to characterize the student sample, illustrating what African American high school students' attendance looked like during the 2018-19 school year. Then I discuss the results of three models of multiple regressions that tested the relationship between these students' severity of full and partial absences with academic achievement as measured by GPA. Lastly, I discuss the results of three models of multiple regressions that tested the relationship between these students' severity of full and partial absences with their

perceptions of belonging as measured by eight school connectedness items within the 2018-19 School Experience Survey.

The Participation-Identification Model

As discussed in Chapter 2, Finn's (1989) participation-identification model defines student engagement as an interaction between behaviors that enable learning (participation) and emotional or psychological engagement towards school (identification). The more that a student feels connected to a school, the more they will attend (K. Booker, 2006; Goodenow, 1993). For this study, the participation-identification model suggests that chronically absent African American high school students display low attendance because they possess a low sense of belonging at their schools. This model further suggests that African American high school students who display chronic absences will have lower levels of academic achievement than those students who have no attendance issues.

The Associations Between Demographic Characteristics and Attendance Patterns

The first research question was addressed by using chi-square tests of independence to determine whether or not there were significant associations between African American high school students' full absence and partial absence severities and their demographic characteristics (e.g., gender). For all of the chi-square tests of independence, all of the expected cell frequencies were greater than five. The chi-square values, degrees of freedom, and corresponding p-values are reported in Table 2 below. Sample sizes and percentages are reported in Tables 3 and 4 below. First, full absence severities were distributed by gender, grade level, and school location. Second, partial absence severities were distributed by gender, grade level, and school location.

Regarding the chi-square tests distributing students' absences by school location, erroneous data[7] were excluded, reducing the sample size to 11,757 African American high school students. All of the distributions provided the percentages of each demographic characteristics (e.g., gender) that were at each severity of full and partial absences. Regardless of the demographic characteristics, full and partial absences were not mutually exclusive within the sample. More than 90% of students displayed some combination of both full absence and partial absence severities. The majority of students within the sample periodically missed school, and when they did attend school, they also missed a portion of their classes. A descriptive contingency table showing the overlap between full absence and partial absence severities can be found in Appendix A. The following section will discuss the distributions of gender, grade level, and school location (e.g., Region A) by full absence and partial absence severity categories, as well as the results of chi-square tests for these distributions.

Table 2
Chi-square Values

Distribution	χ^2	df	p
Full Absence Severity by Gender	25.64	3	<.001
Partial Absence Severity by Gender	1.67	3	.643
Full Absence Severity by Grade Level	36.86	9	<.001
Partial Absence Severity by Grade Level	94.90	9	<.001
Full Absence Severity by School Location	197.05	15	<.001
Partial Absence Severity by School Location	413.01	15	<.001

[7] The District consists of six regions. However, a seventh region was provided in the data set. Thus, the seventh region was presumed to be erroneously included in the data set. The region contributed approximately 200 cases.

Table 3
Distribution of Full Absence Severity by Demographic Characteristic

Demographics	Full Absence Severity									
	Not Absentee (≤ 1%)		Nonproblematic (1-10%)		Problematic (10-15%)		Chronic (≥15%)		Total	
	n	%	n	%	n	%	n	%	n	%
Gender									12004	
Male	237	4.0	3664	61.3	872	14.6	1203	20.1	5976	100
Female	153	2.5	3620	60.1	943	15.6	1312	21.8	6028	100
Grade Level									12004	
Freshman	140	4.3	1970	60.1	456	13.9	714	21.8	3280	100
Sophomore	103	3.3	1851	59.8	453	14.6	687	22.2	3094	100
Junior	75	2.8	1673	62.0	409	15.2	541	20.1	2698	100
Senior	72	2.5	1790	61.1	497	17.0	573	19.5	2932	100
School Location									11757	
Region A	46	3.3	698	50.0	216	15.5	436	31.2	1396	100
Region B	9	3.3	138	50.5	42	15.4	84	30.8	273	100
Region C	26	4.4	362	61.9	80	13.7	117	20.0	585	100
Region D	55	5.6	623	63.8	126	12.9	173	17.7	977	100
Region E	96	2.7	2277	63.9	522	14.6	670	18.8	3565	100
Region F	129	2.6	3134	63.2	803	16.2	895	18.0	4961	100
Total	390	3.2	7284	60.7	1815	15.1	2515	21.0	12004	100

Note: Erroneous data for school location were excluded from the distribution, resulting in a smaller sample size.

Table 4
Distribution of Partial Absence Severity by Demographic Characteristics

Demographics	Partial Absence Severity									
	Not Partially Absent (≤ 1%)		Nonproblematic (1-10%)		Problematic (10-15%)		Severe (≥ 15%)		Total	
	n	%	n	%	n	%	n	%	n	%
Gender									12004	
Male	345	5.8	2293	38.4	768	12.9	2570	43.0	5976	100
Female	329	5.5	2360	39.2	794	13.2	2545	42.2	6028	100
Grade Level									12004	
Freshman	231	7.0	1407	42.9	351	10.7	1291	39.4	3280	100
Sophomore	145	4.7	1209	39.1	422	13.6	1318	42.6	3094	100
Junior	107	4.0	1010	37.4	399	14.8	1182	43.8	2698	100
Senior	191	6.5	1027	35.0	390	13.3	1324	45.2	2932	100
School Location									11757	
Region A	82	5.9	522	37.4	183	13.1	609	43.6	1396	100
Region B	12	4.4	111	40.7	46	16.8	104	38.1	273	100
Region C	43	7.4	287	49.1	55	9.40	200	34.2	585	100
Region D	71	7.3	549	56.2	91	9.30	266	27.2	977	100
Region E	172	4.8	1491	41.8	542	15.2	1360	38.1	3565	100
Region F	126	2.5	1656	33.4	636	12.8	2543	51.3	4961	100
Total	674	5.6	4653	38.8	1562	13.0	5115	42.6	12004	100

Note: Erroneous data for school location were excluded from the distribution, resulting in a smaller sample size.

Characteristics of the School Locations

In 2018-19, 12,029 African American students were enrolled in The District's high schools, but data was missing for 25 of these students (n = 12004). These students attended 254 high schools that are located in six regions of The District, divided amongst 4,751 square miles of the major county, including 503 square miles of the major city. The names of these regions have been replaced with pseudonyms, and the county and city names have been omitted to maintain anonymity. The demographic and geographic descriptions for each region are discussed next.

Regions A and B are the smallest geographic locations with The District. Region A spans the urban center of the major city. Although Region B is located adjacent to Region A, it is comprised primarily of suburban neighborhoods. Nearly 12% of the sample were enrolled in Region A high schools. The lowest proportion of African American students attended high schools located in Region B (2.3%). Regions C and D are geographically located in the outermost portions of the major county. Region C primarily comprises the rural areas of the major county, while Region D comprises one of the most affluent areas. Regions C and D cover nearly 50% of The District. However, only 5% of the sample were in enrolled in high schools located in Region C. Similarly, only 8.3% of the sample were enrolled in high schools located in Region D. Most African American students within the sample were enrolled in high schools located in Regions E and F. Region E is also located in one of the outermost portions of the major county and is adjacent to one of the most affluent areas of the state. However, Region E is comprised of some of the lowest socioeconomic communities in the major city and county. This region had the second largest proportion of African American high school students (30.3%). Region F is the largest individual geographic location within The District and is also adjacent to Region A. This region also has the most economic diversity as it comprises some of the wealthiest and poorest communities within The District. More importantly, Region F had the largest proportion of African American high school students (42.2%).

Distribution of Attendance Pattern by School Location

The smaller geographic regions had the highest proportions of chronically absent African American students within the sample. For instance, 31.2% of students in Region A, one of the smallest locations, were chronically absent compared to only 17.7% in Region D, one of the largest locations, which had the lowest proportion of chronically absent students. These

differences in full absence severity by school location were significant (χ^2 (15) = 197.05, p < .001). Regardless of school location, most students had nonproblematic absences. There were also significant differences in partial absence severity by school location (χ^2 (15) = 413.01, p < .001). Compared to all other locations, Region F (51.3%) and Region A (43.6%) had the highest proportion of African American high school students who were severely partially absent. Once again, Region D (27.2%) had the lowest proportion of students at this category.

Distribution of Attendance Pattern by Gender

Slightly more females than males were at higher full absence severity categories. For instance, 15.6% of females displayed problematic absences compared to only 14.6% of males. Similarly, 21.8% of females were chronically absent compared to 20.1% of males. These differences in full absence severity by gender were significant ($\chi^2(3) = 25.64$, p < .001). However, there were no significant differences in partial absence severity by gender ($\chi^2(3) = 1.67$, p = .643). Considering the very small difference in proportions, male and female students within the sample practically displayed an equal distribution of problematic and chronic absences, as well as partial absence severities, suggesting that there was no gender gap with regard to attendance pattern. This finding will be discussed further in Chapter 5. Regardless of gender, most students were either nonproblematic or severe. Less than six percent of students were not partially absent.

Distribution of Attendance Pattern by Grade Level

The proportion of students with chronic absences decreased with grade level. For instance, 22.2% of sophomores were chronically absent compared to 19.5% of seniors. These differences in full absence severity by grade level were significant (χ^2 (9) = 36.86, p < .001). Although fewer than five percent of each grade level was not absentee, a higher proportion of

freshmen (4.3%) were at this category than all other grade levels. Regardless of grade level, nearly two-thirds of students displayed nonproblematic absences. Unlike for chronic absence severity, the proportion of students with sever partial absences increased with grade level. Forty-five percent (45.2%) of seniors were severely partially absent, compared to 39.4% of freshmen. These differences in partial absence severity by grade level were also significant (χ^2 (9) = 94.90, $p < .001$). The following sections will discuss the effects these patterns of attendance had on African American high school students' academic achievement and sense of belonging.

The Effects of Attendance Pattern on Academic Achievement

The second research question was addressed by using multiple regression analysis to determine and compare the differences, if any, in mean GPA (year-to-date) between African American high school students with differing severities of full absenteeism, partial absenteeism, and no attendance issues. Specifically, three multiple regression models were run to determine the association of the predictor variables full absence severity, partial absence severity, gender, and grade level with the output variable GPA. In the regression models, the categorical severities for full and partial absences, the nominal categories of gender, and the ordinal categories of grade level were converted into "dummy" dichotomous variables (e.g., yes or no).

In Models 1 and 2, four severity categories of full absences and partial absences, respectively, were run to determine their association with GPA, while controlling for the effects of covariates (i.e., gender and grade level). Covariate categories included male and female (for gender) and freshman, sophomore, junior, and senior (for grade levels). In Model 3, partial absence severities were run, while controlling for the effects of full absence severities, gender, and grade level. Assumptions were tested using scatter diagrams of residuals versus predicted residuals, as well as normal probability plots (Morgan et al., 2002). No violations of normality,

linearity, multicollinearity, or homoscedasticity were detected. Box plots did reveal outliers; however, their impact on the tests was not significant. Regression coefficients and standard errors for all three models can be found in Table 5 below. The equations for the three regression models can be found in Appendix C. The following section will discuss the results of each regression model.

Table 5
Multiple Regression Results for the Associations between Attendance Pattern and GPA (n = 12004)

Variable	Model 1	Model 2	Model 3
Constant	2.318	2.457	2.625
	(.053)	(.035)	(.054)
Full Absence Severity			
Nonproblematic	-.116*		-.028
	(.052)		(.049)
Problematic	-.636***		-.339***
	(.055)		(.051)
Chronic	-1.067***		-.704***
	(.054)		(.051)
Partial Absence Severity			
Nonproblematic		-.124***	-.186***
		(.034)	(.033)
Problematic		-.524***	-.492***
		(.038)	(.036)
Severe		-1.036***	-.885***
		(.034)	(.033)
Gender			
Female	.368***	.339***	.357***
	(.015)	(.015)	(.014)
Grade Level			
Sophomore	.173***	.212***	.207***
	(.021)	(.020)	(.019)
Junior	.325***	.397***	.377***
	(.021)	(.021)	(.02)
Senior	.522***	.597***	.575***
	(.021)	(.020)	(.019)
R^2	.254	.296	.369

*Note: Standard errors shown in parentheses. *p<.05. **p<.01. ***p<.001*

Results from Model 1 show that full absence severity had a negative relationship with academic achievement ($F(7, 11427) = 556.435$, $p < .001$, adj. $R^2 = .254$). The results also indicate that the size of the effect of full absences on GPA increases with each severity category. African American high school students with chronic absences are expected to have a lower GPA, on average, than those with no absenteeism. Male freshman students who were not absentee are expected to have a mean GPA of 2.318, controlling for the effect of gender and grade level ($t = 43.908$, $p < .001$). Students with nonproblematic absences are expected to have a mean GPA of 2.202, which is .116 points lower than students who were not absentee, controlling for the effects of gender and grade level ($t = -2.226$, $p = .026$). Students with problematic absences are expected to have a mean GPA of 1.682, which is .636 points lower, on average, than students who were not absentee, controlling for the effects of gender and grade level ($t = -11.608$, $p < .001$). However, students who were chronically absent are expected to have GPAs 1.067 points lower, on average, than students who were not absentee, controlling for the effects of gender and grade level ($t = -19.736$, $p < .001$). While a majority of the research literature focuses on the relationship between chronic absenteeism and academic achievement (K. Booker, 2004; Finn, 1989; Goodenow, 1993; Mac Iver & Messel, 2012), partial absences may also contribute significantly to that relationship. Model 2 tested the association between partial absence severity and GPA while controlling for the effects of covariates (i.e., gender and grade level).

Results from Model 2 show that partial absence severity also had a negative relationship with academic achievement ($F(7, 11427) = 686.333$, $p < .001$, adj. $R^2 = .296$). Similar to Model 1, the results indicate that the size of the effect of partial absences on GPA increases with each severity category. African American high school students with severe partial absences are expected to have a lower GPA, on average, than those with no partial absences. Male freshman

students who were not partially absent are expected to have a mean GPA of 2.457, controlling for the effect of gender and grade level (t= 70.407, p < .001). Students with nonproblematic partial absences are expected to have a mean GPA of 2.333, which is .124 points lower than non-partially absent students, controlling for the effects of gender and grade level (t = -3.619, p < .001). Students with problematic partial absences are expected to have a mean GPA of 1.933, which is .524 points lower than non-partially absent students, controlling for the effects of gender and grade level (t = -13.749, p < .001). However, students who were severely partially absent are expected to have GPAs 1.036 points lower, on average, than students who were not partially absent, controlling for the effects of gender and grade level (t = -30.203, p < .001). Chronic absenteeism and partial absences are not mutually exclusive phenomena; 92% of the study sample displayed a combination of full and partial absences. Therefore, Model 3 explored the associations between both attendance patterns and GPA, controlling for the effects of covariates (i.e., gender and grade level).

Consistent with Models 1 and 2, the results from Model 3 show that problematic and chronic absence and partial absence severities had a negative relationship with academic achievement and the size of the effect of that relationship increases with each severity category ($F(10, 11424) = 668.284$, $p < .001$, adj. $R^2 = .369$). Overall, the effects of partial absence severities are stronger than the effects of full absence severities. African American high school students with severe partial absences are not only expected to have a lower GPA, on average, than those with no partial absences but a lower GPA, on average, than those with chronic absences. Male freshmen students who were neither absentee nor partially absent are expected to have a mean GPA of 2.625, controlling for the effect of gender and grade level (t= 48.926, p < .001). Compared to Models 1 and 2, two key distinctions emerge. First, the effects of

problematic and chronic absences moderately decrease, controlling for the effects of partial absence severity, gender, and grade level. For instance, in Model 1 chronic absence had an effect of -1.067 points ($t = -19.736$, $p < .001$) and in Model 3 this category has a much lower effect of -.704 points ($t= -13.906$; $p < .001$). Second, the effects of problematic and severe partial absences slightly decrease, controlling for the effects of full absence severity, gender, and grade level. For instance, in Model 2 severe partial absence had an effect of -1.036 points ($t = -30.203$, $p < .001$) and in Model 3 this category has a slightly lower effect of -.885 points ($t = -26.748$, $p < .001$). Despite the changes in coefficients, the effects of partial absence severities on GPA remain larger than the effects of full absence severities, indicating that partial absences account for more of the differences in mean GPA than full absences. In Model 3, students who were chronically absent and not partially absent are expected to have a mean GPA of 1.921 ($t= -13.906$; $p < .001$). However, students who were severely partially absent and not absentee are expected to have a mean GPA of 1.74 ($t = -26.748$, $p < .001$). The following section will discuss the effects these patterns of attendance had on African American high school students' reported sense of belonging.

The Effects of Attendance Pattern on Sense of Belonging

The third research question was addressed using multiple regression analysis to also determine and compare the differences, if any, in mean scores of school connectedness between African American high school students at differing severities of full absenteeism, partial absenteeism, and no attendance issues. Sense of belonging was measured by The District's School Experience Survey under the construct of school connectedness that consisted of nine items, rated on a five-point Likert scale (see Appendix B). These items had a high level of internal consistency, as determined by a Cronbach's alpha of .841. Only slightly more than half

of African American students within the sample responded to all nine connectedness items (n = 6269). For each of these students, a composite score was created from the nine items related to belonging. All items were weighted the same. The outcome variable was the average of the summed scores (mean score). Mean scores close to five were interpreted as a high connection to school, and mean scores close to one were interpreted as a low connection to school.

Regarding the regression analysis, three models were run to determine the associations between the predictor variables full absence severity, partial absence severity, gender, and grade level with the output variable school connectedness. In each model, the categorical severities for full absences and partial absences, the nominal categories of gender, and the ordinal categories of grade level were converted into "dummy" dichotomous variables (e.g., yes or no). In models 1 and 2, four severity categories of full absences and partial absences, respectively, were run to determine their associations with school connectedness, while controlling for the effects of two covariates (i.e., gender and grade level). In model 3, partial absence severities were run, while controlling for the effects of full absence severities, gender, and grade level. Assumptions were tested using scatter diagrams of residuals versus predicted residuals, as well as normal probability plots (Morgan et al., 2002). No violations of normality, linearity, multicollinearity, or homoscedasticity were detected. Box plots did reveal outliers; however, their impact on the tests was not significant. Regression coefficients and standard errors for all three models can be found in Table 6 below. The equations for the three regression models can be found in Appendix D. The following section will discuss the results of each regression model.

Table 6
Multiple Regression Results for the Associations between Attendance Pattern and School Connectedness (n = 6269)

Variable	Model 1	Model 2	Model 3
Constant	3.712	3.847	3.897
	(.08)	(.043)	(.084)
Full Absence Severity			
Nonproblematic	-.176*		-.064
	(.079)		(.079)
Problematic	-.248**		-.075
	(.082)		(.083)
Chronic	-.123		.061
	(.082)		(.083)
Partial Absence Severity			
Nonproblematic		-.279***	-.270***
		(.042)	(.042)
Problematic		-.387***	-.386***
		(.046)	(.047)
Severe		-.418***	-.432***
		(.043)	(.044)
Gender			
Female	-.114***	-.116***	-.118***
	(.018)	(.018)	(.018)
Grade Level			
Sophomore	-.062*	-.042	-.044
	(.024)	(.024)	(.024)
Junior	-.067**	-.042	-.043
	(.025)	(.025)	(.025)
Senior	.025	.050*	.053*
	(.025)	(.024)	(.024)
R^2	.013	.029	.032

*Note: Standard errors shown in parentheses. *p<.05. **p<.01. ***p<.001*

Results from Model 1 show that full absence had a negative relationship with sense of belonging ($F(7, 6250) = 11.416$, $p < .001$, adj. $R^2 = .012$). While chronic absences had the largest effect on connectedness, only nonproblematic (p = .026) and problematic absences (p = .002) added statistically significantly to Model 1. This suggests that the differences in mean scores are not attributable to chronic absences. African American high school students who were

problematically absent are expected to have a lower sense of belonging, on average, than those with no absenteeism. Male freshman students who were not absentee are expected, on average, to have a mean score of 3.712, controlling for the effect of gender and grade level (t= 46.534, p < .001). Students with nonproblematic absences are expected, on average, to have a mean score of 3.536, which is .176 points lower than students with no absenteeism, controlling for the effects of gender and grade level (t = -2.226, p = .026). However, students who were problematically absent are expected to have mean scores .248 points lower, on average, than students who were not absentee, controlling for the effects of gender and grade level (t = -3.026, p = .002). Similar to academic achievement, the research literature regarding belonging also focuses on its relationship with chronic absenteeism (Benner & Wang, 2014; K. Booker, 2006; Finn, 1989; Goodenow, 1993; Mac Iver & Messel, 2012; Voelkl, 1997). However, partial absence may account for more of the observed variance. Model 2 tested the association between partial absence severity and school connectedness while controlling for the effects of covariates (i.e., gender and grade level).

Results from Model 2 show that partial absence severities also had a negative relationship with sense of belonging ($F(7, 6250) = 26.493$, $p < .001$, adj. $R^2 = .028$). Similar to Model 1, the results also indicate that the effect of partial absence on connectedness increases with each severity category. Unlike full absence severity, all categories of partial absence severity added statistically significantly to the prediction ($p < .001$). African American high school students with severe partial absences are expected to have a mean score lower than those with no partial absences. Students who were not partially absent are expected to have a mean score of 3.847 on average, controlling for the effects of gender and grade level (t = 90.393, p < .001). Students with nonproblematic partial absences are expected to have a mean score of 3.568, which is .279

points lower than students who were not partially absent, controlling for the effects of gender and grade level ($t = -6.662$, $p < .001$). Students with problematic partial absences are expected to have a mean score of 3.46, which is .387 points lower than students who were not partially absent, controlling for the effects of gender and grade level ($t = -8.364$, $p < .001$). However, students who were severely partially absent are expected to have mean scores .418 points lower, on average, than students who were not partially absent, controlling for the effects of gender and grade level ($t=-9.796$, $p < .001$). This model significantly predicts the differences in mean scores and substantially improves the conclusions made in Model 1. Model 3 explored the associations between both attendance patterns and connectedness, controlling for the effects of covariates (i.e., gender and grade level).

Similar to Models 1 and 2, the results from Model 3 show that partial absence severities had a negative relationship with school connectedness, and the effect of that relationship increases with severity category ($F(10, 6247) = 20.905$, $p < .001$, adj. $R^2 = .031$). Regarding attendance patterns, only partial absence severity added statistically significantly to Model 3 ($p < .001$). Overall, the effects of partial absence severities are stronger and more significant than the estimated effects of full absence severities. Male freshmen students who were neither absentee nor partially absent are expected to have a mean score of 3.897 on average, controlling for the effects of gender and grade level ($t= 46.632$, $p < .001$). Compared to Models 1 and 2, two significant differences emerge. First, when controlling for the effects of full absences, gender, and grade level, the estimated effects of nonproblematic and problematic partial absences slightly decrease, while the effects of severe partial absences slightly increase as compared to Model 2. In Model 3 African American high school students with nonproblematic partial absences are expected to have a mean score .270 points lower, on average, than students who are

not partially absent (t=-6.383, p < .001) and in Model 2 this category had a slightly larger expected change in mean score at .387 points (t = -8.364, p < 0.001). Regarding severe partial absences, in Model 2, African American high school students at this category were expected to have a mean score .418 points lower, on average, than students who were not partially absent (t = -9.796, p < .001). However, in Model 3, the expected effect of severe partial absences is slightly higher at .432 (t = -9.878, p < .001). Second, when controlling for the effects of partial absences, gender, and grade level, the estimated effects of full absences are not significant, suggesting that any differences in connectedness between chronically absent and non-absentee students may be due to chance. Furthermore, the changes in the significance of the coefficients for full absence severities, when controlling for partial absences and other covariates, indicate that partial absences most likely account for most of the variance observed in Model 1, which did not control for partial absence severities. The following section will summarize all of the results of this study.

Summary

During the 2018-19 school year, 60.7% of African American high school students in The District were nonproblematically absent, meaning that they missed school for less than 10% of that school year. However, 42.6% of the sample were severely partially absent because they attended school but missed one or more of their classes for at least 15% of the school year. While most African American high school students were attending school, close to half of those students were not attending all of their classes. Nearly half of African American males (43%) and females (42.2%) were severely partially absent. A higher proportion of students at this severity category were seniors (45%) who most likely attended high schools located in Region F, where 51.3% of African American high school students were severely partially absent. Chi-

square analysis of the distributions of gender, grade level, and school location by full absence and partial absence severities revealed that there were statistically significant associations between all demographic characteristics and attendance patterns, except for between gender and partial absence severity.

Multiple regression analysis of the associations between partial absence severity categories and GPA (e.g., academic achievement), while controlling for the effects of full absence severities and covariates (i.e., gender and grade level), indicated that problematic and chronic absences, as well as all partial absence severity categories, are expected to have a negative relationship with GPA. However, among these predictors, the estimated effects of partial absence severities are expected to be the strongest for African American high school students within the sample ($F(10, 11424) = 668.284$, $p < .001$, adj. $R^2 = .369$). Similarly, multiple regression analysis of the associations between partial absence severity and school connectedness (e.g., sense of belonging), while controlling for the effects of full absence severity and covariates (i.e., gender, and grade level), revealed that partial absence severities are also expected to have a negative relationship with school connectedness, but the estimated effects of full absences are not significant. Additionally, the estimated effects of partial absence severity categories are the strongest of all predictor variables for African American high school students within the sample ($F(10, 6247) = 20.905$, $p < .001$, adj. $R^2 = .031$). The following chapter will discuss the importance and limitations of these results, as well as examine their implications for practice and future research.

CHAPTER 5: DISCUSSION

Introduction

The goal of this study was to better understand African American high school students' patterns of attendance in high schools (i.e., full and partial absence severities) and the differences of effect on achievement and engagement (i.e., belonging). Chronic absenteeism (e.g., missing school) is a growing problem at the local, state, and national levels. The research literature over the last two decades suggests that those who are most at-risk for this attendance issue are African American high school students with low academic achievement (i.e., GPA) and low perceptions of belonging (Benner & Wang, 2014; Skedgell & Kearney, 2018). During the 2017-2018 school year, 19.7% of African American students were chronically absent nationally, as well as within the state of California (Chang et al., 2018). However, this rate was much higher in The District, where 24.1% of African American students were designated as chronically absent; notably, high school students contributed to at least 25% of this rate (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Chronic absenteeism has been the focus of many district-level interventions and national research studies. However, the problem of partial absences (e.g., attending school but missing classes) also requires the attention of researchers and policymakers. Indeed this was one of several recommendations made by The District's task force investigating chronic absenteeism (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017).

The current study filled this need by investigating the full absence and partial absence severities of African American high school students enrolled in The District during the 2018-19 school year. Specifically, three research questions were addressed. First, this study explored key demographic characteristics of African American high school students (i.e., gender, grade level,

and school location), as well as determined the significance of the distribution of those characteristics by full absence and partial absence severities through chi-square tests for independence. Second, the study investigated the differences in academic achievement between chronically absent and severely partially absent African American high school students by determining the estimated effects of full absence and partial absence severities on GPA, while controlling for the effects of covariates (i.e., gender and grade level), through three models of multiple linear regressions. Finally, the study investigated the differences in perceptions of belonging between chronically absent and severely partially absent African American high school students by determining the estimated effects of full absence and partial absence severities on school connectedness, while controlling for the effects of covariates (i.e., gender and grade level), through three models of multiple linear regressions. The following section will discuss the importance of the results of these analyses.

Conclusion

Partial Absenteeism is More Prevalent than Chronic Absenteeism

Chronic absenteeism is occurring at a high rate for African American high school students. During the 2017-18 school year, 24.1% of African American students were chronically absent in The District (*ERS Report to [The District] Advisory Task Force: Attendance Analysis*, 2017). Since California defines chronic absences as missing at least 10% of the school year (California Education Code, 2013), the rate of absenteeism for African American high school students in The District is far higher at 36.1%. The significant associations between grade level, school location, and full absence severities show that chronic absenteeism may be occurring in slightly more proportions for African American high school sophomores than for other grade levels, as well as in much higher proportions in high schools located in Region A than for those

in other locations. Chronic absences occurred more often amongst younger African American high school students than their older counterparts.

The issue of partial absences, particularly severe partial absences, requires more attention from district leaders and school personnel as it is occurring at a much higher rate than chronic absences. During the same school year, 42.6% of African American high school students were severely partially absent. The high rate of chronic absences is distressing, but the much higher rate of severe partial absence is intolerable. The significant associations between grade level, school location, and partial absence severities show that severe partial absences may be occurring in slightly more proportions for African American high school seniors than other grade levels and in much higher proportions in high schools located in Region F than for those in other locations. Unlike chronic absences, partial absences occurred more often amongst older African American high school students than their younger counterparts. Unfortunately, the cross-sectional data analyzed within this study does not allow for longitudinal analysis. Therefore, future research should address the associations between attendance patterns and grade level over time for African American high school students.

There is No Gender Gap for School Resistance

The very small differences in full absence severities by gender and the lack of significant differences in partial absence severities by gender suggest that African American high school males and females are equally distributed for both full absences and partial absences. Students who miss school (e.g., chronically absent) are more likely to report a low sense of belonging to their school (Finn, 1989; Fredricks et al., 2004). Presumably, this is also true for students who attend school but miss a portion of their classes (e.g., partially absent). The research literature regarding student attendance identifies missing or skipping class as behavioral disengagement

(Fredricks et al., 2004). In recent studies, missing class is recognized as one of several student behaviors referred to as resistance to schooling (Geven et al., 2017). Furthermore, research comparing gender differences for resistance to schooling behaviors indicate that, in developing countries, males display more resistance to schooling and attain lower levels of achievement than females (Buchmann et al., 2008; Geven et al., 2017; Hadjar & Buchmann, 2016; Legewie & DiPrete, 2012; McFarland, 2001). The factors contributing to this gap include gender composition (Demanet et al., 2013), socioeconomic composition (Legewie & DiPrete, 2012), and peer pressure (Warrington et al., 2000). Few of these studies, if any, have examined the phenomenon of missing class explicitly, nor have many of them focused on this behavior amongst African American adolescents. The results of the current study expand the research literature by suggesting that the gender gap in school resistance (e.g., full and partial absenteeism) for African American high school students may not exist as it does among adolescents within other racial/ethnic demographics and nationalities. These results also implore the need for future research to explore the reasons why.

Partial Absences Matter More Than Full Absences

As briefly discussed in Chapter 4, there were many overlaps between full absence and partial absence severities within the sample (see Appendix A). Overwhelmingly, less than one percent (.9%) of the sample was neither absentee nor partially absent. Only two percent of the sample was only chronically absent (1.2%) or only severely partially absent (1.1%). Nearly the entire sample displayed some combination of both full absences and partial absences. The phenomena of chronic absences and severe partial absences are clustered for African American high school students. More importantly, the effects discussed below are far worse than we may imagine because they occur in tandem rather than in isolation. Even so, partial absence severity

may have the largest impact on African American high school students' academic achievement and sense of belonging.

Academic Achievement. The negative relationship between full absence severity and academic achievement shown in the initial model of the multiple regressions for GPA confirms several findings within the research literature regarding chronic absenteeism. Namely that students with higher severities of full absences (i.e., problematic and chronic absences) have displayed lower levels of academic achievement than students who are either not absentee or have nonproblematic absences (Allensworth & Easton, 2007; *Civil Rights Data Collection*, 2014; Mac Iver & Messel, 2012; Skedgell & Kearney, 2018). However, the latter regression model shows that the effects of severe partial absences on GPA are stronger than chronic absences. African American high school students who are severely partially absent may have even lower levels of achievement than those who are chronically absent.

The results of this study expand the research literature by suggesting African American high school students who do not attend school may have higher grades, on average, than those who actually attend school but miss their classes. Moreover, the results challenge the participation-identification model, which suggests that students who attend school more often are expected to have better academic outcomes than those who attend school less often. These results also highlight the need for much more research focused on the impacts of partial absences on academic achievement for African American adolescents.

Sense of Belonging. The negative relationship between full absences and sense of belonging shown in the initial model of the multiple regression for school connectedness from also confirms several findings within the research literature. According to Finn's (1989) participation-identification model, regardless of race/ethnicity, students who feel connected to

their school (i.e., identify with school) can be expected to attend school more (i.e., participate in school) than those who do not feel connected to school. In recent years, several studies have confirmed this model, showing that chronically absent students report feelings of low connection to school (Hendron & Kearney, 2016; Kearney, 2008; Önder, 2017). Additionally, school connectedness (e.g., sense of belonging) has been linked to higher levels of academic achievement and higher graduation rates for students (Beekhoven & Dekkers, 2005; Fredricks et al., 2004). While a vast majority of the research literature explores how belonging affects attendance, the current study examined how attendance affected sense of belonging. Investigating this unique interplay of the variables revealed findings that expand the research literature. The latter regression model shows that the effects of partial absence severities on connectedness are stronger than full absence. In fact, the effects of full absences, particularly chronic absences, were not significant. African American high school students who have any severity of partial absences may report a lower connection to their school than those who are absent from school entirely.

These results are significant because they indicate that African American high school students who attend school but miss their classes (e.g., are partially absent) may feel less connected to their school than those who do not attend school as often (e.g., are chronically absent). These results also challenge the participation-identification model, which argues that students who attend school more often have a higher sense of belonging than students who attend school less often. In addition to academic achievement, future research must focus on the impacts of partial absences on sense of belonging and vice versa, particularly for adolescent African American students. Future research should also investigate the association of these

students' perceptions of belonging amongst their peers and school staff with their attendance patterns.

Limitations

Despite the novelty and statistical significance of this study's results, there are several limitations that primarily relate to the trustworthiness of the pre-existing data, as well as the availability of particular variables within the data. This study's research questions were addressed primarily using attendance records and grade reports from numerous teachers throughout The District. Although there are contingencies at district and school levels (e.g., teacher discrepancy reports and audits), a majority of the secondary data analyzed within this study was done so in good faith that teachers reported the data with due diligence and accuracy.

Similarly, the type of secondary data that was available limited the variables that could be analyzed, as well as the types of statistical tests that could be conducted. For instance, the cross-sectional data utilized within the current study do not allow for an analysis of students' absenteeism over time. The cross-sectional nature of the data also prevented the direction of causality within the variables' associations from being determined. As stated earlier within this chapter, future research of longitudinal data would enable an analysis of how the observed effects potentially change over time. Additionally, longitudinal data would allow researchers to better determine the direction of the relationships between attendance patterns and academic achievement as well with sense of belonging. Regarding the connectedness items, responses were only available for a little more than half of the participants. These responses may not be representative of the entire sample. Additionally, the coefficients of determination within the regression models were limited to the particular data available.

The results of the multiple regression analyses showed significance primarily regarding the effects of partial absence severity on GPA and school connectedness. However, the highest coefficient of determination for the regression models within this study was 37%. While this does not challenge the validity of the results, the size of the coefficients may have been limited by the availability of additional variables within the data sources. The inclusion of variables such as student or community socioeconomic status, parental involvement, teacher pedagogy, and class size, may have greatly improved the regression models.

Implications for Practice

Both chronic absences and partial absences are major issues. Current district- and school-level policies and interventions target chronic absenteeism. However, the results of this study demand that more attention is given to resolving severe partial absences because their impacts on academic achievement and school belonging are larger and more significant than chronic absences. Additionally, African American high school females must also be included as vital participants because they are just as likely to miss school or class as their male counterparts. The reasons for chronic absences are widely researched (Balfanz & Byrnes, 2012; Bean et al., 2006; Bridgeland et al., 2006; Chang et al., 2018; Geven et al., 2016, 2017; Hancock et al., 2018; Hendron & Kearney, 2016; Henry & Huizinga, 2007; Kearney, 2008; Mac Iver & Messel, 2012; Önder, 2017; Skedgell & Kearney, 2018). However, the reasons for partial absences are not. More importantly, the reasons for partial absences may be specific to the contexts of individual schools. Therefore, efforts should be made at the district level to investigate chronic absenteeism, while individual school sites should focus on addressing the issue of partial absences. The following sections will discuss implications for district- and school-level practices within any

school system where African American high school students' attendance (or lack thereof) may be an issue.

District-Level Practices

District level efforts should focus on resolving rates of chronic absences because it is difficult for school site staff to directly interact with students who are not physically present on their campuses. Within most school districts, there should exist a department aimed at evaluating and providing health and human services to all students. It is incumbent upon this department to investigate the reasons why African American students have the highest rates of chronic absences and, quite possibly, severe partial absences. Any investigation should include piloting and implementing interventions targeting African American students in lower grade levels (e.g., sophomores). Achievement in school is positively influenced by students' participation or attendance (Finn, 1989). However, successful interventions have also improved students' achievement by intentionally considering their attributions for success and failure in school. School districts should develop and implement interventions similar to those which focus on all four domains of the factors contributing to chronic absenteeism (i.e., individual, family-based, school-based, and community-based) (Teasley, 2004).

Weiner's (1972) classic attribution theory predicts students' motivation for achievement based on the factors to which they attribute their success and failures in school. Weiner argues that low achieving students who are able to persist when they fail do so because they attribute that failure to a lack of effort rather than to a lack of ability. Effort is an unstable attribute, adjusted under the control of the individual; students can give more or less effort depending on the difficulty of a task. However, ability is a stable attribute because it is not necessarily under the individual's control; students cannot quickly modulate abilities that they do not possess.

Therefore, attribution retraining interventions aim to improve students' causal ascriptions from a lack of ability to a lack of effort.

Several studies have investigated the effects of attribution retraining interventions on African American adolescents' achievement outcomes (Aronson et al., 2002; Cue, 2014; Good et al., 2003; Graham et al., 2015). Cue's (2014) novel intervention focused on retraining the attributions of African American middle schoolers in a large urban school district. The brief intervention consisted of 20-minute lessons occurring twice a week for three weeks at three ethnically congruent middle schools. Consistent with the attribution retraining literature, the results of the mixed methods study showed that, after receiving the intervention, the experimental group was more likely to attribute failure to unstable factors (e.g., lack of effort) than stable factors (e.g., lack of ability). Additionally, the study showed a decrease in students' ascription to discrimination and other harmful attributes. Although these effects were greater amongst African American males in the study, these findings suggest that attribution retraining interventions can be effective in improving achievement motivation for African American students (Cue, 2014). By extension, these interventions may also improve African American students' participation or attendance in school.

Unfortunately, addressing the issue of chronic absences alone will not resolve the issues with attendance displayed by African American high school students, especially since these students may display both full absence and partial absence severities. On the contrary, attention must also be given to those who are severely partially absent. All school districts should apply Skedgell & Kearney's (2018) multi-tier system for support to monitor students' attendance, ensuring opportunities for early detection of chronically absent and severely partially absent students. Interventions may include students who are at the problematic category for full and

partial absences to forestall more severe attendance issues. Each State Board of Education should also adopt this multi-tiered system, allowing for a more accurate and precise accounting of students' chronic and partial absenteeism throughout the nation. State and federal governments must also provide significantly more funding for schools or school locations with the highest proportions of chronic absences and severe partial absences. Rather than funding programs aimed at policing and penalizing our youth (e.g., school police), most (or all) of the educational funds should be invested in programs empirically shown to actually improve students' maladaptive behaviors, such as the interventions and practices discussed in this chapter. Clearly, additional funding should be used to hire district and school site staff whose sole responsibilities are investigating African American students' reasons for missing school and classes, implementing restorative practices and building authentic relationships with these students, and conducting tardy sweeps on campuses to better identify the students most in need of attendance interventions (rather than just to penalize them).

School-Level Practices

At the school site level, attendance counselors are responsible for monitoring and improving the attendance rates for each student demographic. These school site staff members are also responsible for contacting families regarding students' attendance and performance in school. Since partially absent students do attend school, these counselors may be better equipped to investigate this issue within their own school sites than district-level leaders by virtue of having direct physical access to the students. Attendance counselors must establish frequent and consistent check-ins with all severely partially absent African American high school students. Most of these meetings should focus on African American students at higher grade levels (e.g., seniors). These meetings should also implement restorative practices centered on relationship

building rather than disciplinary actions, especially since African American students are less likely to receive positive behavior interventions than other student demographics (Payne & Welch, 2015). This approach should increase students' perceptions of connectedness or belonging, which would also increase their motivation to attend class because they focus on relationship building (Sheldon, 2007; Teasley, 2004). Tardy sweeps and hall monitoring should also happen more frequently. However, providing consequences alone will not be enough to resolve the problem of missing classes.

There are several studies showing the relationship between school climate and the frequency of "skipping" behaviors (Cohen et al., 2009; Hendron & Kearney, 2016; Keppens & Spruyt, 2019; Pellerin, 2005). However, those studies also show that disciplinary or authoritarian schools do not prevent these behaviors from happening altogether. Keppens & Spruyt (2019) found that while school resistance (e.g., skipping) occurred less often in authoritarian schools than permissive schools, the occurrence of these behaviors represented acts of rebellion within disciplinary schools. Whether schools are lenient or strict, African American high school students will continue to be disproportionately partially absent until all (or at least most) adults in their schools foster positive and authentic relationships with them. There are multiple and complex reasons why African American high school students are missing school and missing classes. Neither tardy notes, nor suspensions, nor any other disciplinary actions will ever elucidate those reasons. Instead, restorative practices must be rigorously utilized. The core idea of restorative practices is that discipline may bandage maladaptive or bad behaviors, but it will not root out the cause. The solution is for all of the adults on high school campuses (e.g., teachers, counselors, and administrators) to build authentic relationships with these students for

the sole purpose of understanding them. Therefore, schoolwide policies should transition from punitive to relational.

Since most school counselors may have large caseloads, these solutions also require additional funding and hiring of school personnel (i.e., counselors, student support aids, and other paraprofessionals). This would decrease the student-to-staff ratio and increase the effectiveness of these efforts as the adults would be able to spend more time with fewer students. Additionally, the school site staff dedicated to restorative practices and building meaningful relationships with students should provide regular professional development to teachers and other staff members regarding culturally relevant or responsive teaching, social-emotional learning, and restorative practices. All three of these pedagogies are known to foster positive relationships with students, as well as increase their academic outcomes (Bondy et al., 2007; Graves et al., 2017; Wong et al., 2011).

Future Research

Most studies within the research literature employ a quantitative approach, allowing researchers to develop a list of risk factors for chronic absenteeism. However, these risk factors may not be generalizable to all student populations, particularly those who identify as African American. It is also unclear how these risk factors influence these students' decisions to miss class (e.g., partial absenteeism). Clearly, knowing the risk factors of chronic absenteeism is not enough to improve attendance and achievement outcomes for African American students. More importantly, very little is known about why partially absent African American students miss their classes. Lastly, the reasons provided by African American students who miss their classes may be vastly different from those who do not attend school altogether. We need to know why and how these risk factors (or other novel factors) impact African American students' attendance in

school. Authentic and detailed descriptions from interviews can provide a narrative for how African American students' experiences, including interactions with staff, peers, and parents, influence their decisions to miss school and class. Samples of chronically and partially absent African American students could be interviewed phenomenologically in focus groups to generate detailed descriptions that enable a deeper understanding of what it is like to be chronically absent or severely partially absent (Creswell, 2013). Themes could then be used to construct rich descriptions of African American students' experiences (e.g., the quality of interactions with staff, peers, and parents) at home and in school, as well as how those experiences impact their decisions to attend school or class.

While we know that school participation and belonging influence students' attendance (or vice versa), it is not clear why these factors are reported as lower for chronically absent African American students, who the research literature overwhelmingly suggests are the most at-risk for chronic absenteeism (Bean et al., 2006; Skedgell & Kearney, 2018). Similar to Mickelson's (1990) attitude-achievement paradox for African American adolescent students, the results of this study demand further research regarding the relationship between sense of belonging, attendance, and achievement for African American students. Researchers must include African American students with partial absences, particularly those at the severe category, in their interventions and studies. Researchers must also include African American females as vital participants since they may actually be more at risk for chronic absences than their male counterparts. We must talk to these students, as stakeholders, and evaluate the case of their attendance, or lack thereof, in order to better understand how to improve their engagement and achievement outcomes. Statistical analyses, alone, is not enough to understand their stories. African American students' perspectives are fundamental to determining how their experiences

in school shape their attendance, achievement, and feelings of belonging. Future research should also include a comparative analysis with other student demographics. This study focused on African American students, but these results should be investigated with other student populations. For instance, exploring how partial absences impact academic achievement and belonging for Asian/Pacific Islander, Latinx, and students who identify as LGBTQ may be instrumental in improving outcomes for these demographics as well.

Summary

When I reflect on the achievement gap, I am constantly reminded of the many students who commit to the resolution that education is not for them. All too often, students of color are the ones who give up, fall short, and are allowed to do so. The disparity in achievement between students of color, particularly African American students, and their white counterparts is related to low perceptions of belonging (K. Booker, 2004; Goodenow, 1993), low racial/ethnic congruence within their schools (Benner & Graham, 2007), the lack of access to adequate transportation (Parke & Kanyongo, 2012), high rates of absenteeism (Finn, 1989; Skedgell & Kearney, 2018), and a plethora of other reasons. A vast majority of the research literature suggests that improving these issues requires schools to foster and support students' cultural capital or habitus (Park & Eagan, 2011; Rios-Aguilar et al., 2011), develop a college-going culture (Jarsky et al., 2009), and partner with higher education institutions (Bathgate et al., 2011). Rose (2014) argues that it is more democratic to incorporate the diverse needs of all students than it is to push them towards a singular vision of education. All students' cultural capital should be actively valued and developed through the school curricula (Rios-Aguilar et al., 2011; Yosso, 2005). Schools should provide all students with pathways to developing their character and academic skills, to those who consistently miss school and class just as much as

those who consistently attend school and class. As educators, we have the unique and moral obligation to shift the trajectory of our students by transforming the culture of our schools (Holland & Farmer-Hinton, 2009; Jarsky et al., 2009). However, it is impossible to incorporate what is unknown. Therefore, at the most basic and purest levels, the solution to improving academic outcomes, including attendance, for African American high school students (and all students) is to build authentic and loving relationships through which their culture, aspirations, and experiences are better understood.

The results of this study are eye-opening and deafening, but so much more remains unknown regarding African American high school students' reasons for their patterns of attendance. There is a true need for a better understanding of the factors influencing students' decisions not to attend school or class (Hancock et al., 2018). This is especially true for African American students who are the most at risk for chronic absenteeism (Skedgell & Kearney, 2018) and partial absenteeism. Individual's understanding and decision-making are based on their experiences and interactions with others (Lambert, 1995). These interactions may directly influence students' feelings of belonging in school and their decisions to attend school and class. Therefore, understanding African American students' experiences in schools requires dialogue about their interactions with others, particularly their parents, peers, and school staff.

We must also recognize the impact of race/ethnicity on the everyday experiences and interactions of these students, which often include themes of prejudice, discrimination, microaggressions, and overt racism or students' perceptions of one or more of these actions towards them (Harris, 2015; Solorzano et al., 2000). These interactions may be more negative or disparaging for African American students than students of other cultural backgrounds, especially their white counterparts. Their experiences in schools may be vastly different from

those of other students, which is why they display the highest rates of chronic absenteeism, and possibly the highest rates of partial absences practically everywhere in the US. When more district leaders and school personnel seek to understand these students, they will feel cared for and connected to more individuals within their schools. Perhaps if African American students feel more connected to their schools and to the other human beings in them, they will attend more often. Certainly, if we as educators and researchers attempt to do nothing, then the gap in academic outcomes for these students will continue to worsen. As educators, both practitioners and researchers, we have a responsibility to ensure that all students are successful in our schools so that all of them believe that education is meant for them.

APPENDICES

Appendix A

Table 7. *The Overlaps between Full Absence and Partial Absence Severities*

Full Absence Severity	Partial Absence Severity									
	Not Partially Absent		Nonproblematic		Problematic		Severe		Total	
	n	% total	n	% total	n	% total	n	% total	n	%
Not Absentee	113	.9	110	.9	32	.3	135	1.1	390	3.2
Nonproblematic	373	3.1	3752	31.3	978	8.1	2181	18.2	7284	60.7
Problematic	45	.4	433	3.6	271	2.3	1066	8.9	2515	15.1
Chronic	143	1.2	358	3.0	281	2.3	1733	14.4	2515	21.0
Total	674	5.6	4653	38.8	1562	13.0	5115	42.6	12004	100.0

Appendix B

Table 8. *List of Connectedness Items within 2018-19 [District] School Experience Survey*

Survey Items	Likert Scale				
	1	2	3	4	5
1. How strongly do you agree or disagree with the following statement about your school? I am happy to be at this school	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
2. How strongly do you agree or disagree with the following statement about your school? I feel like I am part of this school	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
3. How strongly do you agree or disagree with the following statement about your school? I feel close to people at this school	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
4. How strongly do you agree or disagree with the following statement about your school? The teachers at this school treat students fairly	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
5. How strongly do you agree or disagree with the following statement about your school? Teachers care if I'm absent from school	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
6. How strongly do you agree or disagree with the following statement about your school? I feel accepted for who I am at this school	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
7. How strongly do you agree or disagree with the following statement about your school? Adults at this school treat all students with respect	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
10. How strongly do you agree or disagree with the following statement about your school? Kids at this school are kind to each other	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
12. How strongly do you agree or disagree with the following statement about your school? LGBTQ (lesbian, gay, bisexual, transgender, and/or queer) students at this school are accepted	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree

Appendix C

Figure 2. *The Equations for the Multiple Regression Models Associating Attendance Pattern and GPA*

Model 1

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Absent) + \beta_2(Problematically\ Absent) + \beta_3(Chronically\ Absent) + \beta_4(Female) + \beta_5(Sophomore) + \beta_6(Junior) + \beta_7(Senior)$$

$\hat{y}\ is\ the\ predicted\ GPA.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ absentee, male, and\ freshman).$

$\beta_1\ through\ \beta_7\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

Model 2

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Partially\ Absent) + \beta_2(Problematically\ Partially\ Absent) + \beta_3(Severely\ Partially\ Absent) + \beta_4(Female) + \beta_5(Sophomore) + \beta_6(Junior) + \beta_7(Senior)$$

$\hat{y}\ is\ the\ predicted\ GPA.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ partially\ absent, male, and\ freshman).$

$\beta_1\ through\ \beta_7\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

Model 3

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Absent) + \beta_2(Problematically\ Absent) + \beta_3(Chronically\ Absent) + \beta_4(Nonproblematically\ Partially\ Absent) + \beta_5(Problematically\ Partially\ Absent) + \beta_6(Severely\ Partially\ Absent) + \beta_7(Female) + \beta_8(Sophomore) + \beta_9(Junior) + \beta_{10}(Senior)$$

$\hat{y}\ is\ the\ predicted\ GPA.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ absentee, not\ partially\ absent, male, and\ freshman).$

$\beta_1\ through\ \beta_{10}\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

Appendix D

Figure 3. *The Equations for the Multiple Regression Models Associating Attendance Pattern and School Connectedness*

Model 1

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Absent) + \beta_2(Problematically\ Absent) + \beta_3(Chronically\ Absent) + \beta_4(Female) + \beta_5(Sophomore) + \beta_6(Junior) + \beta_7(Senior)$$

$\hat{y}\ is\ the\ predicted\ mean\ sum\ connectedness\ score.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ absentee, male, and\ freshman).$

$\beta_1\ through\ \beta_7\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

Model 2

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Partially\ Absent) + \beta_2(Problematically\ Partially\ Absent) + \beta_3(Severely\ Partially\ Absent) + \beta_4(Female) + \beta_5(Sophomore) + \beta_6(Junior) + \beta_7(Senior)$$

$\hat{y}\ is\ the\ predicted\ mean\ sum\ connectedness\ score.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ partially\ absent, male, and\ freshman).$

$\beta_1\ through\ \beta_7\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

Model 3

$$\hat{y} = \beta_o + \beta_1(Nonproblematically\ Absent) + \beta_2(Problematically\ Absent) + \beta_3(Chronically\ Absent) + \beta_4(Nonproblematically\ Partially\ Absent) + \beta_5(Problematically\ Partially\ Absent) + \beta_6(Severely\ Partially\ Absent) + \beta_7(Female) + \beta_8(Sophomore) + \beta_9(Junior) + \beta_{10}(Senior)$$

$\hat{y}\ is\ the\ predicted\ mean\ sum\ connectedness\ score.$

$\beta_o\ is\ the\ intercept\ or\ constant\ (not\ absentee, not\ partially\ absent, male, and\ freshman).$

$\beta_1\ through\ \beta_{10}\ are\ the\ epected\ coefficients\ for\ the\ corresponding\ variables.$

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