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THE RELATIONSHIP BETWEEN STUDENT BASIC PSYCHOLOGICAL NEEDS SATISFACTION AND TRUANCY

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THE RELATIONSHIP BETWEEN STUDENT BASIC PSYCHOLOGICAL NEEDS SATISFACTION AND TRUANCY

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

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Abstract

In spite of intense efforts to reduce student truancy, the prevalence of truancy at the high school level has remained consistent. The body of knowledge exploring truancy has identified myriad correlational relationships with truancy. The extant literature tends to focus on providing data to support how truancy is related to other abhorrent behaviors and undesirable life outcomes. However, little evidence has been presented with regard to the mechanisms underlying why students skip class. Many of these studies operationalize truancy as entire days of school missed without the knowledge or consent of their parents. Few studies have operationalized truancy to include individual sections of class skipped after a student has arrived to school. Few studies have examined truancy through the lens of Self-Determination Theory. The study of truancy through the lens of Self-Determination Theory may help to provide evidence for the mechanisms behind why students are motivated to attend class or not. The purpose of this study was to conduct an initial empirical investigation into the relationship between student perceptions of basic psychological need satisfaction or frustration and truancy. A randomly selected group of 10th, 11th, and 12th grade students from a large comprehensive urban high school participated in a school climate survey. Self-reported student perception data garnered from the climate survey and district administrative attendance data were utilized. Spearman's rho correlational and negative binomial regression analyses were employed to determine the strength and direction of the relationship between student psychological needs and truancy. Results of the analysis indicated class truancy to be highly prevalent overall and across all measured student subgroup categories. While no significant

associations were found between the focal variables and truancy, several interesting findings were presented.

Chapter One: Introduction

The cat-and-mouse dynamic between high school students and their schoolteachers and leaders is a mainstay of American schooling folklore, if not a reality. High school students engage in an endless cycle of skipping class while teachers and leaders struggle to get them to attend. This dynamic is so prevalent that it has found its way into American pop culture in classic films such as *Fast Times at Ridgemont High, The Breakfast Club,* and *Ferris Bueller's Day Off,* to name a few. These caricatures work for film, but is this dynamic oversimplified? Countless public school students have no doubt stopped at the threshold of their classroom or school, questions in their mind. What are we doing in class today? Will I have fun? Will I learn? Am I passing this class? How will the teacher treat me? This understated pause at the door may, in fact, mask a complex psychological process in the mind of the high schooler, one that is seldom understood or examined.

The high school truant is stereotypically thought of as a slacking, pot smoking, hell-raising social deviant, conspiring to outsmart school adults. Many high school truants do engage in delinquent behavior, but this, of course, is a broad generalization. The image of a high school student pausing with indecision paints an alternative portrait of the high school truant, suggesting a conscious decision to not attend. Perhaps they perceive their teacher as unapproachable, cold, or sarcastic toward students. Perhaps their teacher fails to provide students with a voice in their own learning. Perhaps their teacher does not encourage students to challenge themselves academically. Maybe their teacher puts students down when mistakes are made. Is it possible that students deciding to

engage in truanting behaviors is less a function of student behavioral pathology, and more a function of how students perceive of the learning conditions in their classrooms?

Absenteeism can take make many forms in the context of public schooling. Excused, unexcused, verified, unverified, sick, doctor, court, emergency, and truant are a few of the countless ways in which schools code for students not in attendance. Truancy is a unique phenomenon in the pantheon of school attendance coding. Many may use the terms unexcused absence, chronic absenteeism, and truancy interchangeably. However, truancy is differentiated from other forms of absenteeism. All truancy occurrences are unexcused absences, but not all unexcused absences are truancy occurrences. The factor that typically sets truancy apart from other forms of absenteeism is parental awareness of the absence in question. A parent not having reliable transportation, parents working too late and sleeping through an alarm, chronic illness, or vacation would all typically be considered unexcused absences by public schools. None of those circumstances would necessarily be considered truancy. Chronic absenteeism is typically associated with the habitual lack of attendance from school (Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019a; Gottfried & Hutt, 2019b). If a parent thought a student was at school, but they were not, the student was truant (Guare & Cooper, 2003; Shute & Cooper, 2014; Shute & Cooper, 2015).

Truancy is typically defined as the absence from school without the consent or knowledge of a parent or guardian (Jones & Lovrich, 2011). Since the advent of compulsory education in the early 20th century, truancy has presented itself as a major educational issue plaguing teachers, parents, administrators, and policy makers alike (Katz, 1976). The truancy problem at its most fundamental level comes down to the fact

that when students are not present, learning cannot occur. When examining the scholarly literature written on the unique phenomenon of truancy, it quickly becomes apparent that the operationalization of truancy lacks consistency across studies (Sutphen, Ford, & Flaherty, 2010). One study attempting to establish a generalizable national prevalence rate of truancy, operationalized truancy as having students self-report if they had skipped one or more days of school in the last month. This study resulted in a reported national prevalence rate of around 11% (Vaughn, Maynard, Salas-Wright, Perron, and Abdon, 2013). Other studies that broadened the operationalization to include truanting from individual classes, reported prevalence rates as high as 70% (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014; Shute & Cooper, 2015). Local districts and municipalities all define truancy for their schools differently. Some consider truancy as entire days of school missed. Some do not code for truancy until a certain threshold of consecutive days have accrued. Some consider every section of school missed without parent notification as truancy (Sutphen et al., 2010).

These varying definitions of truancy render sense making of the truancy literature difficult. Upon examination of the truancy literature, it seems the purest operationalization of truancy as a variable would need to consider every section of school missed without consent or knowledge from parents. When defined in this fashion, the magnitude of the truancy problem changes (Guare & Cooper, 2003; Shute & Cooper, 2014; Shute & Cooper, 2015). Studies that have considered entire days of missed school and individual sections of class missed after a student has arrived at school have reported truancy prevalence rates as high as 70%. That is to say, up to 70% of students have

skipped at least one individual class in the recent past (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014, 2015).

In addition to the negative consequences for learning, schools and communities are faced with profound economic ramifications from truancy as well (Garry, 1996). Schools are funded based on attendance and enrollment. When students are truant, schools lose average daily attendance funding. When students do not graduate, communities are faced with an undereducated workforce (Garry, 1996). One particular high school in a Midwestern state is granted approximately $3,400 annually for each regular education student enrolled. This equates to a loss of approximately $19 for every day of school missed for every student. This is an approximate loss of $3 for every single class missed. In the month of February of 2018, this school recorded a total of 14,481 sections or individual classes had been truanted. This equates to a total funding loss of $43,443 for one single month.

Statement of the Problem

The body of literature on the phenomenon of student truancy is massive (Baker et al., 2001; Conolly & O'Keeffe, 2009; DeKalb, 1999; Garry, 1996; Grant, 1992; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014, 2015). However, the literature lacks the explicit and consistent application of theory to help explain *why* students choose to engage in truant behaviors. While not explicit, there does seem to be some latent theorizing regarding truancy present in the literature, however. The taxonomy of truancy literature tends to divide into two major philosophical branches. There are studies and governmental reports that consider truancy as an abhorrent behavior engaged in by students with some form of

psychopathology, and there are studies that consider truancy as a rational decision, consciously made by students in response to some aspect of their classes or school (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

The delinquent theory of truancy forms a vision of the truant student as some kind of deviant. Countless studies characterize students engaged in truant behavior as criminal and malicious (Baker, Sigmon, & Nugent, 2001; Conolly & O'Keeffe, 2009; Garry, 1996; Grant, 1992; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). In other words, truancy is a problem that originates with the truant, and that something must be wrong with a student for them to throw away the opportunity that a free public education affords. These studies cite empirical evidence of the correlates between truancy and myriad other criminal activities and undesirable life outcomes (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Grant, 1992; Henry, 2007; Henry & Huizinga, 2007).

While there are correlations between truancy and criminality, these studies fail to consider truancy in its totality. For the delinquency theory of truancy to hold true, its main premise must be true. Truants are social deviants. Truants have something wrong with them. This becomes hard to reconcile with prevalence rates nearing 70%. Are 70% of our high school students social deviants? Do 70% of our high school students exhibit some form of psychological pathology?

A competing philosophy of student truancy regards truancy as a rational decision made by students in response to their school or class environment. In 2003, Guare and Cooper introduced an idea of thinking of students as consumers of learning. They analogize students attending class with consumers purchasing a product. They argue that students must find value in their classes for them to choose to attend. Several other

studies followed suit and began to abandon the idea that all truants are deviants. These studies argue that all students make a conscience decision to enter class or not based on a wide variety factors (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). This philosophy of student truancy raises interesting questions in regard to the school or classroom environment. What are the conditions that lead students to turn away from their classes? What responsibility do schools have to ensure students find value in their classes? This philosophy regards truancy as a function of the school's ability to address students' psychological needs for learning and development.

Neither of these conceptual viewpoints have been studied through the lens of an established psychological theoretical framework, however. One framework that could help provide a deeper understanding of why students choose to engage in truanting behaviors is Self Determination Theory (SDT). SDT is a theory of human well-being and motivation, which, as a basic precept, assumes that all humans are driven by an innate sense of growth and learning. Humans actively seek out social interactions and long to learn and experience new things. In order to maintain this innate sense of intrinsic motivation to learn, humans must perceive of their basic psychological needs as being satisfied. The maintenance of well-being through the satisfaction of psychological needs is one of several mini-theories of SDT called Basic Psychological Needs Theory (BPNT; Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2017). Little research on the subject of truancy has explored the relationship between psychological needs and truancy. This study addresses this gap in the literature.

The purpose of this study was to conduct an exploratory empirical investigation into the relationship between basic psychological need satisfaction and frustration and

overall student truancy at one large urban high school in the Southwestern US. This study was guided by the following research questions:

1. What is the overall prevalence of truancy at the participating high school?
2. Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject area?
3. Are there differences in course subject area truancy prevalence by ethnicity?
4. Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups?
5. Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?

Scholarly Significance

By framing the exploratory study in this way, the study could have broad implications for research, school policy, and practice. Should evidence of a relationship between basic psychological needs and student truancy be found, the approaches to how truancy is understood could be altered significantly. Evidence of the explanatory mechanisms behind a student's choice to engage in truanting behaviors should encourage more research and investigation into how the school or classroom environment influences truancy. The correlates of truancy and unsavory life outcomes are well established (Baker et al., 2001; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). Scholars must begin to shift the

direction of research towards a better understanding why students decide to engage in truanting behaviors in the first place.

Furthermore, school leaders could use this evidence to produce more nuanced and informed truancy intervention policies and practices. When truancy is viewed as a delinquent behavior, the response to truancy is of a punitive nature (Guare & Cooper, 2003; Shute & Cooper, 2014; Shute & Cooper, 2015). A student skips class. The student is caught. The student is punished. If truanting behaviors persist, the punitive response increases in severity. No effort is given to address the underlying causes of the behavior. Schools typically react to truancy, but in reality do little to prevent truancy. If a relationship between basic psychological needs and student truancy is revealed, it could fundamentally change how schools address student truancy.

Chapter Two: Review of Literature

The body of knowledge on high school truancy is vast (Baker et al., 2001; Conolly & O'Keeffe, 2009; DeKalb, 1999; Garry, 1996; Grant, 1992; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014, 2015). An internet query for key terms such as "truancy", "skipping", or "cutting class" reveals numerous scholarly research studies and governmental reports. However, prior studies have provided a limited lens for understanding why truancy occurs. The body of truancy literature is large, but remains out of focus. While we seem to know much about the correlates of truancy, we do not seem to know much about *why* students engage in truanting behaviors. The literature does not even seem to contain a consensus on a simple definition of truancy.

Truancy is a complex and often misunderstood phenomenon in public education. Understanding its complexity begins with the inception of compulsory education in the United States. From there, one can trace the subtle changes over time from the perception of truancy as a deviant delinquent behavior, to the modern perspective of truancy as a signpost for school organizational and pedagogical health. This dichotomy of truancy perspectives manifests in distinct approaches to truancy interventions. When truancy is seen as an abhorrent behavior, engaged in by juvenile delinquents, the response tends toward zero-tolerance punitive interventions. When truancy is viewed as a rational decision made by discerning thinkers, the interventions tend toward more empathetic, preventative measures involving all stakeholder groups.

A Brief History of Truancy

If you were to type "truancy etymology" into the Google search bar your results would reveal that the word "truant" finds its origin in Middle English meaning beggar, or an Old French term meaning wretched. Perhaps the etymological origins of the word truant have shaped our modern perception of a truant high school student. That is to say, the common perception of a truant student is one of a juvenile delinquent (Shute & Cooper, 2014). A more modern broad definition of truancy would be one who wanders from their appointed duty. A specific definition in the education context would be a student that willingly fails to attend school without parental knowledge, permission, or excuse.

This common perception of the truant student has prevailed since the advent of compulsory education in the United States (Shute & Cooper, 2014). Only a deviant would willingly give up a free public education. To forfeit the benefits of education must mean something is wrong with the student; they must possess some personal deficiency if engaging in truanting behaviors. The idea of compulsory education can be traced back to the early Protestant reformation. Martin Luther himself published remarks attempting to persuade the public of the virtues of mandatory education. Those early Protestants went so far as to levy the first recorded fines on parents that failed to send their children to school (Zhang, 2004). Compulsory education is a relatively new concept in the United States. The mid 1800s marked a transition away from an American agrarian society to an industrialized one. This industrialized society found itself more dependent on technology. Citizens required more education to fill the need for skilled workers (Katz, 1976). States began mandating school age children attend public school in the latter half of the 19th

century and the early years of the 20th century (Cabus & De Witte, 2011). By 1918, all states in the Union had compulsory education statutes on the books (Katz, 1976).

While all States had compulsory education statues written into law by 1918, the enforcement of those laws did not begin in earnest until the 1930s and 1940s. This time period saw compulsory education evolve from empty rhetoric to complex interrelated systems of rules, regulations, and legislation actively punishing parents and students that failed to conform (Katz, 1976).

With the advent of these more complex regulatory mechanisms to compel students to attend school, came the dawn of truancy as an educational issue worthy of attention (Shute & Cooper, 2014). As compulsory education became more and more systematic and institutionalized, public schools came to rely more and more on municipal, state, and federal funding dollars. These funding dollars were directly tied to the number of students that attended a given school. The 1930s and 1940s saw school districts across the country begin to commit more budgetary resources to preventing students from truanting. As the daily functionality of schools became inextricably linked to state aid, schools began to galvanize their administrative power in the service of truancy prevention and punishment. For the first time in American history, the attendance office and the truancy officer came into the common vocabulary of school (Katz, 1976). The emergence of truancy as an educational issue also resulted in the inception of truancy as a topic of scholarly research.

Truancy Operationalization

As previously mentioned, the body of literature pertaining to school truancy is large, and lacks consistency on how truancy is defined (Guare & Cooper, 2003; Shute &

Cooper, 2014). This definitional inconsistency casts a shade of specificity to each individual truancy study. The results from many truancy studies cannot be generalized beyond the individual data sample at hand (Sutphen et al., 2010).

Generally speaking, truancy is defined as wandering from one's appointed responsibilities (Shute & Cooper, 2014). In the educational setting, truancy can be defined broadly as a student's absence from school without a parent's knowledge or consent (Jones & Lovrich, 2011). However, the operational definition employed from any selected truancy study to another can vary widely. For example, in 2010, Sutphen, Ford, and Flaherty conducted a comprehensive review of truancy based academic literature. The authors reviewed 16 research-based studies published between the years 1990 and 2007. Of those 16 studies, 11 different definitions of truancy were utilized. Two studies failed to define truancy at all. Some defined truancy as 20 or more absences. Some defined truancy as any absence without excuse. Some defined it as missing 12% or more of the school year, while others defined it as being present for less than 80% of the previous school year (Sutphen et al., 2010). This variation in truancy definition is due in large part to the local, state, and federal rules, regulations, and statues regarding compulsory education. Many states define truancy differently, while others leave the responsibility of definition up to local school districts or even individual schools (Sutphen et al., 2010).

How an academic study operationalizes truancy has implications for the accuracy of its claims. If one study begins to consider an absence a truancy after its 20th occurrence, the prevalence rate that study claims will be woefully under-represented compared to a study that considers any absence without excuse a truancy. There simply is

not a universal standard for how academic research operationalizes truancy (Guare & Cooper, 2003; Shute & Cooper, 2014; Sutphen et al., 2010).

Another unique distinction in the literature pertaining to the definition of truancy is the phenomenon of "in school" or "post registration" truancy. Traditionally, academic research has focused on truancy for entire days of school. Partial days or individual hours of truancy occurrence were ignored. Studies that only account for full days of truancy are greatly under- representing the magnitude of truancy prevalence for the sample at hand (Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). O'Keeffe (1993) was one of the first researchers to begin to include, what he called "post-registration" truancy in his operationalization of truancy when studying truancy habits in Great Britain. He found that "post registration", "in school", or "class truancy" truancy occurred twice as much as truancy for entire days. One large-scale study of truancy in Chicago Public Schools found that the average number of absences in an individual class session of a major subject area was twice the number of full day absences (Roderick et al., 1997). Again, studies that ignore partial day truancy or truancy from individual hours of a student's high school schedule are under-representing the prevalence of truanting behaviors in the sample studied.

For this study, truancy was defined as any absence to any hour of a student's high school schedule. Additionally, that absence was committed without the knowledge or consent of a parent. That is to say, a teacher recorded the student as absent and no parent or guardian contacted the school to verify or give permission for the absence. This definition of truancy captures both entire days of truancy and truancy from one or more classes after the student had arrived to school.

Truancy as a Delinquent Behavior

Much of the early research regarding the subject of truancy reflects a certain perspective regarding the truant student. Shortly after the widespread institutionalization of compulsory education in the United States, students began to rebel against that compulsion and skip school or class (Katz, 1976; Shute & Cooper, 2014). The first scholarly research to investigate the causes of the truancy phenomenon centered on psychological pathology. In other words, a student must have some form of mental dysfunction to willingly refuse the universal benefits of a free public education. These early studies placed the locus of truancy causality on the student (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

The second wave of scholarly research investigating the causes of truancy focused on the social and familial influence on the student. Poor family dynamics, bad parenting, poverty, or involvement in gang activity were commonly cited as factors influencing the likelihood of truanting behaviors (Shute & Cooper, 2014). Both of these prevailing conceptual lenses of truanting behavior contribute to the overall perception that truant students are juvenile delinquents (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

Many reports written throughout the 1990s began to draw relationships between truancy and crime (Baker, Sigmon, & Nugent, 2001; Garry, 1996; Grant, 1992). These reports indicated students that consistently decide to cut class are far more likely to be involved in undesirable criminal behaviors later in life. These undesirable behaviors include the entire spectrum of delinquency and criminality. In her 1996 report, Eileen Garry cites an interview with an attorney of the California truancy court system. The

attorney stated many local gang members began their delinquent behavior with truancy. A University of Maryland study found that over half of all juvenile female arrests tested positive for drug use when arrested during school hours (Garry, 1996). A similar study found 53% of a sample of over 500 students in San Diego tested positive for drug use when arrested during the school week (Garry, 1996). One report dating back to the 1970s claimed that nearly 95% of juvenile offenders arrested for burglary, shoplifting, or vandalism had begun their downward trajectory toward crime with skipping school (Shute & Cooper, 2014). Tacoma, WA reported that nearly one third of all daytime burglaries and one fifth of daytime aggravated assaults were committed by juveniles that should have been in attendance at school. One California County reported that 60% of all daytime crimes committed during school hours were perpetrated by juvenile offenders (Baker et al., 2001). In a study investigating the profiles of juveniles convicted of murder, 57.6% of the subjects had a documented history of truanting behavior (Grant, 1992).

For decades, the body of knowledge concerning the phenomenon of truancy persistently painted the truanting student as a delinquent or criminal. The causes of truancy were squarely placed on the student, their family, or societal factors. Most of these studies failed to cast their investigative lens on the place from which the student was fleeing. More recent literature has begun to shift the focus of study from outside the school to inside the school (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

Truancy Prevalence

Truancy is universally considered a persistent and widespread phenomenon plaguing public schools across the United States of America. That said, an accurate and

nationally generalizable prevalence rate for truancy continues to elude policy makers and researchers alike (Maynard, Vaughn, Nelson, Salas-Wright, Heyne, & Kremer, 2017; Vaughn et al., 2013). This is partially due to the variation in how local school districts, municipalities, and states define truancy (Sutphen et al., 2010). Until No Child Left Behind (NCLB), few districts were even required to record truancy data (Shute & Cooper, 2014). Although NCLB required districts to begin gathering truancy data, the statute did not mandate that the data be made public or provide a standard definition of truancy (Seeley, 2006).

Even without a statistically reliable representation of truancy prevalence, several reports and studies provide some sobering anecdotes that speak to the magnitude of the truancy problem across the country (Shute & Cooper, 2014). Student truancy and absenteeism is one of the most often-cited discipline issues by school principals (DeKalb, 1999). New York City Public Schools reports that 150,000 of its 1,000,000 students are absent on any given day (DeKalb, 1999). Los Angeles Unified School District claims that 10% of its student body is absent on any given day (DeKalb, 1999). In 2003, 35% of nationally sampled 12th graders reported skipping one or more days of school in the last month (United States Department of Education, 2013). In 2005, nearly 35% percent of 12th graders enrolled in Denver Public Schools were classified as chronic truants (United States Department of Education, 2013). The Florida Department of Education has reported that 14.8% of high school students meet the criterion for chronic absenteeism (United Sates Department of Education, 2013). Milwaukee Public Schools has reported that 74% of enrolled high school students are labeled as habitual truants (United Sates

Department of Education, 2013). 24.8% of California students met the state definition of chronic truant (United Sates Department of Education, 2013).

Each of these aforementioned statistics is based on a different state or local definition of truancy. These variations in definition provide evidence to the difficulty in establishing a national prevalence rate. In 2013, Michael Vaughn and his colleagues set out to establish a reliable national prevalence rate for truancy. The authors utilized data garnered from the National Survey on Drug Use and Health. This instrument was specifically designed to be nationally generalizable. Vaughn and his colleagues found the national prevalence rate of truancy to be approximately 11%. That is to say, approximately 11% of students surveyed, self-reported they had skipped school at least once in the last month (Vaughn et al., 2013). A follow up study examined the temporal trends of the same survey and found truancy prevalence rates to fluctuate very little from 11% across the years 2002 to 2014. This seems to provide some evidence to the claim that truancy interventions have had very little effect on the prevalence of truancy nationally (Maynard et al., 2017). It is important to point out that the Vaughn (2013) and Maynard (2017) studies do not differentiate between entire day truancy and class truancy. One could argue an 11% truancy prevalence rate may be a vast under representation. As mentioned previously, when studies account for in-school truancy, prevalence rates can approach up to seven times as high (Guare & Cooper, 2003; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014).

Studies that have included in-school truancy or class truancy along with entire day truancy have reported markedly higher prevalence rates within their samples. When studies broaden their definition of truancy to include truancy from class after a student

arrives to the school building, a more truthful representation of the truancy phenomenon is achieved (Shute & Cooper, 2014). O'Keeffe (1993), Roderick (1997), Guare and Cooper (2003, 2014) all reported truancy prevalence rates closer to 70%.

Another interesting finding of the studies that do account for in-school truancy is the high prevalence of truanting behavior across race/ethnicity (Shute & Cooper, 2014). In a study designed to determine the relationship between truanting behaviors and race/ethnicity, Shute (2009) found all race/ethnic groups exhibited truanting behaviors in excess of 57%. While all displayed high levels of truanting behaviors, it was found that ethnic minorities engaged in truanting behaviors at a significantly higher rate than that of their Caucasian counterparts. This difference was determined by a t-test analysis at a 95% confidence interval (Shute, 2009).

The lack of consistency in how truancy is operationalized in the literature results in substantial variation in reported truancy prevalence rates. In spite of this inconsistency, the body of knowledge focusing on the prevalence of the truancy phenomenon clearly shows a widespread problem amongst public schools. The literature indicates that truancy is not an issue confined to a specific racial or ethnic group. It prevails at high rates amongst Caucasian students and minority students alike. The next section explores some of the correlates of truancy found in the literature.

Factors Underlying Truancy

More recent literature centering on the phenomenon of truancy has focused on the correlates of truancy. Researchers have attempted to determine the characteristics of students that may lead to truanting behaviors. We have a growing body of knowledge of

what the risk factors for truancy are. The literature also provides insight into the undesirable outcomes truancy may put students at risk for in later life.

Certain characteristics of students increase the likelihood they will engage in truanting behaviors. Older students tend to truant more often than younger students. While the prevalence for truancy among all ethnicities is high, minority students are more likely to engage in truanting behaviors than Caucasian students. Students from lower socioeconomic backgrounds tend to truant more often than their more affluent counterparts. Interestingly, male students and female students tend to truant at relatively even rates (Baker et al., 2001; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Vaughn et al., 2013;).

The literature has indicated there are several categories of risk factors that can serve as predictors for future truanting behaviors. Those categories are social or family factors, student factors, and school factors (O'Keeffe, 1993; Baker et al., 2001; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Vaughn et al., 2013; Shute & Cooper, 2014; Maynard et al., 2017).

Social and family factors are characteristics of the student's home life that can put the student at higher risk for engaging in truanting behaviors. The characteristics of the environment a student is parented in influences the student's decision-making with regard to truanting. Unfortunately, many students are raised in less than healthy home environments, which lead to tendencies to truant (Shute & Cooper, 2014). Parental neglect or abuse can lead to student truancy. A disorganized family structure or lack of parental supervision at home may put students at higher risk for engaging in truanting behaviors. Parental drug abuse, violence in the home, and parental mental health are all

factors which may lead to student engagement in skipping school or class (Baker et al., 2001; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013).

The attitude of parents towards school can influence student truancy. For example, parents that have not completed school or show a lack of support for the value education can put their students at higher risk for truanting behavior. Students whose parents are oblivious or unaware of truancy policy or statute tend to skip more often. Some parents may even condone the act of truancy. These students, as one would imagine, tend to truant more often (Baker et al., 2001; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013).

Certain characteristics of the students themselves can predict the likelihood of engaging in truanting behaviors. Many students do not see value in education. Students that lack academic ambition tend to engage in skipping school or class. Similarly, students that perform poorly in an academic sense are more likely to truant. Students with low self-esteem, poor physical health, or have difficulty making friends are all at higher risk of engaging in truanting behaviors. Some students have difficulty with transportation to school or have employment related scheduling conflicts with school. These students truant more often. While these students make up a small minority of truanting students, delinquent behavior puts students at higher risk of engaging in truancy. Delinquent behavior such as drug abuse, gang involvement, and criminal activity in general all can lead to higher rates of truancy. It is important to point out that these delinquent students only account for a fraction of the overall population of students that truant (Shute &

Cooper, 2014). However, this small portion of the overall population of truant students is responsible for the common perception and attitude towards truancy (Baker et al., 2001; Conolly & O'Keeffe, 2009; Guare & Cooper, 2003 Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013).

Related to previous discussions of the factors that predict the likelihood of truancy, the reciprocal of that research is well covered in the literature. Engagement in truanting behaviors can increase the likelihood of many undesirable delinquent behaviors throughout adolescence. Students that engage in truanting behaviors tend be at higher risk for performing poorly academically. They are more likely to drop out of high school altogether. Truants are more likely to engage in illicit drug use. They are more likely to be involved in physical altercations. They are more likely to be involved in criminal activity (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). Students that partake in truanting behaviors are more likely to exhibit attitudes that favor taking risks in general (Maynard et al., 2017; Vaughn et al., 2013).

Another focus of the truancy literature provides evidence as to the post-secondary life outcomes for which truants are at higher risk. Students that truant are more likely to be unemployed after high school (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). Most of the undesirable behaviors that truants are more likely to engage in during high school, persist after high school. Drug use and criminality are both associated with having engaged in truanting behaviors in high school (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014;

Vaughn et al., 2013). This vein of literature, albeit important evidence-based information, continues to exacerbate the common perception of truancy as a deviant behavior or personal deficiency.

Despite the growing body of knowledge pertaining to the aspects of the school itself that may influence truancy prevalence, the commonly held belief remains that the root of the truancy problem lies at home or with the truant (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). This common belief flies in the face of mounting evidence to the contrary. Many of the factors that place students at higher risk for engaging in truanting behavior originate within the school itself. Poor attendance policies, lack of consistency in attendance policy implementation, lack of truancy consequences, poor attendance record keeping, and poor communication with parents regarding attendance are all structural school related factors that may lead to increased truancy prevalence (Baker et al., 2001; Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014; Vaughn et al., 2013).

These school related structural or policy factors shed some light on the responsibility of schools to reduce truancy. Perhaps more telling are the factors related to how students perceive their school environment. Several studies have shown that the root causes of truancy may center on the quality of education taking place within the school itself. That is to say, truancy prevalence may be a barometer of school culture, classroom pedagogy, and teacher quality (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; O'Keeffe, 1993; Roderick

et al., 1997; Shute & Cooper, 2014; Vaughn et al., 2013). The perspectives of truants themselves can provide evidence of such a claim.

Student Perspectives on Truancy

Much of the literature reviewed thus far has framed the correlates and causes of truancy around factors outside of school. When researchers have probed the perspectives of the truants themselves, much of the evidence suggests the reasons for skipping school lay within the school itself. There is an increasing body of knowledge that suggests students engage in truanting behaviors due to their perceptions of the characteristics of their school environment (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014).

Several studies have found a strong relationship between students perceiving their school and teachers as controlling and truanting behaviors. When students feel that they are being forced to be in a certain class or abide by certain arbitrary rules they tend to truant more often. These types of school and class environments treat students as forced conscripts in the educational process. In many cases, these controlling environments fail to generate a sense of educational value within students. When students do not see how the curriculum of a particular class has value, they are at an increased risk to skip that class. This is also supported by evidence that seems to indicate many students enjoy the overall social environment of their school but skip certain classes because they dislike those classes.

The curriculum of certain classes may be perceived as controlling as well. For example, some Native American students may have deeply-held beliefs that American

public education itself is a remnant of colonialization and still harbor anger at the atrocities perpetrated against Native Americans under its authority. Those beliefs may persist on a generationally also. Certain subject areas may be viewed as manifestations of this colonialism, imperialism, and settler futurism. As a result, history courses may truanted more often by indigenous peoples as a form of protest or resistance. United States history to a Native American student could be seen as the acceptance and/or ignorance of the eradication of their culture (Brayboy & Maaka, 2015; Hickling-Hudson & Ahlquist, 2003; Tuck & Gaztambide-Fernández, 2013; Tuck & Yang, 2012).

Further, students of color may be truanting from classes that they perceive as discriminatory, or else lack acknowledgement, respect, and/or responsiveness to their home culture, identity, or heritage. Indigenous students and students of color may have trouble relating to teachers or curriculum that fail to be responsive to their culture. Students of color may turn away from classes that send implicit or explicit messages about the inherent value or worth of particular backgrounds, cultures, and identities over others (Pewewardy & Hammer, 2003; Vavrus, 2008). This may manifest in students truanting from those classes.

Studies have also indicated the reasons for disliking a class may be a result of the teacher's methods. When teachers adhere to a traditional rote lecture method, students are more likely to not attend that class. Conversely, when students are encouraged to interact with their teacher and peers throughout their lesson, students are less likely to skip class. Students that were given little say in the direction of their own curriculum were more likely to skip those classes. Teachers that provided student autonomy in choosing the direction of content in their classes had fewer students truant from them. These studies

give merit to the claim that many students skip class because they perceive those classroom environments as too controlling (Conolly & O'Keeffe, 2009; Dahl, 2016; Guare & Cooper, 2003; Shute & Cooper, 2014).

Another aspect of the school that seems to contribute to the decision to truant from class is academic performance or progress. Many students have reported the reason they decide to skip a class is that they are performing poorly in that class (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). As discussed earlier, many studies have indicated a correlation exists between academic performance and truancy (Baker et al., 2001; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). However, that correlation is not presented as a reason for truanting. The studies at hand directly surveyed students by asking to indicate why they truanted. The results of those studies indicate that many students make a decision to skip a particular class because they perceive it as too difficult or because they do not feel they can be successful. Students tend to skip class more often when they perceive that their teacher is not helping them academically in that class. These studies provide evidence to support the claim that many students skip particular classes because they do not perceive themselves as competent to be academically successful (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014).

Finally, many studies have provided evidence connecting the relationship between the teacher and the student as a potential cause for truanting behaviors (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). Both qualitative and quantitative studies that have ventured to investigate why students skip school or class have concluded a negative relationship with a teacher can be a primary reason a student

truants from that teacher's class (Attwood & Croll, 2006; Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014; Strand, 2014). Guare and Cooper (2003) posit that teachers that are respected and beloved by their students are less likely to have their class skipped. Students often cite their teachers not caring about them as a principal reason for deciding to skip a particular class (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). Beyond simple apathy from teachers, some studies have indicated many students reported they truanted due to more malicious behavior from teachers (Conolly & O'Keeffe, 2009; Shute & Cooper, 2014). One study reported over 25% of truants gave reasons such as "my teacher insults me", "my teacher embarrasses me", "my teacher is rude or sarcastic", or "my teacher is unfair" as a reason for truanting (Conolly & O'Keeffe, 2009). In their 2014 study, Jonathan Shute and Bruce Cooper reported that 41.5% of truanting African Americans expressed feelings of harassment due to their race as the primary reason they cut class. All of these investigations add to the growing body of empirical evidence demonstrating that negative student-teacher relationships contribute to the widespread truancy problem in our public schools.

Unexcused and Chronic Absenteeism

As mentioned in the introduction, truancy is a unique phenomenon set apart from other forms of unexcused or chronic absenteeism. Every truancy occurrence is an unexcused absence. All habitual truancy is chronic absenteeism. However, not all circumstances of those broader phenomenon would necessarily be truancy. Truancy is a narrower, more specifically defined type of unexcused or chronic absenteeism. Chronic absenteeism includes both excused and unexcused absences. Parents in many cases of

unexcused absence or chronic absenteeism may be fully aware their child is not present at school (Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019a; Gottfried & Hutt, 2019b). They may even have given permission for their child to be absent from class. This is the defining metric that sets truancy apart. When a student is truant, the parent thinks they are at school (Guare & Cooper, 2003; Shute & Cooper, 2014; Shute & Cooper, 2015). Because chronic absenteeism includes truancy, the extant literature on the broader phenomenon of chronic absenteeism may be salient in the discussion of the more focused phenomenon of truancy. It is important to note that while there may be evidence of relationships and associations involving chronic absenteeism, those associations may not necessarily be germane to the phenomenon of truancy.

Unlike truancy, there does seem to be a consensus on the standard definition of chronic absenteeism. Chronic absenteeism is defined as absence from 10% or more of the school year. This consensus is largely the result of public school districts adhering to state and federal accountability reporting mandates (Gottfried & Hutt, 2019; Lara, Noble, Pelika, & Coons, 2018). Most typical public school district calendars include approximately 180 instructional days. This results in an operationalized definition of chronic absenteeism as students that have missed 18 or more days of school in an academic year (Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019; Lara et al., 2018). In contrast, truancy is not a mandated accountability reporting category.

This definition of chronic absenteeism can often mask underlying absenteeism issues including class truancy. Many schools and families may not become concerned until the 10% threshold is achieved. However, research indicates that academic decline is incremental with every day of school missed. That academic decline persists for all

students regardless of socio-economic status, grade level, or academic performance level. It is worthy of mention that much of the body of knowledge regarding chronic absenteeism is centered on elementary and middle school age students (Balfanz & Byrnes, 2012; Balfanz & Byrnes, 2013; Chang, Russell-Tucker, Sullivan, 2016; Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019; Romero & Lee, 2007).

The negative academic effects of missing school are not isolated to any particular student subgroup. However, it seems that there are disproportionalities with regard to which subgroups are most likely to be chronically absent (Gottfried & Hutt, 2019). Students from low income families are up to four times more likely to be chronically absent than their more affluent counterparts (Chang et al., 2016). Students with special needs are more likely to be chronically absent. Chronic absenteeism varies by race, school type, grade, and academic performance (Balfanz & Byrnes, 2012; Balfanz & Byrnes, 2013; Chang et al., 2016; Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019; Romero & Lee, 2007). Often the reasons for chronic absenteeism are beyond the control of the student themselves or the school. Lack of reliable transportation or lack of access to affordable health care are common causes of chronic absenteeism for low income students in the early years of school. School leaders have little hope of influencing chronic absenteeism caused be these factors (Chang et al., 2016; Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019).

One national study put the national prevalence rate of chronic absenteeism at 14%. That represents over 6 million students nationwide. While chronic absenteeism is pervasive across all grade levels, chronic absenteeism tends to decline in the later elementary years. However, prevalence tends to increase again as students enter high

school (Lara et al., 2018). The reasons for being chronically absent also change as students get older. In the early years of school there are often reasons with a locus away from the school building. As students enter high school those reasons seem to generate from within the school. Bullying, harsh disciplinary policies, poor academic performance, and disenfranchisement from the school setting are common reasons (Lara et al., 2018; Gottfried & Hutt, 2019). As students become older, truancy may account for a larger portion of chronic absenteeism.

It is also quite evident from the extant research that chronic absenteeism in the early elementary ages can have detrimental effects for students later in their academic careers (Balfanz & Byrnes, 2012; Balfanz & Byrnes, 2013; Chang et al., 2016; Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019; Romero & Lee, 2007). Students that are chronically absent as early as kindergarten are more like to develop weaker reading skills, higher rates of retention, and poor attendance habits later in life (Chang et al., 2016).

There is evidence that some forms of intervention may have success in reducing chronic absenteeism (Sheldon & Epstein, 2004; Balfanz & Byrnes, 2013; Gottfried & Hutt, 2019). Because many of the reasons for chronic absenteeism fall outside the direct influence of the school, many of the most successful intervention practices leverage community and parent partnerships (Sheldon & Epstein, 2004; Balfanz & Byrnes, 2013; Gottfried & Hutt, 2019; Lara et al., 2018). Making sure that districts are communicating with parents is vital to reducing chronic absenteeism. How districts communicate is important. Low-cost texting services have shown success in communicating when students are absent. Those methods can also help in communicating to parents the

detrimental effects of chronic absenteeism. In older grades, parents are often unaware their child is absent so often. Communication can help to build awareness for parents (Chang et al., 2016). Community partnerships that provide mentorships for students have been effective in reducing chronic absenteeism as well (Balfanz & Byrnes, 2013; Chang et al., 2016; Sheldon & Epstein, 2004; Gottfried & Hutt, 2019; Lara et al., 2018). Building accountability is also an important part of intervention. There needs to be a system of accountability for absent students while fostering empathy for chronically absent students (Chang et al., 2016). Many of these strategies, especially those effective at the high school level, may provide meaningful inspiration for truancy intervention.

Theory of Truancy

All of the aforementioned literature regarding truancy is surprisingly devoid of an explicit theoretical framework. However, some latent theory does exist. As discussed previously, most of the existing body of truancy literature paints truancy as a delinquent behavior. These studies and government reports portray student truancy akin to shoplifting, smoking marijuana, and fighting (Baker et al., 2001; Conolly & O'Keeffe, 2009; DeKalb, 1999; Garry, 1996; Guare & Cooper, 2003; Shute & Cooper, 2014). These studies fail to formally express a theoretical framework of truancy. Rather, they present data and empirical evidence as to truancy's place in the pantheon of juvenile delinquency and criminality. These studies present trustworthy evidence as to the relationships between truancy and unwanted life outcomes (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). However, many these studies fail to explore the conceptual mechanisms of why truancy occurs. In the absence of a clear proposed or applied framework, posited relationships between truancy

and other unwanted life outcomes supplant a proper theory of truanting behavior. Combined with common public perceptions, truancy seems cemented in the psyche of educators and researchers as a delinquent behavior (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014).

While much of the existing theory of truancy is shaped by history, etymology, and common perception, some attempts at formally theorizing the "truancy as delinquency" perspective have been attempted (Hirschfield & Gaspar, 2011; Krueger, Markon, Patrick, Benning, & Kramer, 2007; Vaughn et al., 2013). Krueger and his colleagues (2007) have attempted to empirically construct a continuum of externalizing behaviors. Krueger (2007) claims that truancy is an externalizing behavior that fits on his continuum of psychopathological behaviors. He posits that truancy is a psychological disorder akin to other disorders associated with impulsivity (Krueger et al., 2007). Paul Hirschfield and Joseph Gaspar (2011) have attempted to theorize truancy as a complex and interrelated reciprocal relationship between school engagement and delinquency.

The "truancy as a delinquent behavior" approach may have limited explanatory power when the operationalization of truancy is examined more closely. Most studies of truancy, including studies leading to delinquent theory, operationalize truancy as missing school without knowledge or permission for entire days of school (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). When studies operationalize truancy in this manner, truancy is woefully under reported (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). When truancy is operationalized as such, prevalence rates hover around 11% nationally (Vaughn et al., 2013; Maynard et al.,

2017). In order to reconcile the truancy as delinquency theory, one would need to perceive of 11% of high school students as delinquents. This level of prevalence seems plausible on its face. When truancy is operationalized to include class truancy, students truanting from specific classes, prevalence rates jump to a dizzying 60-70%. It seems nearly impossible to reconcile 60-70% of high school adolescents as being delinquents (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

An alternative to the truancy as delinquency theory is centered on the decision-making process of the truant. Rita Guare and Bruce Cooper first conceptualized their theory of truancy in the book *Truancy Revisited* (2003). In it, they posit that truancy must be operationalized to include both school truancy (all day) and class truancy (select classes; Guare & Cooper, 2003). When truancy is defined by including class truancy, the magnitude of the issue becomes clear. Guare and Cooper (2003) claim that truancy is too pervasive a problem to be explained by the nature of delinquent behavior. Truancy is pervasive among all ethnicities and socioeconomic backgrounds (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014).

Guare and Cooper (2003) reject the theory that truancy is some type of personal deficiency. They claim that there is no psychological pathology at work. Rather, truancy is a rational decision made by discerning thinkers in response to the perceived value of classes and schoolwork. All students make rational decisions to attend class or not based on how relevant or engaging they find the lesson (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). Guare and Cooper (2003) analogize students as consumers of the product the school is producing. When students do not find value in the product, they decide not to consume it. When students find class boring or irrelevant,

they skip that class (Guare & Cooper, 2003). This decision-making process is universal to all students, not just malcontents and delinquents (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). Every student is either motivated or not to enter into and participate in a class. Is the class boring? Is the class relevant to my future? Does my teacher care about me? Can I be successful in this class? Do I have any say in this class? These are just a few of the questions students are likely to ask themselves at the threshold of their classroom door.

Chapter Three: Theoretical Framework

As mentioned previously, the body of truancy literature does engage in some theorizing as to the reasons for truancy (Baker et al., 2001; Conolly & O'Keeffe, 2009; DeKalb, 1999; Garry, 1996; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014; Vaughn et al., 2013). However, those theoretical perspectives are not firmly moored in any established theoretical framework. Much of the existing body of knowledge frames truancy as just one of a plethora of typical delinquent adolescent behaviors (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Vaughn et al., 2013). This approach is undergirded by an assumption that truanting students possess some personal deficiency that leaves them vulnerable to delinquency (Baker et al., 2001; DeKalb, 1999; Garry, 1996; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Vaughn et al., 2013). This perspective claims that something must be wrong with an individual to forfeit the universally accepted benefits of a free public education (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). This perspective begins to breakdown when truancy prevalence is scrutinized more closely. Several studies that have operationalized truancy as not only skipping entire days of school, but also individual classes, have reported prevalence rates as high as 70% (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014). In order for the delinquent perspective to hold true, one would have to accept the assumption that 70% of students are juvenile delinquents (Shute & Cooper, 2014, 2015).

Another approach towards truancy theorizing is known as the rational thought or rational decision-making perspective (Conolly & O'Keeffe, 2009; Guare & Cooper,

2003; Shute & Cooper, 2014, 2015). This perspective makes the claim that all students make a rational decision to enter a classroom or not based on their perceived value of the class (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). While this perspective seems to hold more merit over the delinquent perspective, a psychological mechanism for how or why these rational decisions are made has not been put forward. Perhaps an existing theoretical framework should be applied as a lens through which the concept of truancy can be examined. Self-Determination Theory and its underlying sub-theory of Basic Psychological Needs could provide that mechanism. The existing literature seems to contain two distinct theoretical perspectives concerning truancy. Some research paints truancy as a delinquent behavior, while other research frames it as a rational decision. The proper application of a theoretical framework could potentially reconcile this schism in the literature. Do students that perceive their classes as satisfying to their basic psychological needs truant less often? Do students that perceive their classes as frustrating to their basic psychological needs truant more often? This study attempts to remedy the theoretical framework gap in the existing truancy literature by answering these questions through the application of Self-Determination Theory and basic psychological need satisfaction or frustration.

Self-Determination Theory and Basic Psychological Needs

Self-Determination Theory (SDT) is a macro theory that attempts to explain motivation and human well-being as a function of one's interaction with the social world. Deci and Ryan (2000) postulate that human motivation manifests on a spectrum. On one end of the spectrum lies amotivation. Amotivation is defined as the absence of motivation in an individual. On the other end of the spectrum lies intrinsic motivation. Intrinsic

motivation is defined as conducting an act or behavior for the enjoyment of the act or behavior itself. The locus of control for an intrinsically motivated behavior lies within the individual. Between these extremes of the spectrum lay a continuum of extrinsic motivational orientations categorized by the degree of external or internal regulation involved. Extrinsic motivation is defined as conducting an act or behavior due to perceived forces (psychological or physical) from without the individual. The sliding continuum of external motivation is determined by the degree to which the locus of causality resides externally or internally. Extrinsic motivation is further classified by the type of regulation involved. The most controlling external motivation is termed external regulation. External regulation involves motivation to receive a reward or to avoid a punishment. External regulation is the least autonomous form of motivation. Next on the spectrum towards intrinsic motivation lies introjected regulation. This involves motivation to avoid feelings of guilt or to enhance one's sense of self-worth. This form of motivation is only slightly more internalized than external regulation and is considered in the literature to be perceived as controlling.

Identified regulation is a form of external motivation hallmarked by an individual's acceptance of a behavior as important. Finally, integrated regulation can be described as motivation due to an individual integrating the behavior into a person's own system of values and goals. Although the latter forms of extrinsic motivation begin to resemble intrinsic motivation, an individual is not performing a task for the enjoyment of the task itself. An individual can integrate a behavior into their own personal code of values and goals, and yet fail to enjoy the behavior itself (Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2000; Ryan & Deci, 2017).

The foundational assumption of SDT is that humans possess an innate disposition towards curiosity. Humans are active and growth oriented. They are driven to integrate themselves into the larger social structure in which they are embedded, moving towards a more cohesive sense of self. Through the lens of SDT, the assumption must be made that students too are inherently curious and seek to learn from their teachers or other school adults. Students possess a growth-oriented disposition and motivation to learn. They are proactive individuals seeking well-being (Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2000; Ryan & Deci, 2017).

Within the macro theory of SDT resides the sub-theory of Basic Psychological Needs. Basic psychological needs are what Ryan and Deci (2017) call the essential elements of human flourishing and well-being. The satisfaction of basic psychological needs is a necessary condition for human flourishing. Basic psychological needs are the nutrients that sustain an individual's innate tendency to be intrinsically motivated (Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2000; Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). Basic psychological needs are the fuel for the engine that is internalized motivation (Adams & Khojasteh, 2018).

SDT posits that individuals possess three basic psychological needs: autonomy, competence, and relatedness. Autonomy refers to an individual's need to perceive control over one's circumstances. Competency refers to an individual's perceived success at accomplishing a task. Relatedness refers to an individual's perceived feelings of belonging, community, and intimacy with others. The central assumption of Basic Psychological Needs Theory, is that in order to sustain an individual's natural disposition towards growth and well-being, one must have their basic psychological needs satisfied

(Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). Conversely, if an individual's basic psychological needs are thwarted or frustrated, ill-being or pathological functioning can result (Vansteenkiste & Ryan, 2013). Basic psychological needs as an inherent human trait has been found to persist across cultures (Ryan & Deci, 2017). The satisfaction of an individuals need for autonomy, competence, and relatedness have been empirically shown to be universally integral to maintain an individual's innate propensity towards psychological growth and intrinsic motivation (Deci & Ryan, 2000; Deci & Ryan, 2002; Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). In a meta-analysis of 99 separate empirical studies, basic psychological needs satisfaction was largely shown to be predictive of psychological growth (Van den Broeck, Ferris, Chang, & Rosen, 2016).

Basic Psychological Needs Theory posits that the social climate or environment plays a role in the perceived satisfaction, thwarting, or frustration of the basic psychological needs of an individual (Adams & Khojasteh, 2018; Vansteenkiste & Ryan, 2013). Social climates that support autonomy, competence, and relatedness will lead to well-being. Whereas, social climates that frustrate autonomy, competence, and relatedness may lead to ill-being or even psychological pathology (Adams & Khojasteh, 2018; Vansteenkiste & Ryan, 2013).

Basic Psychological Needs Theory postulates social environments that provide satisfaction of psychological needs help to move individuals across the spectrum from amotivation, through extrinsic motivation, and towards intrinsic motivation. Conversely, environments that thwart psychological need satisfaction move individuals towards amotivation, and as a consequence diminished personal capacity (Deci & Ryan, 2000;

Deci & Ryan, 2002; Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). Vansteenkiste (2013) argues that certain social environments go beyond simply thwarting need satisfaction, but rather can frustrate need satisfaction. If basic psychological needs are analogized to the nutrients needed to sustain plant life, need thwarting would be akin to withholding water and nutrients. Basic psychological need frustration would be more in line with applying saltwater to a plant. Need frustration not only slows an individual's journey toward well-being and intrinsic motivation, but also causes movement toward amotivation, compensatory behaviors, ill-being, and possible psychopathology. Need frustration is distinct from a lack of need satisfaction. Unsatisfied basic psychological needs may not necessarily manifest in malfunctioning as pervasively as basic psychological need frustration (Vansteenkiste & Ryan, 2013). Studies examining forms of parenting have shown that parenting perceived as frustrating to a child's psychological needs can lead to malfunctioning such as oppositional defiance (Soenens, Deci, & Vansteenkiste, 2017).

Shute and Cooper (2015) argue that 62% to 71% of students are truant at some point in their lives. From a holistic perspective, truancy seems to be a widespread and pervasive problem spanning the entire socio-economic spectrum. It occurs in white communities, black communities, English language learner communities, rich communities, and poor communities (Shute & Cooper, 2015). Over the past several decades, school districts and local governments have acknowledged the problem, and endeavored to develop truancy prevention programs to stem the onslaught of students skipping class (Vaughn et al., 2013). However, despite the good faith efforts of school districts and local governments to reduce levels of truancy, national prevalence rates of

truancy have remained fairly consistent since 2002 (Maynard et al., 2017; Vaughn et al., 2013).

Truancy prevention strategies across the nation have failed to influence prevalence rates any more than a fraction of a percentage point (Maynard et al., 2017; Vaughn et al., 2013). While much of the prevailing literature regarding truancy characterizes the phenomenon as a delinquent behavior, Shute and Cooper (2015) argue otherwise. Shute and Cooper (2015) argue that if 62-71% of students report having skipped class at least once in their life, then 62-71% of all students are juvenile delinquents. Most would disagree that nearly two thirds of all students are juvenile delinquents (including Shute and Cooper). Given that at least some students that would *not* be characterized as abhorrent or delinquent commit truant behavior, then perhaps some characteristic of the school has an influence on truancy itself. Perhaps the school bears some responsibility to motivate students to attend class.

The social environment of a school organization is important to a student's optimal functioning. The satisfaction of basic psychological needs is positively associated with indicators of wellness. Individuals that perceive of their basic psychological needs being met, report feeling better about themselves and about their lives (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2017). An individual's perceived satisfaction of basic psychological needs positively relates to higher levels of intrinsic motivation (Deci & Vansteenkiste, 2004). When students report a lack of intrinsic forms of motivation from their teachers both learning outcomes and student well-being are at risk (Ryan & Deci, 2017). Actions that are intrinsically motivated are the basis for an individual's learning and optimal development (Deci & Vansteenkiste, 2004).

Students that experience supportive school environments achieve higher levels of optimal functioning. When students perceive their social environment at school as supportive of their needs for autonomy, competence, and relatedness, their motivation becomes more internalized (Bartholomew et al., 2017). The satisfaction of autonomy, competence, and relatedness all work together to nurture a student's inner determination to excel academically (Adams & Khojasteh, 2018).

Students that experience frustrating school environments achieve lower levels of optimal functioning. Students that experience controlling school environments that frustrate their basic psychological needs for autonomy, competence, and relatedness become more externally motivated (Bartholomew et al., 2017). Students that experience need frustration from their school environment may begin to develop compensation behaviors or psychopathology (Bartholomew et al., 2017; Vansteenkiste & Ryan, 2013). There is some physiological evidence to support this. One 2011 study revealed that students that experienced controlling classroom environments displayed increased levels of cortisol. Cortisol is a hormone associated with a biological response to stress. Students that experienced classroom environments perceived as autonomous in nature displayed lower levels of cortisol (Reeve & Tsing, 2011).

The Basic Psychological Needs dimension of SDT may provide the explication for why so many students become amotivated to attend class. Students naturally lean towards a disposition of curiosity and learning (Bartholomew et al., 2017). In order to maintain this natural growth-oriented disposition, a student must perceive their school or classroom environment as supportive of their needs for autonomy, competence, and relatedness (Adams & Khojasteh, 2018). Student perceptions of basic psychological need

satisfaction leads to a more internalized motivation to excel (Adams & Khojasteh, 2018; Bartholomew et al., 2017). One outcome variable of student need satisfaction may be student truancy. Students that feel their psychological needs are satisfied may be more motivated to attend class consistently. Students that perceive of their classroom environments as frustrating to their psychological needs may develop maladaptive behaviors such as skipping class altogether.

Students that perceive their school environment as frustrating to their basic psychological needs may be pushed towards amotivation to attend class. When students perceive of their teachers as controlling, they begin to develop compensatory behaviors (Bartholomew et al., 2017). One of those compensations may be to avoid class altogether. Students that perceive of their school environment as frustrating to their basic psychological needs may have higher levels of truancy.

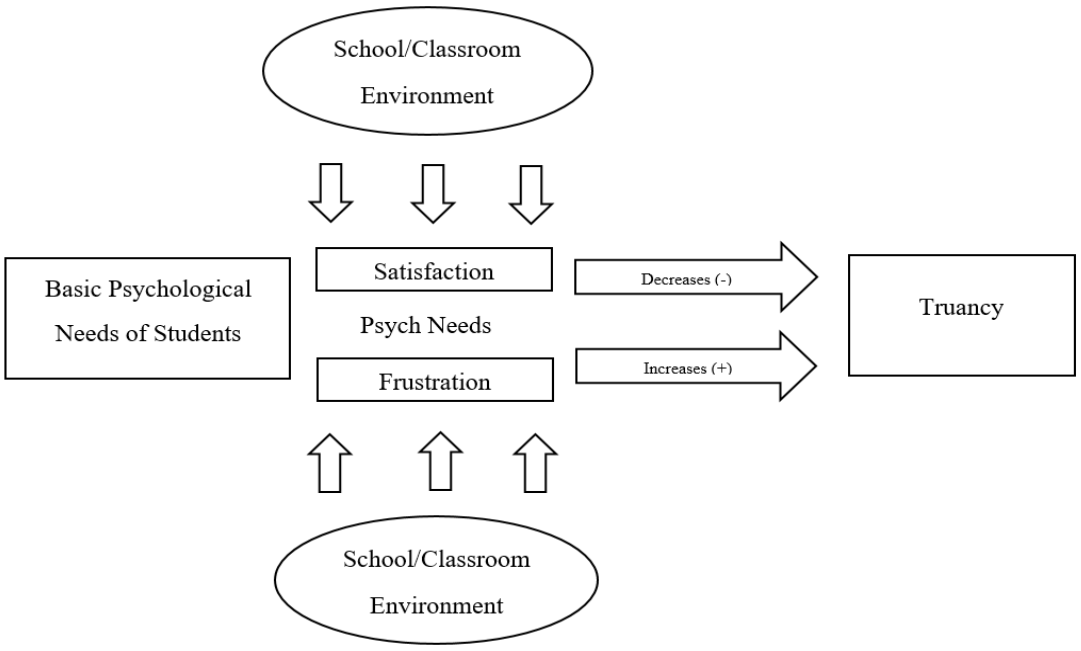

Figure 1. The Relationship between Basic Psychological Needs and Truancy

SDT and Basic Psychological Needs applied to the concept of truancy may reveal a set of questions that hold promise for a better understanding of the social and psychological factors that lead to truanting behaviors. Is there a relationship between how students perceive their school or classroom environments as satisfying or frustrating to their basic psychological needs and truancy? Do students that experience their school or classroom environments as satisfying to their basic psychological needs truant less often? Do students that experience their school or classroom environments as frustrating to their basic psychological needs truant more often? Does the satisfaction or frustration of psychological needs explain any variance in truancy levels? Ultimately, the goal of this study is to use the findings from this initial empirical investigation to guide future truancy research. In turn, any evidence gathered could be used to help shape policy and practice decisions regarding truancy intervention and prevention for the studied high school.

Chapter Four: Method

The extant literature on the subject of truancy has provided a complicated web of knowledge. Much of the information learned from the past century of research on the subject of skipping school has provided educators and policymakers with discordant and conflicting messages about truancy, its antecedents and consequences. Much of the confusion surrounding truancy, along with its causes and correlates, centers on the lack of consistent operationalization of truancy across studies. Competing outlooks on the nature of truancy further muddle how schools and districts should best proceed in preventing or intervening with truanting students. When truanting behavior is seen as a delinquent behavior, akin to shoplifting, smoking, and the like, schools perceive the need to respond with swift, punitive consequences. When truanting behaviors are seen as a response to students' surrounding school and classroom environments, perhaps schools should respond with a more empathetic and self-reflective approach.

Broadly speaking, this study examined how truancy may be related to how schools and classrooms satisfy or frustrate a student's basic psychological needs. In doing so, theory was used to postulate as to the relationships between these variables in the hopes of providing relevant, usable information to policymakers and the leadership team of one large urban high school in service of shaping truancy prevention and intervention practice. Truancy prevalence was examined at one large urban high school. The severity of the truancy problem at the participating school was assessed. Differences in truancy prevalence across student demographic, socioeconomic, and academic performance groups were investigated. Subject area truancy prevalence by ethnicity was also examined. The purpose of this study was to conduct an exploratory empirical

investigation into the relationship between basic psychological need satisfaction or frustration and overall student truancy at one large urban high school. This research study was guided by the following research questions and associated null hypotheses:

RQ1: What is the overall prevalence of truancy at the participating high school?

RQ2: Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject area?

$\boldsymbol{Null\ H_0 2}$: There is no statistical difference in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject areas.

RQ3: Are there differences in course subject area truancy prevalence by ethnicity?

$\boldsymbol{Null\ H_0 3}$**:** There is no statistical difference in truancy prevalence for any course subject area by ethnicity.

RQ4: Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups?

$\boldsymbol{Null\ H_0 4}$: There is no statistically significant relationship between student perceived basic psychological need satisfaction and student truancy.

RQ5: Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?

$\boldsymbol{Null\ H_0 5}$: There is no statistically significant relationship between student perceived basic psychological need frustration and student truancy.

Setting and Data Sources

The studied subject group was comprised of 10th, 11th, and 12th, graders attending a large comprehensive public high school in a metropolitan city in the Midwest. The subjects were a sample of the overall high school population. The subjects were chosen randomly to participate and should therefore be generalizable to the overall high school population of the school. The subject school serves approximately 3500 total students from grades 10 through 12. The subject school is the only high school in the district. The school district is unique in that it does not serve a particular municipality or county. While traditionally the district has been seen as an affluent suburban public school district, the district has undergone a staggering demographic transformation over the course of the past ten years. For the 16-17 school year, over 66% of the district's students participated in the federal free and reduced lunch program (District Annual Report, 2017). That number was 42% just nine years ago (District Annual Report, 2008). For school year 2016-2017, the district's ethnic makeup was comprised of approximately 33% Hispanic, 31% Caucasian, 14% African American, 9% Multi-Racial, 7% Asian, and 5% Native American. In school year 2000-2001, the district reported over 70% of its enrollment was comprised of Caucasian students. The subject school's parent district can be more accurately described as a large urban district, with all of the challenges therein. In spite of the monumental demographic shifts, the subject school has maintained a nearly 90% graduation rate over the last five academic years. However, that graduation rate has begun to trend downward. While graduation rates have remained somewhat consistent, truancy prevalence has seen an increase and student achievement outcomes have seen a decrease (District Annual Report, 2017).

The data used to answer research questions one, two, and three were sourced from the district's administrative database. The student management system utilized by the district warehouses a wide spectrum of data pertaining to individual students and their families. This administrative data provided demographic, socio-economic, academic, and attendance information for each of the participants. Each student in the district is asked how they identify themselves from a racial and ethnic perspective. The district keeps close track of free and reduced lunch applicants. Overall grades, grade point average, and an array of standardized test scores are documented for the entirety of a student's tenure in the district. Similar data were requested from previous districts when students enroll form out of district or state. The student management system also logs and tracks attendance data in real time. Each student's daily course schedule was also tracked. This information was used to generate data on attendance by hour and subject area basis. A typical class schedule at the subject school consists of 6 separate classes. As attendance is taken in each class, the teacher of record enters present, absent, or tardy for each student each hour. An attendance secretary then codes the absence at the end of the day as verified by a parent or truant. The software of the management system has the ability to quantify absences for particular hours of class or entire days. These features allowed me to quantify truancy into a discrete count variable representing the total number of classes truanted by an individual student.

The data used for research questions four and five were sourced from both the administrative data of the district and a survey instrument administered in the spring semester of the 2017/2018 school year. This survey instrument was chosen for its psychometrically-verified reputation for measuring student perceptions of psychological

need satisfaction and frustration (Assor, Kaplan, & Roth, 2002). The outcome variable of this research study was student truancy. As discussed in the review of literature, the operationalization of truancy has not been consistent across past studies of the subject. Differences in how truancy is operationalized can result in wild swings in reported prevalence rates (Sutphen et al., 2010). Some national prevalence rates have been reported around 11% while others argue they are closer to 70% (Guare & Cooper, 2003; Maynard et al., 2017; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014; Vaughn et al., 2013). These swings can partially be explained by how truancy is defined. When truancy is operationalized as absence for entire days of school without knowledge or consent from parents, prevalence hovers around 11% (Vaughn et al., 2013; Maynard et al., 2017). When truancy operationalization includes both absence from entire days of school and individual classes after a student has arrived to the school building, prevalence balloons to 70% (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014). For the purposes this research study, truancy was operationalized as any absence to any individual class without the consent or knowledge of a parent or guardian. This definition included entire days and individual classes. For any desired period of time the district's student management system can quantify the total number of individual classes truanted for any individual student. That data can also be translated to entire days missed or disaggregated to each of the six hours of a student's schedule. Operationalizing truancy to include all incidents of truancy painted a more accurate picture of truancy prevalence.

Measures

As mentioned previously, student truancy was measured through the utilization of the participating district's student management system. Teachers recorded every student of every hour of every school day as present or absent. Those individual absences were then coded by support personnel as verified by a parent or truant. Any absence to any class that had not been verified through a parent was converted to a truancy code at the conclusion of every school day. This attendance data was stored and housed for future use and analysis.

The independent variable for research question two was the assigned or identified category of the student with respect to their demographic group, socio-economic group, and academic performance. The dependent or outcome variable for research question two was total student class truancy. Similarly the independent variables for research question three were course subject area and ethnicity and the dependent variable was total class truancy.

The independent variables for research questions four and five were student perceptions of basic psychological need satisfaction and frustration respectively. In order to operationalize those variables, a survey instrument was utilized. The participating school district collaborated with a large public research institution in order to administer this climate survey to students, parents, and employees of the district. This climate survey is administered every spring. The survey consisted of 79 Likert scale or open response items designed to measure myriad variables. Embedded within the survey were several items specifically designed to measure student basic psychological need satisfaction and frustration (Appendix A). Each of these items consisted of a Likert response from

strongly disagree (1) to strongly agree (4). All related items were then summed and averaged to produce a composite mean. These Likert response composite scores were quantified as an interval/ratio variable for both basic psychological need satisfaction and frustration.

In the spring of 2018, approximately 600 students from 10th, 11th, and 12th grades were randomly assigned to one of two survey forms. Three hundred and eleven students were assigned to survey A, and 298 students were assigned to survey B. Student participants were pulled from their regular schedule into a computer lab to complete the internet-based survey. The survey was designed to measure a wide spectrum of school health indicators. Of the 79 survey items, 26 were specifically designed to measure perceived basic psychological need satisfaction and frustration. All measures were generated and rigorously examined against extant literature. All measures had strong evidence of validity and reliability (Assor, Kaplan, & Roth, 2002). Constructs measuring basic psychological need satisfaction appeared within survey A, and the construct designed to measure basic psychological frustration appeared within survey B. Analysis concerning basic psychological need satisfaction utilized data set A. Analysis concerning basic psychological need frustration utilized data set B. Regression analysis treated the data sets separately while descriptive analysis combined all variables except for those concerning basic psychological need satisfaction or frustration. Conclusions reached from either data set should still be representative of overall school population.

After closer examination of the survey participants, both data sets were noticed to have included students enrolled in a selective alternative school program. These students attended class off-site at an alternative location and participated in a modified block

schedule. These students participate in a single class for four weeks continuously. Those students then rotate class every month. Students at the traditional high school rotate through 6 hour-long classes every day. It was inappropriate to include alternative school participants in the overall analysis of the participating high school, given the stark structural differences in their typical school schedule. Twenty four of the 311 participants of survey A attended the alternative school and were removed from the data set. Twenty one of the 298 participants of survey B attended the alternative school and were removed from the data set. Two hundred and eighty seven net students were sampled for survey A. Two hundred and seventy seven net students were sampled for survey B. A total of 564 students were sampled.

The measure of autonomy support captured the degree to which students perceived phenomenon such as teachers allowing criticism, teachers encouraging independent thinking, teachers fostering relevance, and teachers providing choice (Appendix A). Students were asked to respond to statements such as "Teachers allow students to decide things for themselves." Seven items comprised the autonomy support measures. These items were adapted from the Autonomy-Enhancement Scale (Assor, Kaplan, & Roth, 2002).

The measure of competence support captured the degree to which students perceived their teachers' efforts to encourage increasing levels of academic performance (Appendix A). Students also reported on how they perceived their teachers' expectations of effort and participation. Seven items comprised the competence support measures. Items were adapted from the Consortium on Chicago School Research (available at http://ccsr.uchicago.edu/content/index.php).

The measure of school relational support captured student perceptions of quality relationships with their teachers or other adults at the school (Appendix A). Students were asked to respond to statements such as "There is a teacher or adult at school that really cares about me."

The measure of psychological need frustration captured student perceptions of autonomy, competence, and relatedness (Appendix A). Psychological need frustration is the opposite of need satisfaction. Students were asked the degree to which they feel controlled in their behavior and daily tasks, incapable in their academic abilities, and socially disconnected from people they care about. Students were asked to respond to statements such as "I feel forced to do things I would not choose to do." These items were adapted from the Basic Need Satisfaction and Frustration Scale (Chen et al., 2015).

Data Reduction and Analysis

In order to proceed with data analysis, two separate data sources were merged. Administrative data concerning several student level variables were exported to Microsoft Excel then inserted as new variables of the climate survey data sets. Variables generated from administrative data were created for ethnicity, socio-economic status (free and reduced lunch participation), gender, home language, class schedule by period, total sections of class truanted, truancy by period, total days truanted, and truancy by subject area. Several dummy variables were also created in preparation for regression analysis.

RQ1: *What is the prevalence of truancy at the participating school?*

In order to answer research question one "What is the prevalence of truancy at the participating school?" descriptive statistics sourced from administrative data were utilized. Using administrative data and the analysis program SPSS, a portrait of the state

of the truancy problem at the participating school was generated. Visualizations were generated to provide evidence to the prevalence of truancy across student demographic, socioeconomic, and academic performance groups. Class truancy prevalence by hour and subject area were also analyzed. Overall truancy prevalence at the participating school was determined by calculating the percentage of sampled students that had been recorded as truant for at least one section of class throughout the semester during which the climate survey was administered. The same strategy was used to determine full day truancy prevalence. Total sections truanted and the average number of truancies per student were calculated for every hour of the day and every course subject area. Given the climate survey was administered in the Spring of 2018, the time frame parameter for truancy count was the first day of the Spring 2018 semester to the last day of the semester. Full day truancy prevalence was also determined similarly as a comparison. Mean numbers of class truancies were calculated for each ethnic category of student, free and reduced lunch participants, by grade, by gender, by academic performance group, by hour, and by subject area. Descriptive statistics such as these should provide school leaders with an accurate picture of the prevalence of truanting behaviors at their school.

RQ2: *Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject area?*

To answer research question two, an analysis of the differences in truancy rates across student groups was utilized. While apparent differences in prevalence and occurrence may exist, research question two aimed to determine if those differences were statistically significant. In order to determine if there were significant differences in how often these different student groups truanted, an analysis of their means was conducted

using SPSS. ANOVA analysis is typically the appropriate statistical tool for analyzing differences between group means. However, the output variable of total class truancy was not distributed normally. To address this assumption violation a Kruskal-Wallis test was utilized to determine if any apparent differences in mean class truancy across student subgroups were statistically significant. Total class truancy means were compared between subgroups of ethnicity, socio-economic status (free and reduced lunch participation), English language learner participation, letter grade average, gender, and high school class grade. A Kruskal-Wallis test and the associated post hoc pairwise comparison was also employed to determine if any significant differences in mean class truancy occurrence existed between class subject areas for every hour of the day. The initial Kruskal-Wallis was used to determine if there were any differences in mean for any subject area for each hour. However, the Kruskal-Wallis test did not indicate which subject areas are different from each other. A post-hoc pairwise comparison analysis was used to determine which subject areas exhibited differences in average truancy occurrence.

Additionally, the regression model utilized to answer research questions four and five incorporated these same student subgroups into the model as controls. The regression output provided evidence to the statistical significance between the means of each student category included in the model. The model incorporated gender, ethnicity, socio-economic status (free and reduced lunch participation), grade, and academic performance. Academic performance was written into the model as a continuous variable operationalized by weighted GPA. Academic performance was therefore analyzed based on its correlation to class truancy. The null hypothesis for research question two was

there is no statistical difference in the means of any student category. For academic performance, the null hypothesis was there is no relationship between academic performance and overall student truancy.

RQ3: *Are there differences in course subject area truancy prevalence by ethnicity?*

As an extension of research questions one and two, a course analysis was conducted to determine if any patterns existed when examining subject area truancy occurrence by ethnicity. The purpose of this extension was to determine if there were patterns to the truancy of certain subject/classes that were associated with particular racial/ethnic groups. This analysis focused on students with the most egregious of truancy behaviors. The full sample of 564 students was narrowed to students that had truanted from at least 25 classes throughout the semester. This smaller sample consisted of 143 students. A new variable was created indicating the ratio between truancy occurrences for an hour verses their total truancy occurrences. Students were then flagged if their ratio of class truancy by hour to total class truancy was 30% or higher for any given class. 30% represented approximately one standard deviation from the mean hour truancy to total truancy ratio for the sample. Frequency tables were generated using SPSS. The results were then analyzed to determine if any subject areas were truanted disproportionally by ethnicity.

RQ4 and RQ5: *Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups? Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?*

The output variable for research questions four and five was total class truancy. This was a count variable that could not be treated like a continuous variable. Count variables are discrete and typically do not follow a normal distribution. As such, the assumption of normality was violated. The histograms for total class truancy for both data sets are presented in Figures 2 and 3.

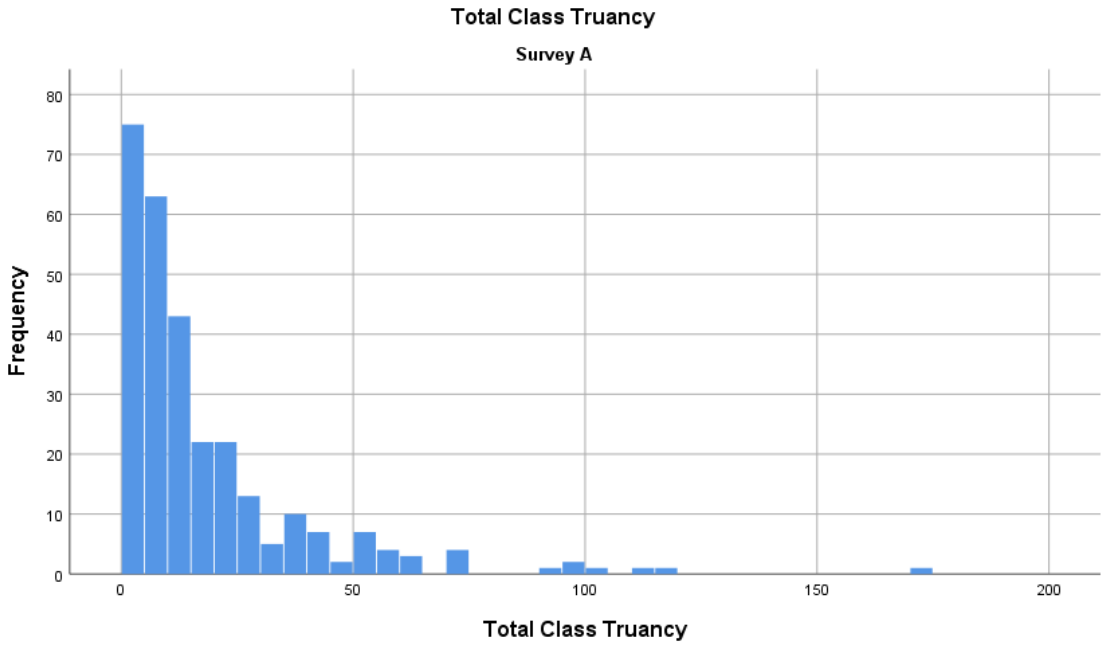

Figure 2. Histogram depicting the distribution of total class truancy for Survey A

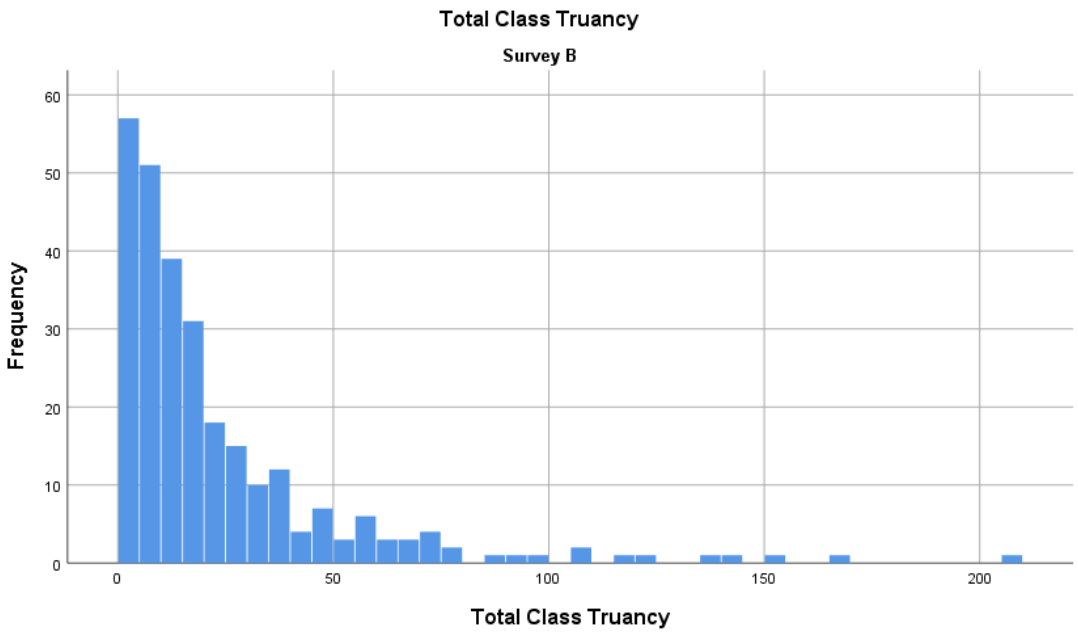

Figure 3. Histogram depicting the distribution of total class truancy for Survey B.

These histograms present a common distribution pattern associated with occurrence count variables. Because of the violation of the normality assumption, Pearson's correlation and linear regression analysis were not appropriate. The non-parametric correlation test is the Spearman's rho correlation. A Spearman's rho correlation analysis was used as an initial determination of association between class truancy, psychological need satisfaction, and psychological need frustration. One of the most common methods for analyzing data with a count outcome variable is a Poisson regression model. The Poisson distribution is a statistical probability pattern associated with counts of occurrences over a fixed amount of time. A Poisson regression uses the Poisson distribution instead of the normal distribution like linear regression (Cameron & Trivedi, 2013; Coxe, West, & Aiken, 2009; Warner, 2013).

Before moving forward with building a Poisson model, the assumptions of a Poisson regression had to be examined. One of the unique assumptions of a Poisson regression is that the mean of the output variable should equal the variance. The combined output variable of total class truancy for both surveys had a mean of 20.19 and a variance of 670.57. This wide difference indicated that the output data was over dispersed. When the output variable indicates overdispersal, a Poisson regression is no longer an appropriate statistical analysis method (Cameron & Trivedi, 2013; Coxe, West, & Aiken, 2009; Warner, 2013).

When outcome count variables exhibit overdispersal, one the most common methods of statistical analysis is a variant of a Poisson regression called a negative binomial regression analysis (Cameron & Trivedi, 2013; Coxe, West, & Aiken, 2009; Warner, 2013). Research questions four and five employed negative binomial regression analyses in order to determine if student perceptions of basic psychological need satisfaction and frustration were associated with total class truancy. Our independent variables for research question four were the composite Likert scores for autonomy, competence, and relatedness satisfaction. Our independent variable for research question five was the composite Likert score for basic psychological need frustration. Our dependent or outcome variable for both questions was total class truancy.

Written into the negative binomial regression models for both questions were a robust set of control variables. Based on the extant literature and an examination of collinearity, several variables were included in the negative binomial model equations. The basic model equations for both research questions are displayed below.

RQ4 model: $\log(Total\ Class\ Truancy) = \beta_0 + \beta_1(FR\ lunch) + \beta_2(Asian) + \beta_3(Hispanic) + \beta_4(Black) + \beta_5(Native\ American) + \beta_6(female) + \beta_7(Grade\ 10) + \beta_8(Grade\ 11) + \beta_9(GPA) + \beta_{10}(Competence) + \beta_{11}(Autonomy) + \beta_{12}(Relatedness) + \varepsilon_i$

RQ5 model: $\log(Total\ Class\ Truancy) = \beta_0 + \beta_1(FR\ lunch) + \beta_2(Asian) + \beta_3(Hispanic) + \beta_4(Black) + \beta_5(Native\ American) + \beta_6(female) + \beta_7(Grade\ 10) + \beta_8(Grade\ 11) + \beta_9(GPA) + \beta_{10}(Frustration) + \varepsilon_i$

Truancy counts for certain hours of the school day were initially thought to be wise control variables. For example, first hour truancy counts may be inflated due to arriving late to school. However, all individual hour truancy counts were found to be highly collinear with total class truancy and were removed from the regression models. The same was true for English language learners. ELL participation was found to be highly collinear with ethnicity and was removed from the model.

Methodological Limitations

There were several limitations to the methodological design of the study. The study only sampled students from a single high school site. This has implications for generalizability. Any evidence gathered will only be generalizable to the overall school site. No explicit generalizations should be made to other sites or districts. However, some inferences could be made to other high schools with similar characteristics.

All survey-based studies are presented with some common limitations. Reference bias being one of them. Participants were not presented with any common scale reference

for their responses (Warner, 2013). Even when thinking of a similar circumstance, one student may strongly agree with a statement and another may disagree. Reference bias may result in some error in how the study measured student perceptions of psychological need satisfaction or frustration.

Table 1

Overview of research design and analytical approach.

	Research Question	**Analytical Approach**	**Data Sources**
Research Question 1	What is the overall prevalence of truancy at the participating high school?	Descriptive Statistics	Administrative Data
Research Question 2	Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, and academic performance groups?	Kruskal-Wallis (Non-Parametric ANOVA)	Administrative Data
Research Question 3	Are there differences in course subject area truancy prevalence by ethnicity?	Descriptive Statistics	Administrative Data
Research Question 4	Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups?	Spearman's Rho Correlation Negative Binomial Regression	Climate Survey Responses Administrative Data
Research Question 5	Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?	Spearman's Rho Correlation Negative Binomial Regression	Climate Survey Responses Administrative Data

Another limitation of survey-based studies is social desirability bias. Respondents may answer the survey in a way they perceive their superiors want them to (Warner, 2013). In this study, students may have answered in a way they thought their teachers or principals wanted them to. This may present an inaccurate portrayal of their true perceptions of their school.

The nature of truancy itself presents a very important limitation in the way of selection bias. When studying truancy, it is possible the students that engage in truanting behaviors most often are not represented in the sample. The survey instrument was administered during the regular school day. Several students may have been truant when they should have been participating. This phenomenon would underrepresent the prevalence of truancy at the participating school.

While the negative binomial regression model intended to take into account a robust set of controls, there were inevitably unobserved confounders to the results. The survey instrument utilized may not have accounted for several factors that may have led to variation in the outcome variable. Administrative truancy policy and practice were not necessarily accounted for. A student may have truanted more often because the assistant principal tasked with holding them accountable may not have been diligent in calling their parents to notify them. The survey instrument did not measure parent attitudes towards their value of education. Some students may have skipped school because their parents just did not care one way or the other. These, or other, unobserved confounders may have introduced some degree of bias in the results of the negative binomial regression analyses.

Lastly, the correlational nature of the methodology raises questions in the way of co-directionality of the studied relationship. While how students perceive of the satisfaction of their psychological needs may account for variation in truancy levels, the opposite may also be true. Students that engaged in truanting behaviors may have developed perceptions of their psychological needs being frustrated by their school or teachers. The negative binomial regression analyses were only be able to provide evidence of the existence of an association. No causal claims can be made.

Methodological Strengths/Contributions

While there were several limitations to the methodological design of the study, several strengths are worthy of mention as well. The application of Self-Determination Theory leads to a novel methodological viewpoint of truancy-specifically the component theory of Basic Psychological Needs. Using how students perceive of their teachers and school as satisfying to their basic psychological needs as an independent variable could help provide evidence to why students engage in truanting behaviors. This evidence is not well represented in the literature. Few, if any, studies have attempted to examine the relationship between basic psychological need satisfaction and truancy.

How truancy was operationalized was an important aspect of the methodological design. Much of the truancy literature only takes into account entire days of school skipped. When a more fine-grained approach to truancy operationalization is utilized, a more accurate representation of truancy prevalence is captured in the sampled population (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). This study took into account not only entire days of school skipped, but also individual sections of class skipped after the student had arrived to school. Many previous studies

have only utilized student survey responses to operationalize truancy. Very few studies have utilized actual administrative data to operationalize truancy.

While the study of a single school site may pose limitations to generalizability, it provides a strength with regard to identifying the contextual features of the school. Studying a single school site allows researchers to understand the context and setting of the study in ways not possible in large investigations at the national level. The ability to unpack the contextual features allowed for the identification of possible unobserved confounders in ways that would have been much more difficult in a multi-site study.

Chapter Five: Results

RQ1: *What is the overall prevalence of truancy at the participating high school?*

As mentioned previously, a student was coded as truant when the student was marked absent from class by their teacher and no parent or guardian had contacted the school to give reason or permission. The prevalence rates of truancy at the participating school are reported in Figures 4 and 5. Figure 4 indicates that 92.20% of all sampled students had truanted from at least one class during the spring 2018 semester. Figure 5 indicates that 73.23% of all sampled students had truanted an entire day of school at least once during the spring 2018 semester. The prevalence rates for student subgroups are presented in Table 2. Table 2 indicates that class truancy was prevalent within and across all student sub-groups. No single prevalence rate for any student sub-group was lower than 82.43% (students earning and average GPA of 4.0 or higher, Table 2). The highest class truancy prevalence rate belonged to students earning an average GPA of less than 2.0. 97.14% of D average students truanted from at least one class throughout the spring 2018 semester (Table 2). Prevalence of class truancy was highest among Hispanic students (95.02%, Table 2). Students participating in the free and reduced lunch program presented higher class truancy prevalence than students that pay full price for lunch. Students earning less than a D average GPA exhibited the highest class truancy prevalence among academic performance groups. Students that indicated a language other than English was spoken most at home had higher truancy prevalence than students reporting English was spoken most often. Seniors seemed to exhibit the highest class truancy rates among school grade (93.13%, Table 2). Finally, male students had higher prevalence rates than females. Included in the results presented in Table 2 are prevalence

levels for students truanting from at least 10 classes and 25 classes respectively. 56.38% of all sampled students truanted from 10 or more classes throughout the spring semester, while 25.35% of all sampled students truanted from over 25 classes. In addition to the prevalence rates for each student sub-group, class truancy descriptive statistics were generated for each student subgroup. Table 3 indicates that there were apparent differences in the average number of class truancy occurrences per student between subgroups. However, the statistical analysis utilized in answering research question two must be considered prior to determining any statistical significance of those differences.

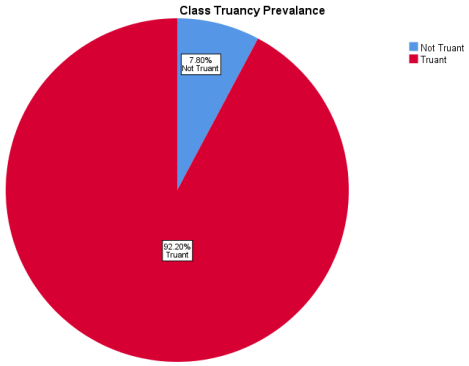

Figure 4. The percentage of students that have truanted from at least one section of class during the spring semester.

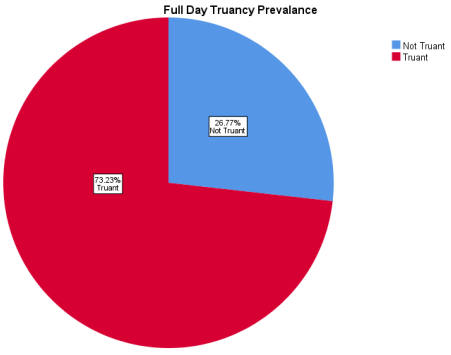

Figure 5. The percentage of students that have truanted from at least one entire day of school during the spring semester.

Table 2

The percentage of students that have truanted from at least one section of class during the spring semester organized by student subgroup category.

	Class Truancy Prevalence	10+ Prevalence	25+ Prevalence	*n (564 total)*	% of Sample
Total Sample	92.20%	56.38%	25.35%	564	100
Student Sub Group					
Ethnicity					
White	86.69%	45.70%	15.90%	138	24.47
Hispanic	95.02%	58.20%	27.90%	201	35.64
Black	94.62%	62.30%	33.10%	130	23.05
Native American	90.91%	69.70%	28.80%	66	11.7
Asian	89.66%	37.90%	10.30%	29	5.14
Socio-Economic Status					
Free-Reduced	94.94%	61.20%	30.40%	415	73.58
Full Pay	84.56%	43.00%	11.40%	149	26.42
Letter Grade Avg					
A	82.43%	27.00%	5.40%	74	13.12
B	91.00%	50.70%	16.60%	211	37.41
C	95.22%	65.10%	32.50%	209	37.06
D	97.14%	78.60%	51.40%	70	12.41
English Language Learner					
Native English	91.22%	55.80%	23.80%	353	62.59
Other	93.84%	57.30%	28.00%	211	37.41
High School Grade					
Sophomore	91.87%	53.40%	24.40%	283	50.18
Junior	92.00%	62.00%	28.70%	150	26.6
Senior	93.13%	56.50%	23.70%	131	23.23
Gender					
Male	93.85%	56.90%	26.90%	260	46.1
Female	90.79%	55.90%	24.00%	304	53.9

Table 3

Descriptive statistics of overall class truancy organized by student sub-group.

Student Subgroup	Mean	N	Std. Deviation	Minimum	Maximum
Ethnicity					
White	14.88	138	21.423	0	141
Hispanic	23.07	201	30.144	0	206
Black	21.95	130	23.153	0	137
Native American	23.42	66	28.242	0	166
Asian	10.28	29	9.323	0	34
Socio-Economic Status					
Free and Reduced	23.05	415	27.801	0	206
Full Pay	12.25	149	17.393	0	141
Letter Grade					
A	7.11	74	8.467	0	38
B	14.48	211	17.270	0	141
C	22.70	209	25.556	0	206
D	43.74	70	40.671	0	166
English Language Learner					
Native English	18.76	353	23.368	0	166
Other	22.59	211	29.551	0	206
High School Grade Level					
Sophomore	19.76	283	24.705	0	152
Junior	23.87	150	33.281	0	206
Senior	16.93	131	16.852	0	91
Gender					
Male	21.04	260	26.371	0	206
Female	19.47	304	25.503	0	172

The descriptive statistics presented in Table 4 indicate that 1st hour was truanted more often than any other hour of the school day. 5th and 6th hours were also truanted more often. The average number of truancy occurrences per student followed the same pattern. The average number of truancy occurrences to first hour was 4.62 (Table 4). Fifth and sixth hours respectively were 3.35 and 3.46 (Table 4). The fewest number of truancy occurrences were to 2nd and 3rd hours (1561 and 1620, Table 4). Those hours also had the lowest average number of truancy occurrences per student (2.77 and 2.86, Table 4).

Table 4

Descriptive statistics for class truancy organized by hour of the school day.

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
1st Hour	563	0	65	2599	4.62	6.768	45.803
2nd Hour	563	0	31	1561	2.77	3.958	15.664
3rd Hour	564	0	37	1620	2.87	4.526	20.488
4th Hour	564	0	32	1782	3.16	4.490	20.163
5th Hour	564	0	29	1889	3.35	4.404	19.393
6th Hour	563	0	48	1946	3.46	5.118	26.192

Table 5 presents the descriptive statistics for truancy occurrence by subject area. For every course subject area, the number of students that truanted a section, the average number of truancy occurrences per student, and the total number of sections truanted are reported for each hour and in total. When examining truancy occurrence by subject area, academic electives seem to have been truanted most often from a total number of truancy occurrences perspective (3930 total sections truanted, Table 5). However, science courses seem to have had the highest average number of truancy occurrences per student (an average of 3.88 truancy occurrences, Table 5). Activity electives exhibited both the lowest total number of sections truanted (661) and the lowest average number of truancy occurrences per student (2.78, Table 5). Tables 4 and 5 represent apparent differences in mean. The analysis methods of research question two will help to determine of these differences are statistically significant.

Table 5

Descriptive statistics of class truancy occurrence organized by subject area and hour.

		1st Hour	2nd Hour	3rd Hour	4th Hour	5th Hour	6th Hour	Total
Math	N (Students)	80	101	88	85	78	65	497
	Mean	4.85	2.85	3.02	3.71	3.29	2.25	3.33
	Sum	388	288	266	315	257	146	1660
English	N (Students)	103	71	78	104	109	108	573
	Mean	4.86	2.75	2.42	2.73	3.51	2.30	3.10
	Sum	501	195	189	284	383	248	1800
Science	N (Students)	86	73	72	118	76	66	491
	Mean	5.97	3.62	2.01	3.53	2.67	5.48	3.88
	Sum	513	264	145	416	203	362	1903
Social Studies	N (Students)	64	95	95	73	72	43	442
	Mean	4.53	1.93	3.69	2.82	3.93	3.02	3.32
	Sum	290	183	351	206	283	130	1443
Academic Elective	N (Students)	184	189	210	171	202	199	1155
	Mean	4.29	2.87	3.00	3.05	3.38	3.83	3.40
	Sum	790	543	630	521	683	763	3930
Activity Elective	N (Students)	46	34	21	13	27	82	223
	Mean	2.54	2.59	1.86	3.08	2.96	3.62	2.78
	Sum	117	88	39	40	80	297	661

RQ2: *Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject area?*

Research question one attempted to paint a portrait of truanting behaviors at the participating high school. Research question one showed there are apparent differences in the mean class truancy rates of student subgroups and for course subject areas. Research

question two attempted to determine if the differences in truanting behaviors between student subgroups and subject areas were statistically significant.

Table 6 presents the results of the initial Kruskal-Wallis analysis of variance. The Kruskal-Wallis test is the non-parametric version of One-Way ANOVA (analysis of variance). This method was used to determine if the total class truancy mean of any student subgroup within a category was significantly different from another.

Table 6

Results of Kruskal-Wallis analysis of variance for each student subgroup category.

	n	**Test Statistic**	**df**	**Sig.**
Student Subgroup				
Ethnicity	564	24.318	4	.000***
Socio-Economic Status	564	29.667	1	.000***
Letter Grade	564	88.001	3	.000***
English Language Learner	564	1.404	1	0.236
High School Class	564	0.946	2	0.623
Gender	564	1.012	1	0.314
Hour				
1st	563	18.635	5	0.002**
2nd	563	6.865	5	0.231
3rd	564	6.95	5	0.224
4th	564	6.313	5	0.277
5th	564	2.571	5	0.766
6th	563	8.353	5	0.138

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

The results of the initial Kruskal-Wallis test indicate that there were highly significant differences in the means within the subgroups of ethnicity ($z = 24.318$, $p = .000$), socio-economic status ($z = 29.667$, $p = .000$), academic performance by letter grade average (z-test=88.001, $p = .000$), and first hour subject area ($z = 18.635$, $p = .002$). However, the initial Kruskal-Wallis test only determined if there were significant differences within an overall subgroup category. The test did not indicate which specific subgroup pairings

within a category were significantly different. A pairwise post-hoc analysis was performed to determine which of the pairings within the student subgroup category exhibited statistically significant differences. Those results are displayed in Table 7.

The results of the mean comparisons using the Kruskal-Wallis test and the post hoc pairwise comparisons indicate that there were significant differences in the average number of class truancy occurrences within some student subgroup categories. The average number of class truancy occurrences differed significantly between several ethnic subgroups. Based on the adjusted *p*-values reported in Table 7, Hispanic students, black students, and Native American students all truanted at higher levels as compared to their Caucasian counterparts. All letter grade GPA subgroups differed significantly from one another. All average letter grade GPA subgroups truanted at higher levels than any higher performing subgroup (Table 7). According to the results of the Kruskal-Wallis test, there were no significant differences between students that indicated a language other than English was spoken most at home and students reporting English was spoken most often (Table 6). There were no significant differences across high school grade level (Table 6). There were no significant differences between males and females (Table 6).

The only statistically significant differences between average numbers of class truancy occurrences by subject area occurred for 1st hour classes (Table 6). The post-hoc pairwise analysis indicated there were statistically significant differences in mean truancy occurrence between activity elective courses and academic electives, social studies courses, science courses, and English courses (Table 7). No other mean differences between subject areas were significant for any other hour of the school day (Table 7). The null hypothesis for research question two was

Table 7

Results of Kruskal-Wallis post hoc pairwise comparisons for significant subgroup categories.

Subgroup Pairings	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Ethnicity					
Asian-White	-14.418	33.266	-0.433	0.665	1.000
Asian-Hispanic	-75.641	32.348	-2.338	0.019*	0.194
Asian-Black	-90.313	33.443	-2.700	0.007**	0.069
Asian-Native American	-96.727	36.280	-2.666	0.008**	0.077
White-Hispanic	61.223	18.003	3.401	0.001**	0.007**
White-Black	75.895	19.904	3.813	0.000***	0.001**
White-Native American	82.309	24.372	3.377	0.001**	0.007**
Hispanic-Black	-14.672	18.328	-0.801	0.423	1.000
Hispanic-Native American	-21.086	23.103	-0.913	0.361	1.000
Black-Native American	-6.414	24.613	-0.261	0.794	1.000
Letter Grade					
A-B	88.618	22.001	4.028	0.000***	0.000***
A-C	151.569	22.029	6.881	0.000***	0.000***
A-D	230.483	27.152	8.489	0.000***	0.000***
B-C	62.952	15.892	3.961	0.000***	0.000***
B-D	141.865	22.462	6.316	0.000***	0.000***
C-D	78.914	22.489	3.509	0.000***	0.003**
Course Subject Area					
Activity-Academic Elective	79.745	26.542	3.004	0.003	0.040*
Activity Elective-Math	83.764	29.793	2.812	0.005	0.074
Activity-Social Studies	106.239	31.123	3.413	0.001	0.010*
Activity Elective-Science	108.925	29.411	3.703	0.000	0.003**
Activity Elective-English	111.009	28.553	3.888	0.000	0.002**
Academic Elective-Math	4.020	21.563	0.186	0.852	1.000
Academic Elec-Soc Studies	26.495	23.366	1.134	0.257	1.000
Academic Elective-Science	29.181	21.032	1.387	0.165	1.000
Academic Elective-English	31.264	19.814	1.578	0.115	1.000
Math-Social Studies	-22.475	27.003	-0.832	0.405	1.000
Math-Science	-25.161	25.010	-1.006	0.314	1.000
Math-English	-27.244	23.995	-1.135	0.256	1.000
Social Studies-Science	2.686	26.581	0.101	0.920	1.000
Social Studies-English	4.769	25.628	0.186	0.852	1.000
Science-English	2.083	23.519	0.089	0.929	1.000

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

Note. Only statistically significant categorical subgroup pairings with more than two subgroups are displayed.

***Null* $H_0$2**: There is no statistical difference in truancy prevalence across student demographic groups, socioeconomic groups, academic performance groups, or course subject area.

Given there were statistically significant differences in means for several subgroups, the null hypothesis for research question two should be rejected.

RQ3: *Are there differences in course subject area truancy prevalence by ethnicity?*

The results of the course analysis are presented in Table 8. This table represents the frequency of students that had truanted 30% or more of their total class truancy to a particular hour of their school day. The subject area of that hour is identified and the results are categorized by ethnicity. No clear patterns presented themselves with regard to any subject area that was truanted more often by any particular ethnicity. Asian students presented little variance at all with regard to a subject area truanted more often than another (Table 8). Social studies courses were truanted most often for Hispanic students (8 students, Table 8). Academic electives and English classes where truanted most often for Black students (5 students, Table 8). Academic electives were truanted most often for Native American students (6 students, Table 8). English courses seem were truanted most often for white students (3 students, Table 8). It should be noted that there were only 65 instances in the sample of any particular hour of class accounting for 30% or more of the student's overall class truancy total. The largest variance for any subject area occurred between Math courses (0 students) and Social Studies courses (8 students) for Hispanic students (Table 8). However, this is only more frequent by one student over Academic Electives (7 students) and two students over Science courses (6 students, Table 8). This seems to indicate that class truancy occurrence was relatively homogeneous across

subject areas or hour of the day (save for 1st hour). No patterns could be discerned. It does not seem that class subject area had much bearing on class truancy for any ethnicity.

Table 8

Number of students with a 30% or higher ratio of hour class truancy to total class truancy sorted by subject area and ethnicity.

		1st Hour	2nd Hour	3rd Hour	4th Hour	5th Hour	6th Hour	Total
Ethnicity	**Subject Area**							
Asian	Math	0	0	0	0	0	0	0
	English	1	0	0	0	0	0	1
	Science	0	0	0	0	0	1	1
	Social Studies	0	0	0	0	1	0	1
	Academic Elective	0	0	0	1	0	0	1
	Activity Elective	0	0	0	0	0	0	0
	Total	1	0	0	1	1	1	4
Hispanic	Math	0	0	0	0	0	0	0
	English	2	0	0	0	0	0	2
	Science	3	0	0	1	0	2	6
	Social Studies	6	0	0	2	0	0	8
	Academic Elective	3	1	1	0	2	0	7
	Activity Elective	1	0		0	0	3	4
	Total	15	1	1	3	2	5	27
Black	Math	0	0	0	0	0	0	0
	English	5	0	0	0	0	0	5
	Science	3	0	0	0	0	0	3
	Social Studies	0	0	0	0	0	0	0
	Academic Elective	0	0	2	0	1	2	5
	Activity Elective	0	0	0	1	0	2	3
	Total	8	0	2	1	1	4	16
Native American	Math	0	0	0	1	0	0	1
	English	0	0	0	0	0	0	0
	Science	0	0	0	1	0	0	1
	Social Studies	0	0	0	0	0	0	0
	Academic Elective	4	0	0	0	2	0	6
	Activity Elective	0	0	0	0	0	0	0
	Total	4	0	0	2	2	0	8
White	Math	0	1	1	0	0	0	2
	English	3	0	0	0	0	0	3
	Science	1	0	0	0	0	1	2
	Social Studies	0	0	0	0	0	1	1
	Academic Elective	0	0	0	0	0	0	0
	Activity Elective	1	0	0	0	1	0	2
	Total	5	1	1	0	1	2	10

RQ4: *Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups?*

Research question four attempted to determine if a relationship existed between total class truancy and student perceptions of autonomy support, competence support, and relatedness support. As mentioned previously, constructs measuring autonomy support, competence support, and relatedness support only appeared on survey A. Descriptive statistics for the focal variables of research question four are displayed in Table 9.

Table 9

Descriptive statistics for student perceptions of competence, autonomy, and relatedness satisfaction.

	n	Minimum	Maximum	Mean	Std. Deviation	Variance
Total Class Truancy	287	0	172	17.49	22.185	492.167
Competence Composite	287	1.00	4.00	2.9920	0.44963	0.202
Autonomy Composite	287	1.00	4.00	2.8537	0.54528	0.297
Relatedness Composite	287	1.00	4.00	3.2488	0.70414	0.496

A Spearman's rho correlation analysis was conducted to determine if any initial associations existed between total class truancy and basic psychological need support. The results of the Spearman's correlation are presented in Table 10.

Table 10

Spearman's rho correlation table for student perceptions of basic psych need support variables and total class truancy.

		Total Class Truancy	Competence Support	Autonomy Support	Relatedness Support
Total Class Truancy	Correlation Coefficient	---			
	Sig. (2-tailed)				
	N				
Competence Support	Correlation Coefficient	-0.079	---		
	Sig. (2-tailed)	0.183			
	N	287			
Autonomy Support	Correlation Coefficient	-0.028	.646**	---	
	Sig. (2-tailed)	0.637	0.000		
	N	287	287		
Relatedness Support	Correlation Coefficient	-.131*	.410**	.311**	---
	Sig. (2-tailed)	0.028	0.000	0.000	
	N	280	280	280	

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

The results of the Spearman's rho correlation analysis seem to indicate the only significant correlation with total class truancy was relatedness support (correlation coefficient = -.131, Table 10). This correlation was significant to the .05 level. The Spearman's rho analysis indicated a negative relationship may exist between the two variables. As one variable increases, the other decreases.

To further examine the existence of any relationships between total class truancy and basic psychological need support, a negative binomial regression analysis was conducted. The negative binomial regression output for the need satisfaction model is presented in Table 11.

Table 11

Negative binomial regression output for the basic psychological need satisfaction model.

Parameter	B	Std. Error	Hypothesis Test			Exp(B)	95% Wald Confidence Interval	
			Wald Chi-Sq.	df	Sig.		Lower	Upper
(Intercept)	3.667	0.5283	48.172	1	0.000	39.117	13.890	110.162
Socio-Economic Status								
Free and Reduced	0.372	0.1604	5.383	1	0.02**	1.451	1.059	1.986
Full Pay	0					1		
Ethnicity								
Asian	0.032	0.3721	0.007	1	0.932	1.032	0.498	2.140
Hispanic	0.375	0.1705	4.842	1	0.028**	1.455	1.042	2.033
Black	0.475	0.1865	6.502	1	0.011**	1.609	1.116	2.318
Native American	0.579	0.2241	6.670	1	0.010**	1.784	1.150	2.768
White (reference)	0					1		
Gender								
Female	0.116	0.1302	0.796	1	0.372	1.123	0.870	1.449
Male	0					1		
Academic Performance								
Weighted GPA	-0.475	0.0758	39.297	1	0.000***	0.622	0.536	0.721
Basic Psych Need Support								
Competence Support	-0.026	0.1974	0.017	1	0.895	0.974	0.662	1.435
Autonomy Support	0.073	0.1676	0.192	1	0.661	1.076	0.775	1.495
Relatedness Support	-0.092	0.1042	0.782	1	0.376	0.912	0.743	1.119

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

Note. Reference groups are set to zero

The negative binomial regression analysis indicated that there were no significant associations between total class truancy and competence support, autonomy support, or relatedness support. The model output did seem to indicate some strong relationships exist between total class truancy, socio-economic status, ethnicity, and academic performance (Table 11). Free and reduced lunch participants were 1.451 times more likely to truant from a section of class than full pay lunch students while holding all other predictor variables constant. Hispanic students were 1.455 times, black students were

1.609 times, and Native American students were 1.784 times more likely to truant from a section of class than white students while holding all other predictor variables constant (Table 11).

The strongest relationship presented in the negative binomial regression model was between total class truancy and weighted GPA (p = .000, Table 11). For every one point increase in weighted GPA, the odds of a student truanting from a section of class decreased by 0.622 times. This relationship is highly significant to the .001 level. Weighted GPA also seemed to account for a vast majority of the variance in total class truancy as evidenced by the Wald-Chi Square of 39.297 (Table 11). It should be noted a zero-inflated version of the model was also run. It produced similar results.

As a follow up analysis regarding the relationship between class truancy and academic performance, a separate negative binomial analysis was conducted. This follow up analysis focused on the variable responsible for a vast majority of the variance of the need satisfaction model. This analysis was conducted to provide more nuanced information regarding the surprising relationship between GPA and truancy. The analysis provided odds ratios between the GPA operationalized as letter grade categories as opposed to GPA as a continuous variable. While not the focal variable of research questions four or five, this relationship seemed very strong and warranted further investigation. Weighted GPA was recoded as separate categories for A average GPA, B average GPA, C average GPA, and D average GPA. Theses academic performance categories were then analyzed against class truancy using the entire student sample. The results are presented in Table 12.

The results presented in Table 12 indicate that D average students were 6.154 times more likely to truant from a class compared to A average students. C average students were 3.194 times more likely, and B average students were 2.038 times more likely. Each of these letter grade categories were strongly associated with class truancy at a highly significant level ($p < .001$ for all letter grade categories, Table 12).

Table 12

Negative binomial regression output for the academic performance model.

Parameter	B	Std. Error	Hypothesis Test			Exp(B)	95% Wald	
			Wald Chi-Sq.	df	Sig.		Lower	Upper
(Intercept)	1.961	0.1242	249.532	1	0.000	7.108	5.573	9.066
Academic Performance								
D Average GPA	1.817	0.1733	109.962	1	0.00***	6.154	4.382	8.643
C Average GPA	1.161	0.1429	66.073	1	0.00***	3.194	2.414	4.226
B Average GPA	0.712	0.1431	24.736	1	0.00***	2.038	1.539	2.697
A Average GPA (reference)	0					1		

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

While some interesting findings were found in the negative binomial analysis no significant results were found with regard to the focal variables of competence, autonomy, and relatedness support (all p values greater than .05, Table 11). It should also be noted that the need satisfaction negative binomial regression model was run with the data set split by grade level. No significant findings were found. The null hypothesis for research question four was

$Null\ H_0 4$: There is no statistically significant relationship between student perceived basic psychological need satisfaction and student truancy.

Based on the results of the negative binomial regression analysis, the null hypothesis for research question four should be retained.

RQ5: *Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?*

Research question five attempted to determine if a relationship existed between total class truancy and student perceptions of basic psychological need frustration. As mentioned previously, the construct measuring basic psychological need frustration only appeared on survey B. Descriptive statistics for the focal variables of research question five are displayed in Table 13.

Table 13

Descriptive statistics for the focal variables of total class truancy and student perceptions of basic psychological need frustration.

	n	Minimum	Maximum	Mean	Std. Deviation	Variance
Total Class Truancy	277	0	206	22.99	29.025	842.453
Psych Frustration Composite	276	1.00	4.00	2.1337	0.69923	0.489

A Spearman's rho correlation analysis was conducted to determine if any initial associations existed between total class truancy and student perceptions of basic psychological need frustration. The results of the Spearman's correlation are presented in Table 14. The Spearman's rho correlation analysis indicates that there was no significant correlation between total class truancy and student perceptions of basic psychological need frustration (correlation coefficient .101 and $p = .093$, Table 14).

In order to further examine the existence of any relationship between total class truancy and basic psychological need frustration, a negative binomial regression analysis was conducted. The negative binomial regression output for the need frustration model is presented in Table 15.

The negative binomial regression output indicates that there were no significant associations between total class truancy and student perceptions of basic psychological need frustration (all *p* values greater than .05, Table 15). The only significant finding was the association between total class truancy and weighted GPA ($p = .000$, Table 15). For every one point increase in weighted GPA, the likelihood of truanting from a class decreased by 0.509 times (Table 15).

Table 14

Spearman's rho correlation table for student perceptions basic psych need frustration and total class truancy.

		Total Class Truancy	Basic Psych Need Frustration
Total Class Truancy	Correlation Coefficient	---	
	Sig. (2-tailed)		
	N		
Basic Psych Need Frustration	Correlation Coefficient	0.101	---
	Sig. (2-tailed)	0.093	
	N	276	

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

In order to further examine the existence of any relationship between total class truancy and basic psychological need frustration, a negative binomial regression analysis was conducted. The negative binomial regression output for the need frustration model is presented in Table 15.

The negative binomial regression output indicates that there were no significant associations between total class truancy and student perceptions of basic psychological need frustration (all *p* values greater than .05, Table 15). The only significant finding was the association between total class truancy and weighted GPA (p=.000, Table 15). For every one point increase in weighted GPA, the likelihood of truanting from a class

decreased by 0.509 times (Table 15). It should be noted a zero-inflated version of the model was also run. It produced similar results.

The null hypothesis for research question five was:

> ***Null $H_0$5***: There is no statistically significant relationship between student perceived basic psychological need frustration and student truancy.

Based on the results of the negative binomial regression analysis, the null hypothesis for research question five should be retained.

Table 15

Negative binomial regression output for the basic psychological need frustration model.

Parameter	B	Std. Error	Hypothesis Test			Exp(B)	95% Wald	
			Wald Chi-Sq.	df	Sig.		Lower	Upper
(Intercept)	4.469	0.4332	106.449	1	0.000	87.279	37.342	203.996
Socio-Economic Status								
Free and Reduced Lunch	0.183	0.1679	1.194	1	0.274	1.201	0.865	1.669
Full Pay	0					1		
Ethnicity								
Asian	0.104	0.2786	0.140	1	0.708	1.110	0.643	1.916
Hispanic	0.201	0.1823	1.211	1	0.271	1.222	0.855	1.747
Black	0.160	0.2018	0.626	1	0.429	1.173	0.790	1.742
Native American	0.261	0.2254	1.345	1	0.246	1.299	0.835	2.020
White (reference)	0					1		
Gender								
Female	-0.007	0.1260	0.003	1	0.957	0.993	0.776	1.272
Male	0					1		
Academic Performance								
WeightGPA	-0.675	0.0881	58.714	1	0.00***	0.509	0.428	0.605
Basic Psych Need Frustration								
Frustation Composite	0.126	0.0962	1.727	1	0.189	1.135	0.940	1.370

****p* < .001, ***p* < .01, **p* < .05

Note. Reference groups set to zero.

Chapter Six: Discussion

The purpose of this study was to conduct an exploratory empirical investigation into the relationship between class truancy and student perceptions of basic psychological need satisfaction and frustration. The results of this study also provided an accurate portrait of the state of truanting behaviors at the participating school. This discussion of the investigative results will provide an opportunity to summarize the key findings, provide reflection on potential explanation of the key findings, make suggestions for further research, and discuss the potential implications for policy, scholarly research, and school practice.

Summary of Key Findings

The results of the empirical analysis produced several interesting findings. The analysis showed that truanting behaviors prevail at high levels at the participating high school. High levels of class truancy prevalence persisted throughout all ethnicities, socio-economic groups, academic performance groups, grade levels, hour of the day, and course subject area. While there seemed to be apparent differences in average class truancy levels between all measured categorical subgroups, those differences only proved to be significantly different for ethnicity, free and reduced lunch status, average letter grade GPA, and 1st hour course subject area. No significant differences were found between the categorical subgroups of English language learner status, gender, or high school grade. Total class truancy and average number of truancy occurrences were highest for first hour. The only statistically significant difference in truancy by class subject area was for 1st hour classes, and only between activity electives and other subject areas. Activity electives were truanted less often than other subject areas during 1st hour.

No patterns could be discerned with regard to differences in class truancy occurrence by subject area for any student ethnicity subgroup. With regard to the focal relationship of truancy and student perceptions of their basic psychological needs, no significant findings were found through the regression analyses. However, a significant correlation was found between class truancy and student perceptions of relatedness support.

Discussion of Findings

Interpretation of the key findings of this exploratory empirical investigation are organized by research question. Much of the explanatory narrative of this chapter represents plausible speculation.

RQ1: *What is the overall prevalence of truancy at the participating high school?*

Much of the extant literature regarding the phenomenon of truancy has adhered to one of two main threads or overall philosophies. Truanting students are delinquents that suffer from some form of psychological pathology, or truanting students are discerning decision makers that make a rational choice to skip a class or not based on some feature of the school or classroom (Baker et al., 2001; Conolly & O'Keeffe, 2009; DeKalb, 1999; Garry, 1996; Grant, 1992; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; O'Keeffe, 1993; Roderick et al., 1997; Shute & Cooper, 2014, 2015). Another issue with the body of research on truancy is the way in which truancy is operationalized (Guare & Cooper, 2003; Shute & Cooper, 2014; Sutphen et al., 2010). Truancy is typically measured by counting full days of school missed without parental permission or knowledge, or each individual class is counted as a truancy event (Guare & Cooper, 2003; Shute & Cooper, 2014; Sutphen et al., 2010).

One of the significant shortcomings of the "truant as delinquent" philosophy is its assumption that all truants are delinquents (Guare & Cooper, 2003; Shute & Cooper, 2014). If truants are social deviants, then the prevalence rate of truancy is akin to the prevalence rate of delinquency. This assumption is difficult to stomach in the face of higher prevalence rates. When studies operationalize truancy as full days of absence without permission, prevalence rates tend to be smaller than if truancy is operationalized to include individual classes truanted after a student has arrived to school. National prevalence rates for full day truancy trend around 11%, and prevalence rates for class truancy can be upwards of 70% (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013).

Truancy for this study was operationalized to be a count of every class a student missed without parental knowledge or permission during the spring semester of school year 2017/2018. The results of the prevalence analysis showed that the sampled students truanted at very high levels compared to prevalence rates of other studies (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013). Class truancy prevailed at 92.20% of students, while full day truancy prevailed at 73.23% of students. Again, this means that students truanted from at least one class over the course of the semester or one full day respectively. These prevalence rates are higher than any of the reviewed literature regarding truancy.

These prevalence rates of truancy seem to fly in the face of the "truant as delinquent" philosophy. If the students that skip class are delinquents of some kind, then over 92% of the sampled students are delinquents. It seems quite unreasonable to make the assumption that over 92% of the participating school's student body suffers from

some sort of psychopathology. It seems much more reasonable that 92% of students are responding with a discernment of their school or classroom environment. While some may be missing class for a variety of legitimate reasons, it seems many students at the participating school are making some kind of decision with regard to which classes they attend or not.

The difference in prevalence rate between class truancy and full day truancy seems to confirm the point that past scholars have made regarding how truancy is operationalized. Only counting full days of school missed without permission can mask a larger truancy problem. Many students may arrive to school and subsequently skip a particular class. Full day truancy operationalization would not necessarily capture those class truancy occurrences (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015).

The prevalence analysis revealed that high levels of class truancy occurred across all measured student subgroup categories (Table 2). Students were divided into subgroups on the basis of ethnicity, socio-economic status, academic performance, home language, grade, and gender. No student subgroup truanted at a lower rate than 82% (students with an average letter grade GPA of A). While all student subgroups truanted at high rates, there were apparent differences in class truancy prevalence between groups. The significance of those differences are discussed in the context of research question two. Hispanic, Black, and Native American students all exhibited higher prevalence rates and average class truancy as compared to White and Asian students. Free and reduced lunch participants truanted at higher rates than full pay students. Truancy rates seemed to increase along academic performance categories. There seemed to be small apparent

differences in truancy rates between home languages, high school grade, and gender. All of these apparent differences seem to lend merit to past studies that have used class truancy as an output variable. That is to say, class truancy prevalence rates are high for all students, but do vary along student subgroup lines (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). These prevalence rates clearly indicate that skipping individual classes at the participating school is a significant problem affecting the entire student body. It is a problem worthy of intervention.

The descriptive statistical analysis of class truancy occurrence by hour of the day indicated that 1st hour, by far, is truanted most often compared to the other hours of the school day (Table 4). This seems to make logical sense. Students that are simply late in arriving to school would manifest in 1st hour being their most truanted hour. The descriptive statistics also seem to indicate that 5th and 6th hours are truanted more often than 2nd, 3rd, or 4th hours. This also seems to make sense given the structural features of the participating school's class schedule and lunch practices. The participating school employs an open campus lunch policy. Students are allowed to leave campus to go home or obtain lunch from a local establishment. Lunch occurs between 4th and 5th hours. Many students may attend class through the morning hours then decide to not return to campus from lunch.

The descriptive statistics regarding subject area class truancy occurrence showed that academic electives were truanted most often (Table 5). However, the academic electives category includes the largest number of courses. Academic electives is a broad category that includes everything from foreign languages to computer science. It is a category that includes all academic classes that are not a core subject requirement. While

the total number of academic elective truancy occurrences may be highest, the average number of truancy occurrences to an academic elective per student was not. Core academic subject areas only presented a range of .78 class truancy occurrences per student. This seems to indicate that no meaningful differences between subject areas and class truancy occurrence seem to exist. All core subject areas are truanted between an average of 3.10 and 3.88 times per student (Table 5).

These higher levels of truancy could be attributed to the longer time window used to count truancy occurrences. An entire semester is longer than most truancy studies. The longer window was used to establish a more continuous output variable. The shorter the window, the more likely it is that no truancy occurrences will be observed. A disproportionate number of zeroes in an output variable can manifest as an obstacle to reliable regression analysis (Cameron & Trivedi, 2013; Coxe, West, & Aiken, 2009; Warner, 2013).

Research question one also relied on administrative data to count actual truancy occurrences. Many previous studies of truancy relied on students self-reporting their truancy habits using a survey instrument. Students are often asked to respond to statements such as “have you skipped school in the last month?” (Conolly & O’Keeffe, 2009; Guare & Cooper, 2003; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013). Many of these students may not be considering an individual class they may have skipped after arriving to school. Another factor that may have inflated the truancy occurrence numbers is the way in which the participating school handles tardiness. The participating school considers students absent if they arrive to class more than 10 minutes late. Some of the truancy occurrences in the sample could be tardy

occurrences. Another factor could be errors in recording practices of teachers. If a teacher takes attendance immediately after class starts and never revisits their roster, some students may be counted absent that arrive late to class.

One particular contextual feature of the participating school could be salient in discussion of the reported class truancy prevalence rates. The participating school prides itself on the college-like atmosphere of its campus. This atmosphere is achieved through an open campus policy. Students are free to come and go from campus at their leisure. Many students participate in virtual classes or concurrent college classes with flexible schedules. It is commonplace to see students at the participating school in soft seating areas, leaving the building, or lounging in an outdoor eating area. It may be there is a consequential caveat to having such an open campus policy with regard to class truancy. Many students may be truanting from class in plain sight. The cost of this college-like, open campus may be higher levels of class truancy.

RQ2 and RQ3*: Are there differences in truancy prevalence across student demographic groups, socioeconomic groups, and academic performance groups? Are there differences in course subject area truancy prevalence by ethnicity?*

Research question two attempted to further investigate any apparent differences in class truancy among student category subgroups. The initial prevalence analysis relied on simple descriptive statistics and frequencies to determine apparent differences between student subgroups. It revealed apparent differences between all subgroups. However, research question two employed more sophisticated statistical analysis methods. The variance analysis revealed that only some of the apparent differences in class truancy rates were significant (Table 6). The variance analysis revealed that the mean class

truancy rates for ethnicity, socio-economic, and academic performance categories exhibited significant differences between their respective subgroups. The variance analysis of mean class truancy occurrence by subject area revealed the only statistically significant differences occurred 1st hour between activity electives and other subject areas (Table 6). No other hours or subject areas presented any statistically significant differences in class truancy mean (Table 7). There were not significant differences between grade level, home language group, or gender.

The results of the variance analysis seem to support prior studies regarding rates of class truancy along student subgroup lines. Prior studies have also concluded that students of color truant at higher levels than their Caucasian counterparts. Those studies also revealed that students from lower socio-economic backgrounds tend to truant at higher rates than more affluent students. The analysis of variance along academic performance groups seems to provide more evidence to prior conclusions that truancy levels vary according to academic performance (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013).

Evidence from this study does seem to contradict prior research conclusions regarding truancy levels along English language learners and grade level. Past studies have shown that truancy levels typically vary significantly along ELL lines and grade level lines (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013). This study operationalized ELL status by way of their self-reported home language. It was a binary variable of speaks English at

home or speaks another language at home. There very well could be more reliable ways to operationalize ELL status.

Furthermore, most prior truancy studies have provided evidence that truancy levels typically increase as students get older (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Henry, 2007; Henry & Huizinga, 2007; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013). The prevalence rates for each grade level increased (Table 2). However, the variance analysis revealed that no significant differences in mean class truancy existed between grade levels.

The variance analysis of mean class truancy by subject area seems to indicate that students truant from 1st hour activity electives less often than other subject areas (Table 7). Activity electives include courses such as band, orchestra, cheer, or dance. These courses are only offered 1st hour. This may explain why these significant differences are not seen throughout the day. Students typically choose to enroll in activity electives based on their interest in the activity even outside of school. Students truanting less often from classes they have a genuine interest in may be a proxy for autonomy support. Students that feel they have a choice to participate in activities they truly enjoy may feel their basic psychological need for autonomy is supported (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2017). No statistically significant differences in mean class truancy occurrence were found for any other hour or for any other subject areas.

Research indicates that many indigenous students and students of color feel curricular choices, subject areas, or the institution of public school itself are discriminatory, or else lacking in acknowledgement, respect, and/or responsiveness to their home culture, identity, or heritage. (Brayboy & Maaka, 2015; Hickling-Hudson &

Ahlquist, 2003; Pewewardy & Hammer, 2003; Tuck & Gaztambide-Fernández, 2013; Tuck & Yang, 2012; Vavrus, 2008). With this in mind, one may hypothesize that courses that exacerbate those feelings may be truanted more often by indigenous students or students of color. Classes such as United States History may be seen a reminder of the genocide perpetrated upon their ancestors. The same could be said for African American students. This study attempted to find some pattern in truancy behaviors to support this. However, class truancy simply seems too ubiquitous to reveal many patterns or associations between any specific ethnicity and any specific subject area (Table 8). All students truanted from all subject areas at high levels with no discernable differences in patterns by race/ethnicity.

The null hypothesis for research question two should be rejected. There are significant differences between class truancy behaviors when comparing student categorical subgroups. It seems that minority students, lower income students, and lower performing students are most at risk of having significantly higher levels of truanting behaviors at the participating school. The null hypothesis for research question three should be retained. No patterns or significant differences could be found regarding any ethnicity truanting from any particular subject area.

RQ4 and RQ5: *Is perceived satisfaction of student basic psychological needs associated with overall student truancy both within and across student subgroups? Is perceived frustration of student basic psychological needs associated with overall student truancy both within and across student subgroups?*

Both research questions four and five examined the association between class truancy occurrence and student perceptions of their basic psychological needs. These

research questions materialized after reviewing the extant truancy literature through the lens of Self-Determination Theory. Much of the truancy that occurs in our nation's schools occurs after the student has arrived at the school building (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Shute & Cooper, 2014, 2015). An analysis of the attendance data of the participating school revealed it is no exception. This leads to questions regarding the school itself. What is it about a class that turns a student away? What motivates a student to enter the classroom or not?

Self-Determination Theory posits that all students are innately driven to learn and grow. In order to maintain this innate intrinsic motivation, it must be nourished, however. The nourishment of motivation comes in the form of the satisfaction of a student's basic psychological needs of autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2017). The claim of this study is that students are motivated to enter any particular classroom based on a discernment of the satisfaction or frustration of their basic psychological needs.

The initial analysis method used to determine if any association existed between class truancy and psychological need support or frustration was a Spearman's Rho correlation analysis. This analysis revealed there were no significant correlations between class truancy and competence support or autonomy support. The analysis did indicate there may be a significant association between class truancy and student perceptions of relatedness support (Table 10). This correlation also indicated the relationship is negative. As students feel that adults at their school care for them, their class truancy occurrences may decrease. No causal claims can made. It could be that students with close relationships with school staff members or have greater feelings of belonging truant

less often. It could also be that students with higher levels of truancy feel disenfranchised and develop negative feelings about their relationships with school staff or belonging within their classes.

The central analysis method for questions four and five was a negative binomial regression model. The models attempted to incorporate a robust set of controls that might also explain variance in class truancies. The negative binomial regression analyses revealed that no significant associations existed between class truancy occurrence and any of the basic psychological need support constructs or the frustration construct (Table 11 and Table 15). At first glance these results seem surprising. However, they become less so given what we know about the nature of chronic absenteeism. Many studies have shown that the reasons behind chronic absenteeism fall outside the direct influence of the school itself (Chang et al., 2016; Gottfried, 2014; Gottfried & Gee, 2017; Gottfried & Hutt, 2019). The lack of any significant association between basic psychological needs and truancy may be a reflection of phenomena the school has little hope of influencing.

The regression output did reveal highly significant associations between class truancy occurrence and ethnicity, socio-economic status, and academic performance. These results were not particularly surprising given these predictor variables were known to be associated with truancy (Conolly & O'Keeffe, 2009; Guare & Cooper, 2003; Maynard et al., 2017; Shute & Cooper, 2014, 2015; Vaughn et al., 2013). What was surprising, was how strong the relationship was between class truancy occurrence and academic performance. For every one-point increase in weighted GPA, the odds of a student truanting from a section of class decreased by 0.622 percent. This relationship was highly significant. Weighted GPA also seemed to account for a vast majority of the

variance in total class truancy (Table 11). To further investigate the strong relationship between academic performance and psychological need support, a follow up analysis was conducted using letter grade point average groups as the only predictor variables (Table 12). The results indicated that D average students are 6.154 times more likely to truant from a class compared to A average students. C average students are 3.194 times more likely, and B average students are 2.038 times more likely (Table 12).

The lack of significant findings regarding the focal variables of basic psychological need support and frustration are not entirely surprising when the statistical power of the model is taken into consideration. The focal predictor variable constructs appeared on separate versions of the survey. This resulted in a smaller sample size for the support and frustration outcome analyses respectively. The relatively small sample sizes may have limited the statistical power necessary to detect significance (Type II error; Warner, 2013).

While the null hypotheses for research questions four and five were retained, some promising evidence was none-the-less found. The correlation analysis did indicate a significant correlation between class truancy occurrence and relatedness support (Table 10). Additionally, one could argue that academic performance could be a proxy for competence support. The circumstances that lead to student feelings of being academically capable could also be the circumstances that lead to higher levels of academic performance. The variance analysis of truancy by subject area revealed significantly lower levels of truancy for activity electives compared to other academic subject areas (Table 7). This could be a proxy for autonomy support. Students choose to participate in activity electives because they enjoy the activity. They are not a course

requirement in any way. This evidence, however tangential, should warrant further investigation into the relationship between class truancy and student perceptions of their basic psychological needs.

Limitations

Like all research investigations, there are several limitations regarding this study. First, the nature of truancy itself limits the ability of research to accurately study truancy. Some students may simply not have been present to participate in the research. In other words, the most egregious of truanting behaviors may never be represented in truancy studies simply because they are truant. Further, in truancy studies, there are countless unobserved confounders at play that may be influencing the class truancy occurrence levels for the students sampled. No survey instrument is exhaustive in measuring the perceptions of students, or measuring every aspect of the student that may influence class truancy. Parental attitudes about school, trauma in the home, drug use, reliable transportation, are all examples of variables that may influence class truancy but are not represented in the statistical analysis of this study. Another significant limitation of this is study is the limited generalizability of the results. The students sampled all attended a single large high school. Any data generated or conclusions reached can only be generalized to the population of the school. No larger generalizations should be made.

Second, how truancy is operationalized has posed a limitation to its study form the outset of truancy as a topic of scholarly research. This study is no exception. While every care was taken to account for all occurrences of truancy, the time frame for counting occurrences was somewhat arbitrary. An entire semester may be too large of a

window. It may be too small. Truancy operationalization will continue to be a limitation to all future truancy research until standard operationalization parameters are set.

Third, the constructs for need support and need frustration appearing on separate versions of the survey instrument led to smaller sample sizes for the respective constructs. This smaller sample size reduced the statistical power of the negative binomial regression analyses. The models for either need support or need frustration may not have had enough power to detect any significant associations. The failure to reject the null hypotheses for research questions four and five may have been Type II error. The study may have failed to detect a significant relationship that does actually exist.

Fourth, social desirability bias could be a limitation of this study. The final report of the climate survey provided to the participating school indicated high school levels of autonomy, competence, and relatedness support. It may be that students are answering in a more positive manner due to how they perceive teachers or school leaders will think of the results.

A related shortcoming of the constructs is their lack of specificity with regard to the context of the statements students are asked to respond to. Students are asked to respond to statements related to all of their teachers' behavior collectively (Appendix A). Students may have a specific teacher that is thwarting or frustrating to their psychological needs, but feel that most of their teachers overall are supportive of them. This may muddle the significance of any actual associations between class truancy and student perceptions of psychological need support or frustration.

Finally, prior research has indicated that the structural attendance practices of a school could influence truancy and chronic absenteeism (Conolly & O'Keeffe, 2009;

Guare & Cooper, 2003; Shute & Cooper, 2014). These structural practices include the rules and regulations pertaining to how schools notify parents and apply consequences after a student is truant from a class. The large size of the participating school dictates that not all students are held accountable for their attendance behaviors in exactly the same way. Each grade of the school is divided between two offices. Each of those offices is staffed by both an attendance secretary and an assistant principal. Each office team is responsible for keeping parents abreast of the attendance habits of their children and applying consequences according to building policy (Appendix B). How one office adheres to those policies is a variable not represented in the sample. This variation in how parents are communicated with regarding truancy could result in error. How students are held accountable for skipping class is a variable not represented in the sample. One student may have higher levels of class truancy because the assistant principal responsible may have failed to hold them accountable.

Suggestions for Future Research

The purpose of this study was to perform an exploratory empirical investigation into the relationship between class truancy and student perceptions of their basic psychological needs. Another goal was to provide school leaders with actionable evidence as to the state of truanting behaviors at the participating school. Like all explorations, what is not found can be just as informative as a discovery. Very little research has been conducted on truancy through the lens of Self-Determination Theory. The lack of significant findings in this study should not be considered a barometer for what future research could uncover.

Further research should be conducted on truancy through the lens of Self-Determination Theory. SDT has been shown to be a powerful theoretical framework to base myriad empirical investigations on a wide variety of educational phenomenon (Ryan & Deci, 2017). The predictor constructs used in this is study have been shown to be valid measures of need support and frustration (Assor, Kaplan, & Roth, 2002). Further studies should attempt to establish a relationship between those constructs and class truancy. Those future investigations should attempt to use a larger sample of students in order to obtain a sufficient level of statistical power. Samples designed to be representative of the nation could be useful to a larger spectrum of school leaders and policy makers.

The regression analysis methods used in this study are not able to produce causal claims with regard to psychological needs and truancy. Future investigators should attempt to develop more experimentally minded studies aimed at determining the existence of any casual relationships between a need supportive environment and a reduction in class truancy occurrence. A series of schools could attempt to implement practices designed to be more supportive of student autonomy, competence, and relatedness. Researchers could then determine if there are any differences in class truancy prevalence after the treatment.

Future research may also attempt to weave qualitative research methods into future empirical investigations. Investigators should attempt to supplement quantitative evidence with the actual thoughts and feelings of students that have truanted from class. Few, if any qualitative studies have attempted to document how students feel about their basic psychological needs as they may relate to truancy. Interviews with a wide spectrum of students could weave an interesting tapestry of the reasons behind why students truant.

Future research should also attempt to explore other theoretical lenses through which to describe and/or explain truanting behavior. While Self Determination Theory has been shown to be a powerful lens through which to study myriad educational phenomena, there may be other theoretical frameworks that could prove useful in helping to determine why students are skipping class (Ryan & Deci, 2017).

One such framework is Uri Bronfenbrenner's Ecological Systems Theory. Ecological Systems Theory is a theory of human development that has been used as a framework for studying chronic absenteeism and may have similar utility in studying truancy (Gottfried & Gee, 2017). Ecological Systems Theory postulates that children develop through multiple interactions within a nested series of ecosystems. The unique characteristics of the child or adolescent interact with these different levels of environmental context to affect overall child development (Bronfenbrenner, 1977; Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006).

The smallest and most intimate ecosystem is the microsystem. The microsystem involves the direct personal interactions (i.e., with parents, teachers, and friends) of the child. How students interact directly with the school microsystem can have profound influence on their development. Students that have negative experiences with teachers and adults within their school may be, consciously or not, choosing to avoid those interactions by skipping class. Bronfenbrenner describes a phenomenon called *person forces* that are characterized as active behavioral dispositions that may work to support or impede development (Bronfenbrenner & Morris, 2006; Gottfried & Gee, 2017). It is possible that these "person forces" have some influence on students choosing to enter class or not.

Surrounding the microsystem is the mesosystem. The mesosystem involves the linkages between a child's different microsystem interactions. Parental attitudes or commentary about school can influence the actual interactions between a child and their teacher. Perhaps the mesosystem, consisting of the linkages between home life and school, accounts for some of the variance in truancy, particularly for minoritized students shown in this study to be most at risk to truant. It could be these interactions are lacking and manifest as an impediment to positive overall development and well-being. It could be that parents of minoritized students may not be engaging with the school at all. It could be that they even make negative comments about the school, a class, or a teacher which affect how that child views or sees the school environment (Bronfenbrenner, 1977; Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006; Gottfried & Gee, 2017).

Encompassing the mesosystem is the exosystem. The exosystem involves the linkages between the different settings in which the child is engaged. The exosystem links a setting the child is not in, to a setting the child is in. For example, a teacher may be having a difficult spat with their spouse and takes it out on students the next day in class. One could argue the exosystems of minoritized students put them at a disadvantage with regard to consistent attendance and truancy. Many minoritized families come from lower socioeconomic backgrounds. Many students have single parent families. The stress of a single parent struggling to succeed at their workplace may have an influence on their student's school microsystem.

Additionally, two other key aspects of the exosystem with important influence on the behavior of students not well-addressed by this study are the values of the school as an organization and the administrative climate. Even well-intentioned administrators

seeking the "best" for their students can undermine the liberation of students. For example, by emphasizing college-going as an organizational priority for all students, some student's values might be supported while other's might be further marginalized. As Paulo Freire would note, the very act of determining for someone else what their goals and aspirations should be—and using institutional resources to only support the pursuit of these specific goals—is oppressive, not humanizing or liberatory. Furthermore, if the pursuit of college admission above all else reinforces the inculcation of values and dispositions aligned with "banking" practices, this too is oppressive (Freire, 2005). Moreover, it is easy for an institution with this singular focus to misinterpret student behavior which seems contrary to this goal as an indication that they are not "college material," and to put in place practices which further marginalize them and limit their potential (e.g., tracking, remedial classwork). Minoritized students likely will internalize feelings of hopelessness in their attempts to meet school expectations that might not align with their personal or familial goals. Issues arising at the exosystem level can manifest at the microsystem level as strained interactions with school staff, as school staff expect changes in behavior from students that indicate that they care about and aspire to the institution's goals (Valenzuela, 1999). When school staff expectations are not met, these can serve to reinforce existing prejudice and/or stereotypes about minoritized students. These strained interactions/relationships with school personnel can result in a loss of sense of belonging with the school and might increase truanting behaviors (Bronfenbrenner, 1977; Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006; Gottfried & Gee, 2017; Valenzuela, 1999).

The macrosystem surrounds the exosystem, and is characterized by the influence of the most distant people, places, and institutions on the child. The macrosystem includes influences from ideas, beliefs, and cultural patterns. Perhaps the overarching macrosystem for minoritized students consists of generational disenfranchisement from school. This school disenfranchisement may be so engrained in familial belief systems, that minoritized students experience patterns of socialization into these systems which reproduce this disenfranchisement (Bronfenbrenner, 1977; Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006; Gottfried & Gee, 2017).

Lastly, is the chronosystem. The chronosystem adds the dimension of time and change to the theoretical model. The chronosystem includes changes in physical address, changes in political climate, and other major life changes that may influence the child. Again, the chronosystems of minoritized students may hold explanatory power for the variance in truanting behavior. Minoritized students are typically far more mobile or transient than their affluent counterparts. Students whose lives are upended due to eviction from their home may not be able to consistently attend, and, moreover, this lack of attendance may be interpreted by the school as delinquency which can strain other aspects of the system (e.g., the microsystem; Bronfenbrenner, 1977; Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006; Gottfried & Gee, 2017).

Because truancy has proven to be a complex and elusive topic of scholarly research, it may require the exploration of other theoretical frameworks through which to study it. These few examples of the application of Ecological Systems Theory to the issue of truancy suggest that it might be an effective framework to use in studying this problem, especially for the student groups this study has shown to be most at risk for

engaging in truanting behaviors. Future studies should consider using this framework, as well as BPNT for exploring this topic.

Implications for Future Research, Policy and Practice

This exploratory study of the relationship between student perceptions of basic psychological needs and truancy could have implications for policy, research, and practice.

Policy. The lay person may think that measuring student attendance is straightforward and simple. This is far from the reality. Student attendance, chronic absenteeism, and truancy are complex phenomenon that prove difficult to measure without a standard definition of what is being measured. Policymakers at the State and Federal level should attempt to standardize how truancy is measured. Chronic absenteeism was once plagued with the same operationalization problems as truancy measurement. A standard has been set nationwide as to how chronic absenteeism is defined. Research concerning chronic absenteeism has started to see a consensus on how chronic absenteeism is operationalized. This has simplified what was once a complex undertaking in attempting to scale up and replicate findings. A similar standard should be set by policymakers for truancy. A standard definition of truancy would be helpful for schools in communicating with parents and families as to the magnitude and consequences of skipping school. Additionally, a standard definition that includes individual sections of class would help to unmask previously overlooked truancy problems.

Research. Truancy has been recognized as a phenomenon that has long plagued educators striving to improve student achievement. In spite of efforts to reduce truancy,

the national prevalence of truancy has remained stagnant (Vaughn et al., 2013). Much of the existing body of knowledge regarding truancy provides evidence to the relationships between truancy and undesirable life outcomes, but little useful evidence to help reduce truancy. Previous literature regarding truancy also fails to establish any semblance of a standardized way to operationalize it. This study bolsters the argument for standardizing truancy in a manner that accounts for both entire days of school skipped and each individual class skipped. This study, along with future investigations, could begin to provide scholars and school leaders with evidence useful in developing new lines of inquiry and prevention strategies to reduce truancy prevalence.

Previous scholarship centering on the phenomenon of truancy has provided little explanatory evidence in the way of understanding *why* students engage in truanting behaviors. By examining truancy through the lens of Self-Determination Theory (SDT), these explanatory mechanisms may begin to be better understood. Viewing truancy through the lens of SDT leads to novel ways of examining the underlying relationships that may be at work when students skip class. Previous literature provides little evidence to support a relationship exists between how students perceive of their basic psychological need satisfaction and their truanting behaviors. This study begins to fill that gap in the literature. Evidence from this study begins to help deepen our understanding of the psychological mechanisms at play when students decide to turn away from attending class. While no significant findings were uncovered with respect to the focal variables of need support or frustration, some promising by proxy evidence was generated. These initial indications of relationships between autonomy support,

relatedness support, and competence support and class truancy provide a base for future inquiry on these relationships.

Practice. This study examines truancy with a more fine-grained approach than most prior literature. By operationalizing truancy in a way that takes into account all sections of class skipped, a more accurate representation of the magnitude of truancy prevalence is achieved. It is clear from this study that class truancy is a massive problem at the participating school. Class truancy is an issue in need of attention, intervention, and prevention.

While the regression analysis found no significant associations between class truancy and student perceptions of their basic psychological needs, some valuable information was produced. First, the correlation analysis did show a significant correlation between student perceptions of relatedness support and class truancy (Table 10). This should have implications in the way that the participating school leverages those relationships. This evidence indicates it may be beneficial for the participating school to concentrate efforts on building meaningful relationships between students and school staff members. Perhaps if students felt that all of their teachers and administrators genuinely cared for their well-being, students would be less likely to turn away from school or class. Secondly, variance analysis indicated that activity electives are truanted from significantly less often than academic courses (Table 7). This could be a manifestation of autonomy support. Students that feel they have control over the classes they take may feel their basic psychological need for autonomy is satisfied. This in turn would more intrinsically motivate a student to attend a class (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2017). Schools may find value in giving students more

choice in the classes they take and offering classes or designing curriculum more related to the activities students genuinely enjoy. Lastly, weighted GPA was found to be strongly associated with class truancy (Tables 11, 12, and 15). While not specifically designed to be a proxy for competence support, one could argue the circumstances within a school that lead to higher academic performance may be supportive of a student's basic psychological need for competence. Competence is not a certain skill, but rather a sense of capability in a task or endeavor (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2017). It seems plausible that as a student experiences success in their academic endeavors, they begin to feel more capable. As a student experiences academic success they perceive of their need for competence being supported. With this in mind, schools and teachers should continue to find ways to engage in positive feedback with students.

The evidence from this study indicates that truancy is a complicated web of confounding and contributing variables. Because of the complexity of the truancy phenomenon, the approach to prevention and intervention should be comprehensive in nature. No one approach can be successful. This study suggests that low performing, low socio-economic minority students are most at risk of skipping a class. The evidence also suggests there may be tangential associations between class truancy and the support of a student's basic psychological needs. The school may be able to tailor interventions and preventions with psychological need support in mind. Instruction could be intentional about allowing for student choice in curriculum and programing decisions. Students could be given more latitude in choosing the direction of their own instruction. From daily activities in the classroom to broad programmatic themes, students should feel they have some semblance of control over what their school day looks like. Students should be

provided with positive feedback in their academic efforts. Academically struggling students in particular are most at risk of skipping school or class all together. Schools should develop a comprehensive approach to positive academic interventions. Students that are provided those positive academic interventions may begin to taste academic success and feel competent in their academic endeavors. Evidence from this study suggests that increasing GPA is incremental in reducing class truancy occurrence. D students are less likely to truant than F students. C students are less like to truancy than D students, and so on. Efforts in increasing academic performance at any performance level may show gains in reducing class truancy. Pointed efforts to build caring relationships with students could translate to gains in truancy reduction. The evidence from this study indicates that students having positive perceptions of belongingness at school and with their classes may be less likely to truant from school or class. Relationship and team building strategies in every class could help to prevent a student from deciding to turn away from class. Partnering students most at risk of truanting behaviors with a staff mentor could be a valuable tool.

Schools can also address low hanging fruit with regard to truancy. Schools should make certain that communication and accountability polices are being followed with fidelity. Simple, low-cost, but systematic communication methods have been found to decrease absenteeism by making parents more aware of an absence. Parents should be notified at every class truancy occurrence. Parents, by definition, are typically unaware when a student is truant from a class. School officials should send informational texts, emails, or phone calls to be sure parents are aware their student is not present for any individual class (Chang et al., 2016; Gottfried & Hutt, 2019; Lara et al., 2018).

Schools should also be sure they are holding students accountable when they are truant from a class. The unexpectedly high truancy prevalence at the participating school may be the result of a laissez faire attitude with regard to skipping class. Many students may be skipping class because it is so easy and perceived to be inconsequential. It seems truanting behaviors at the participating school are so ubiquitous, skipping may be seen as commonplace or no big deal. There is evidence that suggests that a comprehensive and systematic approach to truancy discipline can reduce truancy prevalence (Boswell, 2018). There is also evidence that high levels of absenteeism can begin to have detrimental effects on present students' academic and socio-emotional outcomes (Gottfried, 2014). Keeping more students in the classroom could in turn help to stave off those secondary detrimental effects.

While schools may be capable of influencing some aspects of the risk factors associated with truancy, many of the determinants of truanting behaviors are not controlled by the school. With this in mind, interventions that have leveraged community and parental partnerships have shown success in improving chronic absenteeism (Balfanz & Byrnes, 2013; Chang et al., 2016; Gottfried & Hutt, 2019; Lara et al., 2018; Sheldon & Epstein, 2004). These interventions could have similar effects on truancy. These interventions are hallmarked by parent outreach and community mentorships.

Evidence gathered from this study should provide school leaders with valuable information for formulating a more nuanced approach to truancy intervention policy and practice. This study can contribute to the development of more useful truancy prevention practices. When school leaders know more about which students are at most risk of skipping class and the reasons students may decide to turn away from class, the more

school leaders can develop strategies to prevent truancy. Perhaps the evidence gathered from this exploratory empirical investigation will lead to decisions at the school level that will reduce truancy prevalence.

References

Adams, C. & Khojasteh, J. (2018) Igniting students' inner determination: The role of a need-supportive climate. *Journal of Educational Administration, 56*(4), 382-397. https://doi.org/10.1108/JEA-04-2017-0036

Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: Autonomy-enhancing and suppressing teacher behaviors predicting students' engagement in school work. *British Journal of Educational Psychology, 72*, 261-278. https://doi.org/10.1348/000709902158883

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

Baker, M. L., Sigmon, J. N., & Nugent, M. E. (2001). Truancy reduction: keeping students in school. *Juvenile Justice Bulletin*. https://doi.org/10.1037/e400462005-001

Balfanz, R., & Byrnes, V. (2012). The importance of being in school: A report on absenteeism in the nation's public schools. *The Education Digest, 78*(2), 4.

Balfanz, R., & Byrnes, V. (2013). Meeting the challenge of combating chronic absenteeism. Baltimore, MD: Johns Hopkins University School of Education.

Bartholomew, K. J., Ntoumanis, N., Mouratidis, A., Katartzi, E., Thøgersen-Ntoumani, C., & Vlachopoulos, S. (2018). Beware of your teaching style: A school-year long investigation of controlling teaching and student motivational experiences. *Learning and Instruction, 53*, 50-63. https://doi.org/10.1016/j.learninstruc.2017.07.006

Bell, A. J., Rosén, L. A., & Dynlacht, D. (1994). Truancy intervention. *Journal of Research & Development in Education*. *57*(3), 203-211.

Boswell, Z. (2018). School Disciplinary Responses to Unexcused Absences. (Doctoral Thesis). University of the Pacific. Sacramento, CA.

Brayboy, B. M. J., & Maaka, M. J. (2015). K–12 achievement for indigenous students. *Journal of American Indian Education, 54*(1), 63-98.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist, 32*(7), 513.

Bronfenbrenner, U. (1993). Ecological models of human development. In M. Gauvain & M. Cole (Eds.), Readings of the development of children (2nd Ed., pp. 37–43). New York: Freeman.

Bronfenbrenner, U., & Morris, P. (2006). The bioecological model of human development. In R. Lerner & W. Damon (Eds.), Handbook of child psychology (6th ed.): Vol. 1, Theoretical models of human development (pp. 793–828). Hoboken, NJ: John Wiley & Sons, Inc. http://doi.org/10.1002/9780470147658.chpsy0114

Cabus, S. J., & De Witte, K. (2011). Does school time matter? On the impact of compulsory education age on school dropout. *Economics of Education Review*, *30*(6), 1384-1398. https://doi.org/10.1016/j.econedurev.2011.07.003

Cameron, A. C., & Trivedi, P. K. (2013). *Regression analysis of count data* (Vol. 53). Cambridge University Press. https://doi.org/10.1017/CBO9781139013567

Chang, H. N., Russell-Tucker, C. M., & Sullivan, K. (2016). Chronic early absence: What states can do. *Phi Delta Kappan*, *98*(2), 22-27. https://doi.org/10.1177/0031721716671901

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Duriez, B. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, *39*(2), 216-236. https://doi.org/10.1007/s11031-014-9450-1

Cheon, S. H., & Reeve, J. (2015). A classroom-based intervention to help teachers decrease students' amotivation. *Contemporary Educational Psychology*, *40*(1), 99-111. https://doi.org/10.1016/j.cedpsych.2014.06.004

Conolly, M., & O'Keeffe, D. (Eds.). (2009). *Don't fence me in: Essays on the rational truant*. University of Buckingham Press.

Coxe, S., West, S. G., & Aiken, L. S. (2009). The analysis of count data: A gentle introduction to Poisson regression and its alternatives. *Journal of Personality Assessment*, *91*(2), 121-136. https://doi.org/10.1080/00223890802634175

Dahl, P. (2016). Factors associated with truancy: Emerging adults' recollections of skipping school. *Journal of Adolescent Research*, *31*(1), 119-138. https://doi.org/10.1177/0743558415587324

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination research*. University Rochester Press.

Deci, E. L., & Vansteenkiste, M. (2004). Self-determination theory and basic need satisfaction: understanding human development in positive psychology. *Ricerche di Psicologia*, *27*, 17-34.

DeKalb, J. (1999). Student truancy. *U. S. Department of Education*. Eric Digest, 125

Flannery, K. B., Frank, J. L., & Kato, M. M. (2012). School disciplinary responses to truancy: Current practice and future directions. *Journal of School Violence*, *11*(2), 118-137. https://doi.org/10.1080/15388220.2011.653433

Freire, P. (2005). *Pedagogy of the oppressed* (3rd ed.). New York: Continuum.

Garry, E. M. (1996). Truancy: First Step to a Lifetime of Problems. *Juvenile Justice Bulletin*. https://doi.org/10.1037/e306412003-001

Gonzalez, T. (2012). Keeping kids in schools: Restorative justice, punitive discipline, and the school to prison pipeline. *Journal of Law & Education*, *41*, 281.

Gottfried, M. A. (2014). Chronic absenteeism and its effects on students' academic and socioemotional outcomes. *Journal of Education for Students Placed at Risk, 19*(2), 53-75. https://doi.org/10.1080/10824669.2014.962696

Gottfried, M. A., & Gee, K. A. (2017). Identifying the determinants of chronic absenteeism: A bioecological systems approach. *Teachers College Record*, *119*(7), 1-34.

Gottfried, M. A., & Hutt, E. L. (2019). *Absent from School: Understanding and Addressing Student Absenteeism*. Harvard Education Press. Cambridge, MA.

Gottfried, M. A., & Hutt, E. L. (2019). Addressing absenteeism: Lessons for policy and practice. *Policy Analysis for California Education, PACE*.

Grant, C. (1992). Juveniles who murder. In A. Burges (Ed.), *Child trauma: Issues and research* (pp. 459–472). New York: Garland.

Guare, R. E., & Cooper, B. S. (2003). *Truancy revisited: Students as school consumers*. Scarecrow Press.

Hancock, K. J., Gottfried, M. A., & Zubrick, S. R. (2018). Does the reason matter? How student-reported reasons for school absence contribute to differences in achievement outcomes among 14–15 year olds. *British Educational Research Journal*, *44*(1), 141-174. https://doi.org/10.1002/berj.3322

Hickling-Hudson, A., & Ahlquist, R. (2003). Contesting the curriculum in the schooling of Indigenous children in Australia and the United States: From Eurocentrism to

culturally powerful pedagogies. *Comparative Education Review*, *47*(1), 64-89. https://doi.org/10.1086/345837

Hirschfield, P. J., & Gasper, J. (2011). The relationship between school engagement and delinquency in late childhood and early adolescence. *Journal of Youth and Adolescence*, *40*(1), 3-22. https://doi.org/10.1007/s10964-010-9579-5

Jones, T., & Lovrich, N. (2011). Updated literature review on truancy: Key concepts, historical overview, and research relating to promising practices. *Center for Children and Youth Justice.*

Katz, M. (1976). A history of compulsory education laws (Fastback series). Bloomington, IN: Phi Delta Kappan.

Krueger, R. F., Markon, K. E., Patrick, C. J., Benning, S. D., & Kramer, M. D. (2007). Linking antisocial behavior, substance use, and personality: An integrative quantitative model of the adult externalizing spectrum. *Journal of Abnormal Psychology*, *116*(4), 645. https://doi.org/10.1037/0021-843X.116.4.645

Lara, J., Noble, K., Pelika, S., & Coons, A. (2018). Chronic Absenteeism. NEA Research Brief. NBI No. 57. *National Education Association*.

Mallett, C. A. (2016). Truancy: It's not about skipping school. *Child and Adolescent Social Work Journal*, *33*(4), 337-347. https://doi.org/10.1007/s10560-015-0433-1

Maynard, B. R., Vaughn, M. G., Nelson, E. J., Salas-Wright, C. P., Heyne, D. A., & Kremer, K. P. (2017). Truancy in the United States: Examining temporal trends and correlates by race, age, and gender. *Children and Youth Services Review*, *81*(10), 188-196. https://doi.org/10.1016/j.childyouth.2017.08.008

Monahan, K. C., VanDerhei, S., Bechtold, J., & Cauffman, E. (2014). From the school yard to the squad car: School discipline, truancy, and arrest. *Journal of Youth and Adolescence*, *43*(7), 1110-1122. https://doi.org/10.1007/s10964-014-0103-1

O'Keefe, D. (1993). Truancy in English Secondary Schools, London: DfES.

Pewewardy, C., & Hammer, P. (2003). *Culturally responsive teaching for American Indian students*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.

Reeve, J., & Tseng, C. M. (2011). Cortisol reactivity to a teacher's motivating style: The biology of being controlled versus supporting autonomy. *Motivation and Emotion*, *35*(1), 63-74. https://doi.org/10.1007/s11031-011-9204-2

Roderick, M., Arney, M., Axelman, M., DaCosta, K., Steiger, C., Stone, S., & Waxman, E. (1997). Habits hard to break: A new look at truancy in Chicago's public high

schools. *Chicago, IL: University of Chicago, School of Social Service Administration*.

Romero, M., & Lee, Y. S. (2007). A national portrait of chronic absenteeism in the early grades. *National Center for Children in Poverty*. Columbia University

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, *55*(1), 68. https://doi.org/10.1037/0003-066X.55.1.68

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.

Seeley, K. (2006). Guidelines for a national definition of truancy and calculating rates. *Denver, CO: National Center for School Engagement*.

Sheldon, S. B., & Epstein, J. L. (2004). Getting Students to School: Using Family and Community Involvement to Reduce Chronic Absenteeism. *School Community Journal*, *14*(2), 39-56.

Shute, J. W. (2009). Expanding the truancy debate: Truancy, ethnic minorities, and English language learners. In Conolly, M., & O'Keeffe, D. (Eds.), *Don't fence me in: Essays on the rational truant* (pp. 115-138). University of Buckingham Press.

Shute, J., & Cooper, B. S. (2014). *Fixing truancy now: Inviting students back to class*. Rowman & Littlefield.

Shute, J. W., & Cooper, B. S. (2015). Understanding in-school truancy. *Phi Delta Kappan*, *96*(6), 65-68. https://doi.org/10.1177/0031721715575303

Smith, L. E. (1979). *Profiles of truancy: A Naturalistic study* (Doctoral dissertation), Brigham Young University. Department of Secondary Education and Foundations.

Soenens, B., Deci, E. L., & Vansteenkiste, M. (2017). How parents contribute to children's psychological health: The critical role of psychological need support. In *Development of self-determination through the life-course* (pp. 171-187). Springer, Dordrecht. https://doi.org/10.1007/978-94-024-1042-6_13

Strand, A. S. (2014). 'School–no thanks–it ain't my thing': accounts for truancy. Students' perspectives on their truancy and school lives. *International Journal of Adolescence and Youth*, *19*(2), 262-277. https://doi.org/10.1080/02673843.2012.743920

Sutphen, R. D., Ford, J. P., & Flaherty, C. (2010). Truancy interventions: A review of the research literature. *Research on Social Work Practice*, *20*(2), 161-171. https://doi.org/10.1177/1049731509347861

Tuck, Eve, and Rubén A. Gaztambide-Fernández (2013). Curriculum, replacement, and settler futurity. *Journal of Curriculum Theorizing*, *29*(1), 72-89.

Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, *1*(1), 1-40.

United Sates Department of Education. (2013). *The Challenge Newsletter*. (Vol. 15 Number 2) The Office of Safe and Drug-Free Schools.

Valenzuela, A. (1999). *Subtractive schooling: Issues of caring in education of US-Mexican youth*. State University of New York Press.

Van den Broeck, A., Ferris, D. L., Chang, C. H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, *42*(5), 1195-1229. https://doi.org/10.1177/0149206316632058

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, *23*(3), 263. https://doi.org/10.1037/a0032359

Vaughn, M. G., Maynard, B. R., Salas-Wright, C. P., Perron, B. E., & Abdon, A. (2013). Prevalence and correlates of truancy in the US: Results from a national sample. *Journal of adolescence*, *36*(4), 767-776. https://doi.org/10.1016/j.adolescence.2013.03.015

Vavrus, M. (2008). Culturally responsive teaching. In Good, T. L. (Ed.), *21st century education: A reference handbook* (pp. 49–77). Thousand Oaks, CA: Sage. https://doi.org/10.4135/9781412964012.n56

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Thousand Oaks, CA: Sage.

Zhang, M. (2004). Time to change the truancy laws? Compulsory education: Its origin and modern dilemma. *Pastoral Care in Education*, *22*(2), 27-33. https://doi.org/10.1111/j.0264-3944.2004.00260.x

Appendix A: Climate Survey Items

Study Measures

Competence Support

7 items, 1-4 scale, *strongly disagree* (score 1) to *strongly agree* (score 4), student respondent

1. Teachers in this school really make students think.
2. Teachers in this school expect students to work hard.
3. Teachers in this school help students with difficult assignments.
4. Teachers in this school celebrate the achievement of students.
5. Teachers in this school make learning interesting.
6. Teachers in this school challenge students to achieve academic goals.
7. Teachers in this school expect students to do their best all the time.

Autonomy Support

7 items, 1-4 scale, *strongly disagree* (score 1) to *strongly agree* (score 4), student respondent

1. Teachers allow students to decide things for themselves.
2. Teachers listen to the opinions and ideas of students.
3. Teachers encourage students to work in their own way.
4. Teachers respect students when they share what they really think.
5. Teachers explain why it is important to study certain subjects in school.
6. Teachers show students how to solve problems themselves.

7. Teachers talk about the connection between what is studied in school and what happens in real life.

School Relational Support

3 items, 1-4 scale, *strongly disagree* (score 1) to *strongly agree* (score 4), student respondent

There is a TEACHER or other ADULT at school who…

1. Really cares about me.
2. Listens to me when I have something to say.
3. Tells me when I do a good job.

Psychological Need Frustration

9 items, 1-4 scale, *strongly disagree* (score 1) to *strongly agree* (score 4), student respondent

1. I feel insecure about my abilities.
2. I feel excluded from a group I want to belong to.
3. I have serious doubts about whether I can do things well.
4. I feel forced to do many things I wouldn't choose to do.
5. People who are important to me are cold and distant toward me.
6. I feel disappointed with many of my performances.
7. I feel pressured to do too many things.
8. I think that the people I spend time with dislike me.
9. Most of the things I do feel like "I have to."

Appendix B: Sample Truancy Document

Name: _____ Attendance Contract for Truancy

Students are encouraged to maintain regular attendance. A truancy occurs when a student is absent from class and no verified excuse has been provided by a parent or guardian as to the student's whereabouts.

I understand that due to continued truancies, I am now placed on probationary status for my attendance. The probationary status shall remain in effect until the end of the semester. As a probationary student, I understand that unless my attendance improves, I may be at risk of failing my classes and losing the privileges described below. I understand teachers may require Homework Rescue in order to receive credit for assignments missed through truancy. I understand that my grade in any given class may be lowered to a 59 F before finals if I have accrued more than 10 absences in a semester (Board Policy # 5025).

The following consequences will be issued for further violations:

1st Referral (3 Truancies):
- Assigned 2 days lunch detention
- Review and sign attendance contract

2nd Referral (5 Truancies):
- ✓ Assigned 4 days lunch detention.

3rd Referral (7 Truancies):
- ✓ Assigned 5 days IP.
- ✓ Loss of dance (including PROM) and activity privileges for the remainder of the semester.

4th Referral (9 Truancies):
- ✓ Assigned 5 days IP.
- ✓ Loss of privilege to participate in dances (including PROM) and special events hosted by the school until the end of the school year.
- ✓ Student will be added to the RAO list for the remainder of the semester (no extended lunch).
- ✓ Loss of virtual privileges for the remainder of the semester.

5th Referral (›10 Truancies):
- ✓ Violation of Board Policy #5050: "Willful disobedience of a request of any school official."
- ✓ AP will determine consequence.

I understand that the Compulsory Education Law requires attendance in school. If your absence/tardy history does not improve, we are required by law to report it to the County District Attorney, which may result in a fine. Any parent, guardian, custodian, child or other person violating any provisions of the law shall be guilty of a misdemeanor, and upon conviction; thereof, shall be punished by a fine of not less than $25.00 for the first offense, no less than $50 nor more than $100 for the second offense, and not less than $100 nor more than $250.00 for each subsequent offense.

By signing this contract, you acknowledge that you have exhibited behaviors that put your academic success and ultimately your graduation status in danger.

Student:_____Parent/Guardian_____

Appendix C: IRB Approval

The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects

Human Research Determination Review Outcome

Date: July 03, 2019

Principal Investigator: Joshua Paul Robinson

Study Title: The relationship between student perceptions of basic psychological need satisfaction and truancy

Review Date: 7/3/2019

I have reviewed your submission of the new study application t for the above-referenced study. I have determined this research does not meet the criteria for human subject's research. The proposed activity involves conducting a secondary analysis of existing de-identified data. Therefore, IRB approval is not necessary so you may proceed with your project.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or irb@ou.edu. Thank you.

Cordially,

Lara Mayeux

Lara Mayeux, Ph.D.
Chair, Institutional Review Board