June 2019

Demographic Predictors and Reasons for Chronic Absenteeism amongst Secondary Students with Disabilities

Cashea Holyfield
University of South Florida, cholyfield@mail.usf.edu

Demographic Predictors and Reasons for Chronic Absenteeism amongst Secondary Students with Disabilities

by

Cashea Holyfield

A thesis submitted in partial fulfillment
of the requirement for the degree of
Education Specialist
Department of Educational and Psychological Studies
College of Education
University of South Florida

Major Professor: Jose Castillo, Ph. D
Amber Humm-Brundage, Ph. D
Robert Dedrick, Ph. D

Date of Approval:
May 31, 2019

Keywords: absent, youth, education, low attending

Acknowledgements

I am truly thankful for the support and guidance that have been provided to me by numerous individuals throughout this journey. First, I would like to acknowledge my major professor, Dr. Jose Castillo, for his continuous efforts and availability to speak with me regarding any concerns or issues that arose. Through your guidance, I have become a better researcher. I would also like to thank my committee members Drs. Amber Brundage and Robert Dedrick. The assistance and contributions made by each of you has allowed me to move forward with my research endeavors and for that, I am extremely grateful. I am also thankful to Dr. Sara Moulton for her support and insight throughout this process. Last but certainly not least, I would like to thank God for providing me with strength and for surrounding me with those individuals who have helped facilitate my growth. I would also like to thank my family and friends for their continuous love, encouragement, and prayers.

Table of Contents

List of Tables

Abstract

Many students in secondary schools are increasingly impacted by chronic absenteeism. Researchers have consistently concluded that students who are chronically absent are likely to experience negative outcomes such as difficulties in academic achievement, learning, sociability, and mental health (London, Sanchez, & Castrechini, 2016). However, despite the implications of chronic absenteeism, research studies that primarily focus on assessing students with disabilities' (SWDs) reasons for chronic absenteeism are relatively limited. Although there is some existing research that suggests that SWDs are frequently absent due to health-related reasons, transportation issues, and their perceptions of poor school climate (Erbstein, 2014; Humm-Brundage, Castillo, & Batsche, 2017), there are currently no studies that have examined both student and school demographic predictors of chronic absenteeism for SWDs. The current study utilized a sample of 1,009 chronically absent SWDs across eight states in the U.S. to examine demographic predictors of reasons for chronic absenteeism among SWDs. The researcher examined students' responses to the Reasons for Chronic Absenteeism (RCA) survey. Results indicated that SWDs reported missing school for health-related reasons most frequently, followed by family and transportation reasons. Results also suggested that SWDs' SES, gender, and race/ethnicity were the most common demographic predictors of reasons for chronic absenteeism. Specifically, students who were lower SES significantly predicted Barriers, Disengagement, and Transportation reasons for chronic absenteeism. Students' gender significantly predicted Barriers, Disengagement and Health reasons, and SWDs race/ethnicity

significantly predicted Barriers, Health, and Transportation reasons for chronic absenteeism. School demographic predictors of chronic absenteeism were limited with schools' percentage of English Language Learners being the only significant predictor of the reasons for chronic absenteeism. Implications for research and practice are discussed.

Chapter 1: Introduction

Student absenteeism is a problem that many states and districts are not only monitoring for intervention and prevention purposes, but also to fulfil requirements of the Every Student Succeeds Act (ESSA). ESSA is an education law signed by President Obama in 2015 with the goal of ensuring success for all students and schools, while also providing states more autonomy in regards to meeting legislative mandates (Black, 2017). Through ESSA, states are required to include four measures of academic achievement and a "non-academic" measure of student and school success in their accountability equations (Jordan & Miller, 2017). ESSA however, does not require that all states use one specific type of non-academic measure. Rather, ESSA includes examples of possible non-academic indicators such as school climate and safety, and educator engagement; but the list is not exhaustive as states are provided the latitude to select the measure they would like to use. There are, however, certain criteria that must be followed when selecting the non-academic indicator. Specifically, the indicator must be valid and reliable, statewide, able to meaningfully differentiate school performance, and have the ability to be calculated for various student subgroups (Mays, Fothergill, Katz, & Paisley, 2017; ESSA, 2015).

Thus, given the need for a solid fifth indicator that meets the ESSA criteria, currently, 36 states and the District of Columbia have decided to use chronic absenteeism as their fifth "non-academic" measure. ESSA does not explicitly state a percentage of days that must be missed in order to be considered chronically absent given that this could vary by state. However, it does mention that chronic absenteeism includes both excused and unexcused absences. Chronic absenteeism in particular has become a popular indicator because ESSA already requires states

to report on their absenteeism rates regardless of whether it is used as the fifth "non-indicator;" however, the indicator also has advantages. Chronic absenteeism data can provide additional insight on school quality and success, and the data typically are comprehensible and available through databases (Jordan & Miller, 2017).

Though not officially termed "chronic absenteeism" in early research, attendance rates and the amount of days missed from school that are consistent with what we now refer to as chronic absenteeism have a history of being utilized as Early Warning indicators (Allensworth & Easton, 2007). Early warning indicators are predictors or thresholds (e.g., missing more than 10% of school, suspension, etc.) that are used to indicate students' risk or likelihood of certain outcomes. Davis, Herzog, and Legters (2013) define an early warning system (EWS) as a system that relies on student data which are collected at the school-level to help identify those students who might be at-risk for eventual school dropout. Through reviewing EWS data, schools and districts can work to create interventions and supports necessary to alter undesirable student drop-out trajectories (Davis et al., 2013). Therefore, chronic absenteeism in particular is an early warning indicator because students who are frequently absent are less likely to meet various academic requirements, and research suggests that frequent absence is a sign of current and future academic risk (Rafa, 2017). Additionally, because chronic absenteeism rates have been found to be powerful predictors of whether students are on track to graduate on-time, use of chronic absenteeism as an EWS indicator is becoming increasingly common as more states are gravitating towards reviewing schoolwide data to target students who are considered to be chronically absent (Balfanz, Herzog, & Mac Iver, 2007).

Chronic Absenteeism Research and Students with Disabilities

Chronic absenteeism is critical because it is a crisis that affects approximately 8 million school-aged students in the United States (Bauer, Liu, Schanzenbach & Shambaugh, 2018). In comparison to students who attend school regularly, those who miss at least two days of school per month are likely to become chronically absent (Chen & Rice, 2016). Across research, there is a fairly general consensus that students who miss 10% or more days of school per year are considered chronically absent. This rate typically equates to 18 or more absences within a 180-day school year (Chen & Rice, 2016). While missing 18 days of school out of 180 may not appear very detrimental, research has shown that missing even 30 hours (i.e., around 5 or 6 days) of classroom instruction can have adverse effects on students' learning and academic performance (Raising School Attendance, 2002). As such, chronic absenteeism gives rise to a host of unfortunate outcomes related to school academics, personal concerns, forthcoming job attainment, and more. These outcomes indicate that the effects of students' chronic absenteeism are not only immediate, but can also be gradual and negatively affect the future of such individuals. Research has also shown that students who are frequently absent are more likely to engage in risky behaviors, substance abuse, and are likely to experience anxiety or depression (DeWit, Karioja, Rye, & Shain, 2010, 2011; Grant, 2016; Vaughn et al., 2011).

Although chronic absenteeism is a critical factor for all students, students with disabilities (SWDs) may have unique experiences that contribute to their absenteeism. Currently, there are at least 6.7 million students who are eligible to receive special education services due to their specific disability (National Center for Education Statistics, 2017). Given that research indicates that SWDs are 1.4 times more likely to become chronically absent in comparison to students without disabilities, the need to address chronic absenteeism in this population is exacerbated

(Rafa, 2017). Further, given the relationship between chronic absenteeism and graduation, the increased prevalence of chronic absenteeism among SWDs should be cause for concern. During the 2014-2015 school year, less than 70 percent of SWDs (from 33 states that were included in the analysis) graduated with a high school diploma (Grad Nation, 2015). In consideration of the possible implications of the relationship between chronic absenteeism and undesirable outcomes, the above information reflects the need for examination of the reasons behind chronic absenteeism specifically for SWDs. Below is a review of the literature on reasons for chronic absenteeism. Due to the lack of available information on reasons for chronic absenteeism for SWDs, the review includes information on reasons for all students who are chronically absent and for SWDs when available.

Reasons for Chronic Absenteeism

School-level reasons. In order to understand the factors associated with chronic absenteeism, researchers have typically investigated both student and school level reasons. In regards to school level reasons for absenteeism, most researchers agree that the school plays a critical role in its possible contributions to absenteeism. Specifically, school environment, school schedule, and school climate are common factors cited in the literature that influence students' attendance or lack thereof (Sahin, Areseven, & Kilic, 2016; Van Eck, Johnson, & Bettencourt, 2016). School schedule often refers to school start or end time, and students' course loads or course options whereas school environment characteristics include access to school health services (e.g., mental, physical, vision, and behavior), food options and school safety. The idea of school environment is particularly important given that healthy school environments facilitate healthy school climates (Chronic Absenteeism Brief, 2015). According to Van Eck et al. (2017), students with negative perceptions of their school climate were more likely to attend schools that

had higher rates of chronic absenteeism than were students who had more favorable perceptions of their school climate. Furthermore, rates of chronic absenteeism were found to increase for those students who had negative perceptions of their school climate than for those who had moderate or favorable feelings about school climate. These findings may indicate that school climate plays an important role not only in students' perceptions of their schools, but also in whether or not students actually attend school. Similarly, research examining the perceptions of various school principals also seems to support that school structure and negative school atmosphere are the most important school factors related to chronic absenteeism. In this study, school structure included the lack of attractiveness of schools in regards to limited fun or extracurricular activities, and also reports of challenging course loads and schedules. School atmosphere characteristics included instances of peer bullying and unjust accusations by teachers (Sahin et al., 2016). Given these findings, researchers have suggested that increasing school connectedness, the learning environment, student-teacher relations, and, parental involvement are critical ways in which schools could improve school climate and help decrease rates of chronic absences (Van Eck et al., 2016).

Recently, Humm-Brundage, Castillo, and Batsche (2017) conducted a national study examining the reasons for chronic absenteeism among 5,790 secondary students. As a whole, these students endorsed student-level reasons for missing school (e.g., health, transportation) more frequently than they endorsed school-level reasons. However, frequently endorsed school-level reasons for chronic absenteeism included school stress (34.8%), school climate (32.2%), and school safety (21.2%). Humm-Brundage et al. (2017) also analyzed responses from 1,009 SWDs. SWDs endorsed school-level reasons such as school stress (44.7%), school climate (40.8%) and safety/conflict (30.4%) as barriers to their attendance. This finding indicates that

SWDs in particular also perceived school-level factors and their feelings about school as relevant contributors to their chronic absenteeism.

This general idea is also supported by research that indicates that inclusive and exclusive factors influence SWDs chronic absenteeism. Inclusive services are services that allow SWDs greater opportunities to access the general education curriculum and interact with general education students. Exclusive services are typically more restrictive in that SWDs are taught alongside other SWDs and are separated from general education students and curriculum (Gottfried, Steifel, Schwartz, & Hopkins, 2017; Stiefel, Shiferaw, Schwartz & Gottfried, 2018). For example, a recent longitudinal study that examined the data of 653,736 general and special education students who attended New York City public schools between 2006 and 2012 found that SWDs who received inclusive services were less absent than SWDs who received exclusive services (Gottfried et al., 2017). The researchers suggested that SWDs who receive inclusive services might have an increased sense of belongingness and engagement with others, which facilitates a decrease in their rates of absenteeism.

Student-level reasons. The above studies indicate the school to be influential in regards to chronic absenteeism, but there is also existing research indicating that student-level reasons play a role in why students miss school. Ocak and Baysal (2017) found that students often missed school due to them having to work or due to anxiety. Student physical health is another barrier to students attending school regularly that is often the most frequently mentioned reason for chronic absenteeism (Erbstein, 2014; Humm-Brundage et al., 2017). Additionally, research indicates that students' transportation to and from school, and their perceptions of personal stress contribute to their chronic absenteeism (Humm-Brundage et al., 2017).

In regards to the few studies that have examined SWDs in particular, SWDs reported frequently missing school due to mental health issues, school mobility, and other health related reasons (e.g., cold, doctor's appointment) (Erbstein, 2014; Humm-Brundage et al., 2017; Wagner et al., 1993). SWDs have also indicated transportation issues either to or from school and academic difficulties as frequent barriers to them attending school regularly. Furthermore, suspension, legal system involvement, and housing material/instability have too been reported by SWDs as individual reasons for their chronic absenteeism (Humm-Brundage et al., 2017).

In consideration of student demographics, an older research study investigating demographic characteristics, found gender to be unrelated to chronic absenteeism (Wagner, 1993). Additionally, recent research gathered by the US Department of Education (2016) did not reveal any significant gender differences in regards to students who were chronically absent during the 2013-2014 school year. However, various racial and household discrepancies among chronically absent students have been noted. For example, Wagner (1993) found African American and Hispanic students missed more days of school than their White counterparts, and this discrepancy is still apparent among students in today's society with racial minority students continuously missing more school than White students (USDOE, 2016). Students who live in two parent households have also been found to miss less school than students who lived in single parent households (Wagner, 1993), and students who identify as English Language Learners have also been identified as being chronically absent (Erbstein, 2014). Thus, this information suggests that demographics such as race/ethnicity and household status may be indicators of chronic absenteeism. Researchers have not yet investigated demographic predictors of chronic absenteeism for SWDs.

Conceptual Framework

Given the limited research on SWDs reasons for chronic absenteeism and demographic predictors, research that addresses this population is needed to help stakeholders address chronic absenteeism and to increase attendance. The conceptual framework utilized in this study was derived based on the work conducted by Balfanz and Byrnes (2012). Balfanz and Byrnes conceptualize reasons for chronic absenteeism as falling into three broad categories: (1) students who cannot go to school (Barriers), (2) students who will not go to school (Aversions), and (3) students who do not go to school (Disengagement). Students who cannot go to school are typically those students who miss school due to some barrier or circumstance that causes them to be elsewhere during the day (e.g., having to work). Students who will not go to school are those students who do not attend school because they are trying to avoid certain aspects of school that they may not like such as peer interaction (e.g., bullying), or school events and coursework. Finally, students who do not go to school are those students who are not engaged in school due to them preferring to be elsewhere, who have a lack of parental support for school, and/or who demonstrate a lack of personal effort to get to school. Although often cited in the literature, it should be noted that until recently, the conceptualization of these broad categories was more theoretical than empirical.

Humm-Brundage, Castillo, and Moulton (2018) empirically investigated the reasons for which students were chronically absent. Humm-Brundage et al. (2018) used data from a national study of 5,790 chronically absent students across the U.S. to explore factors that relate to students' chronic absenteeism. Results of exploratory and confirmatory factor analyses revealed that barriers (things that hinder students' ability to attend school), aversions (undesirable events, situations, or people that prevent students' school attendance), and disengagement (a general lack

of interest in school or perceived value of school) tended to explain observed reasons for why students missed school consistent with Balfanz and Byrnes's (2012) work. However, Humm-Brundage et al. (2018) also found other reasons such as transportation issues, health related reasons, and family reasons to be additional direct indicators beyond the above latent variables. Specifically, the three composites included the (1) health composite which refers to reasons students miss school that are related to sickness or illness related appointments, (2) transportation composite which refers to difficulties getting to school, and (3) family composite which refers to personal family related reasons for missing school. See the definition of key terms for more information on and specific examples of the above factors and composites.

Purpose of the Study and Research Questions

Although research indicates that student (e.g., health, demographics) and school-level issues relate to chronic absenteeism, little is known regarding why SWDs miss school and the demographic factors that predict why these students miss school. Furthermore, the extant research is primarily descriptive in nature or focused on a small number of potential student- and/or school-level factors rather than comprehensively addressing which factors predict SWDs' chronic absenteeism using an empirically-supported conceptual framework. Therefore, the purpose of this study was to determine the reasons for chronic absenteeism among secondary SWDs using the Humm-Brundage et al. (2018) framework, and to determine the extent to which there were particular student and school-level demographic factors that predicted reasons for chronic absenteeism among SWDs. For the purposes of this study, secondary SWDs includes both middle and high school SWDs. Specific research questions investigated include:

1. What reasons for chronic absenteeism are most reported by SWDs in secondary settings?
2. To what extent do student and school demographic variables predict the following SWDs reported reasons for chronic absenteeism in secondary settings:
    a. Barriers
    b. Aversions
    c. Disengagement
    d. Health
    e. Family
    f. Transportation

It was hypothesized that aversions and health reasons would be the most frequently reported reasons for chronic absenteeism among SWDs (Erbstein, 2014; Humm-Brundage et al., 2017). It was also hypothesized that SWDs socioeconomic status would be the strongest student-level demographic predictor of the RCA factors (Erbstein, 2014; Pflug & Schneider, 2016). No additional hypotheses were presented due to the lack of empirical research on reasons for SWDs chronic absenteeism.

Definitions of Key Terms

Average Daily Attendance Rates. Refers to the overall attendance of all students in an entire school (Balfanz, 2016; Burner, Discher, & Chang, 2011).

Aversions. Aversions represent undesirable factors that might prevent school attendance. Examples of aversions include peer bullying or teasing, lack of school safety, and student sadness or depression (Balfanz & Byrnes, 2012; Humm-Brundage et al., 2018).

Barriers. Barriers are any general factors that might hinder or prevent a student from attending school. Examples of barriers include, having to work, being suspended, being homeless (Balfanz & Byrnes, 2012; Humm-Brundage et al., 2018).

Chronic Absenteeism. The definition of chronic absenteeism is taken from various researchers (Chang, Russel-Tucker & Sullivan, 2016; Chen & Rice, 2016) and refers to students who miss 10% or more days from school within the school year. Students are considered chronically absent regardless of whether they are excused or unexcused for their absences.

Disengagement. Factors that contribute to students lack of interest or desire to attend school regularly. Examples of disengagement include hanging out with friends instead of attending school, staying up later than normal on school nights, or simply not wanting to attend school (Balfanz & Byrnes, 2012; Humm-Brundage et al., 2018).

Family Reasons. Reasons for which students miss school that are due to family reasons. Examples include family emergencies, trips, or other related duties such as having to take care of a family member (Humm-Brundage et al., 2018).

Gender. For the purposes of this study, gender refers to students' self-identification as either male or female (Humm-Brundage et al., 2017).

Health Reasons. Reasons for which students miss school due to issues that are health related. Examples include short or long-term sickness and health appointments (Humm-Brundage et al., 2018).

Race. For the purposes of this study, race will refer to students' self-reported response as either White, Hispanic, African American, or Multiracial (Humm-Brundage et al., 2017).

Socioeconomic status. For the purposes of this study, socioeconomic status will be referred to by students' eligibility to receive free or reduced lunch (student), and the overall

percentage of students eligible to receive free or reduced lunch (school) (Humm-Brundage et al., 2017).

Special Education. Services that are designed to meet the unique needs of students with disabilities by helping students progress in school (Special Education, 2016).

Students with disabilities (SWD). For the purposes of this study, students with disabilities refers to any student who self-identified as receiving special education services in schools (Humm-Brundage et al., 2018).

Transportation Reasons. Reasons for which students are frequently absent due to challenges getting to school. Examples include car or bus issues (e.g., car would not start, bus came late), or difficulties arriving to school due to inclement weather (Humm-Brundage et al., 2018).

Chapter II: Literature Review

This section gives a broad overview of the literature relevant to this topic. The review begins with an introduction to the overall concepts of absenteeism and chronic absenteeism, the prevalence of chronic absenteeism, and the implications chronic absenteeism has on students. This section then addresses the importance of assessing chronic absenteeism in students with disabilities (SWDs) and what is known about the reasons SWDs miss school. Critical assessments of the methods used to study chronic absenteeism are also included throughout the literature review. This section concludes with a brief summary of the extant research and what questions need to be investigated.

Absenteeism

Absenteeism is a problem that has been impacting many students across the United States. Generally, absenteeism has been defined as periods of time in which students are either unwilling, or simply do not want to attend school (Balkis, Arslan, & Duru, 2016; Teasley, 2004). For students who attend school regularly, the typical number of days missed within a school year ranges between 4-5 days. However, according to research, approximately 8 million students in the U.S. are missing significantly more days of school (Attendance Works, 2018; Bauer et al., 2018). The number of students missing large numbers of days of school is concerning when one considers research indicating that absenteeism impacts students' academic achievement, engagement, and graduation outcomes (Castro, 2008; Gottfried & Kirksey, 2017; Moonie, Sterling, Figgs; Schoenberger, 2012).

Because of the critical role absenteeism plays in the outcomes of students, absenteeism has been used in schools' EWS's. EWS's are intended to help flag students at-risk to allow educators to intervene early and problem solve (Chomeau, 2012). Balfanz, Herzog, and Mac Iver (2007) examined the importance of early identification by demonstrating how predictive factors such as students' poor attendance, class failure, misbehavior and special education status influence their graduation outcomes. In this study, a longitudinal dataset was used to follow a sample of 12,972 students in Philadelphia who were enrolled in the sixth grade during the 1996-97 school year. These students were followed for a total of 8 years (i.e., until 2003-04) or for one year after their expected graduation date if necessary. In regards to attendance, results found that students who missed 10% of school while in the sixth grade were at an increased risk for not graduating. Additionally, at the end of the year 2000, 60% of students who missed 20% or more days of school during their sixth grade year made it to the 9th grade on time. However, these numbers continued to decrease with only 15% of those students having made it to the 11th grade on time. Although it is important to note that throughout the years of this study some of the flagged students switched districts, of the students who were flagged for attendance during the sixth grade that remained in the same district, only 13% graduated on time, and 4% graduated the following school year (i.e., 1 year late).

In a more recent study conducted by Balfanz and Byrnes (2010), the researchers examined early warning indicators among 6th and 9th grade students in West Virginia. Similar to the previous study, attendance rate, behavior problems and course failure/GPA were the indicators reviewed as these indicators have previously been identified as key flags of eventual student dropout. Thus, to determine the factors that were most related to eventual dropout, the researchers utilized logistic regression modeling procedures. The student sample was provided

by the West Virginia Department of Education and included approximately 66,900 students across three grades. Specifically, 21,244 students were in the 6th grade, 25,319 were in the 9th grade, and 20,315 were 12th grade students. Of the indicators examined in this study across all grade levels, attendance was the most common indicator related to drop out among students and schools. Specifically, when examining 6th grade attendance rates in particular, 20% of all 6th grade students included were flagged for having less than 90% attendance, and 17% of all students in the 9th grade were flagged for having less than 85% attendance. Attendance flags for students in the 12th grade were not reported. No outcome data were provided for students who were flagged for attendance rates.

Studies like the ones reviewed above illustrate how students who are frequently absent often become off-track and tend to have less favorable experiences in school (see Allensworth & Easton, 2007; Davis et al., 2013; Gwynne, Lesnick, Hart, & Allensworth, 2009; Rafa, 2017 for more information on absenteeism in EWS). As a result, efforts to increase student attendance with the assistance of EWS's have increased (Balfanz & Byrnes, 2010). Although absenteeism as an EWS indicator has always been defined as missing at least 10% or more days of school (Allensworth & Easton, 2007; Balfanz and Byrnes, 2007) researchers are now beginning to use the term "chronic absenteeism" to refer to missing such high amounts of days from school.

Many schools are also now beginning to track chronic absenteeism as part of their plans to implement the "Every Student Succeeds Act" (ESSA) which was enacted in 2015. ESSA already requires states to keep track of their absenteeism rates, but given the need for a fifth "non-academic" indicator, many states that have recently submitted ESSA plans have included chronic absenteeism as part of their accountability systems (Sparks, 2017). Therefore, because chronic absenteeism is measurable, can provide clear differentiation between schools, and

because decreasing chronic absenteeism has been linked to improvements in academic achievement, it is considered to be a strong indicator of school performance especially in regards to accountability systems (Sparks, 2017). Additionally, more research is emerging that is examining the role of chronic absenteeism in impacting the educational outcomes of students.

Chronic Absenteeism

Some different definitions of chronic absenteeism exist, but many definitions indicate that students are considered chronically absent when they miss at least 10% or more days of school (Balfanz & Byrnes, 2012). This typically equates to missing 18 or more days of school within a 180-day school year. Thus, students who miss at least two days of school per month are likely to become chronically absent (Chen & Rice, 2016). Recent data from the 2015-2016 school year has found that 7.3 million students in the US are chronically absent (Bauer, et al., 2018). This is critical because it provides evidence of a possible increase of approximately 900,000 students who previously met criteria for chronic absenteeism and further reinforces the idea that chronic absenteeism is a national crisis that must be addressed.

Unlike truancy, which refers to absences for unexcused reasons, students who are considered chronically absent are targeted whether they miss school for excused reasons or unexcused reasons including suspension (Chang, Russel-Tucker & Sullivan, 2016; Chen & Rice, 2016). In the past, many districts, schools, and researchers were focused on truancy, but that focus has shifted to chronic absenteeism. Given this recent change to a consistent definition of chronic absenteeism, however, it is important to note that attendance tracking in the United States has been relatively inconsistent across various school districts and states (Henry, 2007). Furthermore, despite the more consistent way in which chronic absenteeism is now measured,

chronic absenteeism is often untracked given some schools' use of average daily attendance rates instead (i.e., not all schools have to track chronic absenteeism).

Average daily attendance rates provides the overall percentage of all enrolled students who attend school each day and are typically used for resource and funding purposes (Burner, Discher, & Chang, 2011). However, because average daily attendance rates look at the school as a whole, it is possible that some individual students who are actually chronically absent may be unaccounted for or unnoticed (Balfanz, 2016). The following example is taken from Bruner, Discher, and Change (2011) and is included to support the above notion and illustrate how average daily attendance rates have the potential to mask chronic absenteeism:

> Even in a school of 200 students with 95 percent average daily attendance, 30 percent (or 60) of the students could be missing nearly a month of school (i.e., chronically absent) over the course of the school year. It all depends whether absences are due to most students missing a few days or excessive absences among a small but still significant minority of students (p. 2).

Research by Harris (2016) further illustrates the effects of average daily attendance rates not only on schools and students individually, but school districts as a whole. This study focused specifically on the amount of funds spent in regards to attendance. Given that some states utilize daily attendance rates to determine how to allocate funds to schools, frequent chronic absenteeism can result in financial strains. Generally, if students do not attend school, states provide the school with less funding which in turn tends to create burdens especially for those schools and districts with high amounts of chronically absent students, and low income or racial minority students (Castelow, Riley, & Petty, 2015). In California for example, during the 2014-2015 academic year, daily attendance rates caused some schools to experience $1 billion in

foregone dollars which further illustrates the implications this has on district resources. Thus, the use of average daily attendance rates and traditional attendance indicators not only provides inconsistent information and may fail to identify students who miss substantial numbers of days, but also may result in financial penalties to school districts with substantial numbers of chronically absent students.

Implications and outcomes. Chronic absenteeism has far-reaching implications on student achievement, learning, future outcomes and mental health (Gottfried, 2014; London, Sanchez, & Castrechini, 2016). However, the majority of the research has focused on the academic outcomes of students who are chronically absent. These consequences have been documented across studies (Balfanz & Byrnes, 2012; Chang & Romero, 2008).

Gottfried (2014) examined the effects of chronic absenteeism on kindergarten students' achievement and socioemotional outcomes. Data from a total of 10,740 kindergarten students enrolled during the 2010-2011 school year student were obtained from the Early Childhood Longitudinal Study. The academic outcome measures included in this study were students' reading and math assessment scores. Socio-emotional data were obtained through teacher assessments of the students' behaviors. The socio-emotional scales used were created by the National Center for Education Statistics (NCES) and were derived from the Social Skills Rating System. Students who had between 11 and 19 absences were considered to be moderately chronically absent whereas students with 20 or more absences were considered to be strongly chronically absent. Results indicated that chronic absentee students demonstrated lower academic performance on both the reading and math exams. Results further found that in regards to students' socio-emotional skills, children who were chronically absent demonstrated fewer behaviors that facilitated their ability to learn, and also appeared less eager to learn. Additionally,

results indicated that the children who were chronically absent demonstrated internalizing behaviors more than externalizing behaviors and appeared less engaged not only academically, but also socially (Gottfried, 2014). Thus, these outcomes illustrate the impact chronic absenteeism has even in the early stages of students' educational endeavors.

Another example of the impact of chronic absenteeism in relation to academic achievement came from a study conducted by Balfanz and Byrnes (2006). Specifically, the researchers examined factors that affect students' ability to close mathematic achievement gaps. Data were collected by three schools in the Philadelphia school district for four cohorts of students who met the criteria for high poverty. A total of 1,233 students were included. Results indicated that in comparison to their non-chronically absent counterparts, students with attendance rates of 60% or less had significantly lower odds of closing the mathematics achievement gap. Additional research indicates that regardless of gender, socioeconomic status, or ethnicity, students who are chronically absent perform worse academically, and "lose out" in regards to their learning and acquisition of knowledge (Chang & Romero, 2008).

Smerillo, Reynolds, Temple, and Ou (2018) utilized a sample of 1,148 fourth through sixth absent students who were chronically absent in order to determine whether chronic absenteeism during the middle years of school (i.e., grades 4-6) was an indicator of achievement in eighth grade and later high school graduation. Student data were obtained through the Chicago Longitudinal Study (CLS) which contains information from kindergarten students who entered the Chicago school system in 1985. In order to measure chronic absenteeism, the teachers and parents rated the students on the number of absences they had during the school year. Achievement in eighth grade was measured by students' subtest scores on the Iowa Test of Basic Skills. Graduation was determined by whether or not a student graduated high school with a

diploma or received a GED by 2001. Results of the study found that in comparison to their regular attending peers, students who were chronically absent in the early grades demonstrated lower math and reaching achievement in the eighth grade, and performed almost two months behind students who were not identified as chronically absent as illustrated by their achievement scores. The negative outcomes associated with chronic absenteeism were further illustrated in students' graduation attainment. Specifically, students who were chronically absent were less likely to graduate with a diploma within four years, or by age 21. Thus, results of this study demonstrate that chronic absenteeism has the potential to not only impact students immediately, but also in the future. Results also reinforce the idea that the achievement gap continues to widen as students who are chronically absent progress throughout school (Smerillo et al., 2018)

Overall, the research on chronic absenteeism suggests that the negative consequences of frequently missing school are high. Researchers hypothesize that when students do not have the ability to learn necessary academic skills while frequently absent from school, the achievement gap widens. This gap often is exacerbated as students get older given that their rates of absenteeism often increase during middle and high school (Attwood & Croll, 2006; De Wit, Karioja, & Rye, 2010). Thus, because students who are chronically absent often require more time and attention from teachers in order to address their learning and social needs, it is critical for schools and districts to try to prevent chronic absenteeism and intervene early when students are identified. However, in order to do this, schools and districts must first have information regarding the reasons for chronic absenteeism in order to effectively intervene.

School-level reasons for chronic absenteeism. The school environment, schedule and climate are factors that play critical roles in regards to their contributions to, and influence on students' chronic absenteeism (Van Eck, 2016). However, research providing school level

reasons for absenteeism is relatively mixed. The extant research on these variables is reviewed in-depth below to provide a comprehensive picture of the current understanding of school-level reasons for chronic absenteeism.

In an examination and comparison of 1,122 chronically absent students and regularly attending high school students from the Southern Piedmont region in North Carolina, Grant (2016) sought to identify which school-related factors, family-related factors, self-concept factors, and teacher related factors relate most to chronic absenteeism. The sample of students was ethnically diverse, and about 50% of students included were eligible to receive free or reduced price lunch. To identify those students who were chronically absent, data from the first semester of the 2014-2015 school year were analyzed. After the analysis, a total of 129 students were identified as chronically absent as they had missed 10% or more days of school during the previous 90-day semester. To obtain additional qualitative data, the researcher randomly selected 15 chronically absent students to participate in focus groups, but only five participated.

Chi-square analyses were used to analyze the data for regular attending and chronically absent students. Focusing on the school-level reasons in particular, results found that chronically absent students had different feelings and opinions regarding school rules and enforcement, teacher relations, and school safety than did regular attending students. For example, 50% of chronically absent students believed that students of all races, cultures, genders, religions, and sexual orientations were treated fairly whereas 65% of regular attending students believed this statement (Grant, 2016). Students' overall enjoyment of school and endorsements of statements such as "I feel welcome at school" and "I feel safe when I'm at school" represent additional statistically significant differences between the two groups of students in which chronically absent students responded less favorably. Furthermore, during a focus group conducted with the

five chronically absent student participants, the students attributed their difficulties to issues with peers, teachers, and academic challenges. In regards to peer issues two of the five students reported instances in which they felt bullied by peers and decided to stay home to avoid conflict. Another student discussed the loneliness felt as a new student and having no friends. The students also expressed feelings of limited teacher support. Specifically, the students suggested that they did not feel a connection with their teachers and felt that the teachers held a nonchalant attitude about their attendance or lack thereof. Finally, in regards to the third theme, academic struggles, the students mentioned the struggles they were experiencing in certain courses which triggered frustration and further facilitated their absence. Moreover, the students mentioned that after a while they no longer saw the need to attend school given the schools' "failure due to attendance policy" which stated that students who miss eight or more classes will not receive academic credit (Grant, 2016).

Van Eck, Johnson, and Bettencourt (2017) demonstrated the role of school climate. Van Eck et al. distributed anonymous school climate surveys to students across 121 different urban public schools during a six-week survey window. A total of 25,776 secondary students were included in this study. Students in the study were considered chronically absent after missing 20 or more days of school. It is important to note that students did not have to miss a full day of school to be considered absent. Those who attended school for only two hours or less during a typical school day were also considered not in attendance. Results of this study found that students who perceived their schools' climate to be relatively moderate or completely negative were likely to have increases in their chronic absenteeism rates. Results further indicated that students who had negative perceptions of their school climate were more likely to attend schools that employed higher rates of chronic absenteeism.

In a national study of 5,790 chronically absent youth, those surveyed reported school level reasons such as school stress (34.8%), school climate (32.2%), and safety/conflict (21.2%) as frequent contributors to their chronic absence (Humm-Brundage, Castillo & Batsche, 2017). In this study, school stress was referred to as overall school difficulty (e.g., preparedness for school, deliberate avoidance of teachers or classes). School climate referred to both the physical environment of the school (e.g., cleanliness, condition, & basic supplies) as well as the affective environment (e.g., kindness & fairness to others). Lastly, safety/conflict referred to safety while at school, as well as safety arriving or leaving from school (e.g., safety while on the bus, safety walking/riding home).

Salient group differences relevant to the most frequently endorsed school-level reasons for chronic absenteeism were also noted in the Humm-Brundage et al. (2017) study. School stress, school climate, and school safety/conflict were all endorsed by approximately 80% of students eligible to receive free or reduced price lunch. Additionally, school stress was also reported by about 50% of White students in comparison to less than 20% of African American, Hispanic and Multiracial students. School climate was reported by approximately 45% of White students and less than 20% of African American, Hispanic and Multiracial students. Finally, school safety/conflict was endorsed by over 40% of White students, and less than 20% of African American, Hispanic, and Multiracial students. The researchers did not explain the potential reasons for these differences nor did they explore whether they were statistically significant.

Unlike the aforementioned studies which examined student responses, a qualitative study conducted by Sahin, Arseven, and Kilic (2016) utilized a group of 64 principals across various elementary, middles, and high schools in Turkey during the 2014-2015 school year to investigate

reasons for chronic absenteeism. The researchers utilized a semi-structured interview to gain the principals' perspectives surrounding the causes of chronic absenteeism and drop out. Results of the interviews found two main school related themes that contributed to absenteeism: (1) School Structure, and (2) Negative School Atmosphere. In regards to school structure, the lack of physical structure and durability of schools, the inability of schools to be viewed as an attractive environment, and extreme course load were reported as the contributing reasons to chronic absenteeism. School atmosphere characteristics included instances of peer bullying, negative friendships, and unjust accusations from teachers. Principals reported that these atmosphere characteristics negatively influenced student attendance (Sahin, Arseven, & Kilic, 2016).

Recent research conducted by Ocak and Baysal (2017), however, revealed slightly different results than the previous studies presented in this section. Five hundred thirty-one public high school students were included in this study. The researchers created "The Scale of Absenteeism Causes" measurement which looks at students' reasons for absenteeism in terms of schools, the students themselves, their parents, and psychological reasons. Students responded to numbered statements using a 5-point Likert scale that ranged from "Never" to "Always." Examples of school related items include: "I remain absent from school because of violence" and "I remain absent from school due to authoritarian teachers." A Cronbach's alpha of .92 was calculated for the school level reasons for absenteeism indicating high levels of internal consistency. Unlike previous studies, the majority of the sample did not respond in favor to questions such as "I remain absent from school because of violence." Rather, students agreed more frequently with items such as "I remain absent from school when I don't have course materials", "I remain absent from school before and after public holidays" and "I remain absent from school because I have to support my family financially." Therefore, the researchers

concluded that the results of this study indicate the causes of absenteeism among students to be more likely related to the students themselves and parental factors rather than school-level or psychological factors.

Student-level reasons for chronic absenteeism. Generally, reasons for chronic absenteeism at the student-level include students' physical and mental health, their perceptions of school, and the availability of family and community support for school attendance (Indiana Department of Education, 2017). Erbstein (2014) examined factors that influence school attendance for students who were chronically absent in the Sacramento City School District. Results of this study were based on 196 K-12 grade students across 17 schools within a single district. However, the students did not complete a specific survey instrument or questionnaire that inquired about their absenteeism themselves. Instead, the information was obtained through various conversations and interactions that the Youth and Family Resource Center (YFRC) social workers and social work interns had with the students over time. A specific amount of time that elapsed was not included in the study. Rather, the assessments were completed whenever the assessors believed that they had enough knowledge and conversational contact with the student that would facilitate accurate information. Among the barriers found, student physical health was mentioned by 36% of the students, and was ultimately the most frequently endorsed contributing factor to chronic absenteeism. Examples of physical health issues included both common illness (e.g., cold, flu) and chronic conditions (e.g., diabetes). Transportation issues were reported by 28% of students assessed. Examples of transportation issues included unreliable service and access to transportation, and transportation safety. Student mental health challenges (e.g., anxiety, depression) were reported by 24% of students overall, however, the rates were highest among the middle school student participants (39%). Responsibilities beyond

those required by the school were reported by 17% of chronically absent students. These responsibilities included having to take care of other family members, or having to work. Although there were some questions about the methodology, this study provides evidence that there is a wide array of student factors that contribute to chronic absenteeism.

A national study conducted by Humm-Brundage, Castillo, and Batsche (2017) which examined the reasons for chronic absenteeism among secondary students further reinforces the notion of student-level factors being common causes of chronic absenteeism. A total of 5,790 youth who had missed 10% or more days of school during the 2015-2016 school year were included. Participants were provided the *Reasons for Chronic Absenteeism Survey (RCA)* through an online survey platform. In regards to student-level reasons for absenteeism, 92.6% of students reported health related reasons as the main barrier to school attendance. The other most commonly reported student level reasons were transportation (53.0%) and personal stress (41.8%). Additional student reasons for chronic absenteeism reported by students in this national study were preferred activities outside of school (41.0%), value of school (38.8%), adult responsibility (17.0%), legal system involvement (15.6%), housing/material instability (13.6%), and suspension (10.5%). Overall, similar to the Erbstein (2014) study, findings regarding student-level reasons indicated there were various reasons for which students were chronically absent; however, there were several factors that were the most prevalent, particularly health related reasons.

Humm-Brundage et al. (2017) also investigated reasons for chronic absenteeism among different student subgroups. Among student subgroups for the health barrier, White students (~55%), and those who qualified for subsidized meals (~75%) reported missing school for health-related reasons most often. Less than 40% of the Hispanic and African American students

surveyed reported missing school for health related reasons. In regards to transportation, students who identified as White (~55%), SWDs (19%), and students eligible to receive subsidized meals (~75%) reported this reason most often. African American, Hispanic, and Multiracial students reported transportation barriers less frequently (~20%) than White students. Gender differences were noted in the personal stress category as females (59%) endorsed this reason more than males (40%). White students also endorsed personal stress more frequently (~55%) whereas less than 20% of racial minority students endorsed this reason. However, students eligible to receive subsidized meals reported personal stress issues more frequently than all subgroups (~75%).

Consistent with Humm-Brundage et al. (2017), socioeconomic status (SES), gender, and race/ethnicity are among the most common demographic factors in the literature that have been found to play roles in students' chronic absenteeism. Although the Pflug and Schneider (2016) examined school absenteeism in the past seven days, the researchers reported demographic findings regarding school absenteeism. Absentee youth were typically older than students who attended school on a regular basis. Additionally, in comparison to their regular attending counterparts, the average youth who was frequently absent also did not reside in a household with both parents, and had significantly lower socioeconomic status. Gender differences among youth were found to be insignificant.

Erbstein (2014) found that many students who received free or reduced price lunch were more likely to be chronically absent. Given that free or reduced price lunch is often considered an indicator of low familial income, this finding indicates that students' socioeconomic status may have contributed as a reason for chronic absenteeism among students in this study. Chronic absenteeism rates also varied in terms of race and ethnicity. However, throughout the 3-year longitudinal study, these rates remained relatively stable across the groups with only a less than

2% increase in chronic absenteeism among youth who identified as African American. As such, during 2012-2013, students who identified as Latino or Hispanic (38.8%), Black or African American (28.6%), and White (15.4%) were most commonly reported as being chronically absent.

Smerillo, Reynolds, Temple, and Ou (2018) examined 1,148 students with frequent absences in order to determine whether students with high absence rates in the early grades experienced lower levels of achievement and graduation rates. The researchers were also interested in determining if the associations of absences with outcomes varied by gender, mothers level of education, and parental involvement. The sample of students were taken from the Chicago Longitudinal study of children who entered kindergarten in 1985. Students were selected based on their attendance ratings from their 4^{th}-6^{th} grade teachers. Similar to the Erbstein (2014) article, students who were chronically absent were more likely eligible to receive subsidized meals. Additionally, in comparison to non-chronically absent students, students who were identified as being chronically absent were more likely to be male than female. Interestingly, however, poorer outcomes were associated with chronically absent students who were identified as being the children of mothers who completed high school, than for the children of mothers who did not complete high school (Smerillo et al., 2018).

Antworth (2009) found some different results regarding student-level factors in comparison to some of the studies reviewed above. In this study, the researcher aimed to identify the factors most highly associated with chronic absenteeism among students attending public schools in Florida. Data from students enrolled during the 2002-2003 school year were used. According to the Florida Department of Education (FDOE), there were approximately 248,000 students who had missed 21 or more days of school during the 2002-2003 school year. These

students were among the total number of over 2.5 million students in the state. Student demographic and disciplinary data were obtained from Florida school district profiles on the FDOE website and from the Education Data Warehouse. The researcher conducted multiple regression, factor analyses, and correlation analyses to determine the associations among factors. Results indicated that race/ethnicity and socio-economic status were not associated with chronic absenteeism. Rather, corporal punishment, in or out of school suspension, eligibility or enrollment in special education, limited English proficiency, and being retained were all found to be predictors contributing to chronic absenteeism. Out-of-school suspension was found to have the greatest relationship.

Students with Disabilities

While the literature described above primarily focuses on all students as a whole, there is emerging evidence to indicate that SWDs may have unique issues relative to chronic absenteeism. Within the school system, SWDs typically are considered to be those students who receive or are eligible to receive special education services. Previously, the number of students between ages 3-21 years who received special education services was 4.7 million. However, this number has increased by 2 million and is currently 6.7 million (National Center for Education Statistics, 2017). Special education is provided with the intent of enabling students to successfully thrive and reach their potentials, in addition to providing them an opportunity to receive free and appropriate education as discussed in the Individuals with Disabilities Education Improvement Act (IDEIA; Hale, Naglieri, Kaufman, & Kavale, 2004). Thus, given that SWDs are entitled to a free and appropriate education and given the fact that missing school significantly contributes to negative school performance and facilitates undesirable outcomes, research that focuses on chronic absenteeism is relation to SWDs must be considered.

Graduation outcomes of SWDs. At both the national and state levels, the graduation gap for SWDs remains prevalent (Grad Nation, 2015). To determine graduation rates specifically, state agencies calculate the Adjusted Cohort Graduation rate (ACGR). This measure is calculated by the total number of students who graduate with a regular high school diploma within four years divided by the adjusted cohort of students (e.g., students who transfer in, student who transfer out, etc.). Essentially, this calculation tells the percentage of students within a cohort that actually graduate on time. The latest state-level Adjusted Cohort Graduation Rate (ACGR) however, revealed concerning data trends. It was reported that in 33 states, 70% or less of their SWDs graduated. Of those 33 states, six had graduation rates of less than 50% for SWDs (Grad Nation, 2015). Moreover, SWDs have experienced lower on-time graduation rates than African American, Hispanic, and American Indian minority students (Stetser & Stillwell, 2014). These graduation rates data are critical because if educators want to see the overall graduation rates of all students in the U.S. improve, the number and percentage rate of SWDs who graduate must increase as well.

Research conducted by Henson (2017) examined the most predictive factors of on-time graduation among SWDs. Specifically, the researcher examined demographic variables such as language proficiency, socioeconomic status, and race/ethnicity. School level variables such as school grades, school transitions and on-time graduation were also examined in order to determine whether or not there was a relationship among the variables. Participants included 692 SWDs from one school district in Central Florida. The students from this study were in the 6th grade during the 2007-2008 school year and were followed as a cohort until their expected graduation. Data were analyzed using multilevel logistic regression. Results indicated that student attendance was found to be a predictor of on-time graduation, and socioeconomic status

was the only significant demographic predictor of on-time graduation among SWDs. Thus, consistent with research on all students, Henson's findings provided support for the role of chronic absenteeism in predicting SWDs likelihood of graduation. Information on the prevalence of chronic absenteeism among SWDs follows.

Prevalence of SWDs chronic absenteeism. During the 2013-2014 school year, it was reported that SWDs were absent more frequently than students without disabilities (U.S. Department of Education, 2016). Specifically, 2013-2014 Civil Rights Data Collection (CRDC) data demonstrated that 18.9% of SWDs were chronically absent in comparison to 12.9% of students without disabilities. Additional data suggests that SWDs are currently 1.4 times more likely to be chronically absent than students without disabilities (Rafa, 2017). For example, research conducted by Cortiella and Horowitz (2014) found that high school freshmen SWDs were absent an average of 50% more days than were freshmen students without disabilities. This pattern of greater absence rates is similar among younger SWDs as well given data which indicates that elementary aged SWDs who receive special education services are 50% more likely to become chronically absent than their peers who do not receive special education services (CRDC, 2016).

Similarly, a brief conducted by Gee (2018) regarding the disparities of chronic absenteeism among students in the U.S reported that during the 2014-2015 school year, 15.60% of SWDs in elementary school missed 15 or more days of school whereas 10.10% of students without disabilities missed 15 or more days of school. For middle school students, 17.9% of SWDs missed 15 or more days of school whereas 11.8% of their counterparts without disabilities missed 15 or more days of school. Finally, in high school, 24.6% of SWDs missed 15 or more days of school in comparison to 18.1% of students without disabilities meeting the 15 or more

days of school cutoff. Based on these data, it is evident that chronic absenteeism rates for both SWDs and those without disabilities steadily increase throughout the k-12 school years, but SWDs demonstrate higher percentages of chronic absenteeism.

Characteristics of and reasons for absenteeism among SWDs. Consistent with students who do not have disabilities, SWDs are likely to experience chronic absenteeism for a variety of reasons. A study conducted by Wagner et al. (1993) illustrates some of the earliest comprehensive and foundational research that examined SWDs characteristics, achievements, and school performance. Wagner and colleagues utilized national data from a 2-year longitudinal study. Data were derived from school transcripts, program forms, school records, student school program surveys, and parent/telephone interviews. Data were analyzed by various multivariate analyses. Results indicated that SWDs reported more health related reasons for their absenteeism than their peers without disabilities. SWDs also reported missing school due to factors related to their individual specific disability category, access to tutoring support, self-care abilities, and mental health. Thus, overall, student-level reasons were reported to be significantly more indicative of absenteeism than were school level reasons such as school climate, school size, and school socioeconomic status.

A more recent study conducted by Erbstein (2014), yielded results consistent with the research conducted by Wagner et al. (1993) in that health reasons were considered to be the leading cause of absence among SWDs receiving special education services. Results of the Erbstein study also revealed that SWDs reported experiencing more academic challenges than did the overall sample of chronically absent students included in the study. Furthermore, mental health and school related discipline issues were also considered to be significant factors in SWDs' chronic absenteeism. These findings are consistent with research conducted by Wiseman

(2015) which found that amongst the SWDs, health related reasons and "other" reasons were the most commonly reported reasons for chronic absenteeism. Examples of health related reasons included mental health and dental treatment.

Similar to the Erbstein (2014), and Wagner (1993) studies, health related reasons (91.4%) was the highest endorsed reason for chronic absenteeism reported by SWDs in the Humm-Brundage et al. (2017) national study on reasons for chronic absenteeism described earlier. SWDs also endorsed other student factors such as transportation issues (57.7%), personal stress (42.6%), legal system involvement (26.2%), and housing material/instability (18.8%) as contributors to their chronic absenteeism. Additionally, school-level factors such as school stress (44.7%), school climate (40.8%), and physical safety/conflict (30.4%) were the most frequently endorsed reasons for chronic absenteeism reported by SWDs in the study. Thus, although health related reasons were the highest endorsed reason overall, results of this study suggest multiple student and school factors for chronic absenteeism.

Additionally, Gren-Landell, Allvin, Bradley, Andersson and Andersson (2015) conducted research in order to examine teacher perceptions of problematic chronic absenteeism. The sample consisted of 158 sixth through ninth grade special education and general education teachers in Sweden; over 25% of the participants identified as special education teachers. In order to participate in this study, the teachers responded to an online questionnaire regarding problematic chronic absenteeism. All of the teachers who participated indicated that they had experience working with students who were chronically absent, but the "type" of experience was not assessed. The questionnaire used in this study was developed by the researches and included questions that inquired about the teachers' basic demographic information (i.e., race, age, number of years teaching etc.), perceptions of the common causes of chronic absenteeism, and

estimates of the number of chronically absent students they had worked with over the past five years. Finally, the teachers were asked about the extent to which they felt that family, peer, individual, and school factor domains were the causes. Descriptive statistics, Cronbach's alpha and repeated measures ANOVAs were calculated based on the provided data. Results of the study concluded that in comparison to general education teachers, special education teachers (i.e., teachers of SWDs) reported more experience with chronic absenteeism. On average, special education teachers reported experience with an estimate of 19 students whereas general education teachers reported experience with about nine students. Furthermore, while special education teachers rated both the individual and school level domains as higher contributors to absenteeism than did general educations teachers, school level reasons were considered significantly more influential by the special education teacher participants. Specifically, the special education teachers felt that because many schools do not match students' educational needs, success and attendance for SWDs become hindered.

There is also additional research which suggest that school-level reasons for chronic absenteeism extend beyond those mentioned above and further relate to the nature of services that SWDs are provided within schools. Inclusive services are services in which SWDs are taught primarily alongside general education students with either a single general education teacher, or with both a general education and special education teacher. Exclusive services are those in which students are kept in restrictive environments and are typically among other SWDs only. Recent research, however, has confirmed that more SWDs are now being educated alongside general education students in inclusive classrooms than they were previously (U.S. Department of Education, 2007, 2015). This change is noteworthy given that older research has found that in comparison to SWDs who had a wide range of general education classes, those who

received more special education services and classes outside of the general education environment tended to miss even more days of school (Wagner et al., 1993).

In fact, in a study of SWDs in urban schools in New York, Gottfried, Steifel, Schwartz and Hopkins (2017) examined the differences between SWDs receiving inclusive and exclusive services. Longitudinal data from September 2006 to June 2012 taken from the New York City Department of Education were utilized. The sample consisted of SWDs and general education students in 1st through 6th grade. The total sample size of unique students was 653,736. Results found that SWDs who received exclusive services were more likely to be chronically absent than those receiving inclusive services. This finding is consistent with research which suggests that students who receive more inclusive services tend to experience a higher sense of school belonging and engagement which in turn can help reduce chronic absenteeism (Freeman & Alkin, 2000; Reschly & Christenson, 2006; Stiefel et al., 2018; Van Eck et al., 2016).

Regarding demographic reasons for chronic absenteeism among SWDs, Wagner et al. (1993) found that gender was not related to chronic absenteeism for SWDs in any secondary grade level. However, gender was found to be related to course failure and drop-out rates. Considering students who were racial minorities, in comparison to White SWDs, African American and Hispanic SWDs missed more days of school. For example, African American students missed about 1.5 days more of school during 12th grade than did White students. While household income or socioeconomic status was found only to be significant for SWDs in the 9th grade, results did confirm that students from two-parent households were less likely to miss school (Wagner et al., 1993). No other studies have examined demographic reasons or predictors for SWDs.

Summary

Chronic absenteeism is a public health concern that has been prevalent in the U.S for years, and has also been linked to negative student outcomes such as poor academic achievement and school dropout (Balfanz & Byrnes, 2006; Schoenberger, 2012). EWSs were created in order to provide educators and stakeholders an opportunity to intervene early in order to address some of the adverse outcomes and trajectories associated with students who are at risk (Chomeau, 2012; Davis, Herzog, & Legters, 2013). In regards to student outcomes, prior EWS research has found that attendance is often one of the leading indicators related to whether a student will eventually drop out of school or graduate on time (Balfanz & Byrnes, 2010)

Although definitions vary by state, students are typically considered to be chronically absent when they miss 10% or more days of school within a school year (Balfanz & Byrnes, 2012; Chen & Rice, 2016). Recent data have revealed that approximately 8 million students in the US are chronically absent (Bauer et al., 2018). These data are concerning not only because they provide evidence of an increase in the number of students who are chronically absent, but also because research has indicated that students who are chronically absent are less likely to graduate, have trouble closing the achievement gap, and tend to demonstrate poorer performance on achievement exams than their non-chronically absent peers (Attwood & Croll, 2006; Balfanz & Byrnes, 2006; Gottfried, 2014).

Given the impact chronic absenteeism has on students, a large portion of literature has recently been dedicated to examining the reasons behind why students are chronically absent. The literature on all students suggests there are several student-level, school-level, familial, and transportation issues that contribute to students' chronic absenteeism (Erbstein 2014; Humm-Brundage et al., 2017; Pflug & Schneider, 2016). Nevertheless, research surrounding the

individual student and school level reasons for chronic absenteeism among SWDs is extremely limited in number. However, some studies have found that SWDs tend to frequently endorse both school related reasons for absenteeism and student reasons (Humm-Brundage et al., 2017) with health often cited as the most frequently endorsed specific reason for chronic absenteeism (Erbstein, 2014; Wagner et al., 1993) among SWDs. To date, studies that examine the demographic predictors of SWDs is an area in need of further research. Therefore, by focusing on student and school demographic predictor variables of reasons for chronic absenteeism among SWDs, researchers can better understand how student and school characteristics that intersect with students' disability status relate to their reasons for missing school. In other words, SWDs may have other characteristics or go to schools that may serve as risk or protective factors.

Chapter III: Method

The purpose of this study was to determine reasons for chronic absenteeism among SWDs and to examine the extent to which certain student and school demographics predicted reasons for chronic absenteeism. The current study was a secondary analysis that utilized an existing data set that included data on secondary students' reasons for chronic absenteeism. This chapter consists of several sections that present descriptions of the study participants, instrumentation, procedures, and analyses relative to the study.

Participants

The study consisted of 1,009 chronically absent SWDs (see Table 1 for participant demographics) who attended 86 middle and high schools (see Table 2 for school demographics). This sample of students and schools was derived from a larger sample of 5,790 chronically absent students across 21 districts and 91 schools (Humm-Brundage, Castillo & Batsche, 2017). In the larger study, participants were selected based upon having missed 10% or more days of school during the 2015-2016 school year. Data were obtained from 6^{th}-12^{th} grade students across eight states in the U.S (CA, FL, IA, KY, ME, MI, MN, RI) and were collected during September through December of 2016.

To be considered an SWD, students included in this study had to respond "yes" to an item on the *Reasons for Chronic Absenteeism Survey (RCA)* survey (described below) that asked if the student receives special education services. It is important to note that gifted students could fall under the category of students receiving special education services as well. No information was collected on specific types of disabilities (e.g., Specific Learning Disabilities,

Emotional/Behavioral Disabilities). Thus, any student who self-identified as receiving special education services was included in this study as an SWD.

While SWDs who participated were obtained from multiple regions across the U.S., the majority of the participants lived in the southeast region (84.7%). The gender distribution of the sample included more than half of the participants identifying as male (57.2%). There were also more middle school student participants (60.4%) than high school participants (39.5%). Additional student demographic data illustrates that the majority of students surveyed identified as White (45.1%), followed by Hispanic/Latino (20.7%) and African American (16.7%). Only a small subset of students reported that English was not their dominant language (8.8%). Finally, the majority of the students also reported that they received free or reduced price lunch (81.0%).

In terms of the schools the participants attended, the total average percent of minority students was slightly greater than 40%, whereas the total average percent of students eligible to receive free or reduced lunch across the schools was approximately 63%. In addition, many of the participating schools did not report high percentages of ELL students, thus the total average percentage of ELL students was 16%. Moreover, the total average percentage of SWDs was just under 20%. Finally, the total average number of chronically absent students across all schools was approximately 238.

Table 1. School Demographics.

Variable	No.	Percent
Region		
West	22	2.2
Southeast	855	84.7
Midwest	540	53.5
Northeast	171	16.9
Gender		
Female	420	41.6
Male	577	57.2
Other	12	1.2
Grade Level		
6^{th}	215	21.3
7^{th}	193	19.1
8^{th}	202	20.0
9^{th}	118	11.7
10^{th}	106	10.5
11^{th}	92	9.1
12^{th}	83	8.2
Race		
White	455	45.1
Black/African American	168	16.7
Hispanic/Latino	209	20.7
Multiracial	98	9.7
Asian	10	1.0
American Indian	20	2.0
Native Hawaiian	2	0.2
Prefer not to say	47	4.7
Dominant Language Not English	89	8.8
Receives Free or Reduced-Price Lunch	817	81.0
Transportation Used for School		
Walk/Ride Bike	130	12.9
Car	374	37.1
Bus	505	50.0

Note. All participants are SWDs. $N = 1{,}009$

Table 2. School Demographics Averages and Totals.

State	# Districts	# Schools	# Students	Avg% Minority	Avg % FRL	Avg % ELL	Avg % SWD	# CA Students	% CA Students	% Surveyed
CA	2	3	22	96.5	85.5	33.0	11.2	13.3	1.8	100.0
		2		96.0	80.5	19.0	10.5	41.5	4.5	89.5
FL	10	8	825	45.5	67.6	8.8	22.6	290.5	18.3	46.5
		7		46.6	51.2	9.0	16.2	85.7	15.1	52.6
		4		47.3	75.4	5.3	21.1	120.0	15.5	52.8
		12		73.4	68.4	8.7	16.8	70.5	6.2	77.4
		2		49.7	61.7	0.1	26.9	183.5	28.9	44.0
		8		38.8	70.4	1.7	19.1	167.6	33.8	72.5
		3		37.3	57.0	2.3	28.1	54.3	7.6	54.3
		7		48.9	73.1	5.2	21.0	135.0	21.9	83.7
		3		38.7	55.6	1.9	22.0	132.3	12.6	45.3
		10		58.4	64.7	7.9	11.0	257.1	24.0	23.9
IA	1	4	76	29.7	69.8	10.0	20.8	176.5	15.0	54.8
KY	2	4	30	22.7	48.7	1.5	4.6	123.0	15.5	39.3
		1		11.1	59.0	0.0	15.4	24.0	6.0	71.0
ME	1	1	20	39.1	71.5	24.0	12.0	317.0	24.6	35.5
MN	3	2	24	24.2	66.5	0.1	57.2	45.5	22.6	56.5
		1		23.0	64.5	0.0	16.1	3.0	0.0	100.0
		1		12.7	51.1	0.0	16.5	19.0	5.7	100.0
MI	1	1	5	11.0	19.5	2.0	6.0	70.0	8.0	100.0
RI	1	2	7	54.0	62.5	8.0	18.5	125.0	20.0	27.9
Total Average				43.1	63.1	16.0	19.8	238.4	18.8	84.0

Note. CA = Chronically Absent; ELL = English language learner; SWD = students with disabilities, FRL= students who receive free or reduced-price lunch. Each statistic is the average across all schools in their respective districts. Total number of states is eight; number of districts is 21; and number of schools is 86; number of students is total number of students across all districts within a state.

Key Variables and Measures

Reasons for chronic absenteeism (RCA) survey. The *RCA* was used to measure reasons for chronic absenteeism in the larger study. The *RCA* survey is a 58-item survey that measures students' reasons for chronic absenteeism and also provides information surrounding the challenges students in schools face (see *Appendix C* for the full RCA survey) (Humm-

Brundage et al., 2017). This measure is broken up into three sections: (1) 14 items related to demographics and perceptions of absenteeism, (2) 32 items that measure reasons for chronic absenteeism, and (3) three open ended questions that ask about students' other reasons for missing school, reasons for which students do come to school, and what would help them come to school more often. Students rate items on reasons for chronic absenteeism on a 0-3 scale measuring how often a given item reflects a reason the student misses school (*0 = Never; 1 = Rarely; 2 = Sometimes; 3 = Usually*). The RCA items require students to be able to read at a third grade level. Readability analyses were conducted on each item. Additionally, in order to ensure that students could comprehend the items within the RCA survey, cognitive interviews were conducted with students (including SWDs). Students provided feedback regarding the language and clarity of the questions, content, and overall organization of the *RCA* instrument. Edits were made to the items based on the findings from the cognitive interviews. See appendix A for additional information regarding the development of the RCA survey.

The 32 items measuring reasons for chronic absenteeism focus on different types or categories of reasons. Three of the domains, *Barriers* (nine items), *Aversions* (seven items), and *Disengagement* (seven items) were derived from Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) procedures (Humm-Brundage et al., 2018). *Barriers* are things that hinder students' ability to attend school (e.g., "I had to work"), *Aversions* are undesirable events, situations, or people that prevent students' school attendance (e.g., "I did not want to be teased or bullied"), and *Disengagement* refers to a general lack of interest in school or the perceived value of school (e.g., "I think school is boring"). CFA indicated good model fit for the items that comprise these three factors. The comparative fit index (CFI) was .93, the root mean square error of approximation (RMSEA) was .03, and the weighted root mean squared

residual (WRMR) index was 2.03. The ranges of standardized loadings were as follows: *Barriers* .51 to .86, *Aversions,* .59 to .83, and *Disengagement*, .60 to .83. Furthermore, internal consistency reliability estimates for the factors were as follows: *Aversions* .87, *Barriers* .77, and *Disengagement* .80.

An additional three composites referred to as *Health* (three items), *Family* (three items), and *Transportation* (three items) issues were not modeled in the CFA because they were thought to be directly observable variables rather than indicators of a latent variable. However, the items were retained in the *RCA* given the literature that shows support for these additional elements as reasons for chronic absenteeism (Humm-Brundage et al., 2018). The *Health* composite refers to reasons students miss school that are related to sickness or illness related appointments (e.g., "I had an appointment [doctor, dentist, counselor, etc.)."]. The *Transportation* composite refers to difficulties getting to school (e.g., "There were problems with the car [would not run, ran out of gas, etc.)"]. Finally, the *Family* composite refers to personal family related reasons for missing school (e.g., "I have to help/take care of a family member"). See *Appendix B* for a table that includes all of the factors and composites with item numbers and examples.

Demographic variables. Both student and school demographic variables were included in the current study. The student level demographic variables were SWDs' race/ethnicity (i.e., White, African American, Hispanic/Latino, & Multiracial), gender (male or female), grade level (middle or high school), language (ELL or non-ELL) and socioeconomic status (eligible for free or reduced lunch or not eligible; Erbstein, 2014; Humm-Brundage at al., 2017; Wagner et al., 1993). The school level demographic variables were schools' percent of students eligible to receive free or reduced lunch, percent of racial minority students, percent of students who identify as English language learners, and percentage of SWDs. These data were derived from

students' responses to demographic items on the *RCA* and district provided data regarding the school demographics, respectively.

Data Collection Procedures

Larger study. In order to obtain a sample of chronically absent students to complete the *RCA*, Humm-Brundage et al. (2017) utilized purposive sampling. Humm-Brundage et al. sent emails to university colleagues and school district contacts within their professional network, as well as national organizations and list-serves with professionals involved in addressing attendance issues. Included in the emails was an invitation letter that described the RCA instrument, administration procedures, training and technical assistance support and data elements, timelines for completion and the contact information of the primary researcher (the primary researcher was Dr. Humm-Brundage who is a member of this thesis committee). Initial contacts also were asked to put the researchers in contact with additional school districts that might have an interest in being involved with the study.

After contacting the primary researcher and committing to participation in the study, participating districts identified their primary contact. The primary contact identified middle and high schools to be involved and coordinated training on administration procedures and additional required data collection (i.e., providing school-level demographic data). Participating schools were charged with identifying students who missed 10% or more days of school during the 2015-2016 school year who would need to complete the survey. District contacts provided the primary investigator with the number of students expected to complete the survey for each school.

A 1-hour training was conducted with the district contacts and school staff who would facilitate student participation. The training was conducted online via Adobe Connect. The purpose of the instrument, items, administration procedures, and timelines were reviewed with

training participants and any questions were addressed. Following the training, the survey link was sent to the district contacts.

After the districts had access to the SurveyMonkey® link, each contact disseminated the link and monitored administration processes including student participation and study response rates. Schools varied in how the students were asked to complete the survey. For example, some schools had students complete it individually in staff members' offices or the media center. Others had students use their own school provided devices (e.g., tablets, laptops), or complete it in large groups. The survey was administered between September-December 2016. In order to inform the districts of their response rates, the primary investigator provided the district contact with weekly updates regarding their response rate through use of tables or screenshots taken from SurveyMonkey®. In order to increase response rates, the primary investigator engaged in problem solving with certain sites that were not obtaining as many responses, and also extended the data collection window for all participants to mid-December.

Current study. In order to obtain access to the dataset containing SWDs responses to the *RCA* survey as well as the school demographics dataset, the student researcher for the current study contacted the primary investigator from the larger study and key personnel from the research team who worked alongside the primary investigator through email. Within the email, the researcher requested access to the datasets (i.e., student and school). The key personnel provided the dataset that contained information only for SWDs, and the primary investigator provided the school demographics dataset. In order to ensure that only schools that had SWDs participate were included, the student researcher accessed the *RCA* Participant/School demographic data and descriptors codebook. Then, the student researcher used the RCA codebook and SWD dataset to determine the schools that needed to be removed from the school

demographics data file. The student researcher frequently cross referenced between data sets to ensure that the correct schools who did not have SWDs complete the survey were removed. Schools that had 0% completion rates were also removed from the sample.

The student researcher engaged in frequent email communication with the primary investigator and key personnel from the larger study in order to address questions related to survey development, administration, and information included in the data sets. The student researcher also engaged in communication regarding missing data and excel miscalculations regarding the school demographic averages. In order to fix the data file to automatically calculate the school averages, the student researcher and key personnel added columns to the school demographics excel spreadsheet and used an excel formula to calculate the averages for each column. After the averages were calculated, the student researcher was provided with updated files via email. Finally, the student researcher asked any additional clarifying questions to key personnel and the primary investigator and edited the school demographics table to reflect the correct averages.

Data Analysis

Preliminary analyses. All of the cleaned student and school data utilized in this study were downloaded and organized into two separate excel documents prior to the analyses being run. The current researcher received the documents from the primary investigator and key personnel. Prior to running the analyses, the researcher reviewed the dataset for accuracy to determine if there are any outliers, or missing data. The researcher also ran additional checks on the dataset (e.g., frequency, ranges) in order to make sure that there were not any impossible data points. Additionally, the researcher checked the assumptions for multilevel modeling. Normality was assessed by viewing skewness and kurtosis. In order to determine if linearity was met, the

researcher visually examined residual plots to determine whether or not there was a straight-line relationship between the predictor and outcome variables. Homoscedasticity was checked by examining the plot that contained the predicted values and residuals in order to determine whether or not the residuals were equally distributed on the x and y axes. Finally, the researcher investigated intraclass correlation coefficients (ICC) for each of the outcome variables to determine the extent of between school variation.

Analyses to answer research questions. In order to answer the questions included in this study, a combination of descriptive statistics and multilevel analyses were used. The researcher utilized descriptive statistics and frequency distributions to determine the most frequently reported reasons for chronic absenteeism among SWDs (Research Question 1).

The researcher conducted multi-level modeling analysis procedures to determine the extent to which selected student demographic and school demographic variables predicted RCA factor and composite scores (i.e., barriers, aversions, disengagement, transportation, family and health; Research Question 2). Separate models were run for each dependent variable (i.e., each RCA factor and composite). Predictors were entered into the model simultaneously.

In regards to student level demographic predictors, students' gender, socioeconomic status, grade level, language, and race/ethnicity were included in the current study. Gender and socioeconomic status was coded dichotomously as 0 or 1. Specifically, females were coded as 0 and Males were coded as 1. Socioeconomic status was coded as 0 if students were not eligible to receive free or reduced lunch and 1 if students were eligible to receive free or reduced lunch. Given that the literature discusses differences between racial and ethnic groups (Humm-Brundage et al., 2017), race was coded as a series of dummy coded variables in order to determine if there were specific differences in relation to certain groups. Specifically, the

researcher created a series of three dummy variables. White students were left out of the series and used as the referenced group. Students who identified as White were coded as 0 and students who identified as African American, Hispanic, or Multiracial were coded as 1. Student grade level was coded as 0 for middle school students and 1 for high school students. Language was coded as 0 if English was the student's primary language and 1 if English was not the student's primary language.

The school-level demographic predictors included in the study were schools' socioeconomic status (the percent of students eligible to receive free or reduced lunch), percent of racial minority students, the percent of students who identify as English language learners, and percentage of SWDs. These predictors were entered as continuous variables.

Ethical Considerations

In order to ensure confidentiality, all data collected from students were anonymous. No identifying information was included in the larger study that could be used to identify participating students. Furthermore, potential concerns students may have had related to reporting gender, race, sex, and ethnicity were addressed by providing students the option to select "prefer not to answer.

Chapter IV: Results

The overall purpose of this study was to determine SWD and school demographic predictors of reasons for chronic absenteeism using Humm-Brundage et al.'s (2018) factor structure. First, the results from the preliminary analyses and descriptive statistics are discussed followed by the correlational analysis of subscale (i.e., barriers, aversions, disengagement, health, family and transportation) scores. Second, assumptions of multi-level regression analyses are explored. Finally, multilevel analyses examining the student and school demographic predictors of chronic absenteeism are presented.

Preliminary Analysis

Descriptive statistics. The researcher used Statistical Package for the Social Sciences (SPSS) 25 software to run preliminary analyses. Descriptive statistics for the current study consisted of means and standard deviations. Table 3 presents descriptive statistics for the factors and composites investigated. Mean scores for the three factors were .33 (*SD* = .44) for *Barriers*, .43 (*SD* = .47) for *Aversions*, and .70 (*SD* = .64) for *Disengagement*. Means scores for the three composites were 1.72 (*SD* = .68) for *Health*, .67 (*SD* = .63) for *Transportation*, and .99 (*SD* = .70) for *Family*. Potential scores for each factor and composite ranged from 0 (*Never*) to 3 (*Usually*).

Internal consistency. The factors and composites were also analyzed to determine their internal consistency for the current sample. Cronbach's alpha for each of the factors (i.e., *Barriers, Aversions, Disengagement*) was .79 which indicates acceptable levels of internal consistency reliability. For the composites, Cronbach's alphas were as follows: *Health* .52,

Transportation .42, and *Family* .64. Values for each of the three composites (Health, Transportation, and Family) were less than .70 (see Table 3); however, these lower values were not surprising given that the items were consistent with a formative measurement model. Unlike a reflective measurement model where the item responses are viewed as the effects of a common latent variable, in a formative measurement model, the items are viewed as the cause of the latent variable (e.g., *Transportation*). In a formative measurement model, there is no expectation that the items within the set are correlated.

Table 3. Descriptive Statistics for Barriers, Aversions, Disengagement, Health, Family and Transportation.

Scale	# of items	Cronbach's alpha	*n*	*M*	*SD*	Skewness	Kurtosis
Barriers	9	.79	921	.33	.44	2.42	8.20
Aversions	7	.79	927	.43	.57	1.63	2.40
Disengagement	7	.79	927	.70	.64	1.01	.51
Health	3	.52	930	1.72	.68	-.25	-.23
Transportation	3	.42	927	.67	.63	1.07	1.05
Family	3	.64	921	.99	.70	.48	-.21

Note. The potential ranges in scores for the scales listed above were 0 (never) to 3 (usually).

Correlational analyses. In order to determine the strength and nature of relationships between variables included in this study, Pearson product-moment correlations were calculated (see Table 4). Among the three factors included in the study, correlations were moderate ranging from .54 to .58. Specifically, there was a moderate correlation between *Aversions* and *Barriers* (r =.55, $p < .001$), *Aversions and Disengagement* ($r = .54$, $p < .001$), and between *Barriers* and *Disengagement* ($r = .58$, $p < .001$). When considering the composite variables, there were also moderate correlations between *Transportation* and *Aversions* ($r = .40$, $p < .001$), *Transportation* and *Disengagemen*t ($r = .43$, $p < .001$) and *Transportation* and *Barriers* (r = 53, $p < .001$). Small to moderate correlations existed between *Family* and *Aversions* ($r = .30$, $p < .001$), *Family* and

Disengagement ($r = .29$, $p < .001$), *Family* and *Health* ($r = .22$, $p < .001$) and *Family* and *Transportation* ($r = .41$, $p < .001$). Finally, correlations between *Health* and *Barriers* ($r = -.02$, $p > .05$) *Health* and *Disengagement* ($r = -.04$, $p > .05$), *Health* and *Aversions* ($r = .05$, $p >. 05$) and *Heath* and *Transportation* ($r = .07$, $p > .05$) were not significant.

Table 4. Pearson Product-Moment Correlations Between Reasons for CA Subscales.

	Barriers	Aversions	Disengagement	Health	Transportation	Family
Barriers	1.00					
Aversions	.55***					
Disengagement	.58***	.54***				
Health	-.02	.05	-.04			
Transportation	.53***	.40***	.43***	.07		
Family	.38***	.30***	.29***	.22***	.41***	

Note. Sample sizes ranged from 921 to 927
**p<.05, **p<.01, ***p<.001.*

Assumptions. Most of the variables in the study had a relatively normal and appropriate distribution (i.e., skewness and kurtosis between -2.0 and +2.0), with the exception of *Barriers* (skewness = 2.42, kurtosis = 8.20) and *Aversions* (skewness= 1.63, kurtosis=2.40). Tests of the distributional assumptions of the errors at each level of the model (normality and equal variance) did not reveal any violations except for in the *Barriers* factor which had a distribution that showed a departure from normality. Visual analyses of the scatter plots of the predicted outcomes showed no substantial violation of homoscedasticity for all of the factors and composites except *Barriers*. Thus, given that the *Barriers* factor did not meet some of the assumptions, it may be necessary to interpret the results for this factor with some caution.

Research question 1

What reasons for chronic absenteeism are most reported by SWDs? In order to answer the first research question, the researcher examined the means of factor and composite scores and

frequencies of responses at the item-level. In terms of factor and composite variables, SWDs in the sample reported missing school for *Health*-related reasons (e.g., short- or long-term illness, health appointments) most often (M = 1.72). *Health* related reasons for missing school was followed by *Family* reasons (M = .99), *Disengagement* (M = .70), *Transportation* (M = .67), *Aversions* (M = .43), and *Barriers* (M = .33). Thus, the average student reported health reasons at a level that approximated being sometimes the reason that they missed school. The average student reported the other five domains as never to rarely being the reason that they missed school.

Table 5 illustrates the item-level data from the RCA. The following section discusses the highest reported survey item endorsed by SWDs within each subscale. The subscales and item analyses are presented in order from most reported (i.e., Health) to the least reported (i.e., *Barriers*). For *Health* reasons, 75.6% of students indicated that they either sometimes or usually missed school due to a short-term sickness (e.g., cold, flu, or headache). In regards to *Family*, 20.1% of students selected that they sometimes or usually missed school due to them having to care for a family member. For *Disengagement*, 72.1% of SWDs endorsed sometimes or usually for the survey item in which they reported having hung out with friends or family members instead of attending school. Twenty-six percent of SWDs endorsed sometimes or usually for the *Transportation* item specifically related to car trouble (e.g., car wouldn't start, insufficient gas). For *Aversions*, 30.2% of students indicated that they either sometimes or usually missed school in order to avoid seeing other students given perceived drama or conflict. Finally, for the *Barriers* subscale, 29.4% of SWDs indicated missing school due to a lack of either clean school clothes, the right school clothes (e.g., uniform), or school supplies; 28.7% of SWDs indicated missing school to go to court.

Table 5. Reasons for CA Survey Item Descriptives.

		N & Valid Percent					
Item	N	0	1	2	3	M	SD
1. Sick- short term[H]	930	54(5.8)	173(18.6)	434(46.7)	269(28.9)	1.99	0.84
2. Sick-long term[H]	930	300(32.3)	245(26.3)	224(24.1)	161(17.3)	1.26	1.09
3. Safety[A]	930	578(63.2)	186(20.0)	107(11.5)	59(6.3)	0.62	0.92
4. Out with friends[D]	930	75(8.1)	185(19.9)	424(45.6)	246(26.5)	1.90	0.88
5. Health Apt.[H]	930	733(78.8)	83(8.9)	71(7.6)	43(4.6)	0.38	0.82
6. Incomplete Work [D]	930	489(52.6)	233(25.1)	155(16.7)	53(5.7)	0.75	0.93
7. Stayed up late[D]	930	439(47.2)	165(17.7)	171(18.4)	155(16.7)	1.05	1.15
8. Car Trouble[T]	927	480(51.8)	206(22.2)	180(19.4)	61(6.6)	0.81	0.97
9.Teased/Bullied[A]	930	540(58.1)	219(23.5)	124(13.3)	47(5.1)	0.65	0.89
10. School is Boring[D]	927	700(75.5)	100(10.8)	79(8.5)	48(5.2)	0.43	0.85
11. Missed Bus[T]	927	651(70.2)	121(13.1)	83(9.0)	72(7.8)	0.54	0.95
12. School Safety[A]	927	630(68.0)	149(16.1)	106(11.4)	42(4.5)	0.53	0.87
13. No reason to go[D]	921	650(70.6)	145(15.7)	93(10.1)	33(3.6)	0.47	0.82
14. Care for family[F]	915	605(66.1)	126(13.8)	127(13.9)	57(6.2)	0.60	0.94
15. No one cares[A]	927	649(70.0)	109(11.8)	114(12.3)	55(5.9)	0.54	0.82
16. Had to work[B]	930	517(55.6)	203(21.8)	166(17.8)	44(4.7)	0.72	0.92
17. Bad weather[T]	921	800(86.9)	67(7.3)	38(4.1)	16(1.7)	0.21	0.59
18. Parents don't care[B]	930	706(75.9)	90(9.7)	77(8.3)	57(6.1)	0.45	0.88
19. Court[B]	927	379(40.9)	282(30.4)	193(20.8)	73(7.9)	0.96	0.97
20. Avoid another student[A]	921	350(38.0)	293(31.8)	232(25.2)	46(5.0)	0.97	0.91
21. Out of town[F]	927	733(79.1)	100(10.8)	60(6.5)	34(3.7)	0.35	0.76
22. Family Emergency[F]	915	628(68.6)	138(15.1)	91(9.9)	58(6.3)	0.54	0.91
23. Suspended[B]	927	756(81.6)	63(6.8)	54(5.8)	54(5.8)	0.36	0.84
24. No clothes[B]	921	300(32.6)	350(38.0)	211(22.9)	60(6.5)	1.03	0.90
25. Homeless[B]	921	851(92.4)	37(4.0)	23(2.5)	10(1.1)	0.12	0.47
26. No power/water[B]	915	602(65.8)	148(16.2)	111(12.1)	54(5.9)	0.58	0.92
27. Tardy[D]	921	662(71.9)	121(13.1)	97(10.5)	41(4.5)	0.48	0.85
28. School is not a nice place[A]	915	674(73.7)	110(12.0)	81(8.9)	50(5.5)	0.46	0.87

Table 5 (continued)

29. Class avoidance[D]	915	733(80.1)	121(13.2)	52(5.7)	9(1.0)	0.28	0.61
30. Sent to office[B]	915	714(78.0)	110(12.0)	58(6.3)	33(3.6)	0.36	0.76
31.Sad/depressed[A]	921	712(77.3)	122(13.2)	66(7.2)	21(2.3)	0.34	0.71
32. Had to move[B]	915	693(75.7)	145(15.8)	51(5.6)	26(2.8)	0.36	0.72

Note: Superscripts denote the factors and composites associated with each item. B= Barriers, D=Disengagement, A= Aversions, F=Family, T=Transportation, H=Health

Research question 2

To what extent do student and school demographic variables predict the following SWDs reported reasons for chronic absenteeism: Barriers, Aversions, Disengagement, Health, Family, Transportation? Research question 2 was examined by utilizing multilevel regression models. A total of six models were analyzed using the *HLM 7* Software. Race (i.e., African American, Hispanic, White, Multiracial), SES, Gender (i.e., Male, Female), grade level, and language (i.e., ELL) were the level-1 student predictors. The schools' percent of students on free-or reduced price lunch (FRL), percent racial minority, percent of ELLs, and percent of SWDs were the level-2 school predictors.

First, the unconditional model including no predictors were included. The intraclass correlation coefficient (ICC) was calculated from this model to determine the degree of dependence between the observations within schools. The higher the ICC, the higher the degree of nesting (see Table 6). ICCs for all of the factors and composites included in the study were below .05. Although the ICCs were below .05, there was still some degree of dependence within the data which resulted in multilevel analyses being run to obtain an understanding of the predictors at each level. Additionally, the researcher examined the within and between variability in the unconditional model. Table 6 illustrates that the variance components values were only significant for the *Transportation* and *Family* composites at the between level. This finding

suggests that schools differed significantly in response to items on those composites, but responses across schools did not differ significantly for any other subscale.

Table 6. Variance components from Two-Level (Students Nested Within Schools) Multilevel Models.

Scale	Variance Component	Unconditional	ICC	Model 1	%
Barriers	Within	.192	.023	.180	6.25
	Between	.005		.006	-20
Aversions	Within	.319	.021	.317	0.62
	Between	.007		.009	-28.57
Disengagement	Within	.400	.012	.395	1.25
	Between	.005		.001	80
Health	Within	.447	.022	.432	3.36
	Between	.010		.007	30
Transportation	Within	.385	.040	.369	4.16
	Between	.016*		**.015***	6.25
Family	Within	.472	.050	.471	0.21
	Between	.025*		**.016***	36

Note. * $p < .05$, ** $p < .01$. Model 1 contained the following level-1 predictors: Race (i.e., African American, Hispanic, White, Multiracial), SES, Gender (i.e., Male, Female), grade level, and language and level-2 predictors: percent of SWD, Free or reduced lunch, minority, and ELL. The % column represents the percentage reduction in the amount of within—and between-school variance from the unconditional model. HLM 7 does not calculate significance for the within variance component.

Conditional models. Results of the multilevel models containing both student and school demographics predicting the factors and composite variables are presented in Tables 7 and 8, respectively. Results are organized by model below.

Barriers. SWDs who identified as Male had positive relations to *Barriers* as reasons for chronic absenteeism (B = 0.15, SE = 0.03, $p < .01$) indicating that male SWDs were more likely to miss school due to *Barriers* than females. Additionally, students' SES (B = 0.08, SE = 0.04, $p < .05$) and identification as African American (B = 0.11, SE = 0.04, $p < .01$) were also significant, positive predictors of Barriers. Thus, SWDs of lower SES (i.e., received FRL) or those who identified as African American were more likely to endorse *Barriers* as reasons for chronic absenteeism than SWDs who were higher SES (i.e., did not receive FRL) or who were White, respectively. No other student or school level demographic variables predicted students' endorsement of *Barrier* reasons.

Aversions. The current study did not yield any significant student or school demographic predictors of *Aversions*. This finding suggests that there were no individual SWD demographic variables or school demographic variables that predicted SWDs to be more likely to endorse *Aversions* as reasons for chronic absenteeism.

Disengagement. SWDs grade level was the strongest predictor of *Disengagement* (B=0.05, SE = 0.01, p < .01) suggesting that in comparison to middle school SWDs, SWDs in high school were more likely to be chronically absent due to them being disengaged. SWDs identification as male (B = 0.09, SE= 0.04, $p < .05$) and their SES (B = 0.14, SE = 0.06, $p < .05$) also predicted disengagement reasons. These findings suggest that males are more likely to miss school due to them being disengaged than females, and SWDs who are lower SES (i.e., those receiving FRL) may be more likely to miss school due to disengagement than students who are of higher SES. There were no statistically significant school level predictors of *Disengagement*.

Health. SWDs who identified as male negatively predicted *Health* reasons for chronic absenteeism (B = -0.15, SE = 0.04, $p < .01$). Given that female SWDs were the referenced group,

these results suggest that Male SWDs were less likely to miss school for health-related reasons than female SWDs. SWDs identification as African American was also found to negatively predict Health reasons (B = -0.13, SE = 0.07, $p < .05$) indicating that African American SWDs may be less likely to miss school due to *Health*-related issues than White SWDs. There were no statistically significant school level predictors of the *Health* composite.

Transportation. SWD's SES was the strongest positive predictor of transportation reasons for chronic absenteeism (B = 0.23, SE = 0.06, $p < .01$) indicating that low-SES SWDs were more likely to miss school due to transportation reasons than high-SES SWDs. Additionally, SWDs identification as Hispanic (B = 0.13, SE = 0.61, $p < .05$) was a significant, positive predictor of *Transportation* suggesting that Hispanic SWDs may be more likely to miss school due to *Transportation* reasons than White SWDs. There were no statistically significant school level predictors of the *Transportation* composite.

Family. There were no statistically significant student level predictors of the Family composite which suggests that there were no demographic predictors of SWDs that would make them more likely to endorse *Family* reasons for chronic absenteeism. At the school level, however, schools' percentages of ELL students was found to negatively predict *Family* reasons (B = -0.02, SE = 0.01, $p < .01$). Thus, schools with higher percentages of students identified as ELLs were less likely to have students who endorsed Family reasons for chronic absenteeism.

Table 7. Student and School Level Predictors of Barriers, Aversion, and Disengagement Reasons for Chronic Absenteeism.

Variable	Barriers		Aversions		Disengagement	
	B	*SE*	*B*	*SE*	*B*	*SE*
Level 1						
African Amer.	**0.107***	.043	0.089	.057	0.045	.062
Hispanic	0.046	.042	-0.034	.056	0.049	.062
Multiracial	0.021	.049	-0.042	.065	-0.043	.072
Male	**0.148****	.029	-0.023	.038	**0.086***	.042
Grade Level	0.007	.010	-0.008	.012	**0.048****	.013
SES	**0.083***	.040	0.023	.053	**0.136***	.059
Language	0.087	.058	0.146	.076	0.099	.084
Level 2						
FRL	0.124	.002	-0.000	.002	-0.001	.002
Minority	0.001	.001	-0.000	.002	0.003	.002
ELL	-0.001	.003	-0.002	.004	-0.001	.004
SWD	0.000	.002	0.004	.003	0.003	.003

Note. * $p < .05$, ** $p < .01$. FRL = free or reduced price lunch; SWD = students with disabilities; ELL = English language learner; *B* = unstandardized regression coefficient; *SE* = standard error; β = standardized regression coefficient. White students were the referenced group for race.

Table 8. Student and School Level Predictors of Barriers, Aversion, and Disengagement Reasons for Chronic Absenteeism.

Variable	Health		Family		Transportation	
	B	*SE*	*B*	*SE*	*B*	*SE*
Level 1						
African Amer.	**-0.133***	.065	0.040	.069	0.115	.061
Hispanic	-0.051	.065	0.084	.069	**0.128***	.061
Multiracial	-0.028	.076	-0.084	.080	0.006	.070
Male	**-0.153****	.044	-0.007	.047	0.080	.041
Grade Level	0.017	.014	0.019	.016	0.008	.014
SES	-0.094	.061	0.055	.065	**0.234****	.057
Language	-0.089	.089	-0.007	.093	-0.029	.083
Level 2						
FRL	0.004	.002	0.003	.003	-0.000	.002
Minority	-0.002	.002	0.003	.002	0.003	.002
ELL	-0.005	.005	**-0.019****	.005	-0.006	.005
SWD	0.001	.004	0.001	.004	0.004	.004

Note. * $p < .05$, ** $p < .01$. FRL = free or reduced price lunch; SWD = students with disabilities; ELL = English language learner; *B* = unstandardized regression coefficient; *SE* = standard error; β = standardized regression coefficient. White students were the referenced group for race.

Chapter V: Discussion

The current study aimed to investigate the most reported reasons for chronic absenteeism among SWDs as well as the student and school level demographic predictors of reasons for chronic absenteeism among SWDs. First, this chapter will compare the findings from the current study to existing literature on reasons for chronic absenteeism. Then, limitations of the study will be discussed. Finally, implications for future research and practice will be explored.

SWDs Most Reported Reasons for Chronic Absenteeism

SWDs in the current study reported missing school for Health-related reasons most frequently. Although health reasons can include doctors' appointments as well as short-term and long-term illnesses, SWDs in the current study most often endorsed short-term sicknesses within this composite. SWDs endorsement of Health reasons as the most reported reason for chronic absenteeism is consistent with research examining chronic absenteeism among all students (Erbstein, 2014; Humm-Brundage et al., 2017). Consistent with the general population of students, SWDs catch common colds, have appointments to attend, and/or have chronic conditions.

One additional possible explanation for the pervasiveness of health-related reasons among SWDs specifically relates to unique medical concerns some SWDs face on a more regular basis. For example, Cortiella and Boundy (2018) suggest that SWDs often endorse health reasons for chronic absenteeism due the fact that some SWDs have more fragile immune systems, or emotional or behavioral disabilities that cause them miss school more often. Liscomb, Haimson, Liu, Burghardt, Johnson, and Thurlow (2017) have also found that in

comparison to students without disabilities, SWDs were three times more likely to have chronic health conditions (e.g., asthma, diabetes, etc.). In fact, the authors found that over twenty-five percent of SWDs had conditions that required them to frequently miss school due to scheduled mental or chronic health treatment. Thus, while there is still a need to understand more about SWDs endorsement of health reasons, the findings from the current study and recent literature suggest that although SWDs often miss school due to common colds and other short term illnesses, SWDs may also endorse health reasons because they have more chronic issues that require ongoing support or care from outside medical settings.

Family reasons was the second highest endorsed reason for chronic absenteeism. Given that many SWDs reported that they have to take care of family members, this finding suggests that SWDs may have other adult responsibilities that require their attention. For this reason, it may be challenging for some SWDs to manage both school and family related concerns. This finding is consistent with research looking at the general student population (Erbstein, 2014; Ocak & Baysal, 2017). Erbstein (2014) found that 17% of students reported having to miss school to take care of a family member or to work. Ocak and Baysal (2017) found that many students indicated that they remained absent from school because they had to support their family financially. In fact, it is not uncommon for students at this age to feel as though they have to take care of their family members depending on individual familial circumstances (Youth Justice Board, 2013). However, the literature does not provide explanations for these findings specifically for SWDs. More research is needed to understand family reasons for chronic absenteeism and whether they differ from the general population of students.

SWDs also reported being disengaged in school (M = .79). Specifically, many of the SWDs in the current study reported that they missed school because they would rather hang out

with friends or family instead of going to school, or did not get their school work completed in time to attend. This finding is consistent with research from a national study in which 41% of chronically absent students reported missing school due to preferred activities outside of school including hanging out with friends or family, staying up too late, or oversleeping (Humm-Brundage et al., 2017). However, one additional possible explanation for SWDs disengagement may relate to their academics and perceived support from teachers. Research indicates that SWDs have trouble finding access to tutors (Wagner et al., 1993) and report experiencing more academic challenges than their peers without disabilities (Erbstein, 2014). For these reasons, it is possible that SWDs who struggle academically may lose interest in school due to them feeling that they will not be able to bring their grades up or that they do not have teachers who are willing to help them succeed (Gren-Landell et al., 2015). In fact, chronically absent students from the general population report limited support and connection with teachers as well.

Transportation reasons for chronic absenteeism are commonly cited in the extant literature as being a top reported reason for chronic absenteeism particularly due to unreliable transportation in which the bus either does not come, or comes late (Erbstein, 2014; Humm-Brundage et al., 2017). In the current study, SWDs frequently reported missing school due to car issues. This suggests that SWDs also may not have the means necessary to get to school (e.g., working car, gas in car) or do not have reliable access to other means of transportation, and do not attend as a result. However, there is currently no research that has examined transportation issues that may be unique to SWDs. Future research is needed to investigate whether SWDs experience any differences in transportation issues that may help explain their patterns of chronic absenteeism (e.g., SWDs may have more unique transportation needs due to their disabilities or health-related conditions).

The two lowest reported reasons reported by SWDs in the current study were Aversions and Barriers. In regards to Aversions, SWDs often indicated that they missed school to avoid seeing other students. SWDs also reported that no one misses them when they do not attend school. Although the current study did not directly examine school climate, some of the items within the Aversions composite reflect indicators of school climate (e.g., *School is not a nice place to be*, *I did not want to be teased or bullied*). Research looking at chronic absenteeism and school climate amongst the general student population have found that student perceptions of school climate influence chronic absenteeism (i.e., students who believe their school climate to be negative are more likely to experience chronic absenteeism; Van Eck et al., 2017).

In consideration of SWDs specifically, research has found that SWDs sometimes experience more isolation and rejection from their peers without disabilities, and may also experience bullying due to specific challenges related to their specific disability (e.g., learning difficulties, behavioral difficulties; Heinrichs, 2003). Nowicki and Sandieson (2002) found that students without disabilities typically would rather hang out with peers who do not have disabilities as opposed to interacting with SWDs. Therefore, the feelings some SWDs might have of being unwanted by peers or teachers, or the thought that no one misses them when they are gone may potentially have long lasting effects on their desire to avoid school and may contribute to them having negative perceptions of their school environments.

Barriers were the least reported reason for chronic absenteeism among the SWDs included in the current study. Although not as common a reason among the current sample, some SWDs reported barriers to attendance related to appropriate clothing, school supplies, or due to them having to attend court. The level of endorsement of Barriers was consistent with responses

from the general population of students (Humm-Brundage et al., 2017). More research is needed to determine whether SWDs encounter any unique experiences related to Barriers.

Demographic Predictors of Chronic Absenteeism

Results from the current study provide evidence that certain student and school demographic characteristics predict reasons for chronic absenteeism. These findings are notable given that there is currently no known research that has specifically examined demographic predictors, especially among SWDs. In regards to student-level demographic predictors, several characteristics predicted reasons for chronic absenteeism and will be discussed in order of those demographics that predicted the most reasons for chronic absenteeism to those that predicted the least.

SES. In the current study, SWD's SES significantly predicted Transportation, Barriers, and Disengagement. Although research has not looked at SES as a predictor, many students who are chronically absent are low SES students as indicated by them receiving free or reduced price lunch (Erbstein, 2014; Humm-Brundage et al., 2017). In regards to Transportation, findings suggest that SWDs who are lower SES (i.e., identification as receiving FRL) are more likely to miss school due to transportation related issues than those who are higher SES (not eligible for FRL). Although issues such as school districts cutting transportation options in poverty areas resulting in fewer transportation options and further commutes likely impact all students (Cornwall, 2018), there may be some unique considerations for SWDs who fall in the low-SES category. For example, although parents of SWDs are responsible for students' transportation to school in some states, some districts provide SWDs access to transportation (Education Commission, 2017). It is possible that low-SES SWD's parents may not be fully aware of the transportation opportunities available to SWDs. It also is possible that SWDs identified as low-

SES may be forced to take public transportation options which may not be safe or reliable, which impacts their decisions to attend school.

Low-SES predicting higher levels of Barriers reported by SWDs is consistent with research indicating that approximately 70% of low SES secondary students missed school to provide care to younger siblings and approximately 85% indicated that they miss school due to unstable living arrangements (Hill, Kemp, MacRae, & Young, 2012). It is plausible that SWDs experience similar issues as their general education peers. Further, research examining the general population has found that low income students are approximately 2 times more likely to be suspended than their higher income peers (Barrett, McEachin, Mills & Valant, 2017). In the current study, approximately 12% of SWDs endorsed the item stating that they sometimes or usually missed school due to suspension suggesting that suspension is also a problem that some SWDs face which prevents them from attending school regularly. In fact, research has shown that SWDs are often suspended or assigned to alternative schools due to their disabilities or for behavioral reasons (Mendez, 2003). Moreover, recent research indicated that SWDs are over two times more likely to be suspended than their peers without disabilities (Barrett, McEachin, Mils, Valant, 2017). Thus, a student who is identified as an SWD and a student who is low-SES may be even more likely to be suspended, a common barrier to attending school.

SWDs SES also predicted Health reasons. Research suggests that in general, low SES students often do not have health insurance, and are at an increased risk for health issues and injury in comparison to students of higher SES status (Ready, 2010). Given that some SWDs may have unique health-related needs due to their specific disability, low-SES status may create additional risk for preventing and intervening to address health issues. For example, a lack of healthcare support could prevent them from receiving necessary medications or care to help them

address any chronic issues they may encounter, which could prevent them from getting back to school within reasonable time frames. In other words, the interaction of being identified as a student who is an SWD and who is low-SES may place them at even greater risk for missing more days of school. However, more research is needed to understand the impact that low-SES and SWD status has on health-related reasons for chronic absenteeism.

Gender. SWDs' gender identification predicted Barriers, Health, and Disengagement reasons for chronic absenteeism. Specifically, male SWDs were found more likely to miss school due to barriers and disengagement reasons than female SWDs, whereas males were less likely to miss for health-related reasons. In terms of barriers, one possible explanation is that male SWDs may be more likely to get sent to the office than females, which would therefore prevent them from attending school or classes regularly (Barret et al., 2017).

Regarding disengagement, research looking at engagement or the lack thereof indicates that male students are more likely to have a negative outlook on school and view school work as less important than do female students (Martin & Marsh, 2005). Additionally, more recent research has also found that male students tend to employ more negative thoughts about their friends' interest and motivation to do well in school in that they believe their friends do not care, which in turn is associated with them also feeling less motivated to do well in school given the displays illustrated by their friend groups (King, 2016). Although there is no literature which has examined male SWDs disengagement in particular, it is possible that male SWDs may encounter similar reasons for disengagement as their general education peers.

In terms of gender differences for health-related reasons, one possible explanation for males being less likely to report health-related reasons may relate to the biological differences between females and males. Some researchers indicate that female students are more likely to

miss school due to issues such as monthly cycles and teen pregnancy (Henderson, Hill & Norton, 2014). However, additional research is needed to gain a better understanding of gender specific health related reasons for chronic absenteeism for all students, including SWDs.

Race/Ethnicity. Although it is important to understand that the experiences and reasons for chronic absenteeism among different racial groups vary, research has consistently found that racial minority students miss school more frequently than their White counterparts (Erbstein, 2014; Wagner et al., 1993). In the current study, SWDs identification as African American positively predicted Barriers and negatively predicted Health reasons for chronic absenteeism. This suggests that African American SWDs may be more likely to miss school due to barriers than White students, and that African American SWDs may be less likely to miss school due to health reasons than their White counterparts. Existing research suggests African American students are at an increased risk for barriers to attending school (Heilmann, 2005). Some African Americans face homelessness and a lack of household stability and security (Erb-Downward & Watt, 2018) at a greater rate than White peers. African American students also are suspended at a greater rate than White students (Barrett et al., 2017). In consideration of SWDs in particular, a recent review of disparities found that over 30% of African American SWDs were suspended in high school, which is nearly twice the rate of their White peers with disabilities (Government Accountability Office, 2018; Lopez, 2018). Thus, identifying as an African American SWD may present additional risk factors that act as barriers to attending school regularly.

In regards to African American students being less likely to miss school due to health reasons than their White peers, one possible explanation for this relates to the possible lack of resources African American students have to receive medical care (Riley, Hayes, & Ryan, 2016; Sohn, 2016). Furthermore, it is hypothesized that in some African American households, parents

may require their children to go to school regardless of whether or not they have a cold or are sick due to lack of childcare or perceived safety issues if they were to stay home alone (Child Trends, 2019). However, more research is needed to further determine differences regarding Health reasons for chronically absent SWDs by race/ethnicity.

SWDs identification as Hispanic positively predicted Transportation scores, suggesting that Hispanic SWDs are more likely to miss school due to transportation issues than White students. Although more research is needed to determine whether or not there are specific transportation issues relevant to Hispanic SWDs, research has illustrated that racial minority students are more likely to have transportation difficulties and longer commutes to school than White students (Cornwall, 2018; McDonald, 2008). Future research should investigate whether specific transportation issues are experienced by Hispanic identifying SWDs.

Grade level. SWDs' grade level was found to negatively predict disengagement, indicating that students in high school were more likely to report missing school due to them being disengaged than SWDs in middle school. This finding is consistent with previous research that found that 17.9% of SWDs in middle school missed 15 or more days of school, whereas 24.6% of SWDs in high school missed 15 or more days of school (Gee, 2018). One possible explanation for this finding may be that because high school students are older, they may have more freedom to hang out with their friends, or begin to think they have no reason to go to school which in turn would contribute to their disengagement (Bridgeland, Dilulio, & Morrison, 2006). For some SWDs, unless someone intervenes, or they gain some type of external or internal motivation, disengagement continues a downward spiral which in some cases leads to dropout. Further, because some high school SWDs may experience pressure to graduate, if they are not performing as well academically, or are uninvolved in extracurricular activities, it is not

surprising that their interest in school could dwindle, or that they might begin to see school as boring (Bridgeland et al., 2006; Reschly, & Christenson, 2006; Thurlow, Sinclair, & Johnson, 2002).

Percentage of ELL students. Schools' percentages of ELL students negatively predicted family reasons for chronic absenteeism, which suggests that students in schools with higher numbers of ELL students were less likely to endorse family reasons for chronic absenteeism. However, more research is needed to determine why these schools would have less students who endorse family related reasons for chronic absenteeism.

Limitations & Recommendations for Future Research

The findings from this study should be interpreted in light of several limitations. First, SWDs included in this study consisted of only those students who self-identified as receiving special education services on the RCA survey. Thus, it is possible that some students who identified as an SWD in the sample actually did not receive special education services. Additionally, although data were collected from several states within the US, because the majority of the sample was obtained from students in Florida, these results may not be generalizable to students in other areas within the country who may have unique experiences and reasons for missing school given their geographical region or location. Furthermore, the participating schools in the study may not be representative of other schools within the same district or state, respectively. Therefore, future research may focus on replicating this study with a larger SWDs sample size across more regions in the US.

General administration procedures for the survey also posed some limitations to the current study. Specifically, although schools were provided with guidance and timelines for administration, schools facilitated administration and decided how the students would complete

the survey. Because students completed the surveys under different settings (e.g., office, lunch room) and sometimes either alone or in the presence of other students, it is unclear whether or not the method of administration played a role in how students responded to the survey. It is possible that students who were completing the survey in a group may have responded differently due to the presence of others. It also is plausible that students may have received different levels of information regarding their absences from schools which could have influenced their responses to the items. Furthermore, because it was up to the districts and schools to identify students who had missed 10% or more days of school, it is possible that some students may have been misidentified; however, this was addressed by providing a clear definition to schools of who met the inclusion criteria. A suggestion for future research may be to consider a more streamlined and consistent method for data collection including steps and procedures participating schools should take while administering surveys, and to assess whether or not cuing of absences has an effect on student responses.

Another limitation to this study includes the use of self-report measures, which despite their validity and reliability, have the potential to reflect biased information due to some participants' favorable responses to items or skewed perceptions regarding reasons for chronic absenteeism. For example, it is possible that social desirability played a role in that some students did not want to admit that they missed school due to reasons such as having to attend court or them wanting to be somewhere else other than school (Garcia & Weiss, 2018). Therefore, future research should utilize responses from multiple informants (e.g., students, parents, teachers) and data collected from other methods (e.g., interviews). Multi-method, multi-informant assessment tends to lead to more accurate understanding of a phenomenon of interest (De Los Reyes, Thomas, Goodman, & Kundey, 2012).

Additionally, the current study's use of an existing dataset to conduct secondary analysis also poses some limitations. For example, the current dataset did not directly measure factors related to chronic absenteeism that have been commonly cited in the literature (e.g., school climate, school stress). Because the current study did not directly measure these variables, it is possible that results may not account for all of the predicted reasons for chronic absenteeism for SWDs. Furthermore, additional information regarding specific types of disabilities of the students was unable to be examined which limited the researcher's ability to look at how the results may have varied by disability type. Thus, future research should examine the specific types of disabilities SWDs have to determine whether or not reasons for chronic absenteeism vary by disability category. Moreover, future research should examine the number of day's SWDs are chronically absent (e.g., 18 days –vs- 30 + days) in order to determine whether there are salient differences regarding the reasons for chronic absenteeism endorsed by SWDs who miss 18 days of school in comparison to those SWD who miss significantly more than 18 days of school.

Another limitation to this study relates to the fact that the researcher did not look at interactions among predictor variables. For example, there is some research that indicates an interaction may exist between African American students who are also low-SES, which may be related to absenteeism (Finn & Rock, 1997; Griffith, 2017). Thus, future research might benefit from examining the interaction between predictors in order to better explain how demographic characteristics interact to explain reasons for chronic absenteeism.

Furthermore, because various researchers have examined the general reasons behind chronic absenteeism, more studies should look into students' responses regarding what would help them come to school more frequently. This approach could provide actionable information

to help facilitate student attendance, which is critical given that some of the reasons for which students miss school may not be alterable (e.g., chronic illness, incarcerated parent). Therefore, researchers should consider holding focus groups or conducting qualitative interviews with students to obtain direct information regarding facilitators to school attendance. This information should be used in conjunction with self-report and review of actual records of days missed among students in order to provide a more holistic view of chronic absenteeism.

Finally, given the identified reasons for chronic absenteeism included in the current study for SWDs, future research might benefit from examining the effectiveness of interventions to address chronic absenteeism based on the common reasons. For example, the general population of students indicated interventions for decreasing chronic absenteeism such as creating better food options for school lunch and later school start times to combat missing school due to issues with oversleeping or Transportation (Humm-Brundage et al., 2017). Interventions related to increased opportunities for after school tutoring, teacher mentors, and activities to increase school connectedness (e.g., including students in school decisions) have also been implemented to address Disengagement and Aversion related reasons for missing school. Additionally, Positive Behavior Interventions and Supports have been implemented in schools not only to encourage positive behavior amongst students, but also to help reduce Barriers related to attendance such as suspension. Finally, illness prevention (e.g., hand washing reminders, information on health supports) have been implemented to reduce sickness (Bauer et al., 2018; Buchan & Stallions, 2018; Humm-Brundage et al., 2017). Determining whether or not these interventions would be effective for SWDs should be a focus for future research. Researchers could also compare outcomes for chronically absent SWDs (e.g., grades, attendance rate, tardies, etc.) before and after the interventions are implemented.

Implications for Practice

Overall, results from this study support the growing research body that suggests that students are chronically absent for a variety of reasons. In addition, this study provides information that may inform how teachers, district leaders, and other educational stakeholders can address chronic absenteeism among SWDs. Specifically, districts and schools can begin to consider prevention and intervention services and supports. For example, with the knowledge that SWDs are more likely to miss schools due to health reasons, schools can begin to engage in prevention efforts to meet those needs by providing SWDs and their families with health resources and informational packets regarding safe handwashing to prevent common colds and sickness. Further, although schools may be unable to handle all health-related issues SWDs face, school and district leaders can also work with school nurses to ensure that SWDs are receiving the best care possible while at school. Additionally, because approximately 42% of SWDs in the current study reported missing school for chronic health related reasons (e.g., asthma, allergies, etc.), this finding suggests that schools should consider coordination of care among professionals (e.g., outside medical provider, nurse, teachers, school psychologists, etc.) to better serve those students who miss school due to chronic health reasons. In order to facilitate coordination of care, school personnel (e.g., nurses) can meet with outside providers, or engage in frequent dialogue through email or phone in order to share pertinent information, and maintain open communication regarding students' medical needs (Center for Disease Control, 2018). Through coordination of care, schools can help improve or maintain medical management, and provide updates in regards to students' health while in the school setting.

In consideration of intervention efforts, by using the RCA survey constructed by Humm-Brundage et al., (2017), schools and districts can identify the reasons for chronic absenteeism

that are most relevant and representative of their SWDs. In order to use the data obtained from the RCA survey in a meaningful way, schools can first look at the overall most reported reasons for chronic absenteeism as identified by the total percentages and/or means for each of the factors and composites of the RCA. However, it would also be necessary for schools to look at the specific items from the RCA survey in order to determine whether or not their students are endorsing certain items within a factor or composite at higher rates than the other items within that factor or composite. For example, if after reviewing item level data, schools realize that majority of students are reporting missing school due to bullying, this information could allow schools to create clearer consequences for bullying, and begin engaging in bullying prevention efforts. Essentially, because chronic absenteeism is an issue schools in our society are currently battling, item level data could provide schools an opportunity to provide even more targeted supports and interventions to students.

Furthermore, in addition to the data schools can collect through use of the RCA survey, schools can supplement these data by collecting other data from their SWDs regarding their connectedness with the school as well as their sense of academic support from teachers and faculty. Although information regarding connectedness and support would be critical to collect from chronically absent SWDs, it might also be helpful to collect this information from SWDs who are not chronically absent as well. Schools and districts could better understand all of their SWDs perceptions and needs in these areas to engage in prevention efforts that might help lessen the likelihood that those SWDs with good attendance would become chronically absent in the future.

Nevertheless, information found from the current study can also be used to assist in building an infrastructure for supporting and facilitating SWDs' attendance by providing

additional opportunities for SWDs to receive mental, academic and social-emotional supports given that (1) SWDs in the current study endorsed being disengaged in school, (2) prior research has shown that SWDs do not feel support from their teachers, and (3) research has also illustrated that some teachers feel that the educational needs of SWDs are not met (Gren-Landell et al., 2015; Wagner et al., 1993). Therefore, because SWDs often already have unique challenges related to their academics, it is important to keep them engaged in school and aligned with teachers who support their academic growth and stimulate their interest. It is also important to consider the inclusion of SWDs in classrooms alongside general education students given that research suggests that SWDs who are included feel more connected to their school which can also facilitate school attendance (Freeman & Alkin, 2000; Reschly & Christenson, 2006; Stiefel et al., 2018; Van Eck et al., 2016).

Findings from the current study can also be used to facilitate meaningful conversation between stakeholders, district leaders, teachers and parents in order to ensure that not only school stakeholders are aware of reasons for chronic absenteeism, but also parents and families given that family related reasons for chronic absenteeism was the second highest endorsed reason for chronic absenteeism among SWDs in the current study. Thus, because SWDs may have to care for family members, respond to family emergencies, or may be on vacation with family members, it is important to keep parents involved and knowledgeable about the reasons for chronic absenteeism. Therefore, if using the RCA survey for SWDs within schools and districts, it would be helpful to provide parents with a parent-friendly 1-page handout of the results as well as simple ways that they can help their SWDs attend school more regularly. Specifically, handouts can be helpful given that parents often lack adequate time to read lengthy documents,

and handouts help ensure parents receive consistent information (Attendance Works Toolkit, 2015).

Findings regarding SWDs demographic and school predictors of reasons for chronic absenteeism can help schools and districts better understand risk or protective factors that predict whether SWDs are likely to frequently miss school. Better understanding of predictors of reasons for chronic absenteeism can allow schools and districts to begin to tailor their interventions to match the needs of SWDs given their race/ethnicity, SES, gender, language and grade level. For example, with the knowledge that African American SWDs are more likely to endorse Barriers, schools can look more deeply at their discipline data for SWDs and have discussions regarding any disparities and follow up by evaluating the current processes and procedures in place in order to create an action plan for decreasing the disparities. Additionally, given that low SES SWDs are more likely to have transportation issues that prevent them from attending school than higher SES students, districts can review the current transportation procedures they have in place for SWDs who are also low SES to ensure that they have a reliable way to school given that many SWDs feel their transportation to school is unreliable. Further, because high school SWDs were found more likely to miss school due to disengagement than middle school SWDs, districts can engage in prevention efforts for SWDs who are in middle school by providing them with increased opportunities to get involved with the school, or incorporate study halls or homerooms with teachers who can provide support to SWDs and provide an opportunity for them to work on homework or other class assignments. By incorporating these changes, it is possible that SWDs could in turn increase their grades, and hopefully facilitate increase graduation outcomes given that SWDs are less likely to graduate on time (Grad Nation, 2015).

Finally, given the finding which suggests that students in schools with higher amounts of ELLs are less likely to endorse Family reasons, it is possible that ELL students' family could serve as protective factors against chronic absenteeism. Therefore, because this represents a relatively positive finding for schools with higher amounts of ELLs, these schools should continue to keep ELL family members involved and aware of school policies and supports.

Conclusion

Chronic absenteeism has become a nationwide crisis that continues to impact schools and students across various states and grade levels. Chronic absenteeism among SWDs in particular has been understudied, and no study has empirically examined the student and school predictors of reasons for chronic absenteeism among SWDs. Consistent with literature examining reasons for chronic absenteeism among general education students, Health reasons was the most frequently reported reason for SWDs missing school. In terms of demographic predictors, SES, gender, and race/ethnicity were the most common predictors of reasons for chronic absenteeism. Although educators and stakeholders cannot change SWDs demographic characteristics, educators can work to provide opportunities for these students to thrive in school given knowledge of the demographic predictors of certain reasons for chronic absenteeism. At the school-level, schools' percentage of ELL students was the only significant demographic predictor –only for one reason for chronic absenteeism - suggesting that schools' demographics may not be enough to predict reasons for chronic absenteeism. Therefore, the current study extended the literature not only by focusing on the reasons for chronic absenteeism among SWDs, but also by examining student and school demographic predictors of chronic absenteeism. Although more research is needed, findings form the current study should be taken

into consideration when schools and districts consider prevention efforts and implementation of interventions for SWDs who are chronically absent.

References

Allensworth, E. M., & Easton, J. Q. (2007). What matters for staying on-track and graduating in Chicago public high schools: A close look at course grades, failures, and attendance in the freshman year. Retrieved from https://www.attendanceworks.org/wp-content/uploads/2017/06/07-What-Matters-Final.pdf

Antworth, R. H. (2008). Factors associated with public school chronic absenteeism. *UNF Graduate Theses and Dissertations. 324*. Retrieved from https://digitalcommons.unf.edu/etd/324

Antworth, R. H. (2009). Factors associated with public school chronic absenteeism. Retrieved from https://digitalcommons.unf.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1362&context=etd

Attwood G., Croll P. (2006). Truancy in secondary school pupils: Prevalence, trajectories and pupil perspectives. *Research Papers in Education, 21*(4), 467–484. doi:10.1080/02671520600942446

Balfanz, R. (2016). Missing school matters. *The Phi Delta Kappan*, *98*(2), 8-13. Retrieved from http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.24893461&site=eds-live

Balfanz, R., & Byrnes, V. (2006). Closing the mathematics achievement gap in high-poverty middle schools: Enablers and constraints. *Journal of Education for Students Placed at Risk 11*(2) 143-159.

Balfanz, R., & Byrnes, V. (2010). Dropout prevention through early warning indicators: A current distribution in West Virginia schools. Retrieved from https://www.wvhepc.org/resources/Drop_Out_Prevention_Report.pdf

Balfanz, R., & Byrnes, V. (2012). Chronic absenteeism: Summarizing what we know from nationally available data. Retrieved from http://solaris.techlab360.org/sites/default/files/document_library/ChronicAbsenteeismReport_May16_executivesummary_withcover_20_1__0.pdf

Balfanz, R., Herzog, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: early identification and effective interventions. *Educational Psychologist, 42*(4), 223-235. doi: 10.1080/00461520701621079

Balkıs, M. M., Arslan, G. G., & Duru, E. E. (2016). The school absenteeism among high school students: Contributing factors. *Educational Sciences: Theory & Practice*, *16*(6), 1819-1831. doi:10.12738/estp.2016.6.0125

Barrett, N., McEachin, A., Mills, J., & Valant, J. (2017). What are the sources of school discipline disparities by student race and family income? Retrieved from https://educationresearchalliancenola.org/files/publications/111417-Barrett-McEachin-Mills-Valant-What-Are-the-Sources-of-School-Discipline-Disparities-by-Student-Race-and-Family-Income.pdf

Bauer, L., Liu, P., Schanzenbach, D. W., & Shambaugh, J. (2018). Reducing chronic absenteeism under the Every Student Succeeds Act. Retrieved from https://www. brookings. edu/wp-content/uploads/2018/04/reducing_chronic_absenteeism_under_the_every_student_succeeds_act2. pdf.

Black, D. W. (2017). Abandoning the federal role in education: The every student succeeds act. *California Law Review, 105*(5), 1309-1373. doi:10.15779/Z38Z31NN9K

Bruner, C., Discher, A., & Chang, H. (2011). Chronic elementary absenteeism: A problem hidden in plain sight. Retrieved from http://www.attendanceworks.org/wp-content/uploads/2017/04/Chronic-Elementary-Absenteeism-A-Problem-Hidden-in-Plain-Sight.pdf

Brief on Chronic absenteeism and School Health. (2015). Retrieved from https://healthyschoolscampaign.org/wp-content/uploads/2015/12/Chronic-Absenteeism-Background-Paper.pdf

Buchan, K., & Stallions, T. (2018). *Increase attendance with pbis strategies* [PowerPoint Slides]. Retrieved from: https://www.schoolcounseloe.org/asca/media/PDFs/WebinarPowerPoints/WEB082718_Handout.pdf

Caseltow, T., Riley, R., & Petty, M. (2015). *What is ADA funding and what are its advantages and disadvantages?* [PowerPoint Slides]. Retrieved from http://wp.vcu.edu/marcuspettysr/wp-content/uploads/sites/5472/2015/02/Financial-Issue-Presentation-.pdf

Center for Disease Control. (2018). Care coordination. https://www.cdc.gov/healthyschools/shs/care_coordination.htm

Chambers, J.G., Shkolnik, J., & Perez, M. (2003). Total expenditures for students with disabilities, 1999–2000: Spending variation by disability. Retrieved from https://files.eric.ed.gov/fulltext/ED481398.pdf

Chang, H. N., Romero, M., & National Center for Children, in Poverty. (2008). Present, engaged, and accounted for: The critical importance of addressing chronic absence in the early grades report. *National Center for Children in Poverty*. Retrieved from http://www.nccp.org/publications/pdf/text_837.pdf

Chang, H. N., Russell-Tucker, C. M., & Sullivan, K. (2016). Chronic early absence: what states can do: Connecticut plays a crucial role in helping its districts reduce chronic absence beginning with younger learners. *Phi Delta Kappan*, *98*(2) 22-27. Retrieved from http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.469850731&site=eds-live

Chen, P., & Rice, C. (2016). Showing up matters: Newark chronic absenteeism in the early years. *Advocates for Children of New Jersey*. Retrieved from https://eric.ed.gov/?id=ED563781

Child Trends. (2019). *Neighborhood safety*. Retrieved from: https://www.childtrends.org/?indicators=neighborhood-safety

Chorneau, T. (2012). Early warning system: Re-engaging chronic truants. *Leadership Burlingame, 41*(5), 26-28. Retrieved from

http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=87052623&site=eds-live

Civil Rights Data Collection. (2016). *A first look.* Retrieved from https://www2.ed.gov/about/offices/list/ocr/docs/2013-14-first-look.pdf

Cortiella, C., & Horowitz, S. (2014). *The State of Learning Disabilities: Facts, Trends and Emerging Issues.* Retrieved from https://www.ncld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf

Cortiella, C., & Boundy, K. B. (2018, April). Students with disabilities and chronic absenteeism. Retrieved from https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief15.pdf

Davis, M., Herzog, L., & Legters, N. (2013). Organizing schools to address early warning indicators (EWIs): Common practices and challenges. *Journal for Education of Students Placed at Risk, 18*(1), 84-100. doi:10.1080/10824669.2013.745210

Department of Education. (2016). *Chronic absenteeism in the nation's schools*. Retrieved from https://www2.ed.gov/datastory/chronicabsenteeism.html#datanotes

De Los Reyes, A., Thomas, S. A., Goodman, K. L., & Kundey, S. M. (2012). Principles underlying the use of multiple informants' reports. *Annual review of clinical psychology, 9*, 123–149. doi:10.1146/annurev-clinpsy-050212-185617

DeWit D. J., Karioja K., Rye J. B. (2010). Student perceptions of diminished teacher and classmate support following the transition to high school: Are they related to declining attendance? *School Effectiveness and School Improvement*, *21*, 451–472. doi:10.1080/09243453.2010.532010

DeWit, D. J., Karioja, K., Rye, B. J., & Shain, M. (2011). Perceptions of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools*, *48*(6), 556–572.

Erbstein, N, (2014). Factors influencing school attendance for chronically absent students in the Sacramento city unified school district (SCUSD). Retrieved from https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/N%20Erbstein%20Brief_Factors-Influencing-School-Attendance.pdf

Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82*(2), 221-234. http://dx.doi.org/10.1037/0021-9010.82.2.221

Ginsburg, A., Jordan, P., & Chang, H. (2014). *Absences add up: How school attendance influence student success*. Retrieved from http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/09/Absenses-Add-Up_090114-1-1.pdf

Gottfried, M. (2014). Chronic absenteeism and its effects on students' academic and socioemotional outcomes. *Journal of Education for Students Paced at Risk, 19*(2) 53-75.

Gottfried, M. A., & Kirksey, J. J. (2017). When students miss school: The role of timing of absenteeism on students' test performance. *Educational Researcher, 46*(3), 119-130. doi:10.3102/0013189X17703945

Gottfried, M. A., Stiefel, L., Schwartz, A. E., & Hopkins, B. (2017). *Showing Up: Disparities in chronic absenteeism between students with and without disabilities*. Retrieved from

https://steinhardt.nyu.edu/scmsAdmin/media/users/lwb232/IESP_WP03-17_Chronic_1.pdf

GradNation. (2017). Progress and challenge in raising high school graduation rates. Retrieved from https://gradnation.americaspromise.org/report/2017-building-grad-nation-report

Grant, J. N. (2016). Understanding and addressing chronic absenteeism in secondary schools. Retrieved from ProQuest Digital Dissertations.

Gren-Landell, M., Ekerfelt Allvin, C., Bradley, M., Andersson, M., & Andersson, G. (2015). Teachers views on risk factors for problematic school absenteeism in Swedish primary school students. *Educational Psychology in Practice, 31*(4), 412-423. doi:10.1080/02667363.2015.1086726

Griffith, D. (2012). What's black got to do with it: An analysis of low-income black students and educational outcomes. Retrieved from https://academicworks.cuny.edu/gc_etds/568

Gwynne, J., Lesnick, J., Hart, H. M., & Allensworth, E. M. (2009). *What matters for staying on track and graduating in Chicago public high schools A focus on students with disabilities.* Consortium on Chicago School Research, University of Chicago. Retrieved from https://ccsr.uchicago.edu/sites/default/files/publications/CCSRSpecialEdWMS-Final.pdf

Hale, J. B., Naglieri, J. A., Kaufman, A. S., & Kavale, K. A. (2004). Specific learning disability classification in the new Individuals with Disabilities Education Act: The danger of good ideas. *The School Psychologist*, *58*(1), 6-13.

Harris, K. D. (2016). In school + on track: Attorney general's report on California's elementary school truancy and absenteeism crisis. Retrieved from https://oag.ca.gov/sites/all/files/agweb/pdfs/tr/truancy_2016_en.pdf

Heinrichs, R. R. (2003). A whole-school approach to bullying: Special considerations for children with exceptionalities. *Intervention in School and Clinic, 38*(4), 195–204. https://doi.org/10.1177/105345120303800401

Henson, K. S. (2017). *Students with disabilities at risk: Predictors of on-time graduation* (Unpublished doctoral dissertation). University of South Florida, Tampa FL.

Henry, K. L. (2007). Who's skipping School: Characteristics of truants in 8th and 10th grade. *Journal of School Health*, *77*(1), 29–35.

Humm-Brundage, A., Castillo, J., & Batsche, G. (2017). *Reasons for chronic absenteeism national survey*. University of South Florida, Tampa FL.

Humm-Brundage, A., Castillo, J., & Moulton, S. (2018). *Reasons for chronic absenteeism confirmatory factor analysis*. University of South Florida, Tampa FL.

Kearney, C. (2008). An interdisciplinary model of school absenteeism in youth to inform professional practice and public policy. *Educational Psychology Review, 20*(3), 257-282

Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., Thurlow, M. L. (2017a). Preparing for life after high school: The characteristics and experiences of youth in special education: Findings from the National Longitudinal Transition Study 2012. Retrieved from https://ies.ed.gov/ncee/pubs/20184007

London, R. A., Sanchez, M., & Castrechini, S. (2016). The dynamics of chronic absence and student achievement. *Education Policy Analysis Archives, 24(112).* Retrieved from http://dx.doi.org/10.14507/ epaa24.2741

Mays, A., Fothergill, S., Katz, N., & Paisley, L. (2017). Addressing chronic absenteeism through ESSA [PowerPoint slides]. Retrieved from https://healthyschoolscampaign.org/wp-content/uploads/2017/05/Chronic-Absenteeism-and-ESSA.pdf

McDonald, N. C. (2008). Critical factors for active transportation to school among low-income and minority students: evidence from the 2001 National Household Travel Survey. *American journal of preventive medicine*, *34*(4), 341-344.

Moonie, S., Sterling, D. A., Figgs, L. W., & Castro, M. (2008). The relationship between school absence, academic performance, and asthma status. *Journal of School Health 78*(3) 140-148.

National Center for Education Statistics. (2017). *Children and youth with disabilities*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cgg.asp

Newton, V. A., & Sandoval, J. S. O. (2015). Educational Expectations Among African American Suburban Low to Moderate Income Public High School Students. *Journal of African American Studies*, *19*(2), 135-156. https://doi-org.ezproxy.lib.usf.edu/10.1007/s12111-015-9296-y

Nowicki, E. A., & Sandieson, R. (2002). A meta-analysis of school-age children's attitudes towards persons with physical or intellectual disabilities. *International Journal of Disability, Development and Education*, *49*(3), 243-265. http://dx.doi.org/10.1080/1034912022000007270

Ocak, G., & Baysal, E. A. (2017). The causes of absenteeism of high school students. *European Journal of Education Studies*, *3*(4) 331-346. Doi:10.5281/zenodo.376841

Office of Special Education, (2016). What is special education? Retrieved from http://www.k12.wa.us/SpecialEd/Families/WhatIsSpecialEd.aspx

Pflug, V., & Schneider, S. (2016). School absenteeism: An online survey via social networks. *Child Psychiatry and Human Development, 47*(3), 417-429. doi:10.1007/s10578-015-0576-5

Rafa, A., & Education Commission of the States. (2017). Chronic absenteeism: A key indicator of student success. Policy Analysis. Education Commission of the States. Retrieved from http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED574526&site=eds-live

Raising School Attendance. (2002). *Education Digest*, *67*(6) 54-56. Retrieved from http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN107875920&site=eds-live

Rasasingham, R. (2015). The risk and protective factors of school absenteeism. *Open Journal of Psychiatry*, *5*(2), 195-203.

Reschly, A. L., & Christenson, S. L. (2006). Prediction of dropout among students with mild disabilities: A case for the inclusion of student engagement variables. *Remedial and Special Education*, *27*(5) 276-292.

Riley, P., Hayes, S., & Ryan, J. (2016). Closing the equity gap in health care for black americans. Retrieved from https://www.commonwealthfund.org/blog/2016/closing-equity-gap-health-care-black-americans

Sahin, S., Arseven, Z., & Abdurrahman Kili. (2016). Causes of student absenteeism and school dropouts. *International Journal of Instruction, 9*(1), 195-210. doi:10.12973/iji.2016.9115a

Smerillo, N. E., Reynolds, A. J., Temple, J. A., & Ou, S. (2017). Chronic absence, eighth-grade achievement, and high school attainment in the Chicago longitudinal study. *Journal of School Psychology*, *67,* 163-178 doi:10.1016/j.jsp.2017.11.001

Sohn H. (2016). Racial and Ethnic Disparities in Health Insurance Coverage: Dynamics of Gaining and Losing Coverage over the Life-Course. *Population research and policy review, 36*(2), 181–201. doi:10.1007/s11113-016-9416-y

Stiefel, L., Shiferaw, M., Schwartz, A. E., & Gottfried, M. (2018). Who feels included in school? Examining feelings of inclusion among students with disabilities. *Educational Researcher, 47*(2), 105-120. doi:10.3102/0013189X17738761

Teasley, M. L. (2004). Absenteeism and truancy: Risk, protection, and best practice implications for school social workers. *Children & Schools*, *26*(2), 117–128.

Thurlow, M. L., Sinclair, M. F., Johnson, D. R. (2002). Students with disabilities who drop out of school: Implications for policy and practice. Issue brief: Examining current challenges in secondary education and transition. Retrieved from http://search.ebscohost.com.ezproxy.lib.usf.edu/login.aspx?direct=true&db=eric&AN=ED468582&site=eds-live

U.S. Department of Education. (2016). *Civil rights data collection (CRDC) for the 2013-14 school year*. Retrieved from https://ed.gov/about/offices/list/ocr/docs/crdc-2013-14.html

U.S. Department of Education. (2016). *Chronic absenteeism in the nation's schools*. Retrieved from https://ed.gov/datastory/chronicabsenteeism.html

Van Eck, K., Johnson, S. R., Bettencourt, A., & Johnson, S. L. (2017). How school climate relates to chronic absence: A multi–level latent profile analysis. *Journal of School Psychology*, *61*, 89–102. https://doi-org.ezproxy.lib.usf.edu/10.1016/j.jsp.2016.10.001

Vaughn, M. G., Wexler, J., Beaver, K. M., Perron, B. E., Roberts, G., & Fu, J. (2011). Psychiatric correlates of behavioral indicators of school disengagement in the US. *Psychiatric Quarterly*, *82*(3), 191–206. doi: 10.1007/s11126-010-9160-0

Wagner, M., SRI International, M. C., & And, O. (1993). *Beyond the report card: The multiple dimensions of secondary school performance of students with disabilities. A report from the national longitudinal transition study of special education students*. Retrieved from https://files.eric.ed.gov/fulltext/ED365088.pdf

Appendix A: RCA Survey Development

The RCA Survey was developed by an experienced researcher at the University of South Florida. The researcher followed development procedures recommended by Devellis (2012). The first step in the development of the *RCA* survey included thorough examination of research and theory surrounding the various reasons students who are chronically absent miss school. After review of the literature an initial set of items was created. Following item development, an expert panel comprised of 13 national, state, district, and school-level stakeholders with knowledge and experience in dropout prevention, truancy, school attendance, and school refusal reviewed and rated the items on a scale from 0-2 in order to assess the items' clarity, relevance and necessity. Items had to meet at least a 70% agreement rate among the stakeholders in order for the items to be retained. Items that did not meet the minimum requirement of agreement in each of the dimensions (clarity, relevance, necessity) were subject to additional alterations or were eliminated based on the reviewers' feedback and suggestions. The reviewers were also able to suggest items to be added to the instrument. In total, 2 items were eliminated, 4 items were split into 2 items each, and 6 additional items were added.

After the revisions were made, the primary researcher identified chronically absent middle and high school students, and used the *RCA* items to conduct cognitive interviews with the student. During the interviews, students thought aloud about what the questions meant and discussed why they were answering items the way they were. The students also expressed any questions about what items meant and provided ways the items might be better worded to meet prospective students' understanding. After the interview was conducted, the students then

provided feedback regarding the language and clarity of the questions, content, and the overall organization of the *RCA* instrument. After analyzing the feedback from students, the items were revised to reflect the feedback provided during the cognitive interviews.

The final version of the *RCA* survey which was used in the national study was comprised of 14 demographic and perception of absences questions; an additional 41 items measured the multifaceted reasons for which students who are chronically absent miss school (e.g., *Barriers, Aversions, Disengagement);* and three open-ended questions were included that inquired about other reasons for absenteeism, reasons the students do come to school, and what would help them come to school more frequently. In essence, this tool was designed to be a self-report survey for chronically absent secondary students that measures their reasons for chronic absenteeism. This tool can be used at both the aggregate and individual level to facilitate and inform intervention development, and data-based problem solving (Humm-Brundage, Castillo, & Batsche 2017). Recent confirmatory factor analyses have been found to indicate good model fit based on the RCA data using the *Barriers* (nine items), *Aversions* (seven items), and *Disengagement* (seven items) three-factor model (Humm-Brundage, Castillo, & Moulton, 2018). Three additional composites also are included, *Health* (three items)*, Transportation* (three items)*, Family* (three items).

Appendix B: RCA Factors and Composites Table

Descriptions of Items on the Reasons for Chronic Absenteeism Student Survey

Factor	Item Number	Item Descriptor
Barriers	16	Had to work
	18	Parents do not care
	19	Had to go to court
	23	Suspended
	24	Did not have right clothes
	25	Homeless
	26	Water, heat, or power turned off
	30	Sent to office too much
	32	Had to move
Aversions	3	Safe on way to/from school
	9	Teased/bullied
	12	Not safe at school
	15	Not missed when gone
	20	Did not want to see another student
	28	School not a nice place to be
	31	Too sad/depressed
Disengagement	4	Hung-out with friends/family
	6	Did not get school work done
	7	Stayed up too late
	10	School boring
	13	No reason to go
	27	Did not want to get in trouble for tardies
	29	Did not want to go to class
Health-Related	1	Sick – short term illness
	2	Sick – long term illness
	5	Health related appointment
Transportation-Related	8	Problems with car
	11	Missed the bus
	17	Did not want to walk in bad weather
Family-Related	14	Take care of/help family
	21	Out of town
	22	Family emergency

Appendix C: RCA Survey

Reasons for Chronic Absenteeism (RCA)

Chronic absenteeism, commonly defined as missing 10% or more of instructional days per school year, has significant impact on student outcomes. It is associated with decreased reading levels, overall academic performance, on-time graduation rates, and post-secondary enrollment as well as increased dropout rates.[1,2] Fortunately, chronic absenteeism rates are alterable at the student and system level when interventions are appropriately targeted and matched to student needs.

In order to efficiently and effectively match interventions to student needs, there is a need for reliable and valid data that provide sufficient information to understand the various challenges students experience. The Reasons for Chronic Absenteeism (RCA) Survey was developed and underwent extensive validation processes including an expert panel review, student reviewers, and a national validation study to ensure the technical adequacy of the items and instrument.

The RCA is designed for secondary students (6^{th}-12^{th} grade) who have missed 10% or more instructional days. The survey is comprised of 14 demographics and perception of absences questions; 28 items measuring multifaceted reasons for absences; and three open-ended questions asking about other reasons for missing school, the reasons they do come to school, and what would help them come to school more often. Students respond to each of the items that ask why they missed school using a 0-3 scale with response options of Never, Rarely, Sometimes, or Usually. Students may take the survey via an online survey platform (e.g. SurveyMonkey©, Qualtrics©, etc.) or hardcopy. Survey administration takes approximately 10 minutes and multiple students may take the survey at one time. Students may be provided the explanation that they are taking the survey so school staff better understand why students miss school. Please allow students privacy to independently answer questions.

Demographic Items
What is the name of your school?
How old are you? (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
What is your gender? (male, female, other [for example: transitioning, transgendered, etc.])
What grade are you in? (6, 7, 8, 9, 10, 11, 12)
Do you get free or reduced price lunch? (yes/no)
What is your mother's level of education? **some high school** **high school diploma**

[1] Balfanz, R., & Byrnes, V. (2012). *Chronic Absenteeism: Summarizing what we know from nationally available data.* Baltimore: Johns Hopkins University Center for Social Organization of Schools.

[2] Chang, H. & Romero, M. (2008). *Present, engaged and accounted for the critical importance of addressing chronic absence in the early grades.* National Center for Children in Poverty (NCCP): The Mailman School of Public Health at Columbia University.

GED **some college** **2-year or associates** **degree 4-year or bachelors** **degree masters degree** **doctorate degree**
What is your Race? (*if more than one race select multi-racial)? **Multi-racial** **Asian** **Black/African** **American** **Hispanic/Latino** **White** **American Indian or Alaskan Native** **Native Hawaiian or Pacific** **Islander Prefer not to say**
Do you get special education services? (yes/no)
Is English your first language or the language you use most often? (yes/no)
What are your **grades?** **All A's** **A's and** **B's** **Mostly** **B's B's** **and C's** **Mostly** **C's C's** **and D's** **Mostly** **D's D's** **and F's** **Mostly** **F's** **A mix of grades**
About how many days of school did you miss <u>last year</u>? **5 days or less** **6-10 days** **11-15 days** **16-20** **More than 20 days**
About how many days of school did you miss in the <u>last month</u>? **0-1 days** **2-3 days** **4 or more days**
Compared to other students, how many school days did you miss last year? **The same as other students** **More than other** **students Fewer than** **other students**

How do you usually get to/from school? Walk or ride a bike
By bus
By car

Survey Items/Directions:

Please rate each question as being Never, Rarely, Sometimes, or Usually the reasons you miss school.

- **Never means that it is never a reason you have missed school.**
- **Rarely means that it is not very often a reason you have missed school.**
- **Sometimes means that it is a reason you have missed school more than 3 times.**
- **Usually means that it is often the reason you have missed school.**

Item	Never	Rarely	Sometimes	Usually
1. I was sick (short term: flu, cold, headache).				
2. I was sick (long term: asthma allergies, chronic-illness).				
3. I did not feel safe *on the bus ride or walk to or from school.*				
4. I hung-out with friends or family instead of going to school.				
5. I had an appointment (doctor, dentist, counselor, etc.).				
6. I did not get my work done or study for a test.				
7. I stayed up too late and missed school or overslept.				
8. There were problems with the car (would not run, ran out of gas, etc.).				
9. I did not want to be teased or bullied.				

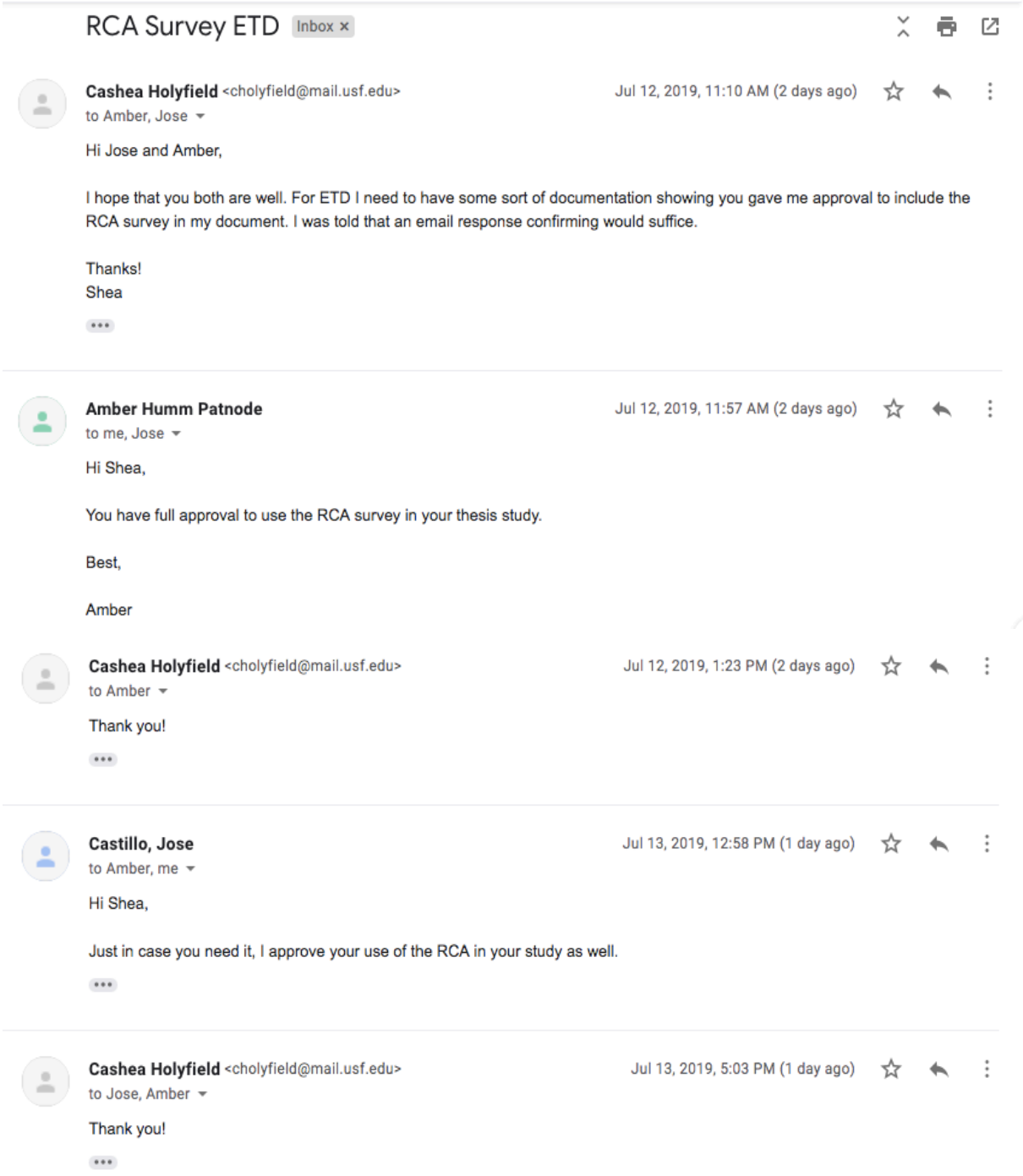
10. I think school is boring.				

Item	Never	Rarely	Sometimes	Usually
11. I missed the bus, or the bus was late or the bus did not come.				
12. I did not feel safe *at school.*				
13. There was no reason for me to go to school.				
14. I had to take care of or help a family member (child, sibling, relative, etc.).				
15. No one misses me when I don't come to school.				
16. I had to work.				
17. I did not want to walk in bad weather.				
18. My parents don't care if I miss school.				
19. I had to go to court or was in jail or juvenile detention center.				
20. I did not want to see another student(s) because of drama or conflict.				
21. I was out of town.				
22. I had a family emergency (death, illness, injury, drama, etc.).				

23. I was suspended.				

Item	Never	Rarely	Sometimes	Usually
24. I didn't have the right or clean clothes or supplies for school.				
25. I was homeless or had no place to stay.				
26. The water, heat, or power were turned off at home.				
27. I did not want to get in-trouble for being late or tardy.				
28. My school is not a nice place to be (people are not nice, people don't care about others, unfair rules, etc.).				
29. I did not want to go to a class.				
30. I get sent to the office too much.				
31. I was too sad/ depressed or anxious/upset to come to school.				
32. I had to move.				
33. Are there any other reasons not listed that you miss school?				
34. What are the reasons you do come to school (e.g. friends, clubs/sports, etc.)?				
35. **What would help you come to school more often or miss fewer days?**				

Appendix D: RCA Survey Approval



RCA Survey ETD Inbox ×

Cashea Holyfield <cholyfield@mail.usf.edu> Jul 12, 2019, 11:10 AM (2 days ago)
to Amber, Jose

Hi Jose and Amber,

I hope that you both are well. For ETD I need to have some sort of documentation showing you gave me approval to include the RCA survey in my document. I was told that an email response confirming would suffice.

Thanks!
Shea

Amber Humm Patnode Jul 12, 2019, 11:57 AM (2 days ago)
to me, Jose

Hi Shea,

You have full approval to use the RCA survey in your thesis study.

Best,

Amber

Cashea Holyfield <cholyfield@mail.usf.edu> Jul 12, 2019, 1:23 PM (2 days ago)
to Amber

Thank you!

Castillo, Jose Jul 13, 2019, 12:58 PM (1 day ago)
to Amber, me

Hi Shea,

Just in case you need it, I approve your use of the RCA in your study as well.

Cashea Holyfield <cholyfield@mail.usf.edu> Jul 13, 2019, 5:03 PM (1 day ago)
to Jose, Amber

Thank you!