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An Exploration of CIS Interventions and their Impact on Homeless Middle School Students

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ABSTRACT

Homeless youth face many barriers during their education that have an impact on their overall success in completing school. This study attempts to identify an evidence-based practice to support homeless students in the school setting. Literature suggests that basic need services are more frequently implemented in schools rather than interventions aimed to address academic, attendance, and behavioral concerns. Communities In Schools (CIS) is a dropout prevention program instilled in all of the Abilene Independent School District (AISD) middle schools and high schools. This program utilizes interventions to target students in areas of academics, attendance, and behavior. A gap in the literature was the lack of research for homeless students, specifically in middle schools, and what school interventions are currently being implemented for this subpopulation. This study sought to explore the effects of CIS interventions on school-related outcomes for homeless middle school students. A one-group pretest-posttest was conducted with secondary data from the 2016-2017 school year in all four of the AISD middle schools. In order to address the problem of lacking a control group, the impacts of the intervention were compared between a convenience sample of all homeless case-managed students \((n=62)\) and another sample of 62 non-homeless case-managed students. Results indicated the academic intervention improved academic performance of the homeless students as well as the non-homeless students. The absence, tardy, and behavior interventions did not improve outcomes for either of the groups, which can be attributed to the small sample
size of each test. The findings suggest CIS interventions can be considered an evidence-based practice that addresses certain barriers for homeless students. Implications from this study include the continual need for services in schools, the beneficial impact of community programs in schools for homeless youth, and a need for further studies that research this subject with a more reliable research design.
An Exploration of CIS Interventions and their Impact on Homeless Middle School Students

A Thesis
Presented to
The Faculty of the Graduate School
Abilene Christian University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science
In Social Work

By
Kaitlyn Tudor
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This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Council of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Social Work

Date

5-11-18

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Assistant Provost for Graduate Programs
This thesis is dedicated to the students I had the joy of meeting this past year who directly inspired this research and opened my eyes to the harsh reality of homeless youth. Their resilience and determination to continue their education, despite many barriers, is admirable beyond description. I hope this study provides further implications of what can continue to be done for these students.

“Speak up for those who cannot speak for themselves, for the rights of all who are destitute.” Proverbs 31:8
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CHAPTER I
INTRODUCTION

Homelessness is continuing to increase across the nation, and a subpopulation often overlooked is homeless youth (Mohan & Shields, 2014). According to the U.S. Department of Housing and Urban Development (HUD), this subgroup is the fastest growing segment of the homeless population and is considered to be the most vulnerable (Rahman, Turner, & Elbedour, 2015). Abilene, a city in west Texas, is not exempt from this rising problem, and the school system experiences it firsthand. The Abilene Independent School District (AISD) homeless liaison, Darrin Cox, states, “It's so important to be at school every day and there are so many barriers that we don't think about . . . having clean clothes, having clothes that you can wear, having shoes you can wear, or a meal to eat” (Baker, 2017). When students are experiencing numerous barriers to their education, it causes a severe impact on the students that needs to be addressed.

The National Law Center on Homelessness and Poverty estimated that nearly 1.35 million children experience homelessness, affecting nearly one out of every forty-five children each year (Griffin & Farris, 2010; The National Center on Family Homelessness, 2010). Interventions have been implemented in various school settings for homeless students, but not all of the interventions have had a significant impact (Havlik & Bryan, 2015; Sulkowski, 2016). Homeless students are already attending school with a disadvantage, and any resources that are available will greatly help them in their educational journey.
According to the National Center on Family Homelessness (NCFH), homeless students are more likely to repeat grades, be expelled or suspended, and are adding to the increasing amount of high school dropouts (National Center on Family Homelessness, 2009). High school students are considered adults in many aspects and are often able to have modes of transportation. However, middle school students are often at a higher disadvantage due to their age and the limited amount of resources available. Middle school students heavily depend on their guardians and are at a pivotal age where dropping out of school is becoming more of an option (Cumming & Gloeckner, 2012). This subpopulation needs community support, whether that be directly from the school system or dropout prevention programs, such as Communities in Schools.

Communities in Schools (CIS) is a dropout prevention program instilled in twenty-five states that aims to increase the likelihood of students staying in school (Communities In Schools, n.d.). Their mission is to “surround students with a community of support, empowering them to stay in school and achieve in life” (Communities In Schools, n.d.). CIS does this by implementing interventions that focus on behavior, attendance, and academics in all middle and high schools. AISD has served a large number of homeless students, a number that is proportional to national trends (Abilene Independent School District, 2015b). While CIS has helped numerous students succeed in school, it has not been determined how their interventions have affected those students who are homeless in the middle school setting. A contemplation of CIS’s interventions and their effect on homeless students has caused the need for this particular study to respond to the question: How does the homeless middle school population respond to interventions intended to prevent school dropouts?
The purpose of this study is to explore the effects CIS’s interventions directly have on case-managed homeless students in producing expected outcomes. Due to no control group being available, data will be compared to its effects on case-managed students who do not identify as homeless to see if the interventions have different effects for the two different groups. The implications from the study will allow for a broader picture of the impact these interventions have had on these students. It will also seek to discover if the interventions are significant when addressing homeless students’ needs.
CHAPTER II
LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter includes two major parts: 1) a review of literature to explore how
previous studies attempted to answer the research question that aims to resolve the
problem and 2) a conceptual framework of this study, which has been developed based
on the literature review.

Literature Review

Research is rapidly growing as the rates of homelessness increase across the
nation, yet there are still multiple areas of ambiguity in regards to this research
(Hernandez Jozefowicz-Simbeni & Israel, 2006). Homeless youth need evidence-based
interventions implemented into their school systems as a way to combat the many
barriers they face (Mohan & Shields, 2014). A literature review was conducted to
determine what interventions are currently being utilized to address homelessness in
middle schools as well as identify gaps in the literature. To date, homelessness
specifically in the middle school setting is not a heavily researched topic and is
considered secondary in comparison to the amount of research regarding homelessness
on overall youth (National Association for the Education of Homeless Children and
Youth, 2010). This literature review focuses on homelessness in the education system,
barriers affecting homeless students, perspectives on homeless students, interventions
currently targeted towards this subpopulation, CIS’s interventions, and a conceptual
framework for homeless youth. The conclusion of this chapter identifies research gaps found in the literature and the purpose of this study that addresses the research gaps.

An EBSCOhost search was conducted on Abilene Christian University’s library database to find scholarly articles and sources. Keywords such as “homelessness,” “middle school,” “education,” “interventions,” and “unaccompanied youth” were utilized in this search. There was inclusion criteria applied to all articles found for this study. The articles must be (a) full text, (b) peer-reviewed, (c) written in English, and (d) completed in the United States. Additional text from supplemental textbooks was also utilized for the purpose of this research.

**Homelessness in the Education System**

The American education system is undergoing many changes in policies as a way to improve overall learning for students and provide them with the best education possible (Stone & Uretsky, 2016). The topic of homelessness in schools has a growing amount of research but lacks specificity and clarity on what can alleviate this problem on a more macro-level. Little research exists on the topic of homelessness in middle school youth, but the research available contains heavy implications for the need of continual research on the topic (Li, Allen, & Casillas, 2017).

The U.S. Department of Housing and Urban Development (HUD) separates homelessness into distinctive categories. Category one, which is the most relevant to this study, defines literal homelessness as “individuals and families who live in a place not meant for human habitation (including the streets or in their car), emergency shelter, transitional housing, and hotels paid for by a government or charitable organization” (Children and Youth and HUD’s homeless definition., n.d.). This
definition is vital to understand when trying to aid this population and see what interventions would be most helpful.

HUD defines the term *unaccompanied youth* as “under 25 years of age . . . have not had a lease and have moved two or more times in the past 60 days and are likely to remain unstable because of special needs or barriers” (Children and youth and HUD’s homeless definition, n.d.). For middle school students, this can have the appearance of a student not having a permanent address or a student temporarily residing with grandparents. Unaccompanied youth and homeless students are two terms often used interchangeably in the school system, which has the potential to cause ambiguity if not properly defined.

The AISD defines the term unaccompanied youth by 42 U.S.C. Section 11302 and its subsequent amendments as

(A) have experienced a long-term period without living independently in permanent housing,
(B) have experienced persistent instability as measured by frequent moves over such period, and
(C) can be expected to continue in such status for an extended period of time because of chronic disabilities, chronic physical health or mental health conditions, substance addiction, histories of domestic violence or childhood abuse, the presence of a child or youth with a disability, or multiple barriers to employment. (2015)

The terms *unaccompanied youth* and *homeless* are used interchangeably at AISD, and eligibility requirements for these terms are vital for fully understanding this problem.
The U.S. Department of Education set these terms for AISD and also enforced the McKinney-Vento Homeless Education Assistance Improvements Act in 2001 (Hendricks & Barkley, 2012). This act had the intention of inhibiting homelessness and providing mandated assistance to this population (Abilene Independent School District, 2015b). This act was originally called the Stewart B. McKinney Homeless Assistance Act of 1987, but in 2001 it was reauthorized as the McKinney-Vento Act. It is part of the No Child Left Behind Act (NCLB), which had the sole intent of aiding low-socioeconomic students who have additional barriers to their schooling (National Association for the Education of Homeless Children and Youth, 2010). Congress aimed to accommodate homeless students via “transportation, ease of registration, school supplies, and some health issues” (Hendricks & Barkley, 2012, p. 179). AISD based their accommodations and assistance for homeless students off the policies of this act. The McKinney-Vento Act reaches to “ensure that homeless children and youths are afforded the same free, appropriate public education as provided to other children and youths” (National Association for the Education of Homeless Children and Youth, 2010). It offers modifications for needed school supplies, as well as transportation, to these students and enforces faculty to help in empowering these students on their education journey.

A study conducted by Wayne State University analyzed five homeless students’ perspectives in the education system, and their findings indicated a need for overall better enforcement of the McKinney-Vento Act (Mohan & Shields, 2014). While the act has been reauthorized, it is still hard to enforce in all school districts without a homeless liaison actively involved. While the act has had amendments and alterations over the
years, the main goal of the act still stands: homeless students need additional help, and our school system is not currently assisting this population in the most effective manner.

As transformative as the McKinney-Vento Act can be, it lacks empirical analysis of its effectiveness in assisting the homeless student population. While it has received federal funding, there has been a shortage of evidence-based research on the act’s direct impact on students. A study in North Carolina suggested students benefiting from the McKinney-Vento Act had no difference in academic achievement than students who are not homeless (Hendricks & Barkley, 2012). This federally funded grant has valuable intentions, but more continuing evidence needs to be discussed to see whether or not homeless students are benefiting from it.

The McKinney-Vento Act has been found to increase mindfulness of homeless youth and demonstrate the need for school districts to abide by the act’s regulations. According to an article in The Journal of Child and Family Studies, middle school students experiencing homelessness often implement more mindfulness practices in school and interpersonal relationships than their non-homeless counterparts. These students are put in situations that force them to be more mindful of their home life, education, and additional stressors (Viafora, Mathiesen & Unsworth, 2015). While mindfulness is an important aspect for all populations, it especially comes into consideration for students experiencing homelessness. To further assist this population, the common barriers their residence adds to their life need to continue being examined and addressed.
Barriers Affecting Homeless Students in the Education System

There have been numerous studies conducted that have revealed the multiple factors that affect homeless students (Canfield, Nolan, Harley, Hardy & Elliott, 2016; Rahman, Turner, & Elbedour, 2015; Sulkowski & Joyce-Beaulieu, 2014). Research conducted by the National Health Care for the Homeless Council informs that unaccompanied youth receive less economic and societal support than homeless adults receive (Ammerman et al., 2004). Identifying the barriers this population faces is important, especially when the subpopulation is often overlooked. Common barriers for homeless students include no permanent residence, parental absenteeism, lack of transportation, experiencing caregiver instability, feeling socially disconnected from classmates, and having limited access to basic necessities (Canfield, Nolan, Harley, Hardy & Elliott, 2016; Rahman, Turner, & Elbedour, 2015; Sulkowski & Joyce-Beaulieu, 2014).

There is a complex relationship between students’ social-emotional factors and academic outcomes in early adolescence. Students’ emotional well-being is affected by their home life and the relationships they have with their family or guardians (Li, Allen, & Casillas, 2017). It is also impacted by their school life, relationships with teachers, and how well they are doing academically. When a student is not doing well academically, it often carries over to how they feel socially as well. Results of multilevel models indicated that school factors, including school truancy and average school reading and mathematics proficiency rates, contributed to individual student outcomes (Stone & Uretsky, 2016). When a student’s home life is unpredictable, it often carries over to their school life.
When a student does not have a permanent residence, their medical stability is often not a priority. Medical bills and doctor check-ups are also an additional cost that can often not be afforded. Similarly, the negative impact of homelessness on psychological and mental health issues has been reported (Smart-Morstad, Triggs, & Langlie, 2017). When a student grows up in an unstable environment, their mental health is often disregarded or not effectively treated. This reaffirms Maslow’s hierarchy of needs and the urgency of intervening for homeless students so the majority of their needs can be met.

**Faculty Perspective of School Homelessness**

From a counselor’s perspective, it is essential that homeless students are aware of the available resources schools have to offer. A qualitative study was conducted that analyzed the free responses of the Knowledge and Skills with Homeless Students Survey [KSHSS] that prompted school counselors to define the highest needs for homeless students. The results from this study indicated four areas of concern: healthy development, services for emotional connection, academic services and supports, and knowledge of services that school systems provide (Havlik, Brady & Gavin, 2014). As a result, this study included many implications that encouraged growth in the school systems framework of addressing homelessness.

A study conducted from Concordia College in Minnesota gained perspective from a school administrator, teacher, social worker, and family shelter school-to-shelter liaison over the impact of homelessness in an elementary school. All four professions agreed that homeless students face additional barriers, which if not addressed early-on can lead to many problems. The social worker reported having difficulties with the McKinney-Vento
Act due to placements often happening without all the needed information (Smart-Morstad, Triggs, & Langlie, 2017). Students often come in after the initial enrollment period and need to be placed in a classroom as quickly as possible, often ignoring antecedents that could potentially affect the students.

Existing literature for homeless students primarily revolves around the perspective of school counselors rather than other education faculty. However, school social workers have also addressed homelessness in schools and the effect school programs can have on students. School social workers have made inferences that many do not understand or have knowledge regarding the McKinney-Vento Act and its implications. Homeless liaisons’ jobs often align with school social workers, but rarely either of these jobs share their knowledge of McKinney Vento’s policies in macro settings. School social workers have inferred that homeless students need a better understanding of the MVA to know how to move forward with this rising problem and what resources are available/interventions needed to be more helpful (Markward & Biros, 2001).

**Current Interventions and Frameworks Implemented**

A large gap in the literature is a lack of empirically-based interventions being implemented in school systems for homeless students. Across the board nationally, the majority of schools are not utilizing empirically supported interventions (Powers, 2010). However, many effective interventions do exist for the low-socioeconomic population, which in part does affect homeless students. Function-based interventions (FBI) and positive behavioral interventions and support (PBIS) are emerging interventions that are currently being implemented across the nation to positively impact homeless students.
Function-Based Interventions. The rise of function-based interventions has a major effect on homeless students. These interventions were originally under the Individuals with Disabilities Education Act (IDEA) in 1997 and have targeted students with mental health and behavioral problems (Trussell, Lewis, & Raynor, 2016). These interventions target a negative behavior and try to make it positive by conducting a function-based assessment (FBA) to see which intervention should be implemented to change the negative behavior into one that is positive. In regards to homeless students, this specific type of intervention can target certain behaviors or difficulties in the classroom that a homeless student is facing (Scott & Cooper, 2017). After the FBA is conducted, different interventions focused on positive reinforcement or differential reinforcement will be put in place as a way to combat the students’ behaviors (Umbreit, Ferro, Liaupsin, & Lane, 2007).

These interventions work with faculty, students, and students’ peers as a way to form the intervention most appropriate for each student. According to Newcomer and Lewis, function-based interventions are more effective in regards to reducing problem behaviors compared to more traditional interventions (2004). While time consuming, these interventions require effort from both faculty and students, but the results have been very positive. Communities in Schools of the Big Country has not yet adopted this type of intervention but continue to search for new evidence-based interventions to implement among their case-managed students (Communities in Schools, n.d.).
Positive Behavioral Interventions and Support. Positive Behavioral Interventions and Supports (PBIS) originates from a school delivery service system called Multi-Tiered Systems of Support (MTSS) (Mathur & Nelson, 2013). The aim of MTSS is to provide various services and interventions at differing levels of intensity to low-socioeconomic students (Sulkowski & Joyce-Beaulieu, 2014). This framework combines aspects from Research to Interventions (RtI) and Positive Behavioral Interventions and Supports (PBIS). In particular, PBIS aims to target students’ behavior with positive support from the school community. However, its main aim is to assist all low-socioeconomic students, although it is still in need of improvements to reach homeless students more effectively (Mathur & Nelson, 2013).

PBIS implements systems change methodology to decrease students’ problem behaviors as well as utilize research-validated practices. Students at a PBIS implemented school are made aware of the school’s expectations and will receive tangible rewards or be reprimanded based on their behavior (Coffey & Horn, 2012). PBIS heavily relies on school wide expectations, which has shown to be challenging due to the small percentage of trained faculty able to integrate this interdisciplinary approach. Oftentimes administrative staff or school counselors are the ones leading this system rather than a specialized practitioner (Eagle, Dowd-Eagle, Snyder & Holtzman 2015). PBIS is often found in juvenile centers, but research is beginning to suggest the importance of having PBIS in the school systems to combat the high amount of at-risk students entering the juvenile system (Mathur & Nelson, 2013).
Communities In Schools’ Interventions

While function-based interventions and positive behavioral interventions and supports serve as effective frameworks for low-socioeconomic students, CIS is able to offer a different approach. This agency provides interventions that focus on decreasing the school dropout rate among students (Communities in Schools, n.d.). It has been suggested that school dropout and school absenteeism are heavily correlated; empirical research has established this strong association by examining various studies over school districts absences (Tanner-Smith & Wilson, 2013). The Beginning School Study found that absences as early as first grade can increase in middle school and then in high school, implying absences can start very early and continue to worsen if never addressed (Attendance Works, 2011). This demonstrates the great need for dropout prevention programs, such as CIS, and for their interventions to be effectively utilized among students of need.

CIS continues to conduct research on evidence-based practices of effective interventions for low-socioeconomic students. Currently, the majority of the intervention process consists of making short-term goals with case-managed students as a way to hold the student accountable and provide an authoritative figure genuinely interested in their success (Compass, n.d.). There are three areas for which a student can be targeted: academics, attendance, and behavior. Regardless of their target area, all of the interventions include setting goals for the students as a way to keep them engaged and help them obtain their goal (Communities In Schools, n.d.).

Figure 1 illustrates the logic model for CIS interventions. There is a success coach and social work intern at each campus who assess the students to determine which
intervention would be most beneficial in each case. Once the intervention is decided, the success coach will meet with the students to help them achieve their short-term goals. Students will meet their short-term goals or have them adjusted by the success coach/intern so they are feasible for the student. Eventually, the short-term goals will assist in the student moving on to the next grade level. The student’s level of motivation is vital in the process of reaching goals and strongly correlates with the expectancy theory earlier discussed. The end result, and mission of CIS, is to help students be equipped to graduate from high school and avoid dropping out.

CIS is continuously looking for more evidence-based interventions to broaden the options available for students. Recently, CIS of the Big Country adopted a program called “Never Be Absent” (NBA). This program has Tier I (school wide) and Tier III (individual) components. For the purpose of this research, Tier III components will be addressed. NBA serves as a specific intervention for students who are being targeted specifically for absences (Li & McLean, 2017). It targets students’ state-reported absences and sets goals with them as a way to hold them accountable and get them to school. In the 2016-2017 school year, all four AISD middle schools had an increase in their case-managed students’ attendance by 50% or more. Three of the four middle schools had a 79% or more increase, with one middle school having a 100% increase of students’ attendance (Li & McLean, 2017). This program is still fairly new, but data supports that it is an effective intervention.

Academic interventions revolve around “Academic Readiness” and “Homework Completion” (Compass, n.d.). The success coach has more academic interventions available, but for the purpose of this research these two interventions will be assessed, as
they are the most common. Academic Readiness analyzes the student’s grades and looks at what classes the student is not passing. To help them pass their classes and move on to the next grade, the success coach will make goals with the student to help them. Homework completion also analyzes the student’s grades and which class the student has missing homework assignments in. A similar process is completed where the success coach and student write down manageable goals for the student to help them not have as many missing homework assignments.

Behavior interventions have been more challenging to analyze due to some behaviors not being easily measurable. Disciplinary actions are observed from students, and students can be targeted if many disciplinary actions have been reported. Self-esteem, alertness, and overall behavior of a student can be targeted by CIS, but measurements often vary. The most common behavior interventions used are targeting self-esteem and classroom conduct interventions (Compass, n.d.). Self-esteem can be targeted as an intervention with CIS resources. Classroom conduct is similar to other interventions by setting goals with the student based on their behavior. For many students, this looks like setting a goal of not getting ISS (In School Suspension) for a few weeks at a time.

All three areas of attendance, academics, and behavior have interactive interventions and allow the student to periodically be checked on to see if their goals should be altered. An evaluation study of the interventions has not yet been identified to investigate its effect empirically. CIS does not have interventions specifically for homeless students, but it would be interesting to see if the interventions have a differing effect on homeless students versus students who have a permanent residence.
Conceptual Framework

Based on the reviewed articles, motivation was a recurring theme that had an integral impact on homeless youth (Dawes & Larson, 2011; Gobin, Teeroovengadum, Becceea, & Teeroovengadum, 2012). To have a better understanding of student homelessness, multiple motivational theories serve as a way to better understand students’ needs and ways communities can address these through interventions. The most prominent motivational theory that provides a foundation for this research is Maslow’s hierarchy of needs. Abraham Maslow created this psychological theory with the intent of portraying the deep internal need individuals have to eventually reach self-actualization (Maslow, 1943). It is understood that a student must have all their basic needs met before they will have the capability to focus on individual motivation (Gobin, Teeroovengadum, Becceea, & Teeroovengadum, 2012). According to Maslow, there are four areas of needs to be met before reaching the goal of self-actualization: physiological, safety, love/belonging, and esteem (Tichy, 2017).

While homeless students need their basic needs met first, their psychological needs are still of importance. Homeless children often have higher depressive rates and higher levels of anxiety than students in traditional housing. Homelessness is also a leading factor in negatively impacting the children’s educational career, overall academic achievement, likelihood for grade retention, and behavioral concerns (Havlik, Brady, & Gavin, 2014). Maslow’s hierarchy of needs is a conceptual framework that should be applied to addressing all of the needs of this population. It poses the idea that once an individual’s physiological needs are met, they will then be motivated to reach higher-level needs (Gobin, Teeroovengadum, Becceea, & Teeroovengadum, 2012). When students’
basic needs are not met, it interferes with all other aspects of their lives. Middle schoolers who do not have permanent housing often do not have their physiological needs met and need additional resources to help them successfully progress through their schooling (Israel, Urberg, & Toro, 2001).

Having an understanding of Maslow’s hierarchy of needs and its relation to motivation correlates with the motivational theory, expectancy theory. The expectancy theory proposes the idea that people will try to achieve different tasks based on the expected outcome or incentives being offered (Dawes & Larson, 2011). This theory can be applied to interventions in school settings that offer incentives, which are offered as a way to motivate students to achieve their goals (Attendance Works, 2011). The theory relies heavily on the three elements: expectancy, instrumentality, and valence (Mitchie, 2001). *Expectancy* is the belief that the student will be able to achieve the goal, *instrumentality* is that the student is aware they will receive a reward if the goal is met, and *valence* is the level of importance the student has placed upon the expected outcome. With the combination of these three elements, it is expected that the student will do their best to achieve the expected goal/target to receive an incentive/end goal (Dawes & Larson, 2011). CIS uses interventions that offer incentives once the students meet their individualized goals. According to the expectancy theory, incentives play a large part in the students achieving their goals; the students are aware they will be receiving something in return and are motivated to reach that certain outcome (Wall & Miller, 2015).

By combining concepts from the expectancy theory with Maslow’s hierarchy of needs, it provides an overall view of the importance of having evidence-based
interventions for students and its ability to motivate students. Students undergoing homelessness need their own sense of intrinsic motivation to overcome various barriers, and these theories establish the importance of giving the students additional assistance to help them obtain their basic needs and succeed in school (Dawes & Larson, 2011; Michie, 2001; Tichy, 2017).

Conclusion

The literature demonstrates a research gap of evidence-based interventions that are supported as effective in assisting homeless middle school-aged students. This study aims to evaluate the interventions implemented by CIS to see if their interventions are effectively assisting homeless students by the program’s standards. As previously stated in the literature, homelessness has been a large barrier for many students, and effective interventions need to be in place. CIS interventions are expected to address the barriers low-socioeconomic students face by assisting them with their grades, behavior, and attendance. While the interventions were created with low-socioeconomic students in mind, it is unknown if these interventions will be as successful with homeless students. This study will investigate whether or not CIS interventions produce expected outcomes for case managed homeless students. The effect of the same interventions will be compared with that for case managed students who do not identify as homeless.

The five hypotheses for this study are listed below:

• H1: Academic interventions will improve the academic performance for the homeless group.
• H2: Absence interventions will improve attendance rate for the homeless group.
• H3: Tardy interventions will improve the tardiness rate for the homeless group.
• H4: Behavior interventions will reduce the disciplinary count for the homeless group.

• H5: The homeless group will have a higher success rate from the CIS interventions in comparison to the non-homeless group.
Figure 1. Communities in Schools Interventions Logic Model.
CHAPTER III
RESEARCH METHODOLOGY

The purpose of this study was to evaluate the effects of four interventions for targeted areas (absences, tardies, academics, and behavior) among homeless case-managed students from Communities In Schools (CIS).

**Research Design**

This evaluation study implemented a one-group pretest-posttest design for each intervention. A one-group pretest-posttest design “assesses the dependent variable before and after the stimulus (intervention) is introduced” (Rubin & Babbie, 2013, p.252). A limitation of this pre-experimental design is its threat to internal validity; other outside factors could potentially play a role in the outcome of this study (Rubin & Babbie, 2013). However, this was the most applicable design for this research study due to the available data provided by the agency. The researcher conducted a program evaluation to evaluate the agency's interventions’ ability to successfully assist homeless students with their absences, tardies, academics, or behavior. To see whether the effect of this intervention is different depending on the homeless condition, this study used another experimental group of non-homeless case-managed students who received the same interventions.

**Sample**

This study utilized convenience sampling from the Abilene Independent School District (AISD) and will focus on CIS’s case-managed homeless population from four AISD middle schools during the 2016-2017 school year. There were a total of 62 case-
managed homeless students during the 2016-2017 school year, and this group will be identified as the homeless group. The 62 students were comprised from four AISD middle schools: 23 homeless students from School A, 9 homeless students from School B, 19 homeless students from School C, and 11 homeless students from School D. To serve as a separate experimental group, 62 non-homeless case managed students were randomly chosen. The same number from each middle school was represented in the comparative group by random sampling from the selected case-managed groups on each campus. For example, because there were 23 homeless case-managed students from School A, 23 non-homeless case-managed students were chosen from School A.

**Data Collection**

This study used secondary data drawn from the CIS data system for the 2016-2017 school year. Access to the data was granted from the agency to the researcher with non-identifying information. This process involved the Compliance Coordinator and Program Support Specialist from the agency compiling the needed data and clearing it of traceable identification. The identification they unidentified includes the student’s name, CIS success coach, and the name of the school. The data available to the researcher included the target area for each student and whether the success coach recorded a success or regression. The success coach from each school was required to record this data based on the agency’s criteria of success. To acquire approval for this study, an exempt form was completed through the Institutional Review Board. The letter of approval is included in Appendix A.
Setting

The setting of the data collection for this study was located at each of the four middle schools served by the CIS of the Big Country. The success coach from each campus is required by CIS to have a caseload of at least 115 students. The success coaches met individually with the majority of their case-managed students, but in some cases, there were focus groups where the same interventions would be implemented in group settings. Success coaches are hired on by the CIS agency and are required to have their bachelor’s degree. They are also required by the agency to undergo orientation training before starting their role as a success coach. Case managed students typically met with their success coach in the CIS office located in each middle school or somewhere locally on school grounds. The students would either be called out of their classroom to discuss the intervention with their success coach or would be in a focus group that met during the lunch hour.

Interventions

During the 2016-2017 school year, the CIS success coaches at all four middle schools implemented interventions for their case-managed students. Each of the four success coaches are assigned one social work college-level intern who assists them throughout the school year. The intern provides interventions to 36 of the 115 case-managed students, while the success coach meets with the remaining 79 students. The middle school students were targeted for absences, tardies, academics, or behavior based on what the success coach determined the student’s target area should be. The interventions are explained in greater detail below.
**Interventions on absences/tardies.** When a student was targeted for attendance, they were given the Never Be Absent (NBA) intervention or Never Found Late (NFL) intervention. The NBA and NFL programs served as interventions that allow students to set weekly goals in regards to their attendance or amount of tardies. If students met their goal, they were given an incentive (mechanical pencils, soda, chips, etc.) and then set another goal. If the student did not meet their goal, they either try again to meet the same goal or alter the goal to make it more manageable. From the data collected, the agency considers it successful if the students end the year with a total of fewer absences or tardies than their recorded baseline from the beginning of the program.

**Interventions on academics.** Students targeted for academics are typically failing one or more classes and need additional assistance. CIS used Academic Readiness or Homework Completion as their main academic interventions. Both of these interventions have the student create measurable academically-centered goals that they believe will be possible to complete. For the Academic Readiness intervention, the success coach/social work intern targeted a class the student was failing and assisted them in making goals to pass the class. Goals are made in two-week increments, and if the student reached the goal an incentive was awarded to them. The Homework Completion intervention targeted a student’s class in which they were not submitting their work. Goals are made approximately every two weeks with the students to set goals on completing their homework and what additional resources are available if they need assistance. The Academic Readiness intervention is considered to be successful by the agency if the targeted grade increases by at least one point. The Homework Completion intervention is
considered to be successful if the student has less missing work than the recorded baseline.

**Interventions on behavior.** CIS used several different behavior interventions, but the students in this study only participated in the Classroom Conduct intervention or Self-Esteem intervention. There were very few students targeted primarily for behavior out of the homeless and non-homeless student samples due to the challenge of measuring success of behavior interventions. However, if the student was being targeted for Classroom Conduct, the success coach or social work intern would utilize the student's’ disciplinary record from the beginning of the year as a baseline. If there was an increase in disciplinary actions from the beginning of the year to the end of the year, this measure was observed. Weekly goals are made with the Classroom Conduct behavior as an attempt to assist the students in having fewer disciplinary referrals. The intervention is deemed successful if the student has fewer disciplinary referrals than the recorded baseline.

If the student was targeted for self-esteem, a classroom teacher or school counselor wrote a referral for the student based on their observed behavior at the beginning of the year. The intervention would consist of the student meeting with the success coach or social work intern to do evidence-based interventions and assessments that target self-esteem. An example would be the success coach conducting a self-esteem assessment with the student, implementing an evidence-based intervention, and then conducting a posttest assessment to see if the intervention was successful. If the posttest reflects a positive change at the end of the academic year, the intervention is deemed successful.
Measures

The data gathered included the student, success coach, respective campus, targeted area, and whether the primary area increased or decreased in comparison to the students’ baseline information. Both experimental groups were compared to see if CIS’s interventions are more effective for students who identify as homeless compared to their non-homeless student counterparts.

Absences/tardies. Students who are targeted for attendance can either receive the absence intervention or the tardy intervention. Both interventions use the amount of absences or tardies from the previous year to serve as the baseline. This method provides direction for the success coach and intern as they meet with the student to set goals. For this study, “absence” refers to the amount of state reported absences each student had for the academic school year. Goals were set to have a higher attendance rate/lower amount of tardies, and the goal was to keep the amount under the recorded baseline. Interventions are deemed successful if the student’s end result has improved since their recorded baseline.

Academics. The same method described above was also applied to academics; the recorded baseline from the previous year served as the measurement to determine the intervention’s success. In regards to academics, the student’s grade of one core class (English, math, history, or science) was used as a baseline. The grade ranges from 0-100. If the student has a failing grade, it will be used as the baseline. If the student is not turning in assignments or has missing assignments, the initial amount will be used as a baseline.
Behavior. For the purpose of this study, behavior interventions were deemed successful if the student’s disciplinary count was less than the baseline from the previous year or if the student’s self-esteem posttest improved from the pretest. The success coach and social work intern assessed the students periodically to implement the classroom conduct or self-esteem interventions. The interventions were deemed successful if there was any form of improvement at the end of the academic school year, i.e. less disciplinary referrals, increase in self-esteem posttest.

Individual Student Success

An individual student was considered to have reached their goal if the student’s performance after the intervention (posttest) had improved compared to their recorded baseline (pretest). The pretest of each intervention is determined by each measurement during the 2015-2016 academic school year. The posttest is determined by each measurement during the 2016-2017 school year. Target areas will be measured by a dichotomous variable of “1=success” or “0=regress.”

Analysis Plan

Descriptive analyses were conducted to examine the demographic information for each of the two groups with four interventions (absences, tardies, academics, and behavioral intervention groups for homeless and non-homeless samples) and to see the success rate of each intervention. The success rate of each intervention is measured by the number of students who reached their goal at the end of the intervention (measured by the student’s individual success) divided by the total number of students who participated in the intervention.
To examine if there was a significant difference in the posttest score between the homeless group and non-homeless group, ANCOVA and independent samples t-tests were conducted. Paired t-tests were utilized to examine the change between the pretest and the posttest scores for each group. An ANCOVA test was then conducted to compare the post score between the homeless group and non-homeless group after controlling for the pretest score. ANCOVA is considered a commonly used statistical tool for this purpose because it includes covariates (i.e., pretest) so that the group difference is significant even after the effects of the covariates are controlled (Rubin & Babbie, 2013). The independent samples t-test reveals if there has been a significant difference in the pretest score between the two groups.
CHAPTER IV
RESULTS

Characteristics of the Sample

The study analyzed data from the agency’s database over middle school students from the 2016-2017 school year. There were 124 CIS case-managed students whose data was analyzed, with 62 being homeless students and 62 students who were not homeless. The descriptive statistics (Table 1) allowed for a deeper understanding of important factors of the sample. There were more female students in comparison to male; 57 of the students in this study were male (46.0%) while 67 were female (54.0%). The largest age group consisted of sixth grade students, with a total number of 46. The second largest group was the seventh grade students, who accounted for 34.0% of the total. The eighth grade students were the smallest group, with 35 students at 28.2% of the total.

Table 1

*Characteristics of the Sample of Case-Managed Middle School Students (N =124)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Range</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>57</td>
<td>46.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67</td>
<td>54.0</td>
</tr>
<tr>
<td>Grade</td>
<td>Sixth</td>
<td>46</td>
<td>37.1</td>
</tr>
<tr>
<td></td>
<td>Seventh</td>
<td>43</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Eighth</td>
<td>35</td>
<td>28.2</td>
</tr>
<tr>
<td>Campus</td>
<td>A</td>
<td>18</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>38</td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>46</td>
<td>37.1</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>22</td>
<td>17.7</td>
</tr>
</tbody>
</table>

*Note.* Success coach had same descriptive statistics as the campus they are designated.
Each of the four middle schools had their own amount of homeless students on their caseload. School A had 9 homeless students, School B had 19, School C had 23, and School D had 11. With the non-homeless group factored in, the schools amount of students in the study doubled. For example, School A had a total of 18 students (9 homeless and 9 non-homeless) whose data was used for this study.

**Descriptive Statistics of Major Variables**

Table 2 presents descriptive statistics of major variables, including the four interventions’ pretests and posttests for homeless students and non-homeless students.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Non-homeless</th>
<th></th>
<th></th>
<th>Homeless</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min</td>
<td>Max</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Academic PreTest</td>
<td>48</td>
<td>20.00</td>
<td>78.00</td>
<td>61.42</td>
<td>11.64</td>
<td>40</td>
</tr>
<tr>
<td>Academic PostTest</td>
<td>48</td>
<td>50.00</td>
<td>97.00</td>
<td>73.85</td>
<td>11.52</td>
<td>40</td>
</tr>
<tr>
<td>Behavior PreTest</td>
<td>6</td>
<td>0.00</td>
<td>1.00</td>
<td>0.17</td>
<td>0.41</td>
<td>10</td>
</tr>
<tr>
<td>Behavior PostTest</td>
<td>6</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>10</td>
</tr>
<tr>
<td>Absence PreTest</td>
<td>5</td>
<td>1.30</td>
<td>5.50</td>
<td>3.36</td>
<td>1.73</td>
<td>7</td>
</tr>
<tr>
<td>Absence PostTest</td>
<td>5</td>
<td>1.00</td>
<td>4.60</td>
<td>3.10</td>
<td>1.51</td>
<td>7</td>
</tr>
<tr>
<td>Tardy PreTest</td>
<td>3</td>
<td>0.00</td>
<td>10.00</td>
<td>4.43</td>
<td>5.10</td>
<td>4</td>
</tr>
<tr>
<td>Tardy PostTest</td>
<td>3</td>
<td>1.50</td>
<td>9.50</td>
<td>5.00</td>
<td>4.09</td>
<td>4</td>
</tr>
<tr>
<td>Direct services</td>
<td>62</td>
<td>7</td>
<td>52</td>
<td>21.44</td>
<td>10.03</td>
<td>62</td>
</tr>
<tr>
<td>Basics needs services</td>
<td>62</td>
<td>0</td>
<td>9</td>
<td>1.26</td>
<td>2.08</td>
<td>62</td>
</tr>
</tbody>
</table>

In addition to the CIS major interventions, direct services and basic needs services were provided. Homeless students received more direct and basic need services than non-homeless students. Pretests and posttests were collected for each intervention by incorporating the previous year as a baseline. The pretest is the targeted area baseline from the previous year while the posttest score is the end result after the CIS intervention. It is important to note the desirable outcome for each intervention: academic pretests should increase after the intervention, absences and tardy pretests should decrease after
the intervention, and behavior should decrease after the intervention. Although the
descriptive statistics indicate the improvement in most cases after the interventions,
hypothesis tests were conducted to see if the change in each intervention was significant
enough to reject the null hypothesis.

**Hypothesis Testing**

**Group Equivalence**

Before conducting hypothesis testing analyses, the scores of AcademicPreTest
were compared between the homeless and non-homeless groups. This was done by using
an independent-samples *t*-test to evaluate the equivalence of the groups in variables prior
to the intervention. For the remaining variables (absences, tardies, and behavior), the
group difference in the mean were not statistically different. In other words, the
difference between groups did not reach significance, suggesting that groups were
equally matched in prior.

Table 3 discloses the results of these independent *t*-tests from the interventions as
well as results of the amount of services case-managed students had each month. It was
calculated that, on average, services were provided more for homeless students (23.60
direct services and 2.65 basic needs services) in comparison to non-homeless students
(21.44 direct services and 1.26 basic needs services).
### Table 3

*Results of Independent Samples t-tests of Variables Before Intervention*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>AcademicPreTest</td>
<td>Non-homeless</td>
<td>48</td>
<td>61.42</td>
<td>11.64</td>
<td>87</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>Homeless</td>
<td>41</td>
<td>61.24</td>
<td>14.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BehaviorPreTest</td>
<td>Non-homeless</td>
<td>6</td>
<td>0.17</td>
<td>0.4</td>
<td>14</td>
<td>-0.717</td>
</tr>
<tr>
<td></td>
<td>Homeless</td>
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<td>1.08</td>
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<td></td>
</tr>
<tr>
<td>AbsencePreTest</td>
<td>Non-homeless</td>
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<td>3.36</td>
<td>1.73</td>
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<td>0.718</td>
</tr>
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<td>7</td>
<td>2.7</td>
<td>1.46</td>
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<td>TardyPreTest</td>
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<td>4.43</td>
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<td>5</td>
<td>0.235</td>
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<tr>
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<td>Homeless</td>
<td>4</td>
<td>3.7</td>
<td>3.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

#### Paired-samples T-tests for Academic Scores

A paired-samples t-test was conducted to compare pretest and posttest scores of academic scores for each group at a two-tailed alpha level of 0.05. Table 4 displays the results. For the non-homeless group, the difference in the scores between pretest ($M=61.42$, $SD=11.64$) and posttest ($M=73.85$, $SD=11.52$) was found to be statistically significant, $t(47) = 6.23$, $p < .001$. For the homeless group, the difference in the scores between pretest ($M=61.24$, $SD=14.67$) and posttest ($M=73.22$, $SD=9.50$) was found to be statistically significant, $t(40) = -4.88$, $p < .001$. For the remaining outcome variables, there was no statistical difference between pretests and posttests.
Table 4

**Paired-samples t-tests for Pretests and Posttests**

<table>
<thead>
<tr>
<th>Group</th>
<th>Scores</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Df</th>
<th>t</th>
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<tbody>
<tr>
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<td>AcademicPreTest</td>
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<td>11.64</td>
<td>47</td>
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</tr>
<tr>
<td></td>
<td>AcademicPostTest</td>
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<td>73.85</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Homeless</td>
<td>AcademicPreTest</td>
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<td>61.24</td>
<td>14.67</td>
<td>40</td>
<td>-4.88***</td>
</tr>
<tr>
<td></td>
<td>AcademicPostTest</td>
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<td>73.22</td>
<td>9.50</td>
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<tr>
<td>Non-homeless</td>
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<td>0.41</td>
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<td>1.00</td>
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<tr>
<td></td>
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<tr>
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<td></td>
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<td>0.94</td>
</tr>
<tr>
<td></td>
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<td>3.10</td>
<td>1.51</td>
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</tr>
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<td>2.76</td>
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<tr>
<td>Non-homeless</td>
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<td>2</td>
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<td>4.09</td>
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<td></td>
</tr>
<tr>
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<td>TardyPreTest</td>
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<td>3.70</td>
<td>3.25</td>
<td>3</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>TardyPostTest</td>
<td>4</td>
<td>1.93</td>
<td>1.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**ANCOVA Analysis**

An analysis of covariance (ANCOVA) was conducted to assess the effect of CIS’s intervention on students’ achievement on academic performance for different groups. This would be conducted after taking into account potential sources of variance due to pretest scores. Students’ grades in tests at the beginning of the semester were used as a covariate to remove the variation in the dependent variable (DV) that is due to the students’ prior academic performance. Before conducting the ANCOVA, key assumptions of this test were checked by analyzing the dependent variable (AcademicPostTest), the covariate (AcademicPreTest), and the group (homeless and non-homeless).
**Normality.** The assumption states that the DV and covariate are approximately normally distributed for each category of the groups in the population. In order to investigate the normality assumption, Kolmogorov-Smirnov tests were used. According to the significance level of Kolmogorov Smirnov’s test, the normality assumption was met for posttests but not for pretests.

**Homogeneity of Variances.** The assumption states that the variance of the dependent variable for the population groups are equal. In order to test this assumption, Levene’s test was conducted. The results of Levene’s test showed homogeneity of variances was met.

**Linearity between DV and Covariate.** The assumption states that there is a linear relationship between Covariate and DV at each of the population groups. The Pearson Correlation was used to check the linearity assumption for each of the groups (i.e., homeless versus non-homeless). The significance value showed this assumption was met for the non-homeless group but was violated for the homeless group.

**Homogeneity of Regression Slopes.** The assumption states that the slope of covariate on DV should be similar across the population groups. In other words, there is “no” interaction between two independent variables, the group and the covariate. The ANCOVA test that includes interaction effect of the group and pretest showed the homogeneity of regression slopes was met.

**Homoscedasticity of Residual Variance.** The assumption states that the variance of residual, which is calculated by SPSS after conducting the analysis, is the same for any value of independent variables (IVs). To test this assumption, the researcher visually investigated if there is a funnel type of pattern in a scatterplot of the standardized
residuals against the predicted values. Due to no apparent funnel pattern being found, the homoscedasticity of residual variance assumption was considered met.

As a remedy for addressing the violation of the assumptions of ANCOVA, it is recommended that statistical analyses be conducted on transformed data. Given the small sample size and the exploratory nature of this study, the researcher decided not to use the remedy. Therefore, the results should be contemplated with caution. The results of ANCOVA (Table 5) revealed a statistically not significant effect of being homeless on AcademicPostTest: $F(1, 86) = .074, p = .786, \eta_p^2 = .001$, after controlling for the statistically significant effect of the pretests: $F(1, 86) = 5.548, p = .021, \eta_p^2 = .061$. Table 6 demonstrates the estimated marginal mean of AcademicPostTest for the non-homeless group, which was slightly higher than that of the homeless group. This difference between the two groups was statistically insignificant: $t = .272, p = .786$.

Table 5

Results of ANCOVA of AcademicPostTest for Homeless Students

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>14312.585</td>
<td>1</td>
<td>14312.585</td>
<td>133.038</td>
<td>.607</td>
</tr>
<tr>
<td>Homelessness (0/1)</td>
<td>7.964</td>
<td>1</td>
<td>7.964</td>
<td>.074</td>
<td>.001</td>
</tr>
<tr>
<td>Pretests</td>
<td>596.881</td>
<td>1</td>
<td>596.881</td>
<td>5.548**</td>
<td>.061</td>
</tr>
<tr>
<td>Error</td>
<td>9252.122</td>
<td>86</td>
<td>107.583</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$, ** $p < .01$, *** $p < .001$; $R^2 = .061$ (Adjusted $R^2 = .040$)
Table 6

Results of ANCOVA of AcademicPostTest by Non-Homeless Students

<table>
<thead>
<tr>
<th>Factors</th>
<th>Estimated Marginal Mean</th>
<th>B</th>
<th>SE</th>
<th>T</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>60.993</td>
<td>5.438</td>
<td>11.216</td>
<td>.594</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-homeless</td>
<td>73.84</td>
<td>.600</td>
<td>2.206</td>
<td>.272</td>
<td>.001</td>
</tr>
<tr>
<td>Homeless</td>
<td>73.24</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretests</td>
<td>.200</td>
<td>.085</td>
<td>2.355</td>
<td>.061</td>
<td></td>
</tr>
</tbody>
</table>

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

Combined with the results of ANCOVA with the paired-samples t-tests, the CIS intervention appeared to be effective in increasing academic scores for both homeless and non-homeless groups. Because there was no control group, these results do not show if those improvements could be due to factors other than the CIS intervention.

Promotion to the Next Grade

Although the study attempted to measure the short-term outcome for each intervention, the mid-term outcome (i.e., whether the participants were promoted to the next grade) also were collected and analyzed. A chi-square test was conducted to examine if there was a difference in promotion to next grade between the two groups (Table 7). The majority of students (91% in non-homeless students and 96% of homeless students) were promoted to the next grade. Because there is no value to compare to the outcome values, these findings do not necessarily inform whether the intervention influenced this outcome.
Table 7

*A Chi-square Test of Difference in Promotion to Next Grade (N = 110)*

<table>
<thead>
<tr>
<th>Group</th>
<th>Promotion Yes</th>
<th></th>
<th>Promotion No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Proportion</td>
<td>Frequency</td>
<td>Proportion</td>
</tr>
<tr>
<td>Non-homeless</td>
<td>5</td>
<td>9%</td>
<td>50</td>
<td>91%</td>
</tr>
<tr>
<td>Homeless</td>
<td>2</td>
<td>4%</td>
<td>53</td>
<td>96%</td>
</tr>
</tbody>
</table>

$\chi^2 = 1.373; \ * p < .05, ** p < .01, *** p < .001$
CHAPTER V

DISCUSSION

This study aimed to identify an evidence-based practice to help homeless students in a school setting. Research gaps that have been found from a literature review included the lack of research for homeless students in middle schools and what school interventions are currently being implemented for this subpopulation. Communities in Schools’ (CIS) is a dropout prevention program instilled in all AISD middle schools and utilizes interventions that target students on academic, attendance, and behavioral concerns. This study sought to explore the effects of CIS interventions on school-related outcomes for homeless middle school students. A logic model was created and sets of hypotheses were tested on the immediate outcomes from the interventions.

Summary of Hypothesis Testing

The following are the results of the hypotheses on the effect of CIS interventions on the immediate outcomes:

- **H1**: Academic interventions will improve the academic performance for the homeless group. (Supported)
- **H2**: Absence interventions will improve attendance rate for the homeless group. (Not supported)
- **H3**: Tardy interventions will improve the tardiness rate for the homeless group. (Not supported)
• H4: Behavior interventions will reduce the disciplinary count for the homeless group. (Not supported)
• H5: The homeless group will have a higher success rate from the CIS interventions in comparison to the non-homeless group. (Not supported)

The results indicated that Hypothesis 1 is supported, due to the improvement in academic performance of homeless and non-homeless case-managed students after the academic intervention. This inferred that both the homeless and non-homeless students benefitted from CIS’s academic intervention. The effectiveness of the academic intervention utilized student’s motivation and incentives, which was consistent with previous studies (Li, Allen, & Casillas, 2017). The other four hypotheses were not supported after the data was analyzed and the results were identified. Several factors likely had an effect on these results, such as the small sample size and the lack of a control group. However, the results revealed implications that CIS interventions are effective and would benefit from further studies.

Hypothesis 5 was tested only on the academic intervention because of the small sample size for the other interventions. Based on Maslow’s theory, the researcher originally hypothesized homeless students would benefit from the intervention more than non-homeless students because they may have more barriers and needs. The failure of supporting this hypothesis can be explained in several ways. The descriptive statistics indicated that homeless students received direct services and basic needs services. The effect of the academic intervention may be the same for both of the experimental groups due to the lower level of needs that had been addressed for homeless students. The data from this study does not necessarily provide evidence on whether the effect of an
academic intervention would be different depending on whether or not the basic needs had been met of the homeless group.

**Discussion of Findings**

Unlike the academic intervention, the absence, tardy, and behavior interventions were not statistically significant for both groups. With a couple of exceptions, the descriptive statistics signified that students’ outcomes changed from pretests to posttests in a desirable direction. Therefore, the lack of statistical improvement in absence, tardy, and behavior interventions can be attributed to the lack of statistical power due to small sample sizes. It is imperative to note that the academic intervention is the only intervention that had a large enough sample size to run certain statistical tests; the other sample sizes provided too few students. CIS tends to target a larger amount of students for academics on their caseload, which is likely due to the academic measurement being more objective than the other interventions.

In addition to the statistical power issue, assessing the impact of the behavioral intervention had an additional problem. A common barrier for CIS behavior interventions is the lack of regularity for all success coaches implementing the same behavioral interventions. Self-esteem can be hard to define, and improvement can be subjective based on the opinion of faculty as well as the CIS success coach. Therefore, the behavior interventions in this study were very few and at times unclear due to documentation. It is important to take into account that the academic, absence, and tardy interventions are more objectively measured, while the behavior intervention tended to be more subjectively measured.
The majority of pretests and posttests had desirable outcomes, excluding the homeless students targeted for behavior and tardies. The behavior count increased rather than decreased from the beginning of the school year compared to the end of the school year for the homeless group. This could be due to underlying variables that are unknown to this study. Likely factors to explain the increase in behavior problems are the student’s home life and lack of structure in the home. The tardy intervention indicated an increase in tardies rather than a decrease after the tardy intervention had been implemented. This could be due to the student’s lack of motivation or their unwillingness to abide by school procedures.

The overall findings from this study indicated that Maslow’s theory could be the reasoning for homeless students improvement for the academic interventions. The homeless liaison and CIS success coaches provided basic needs services along with the CIS interventions, and this allows the students basic needs to be met. With their basic needs met, they are able to advance higher on Maslow’s Hierarchy of Needs and achieve alongside their non-homeless peers. This could explain why the homeless group also had statistically significant findings for the academic intervention; due to their basic needs not being an overwhelming barrier, they were able to focus on their academic goals and consistently meet with their success coach to achieve their goals. While homeless students did not benefit more from the interventions than their non-homeless counterparts, it should be noted that they still improved. It could be argued that homeless students had a higher chance of not improving after the interventions due to their barrier of homelessness.
Despite this barrier, the homeless case-managed group did benefit from CIS’s interventions and the majority advanced on to the next grade level. Based on the logic model in Chapter III, this is an intermediate outcome that can be accomplished by addressing the immediate outcomes (academic performance, attendance, and behavioral concerns). The majority of students (93.6%) were promoted to next grade. This result does not necessarily support that this outcome had been accomplished due to the effect of CIS interventions on the immediate outcomes. However, a high percentage of success in these outcomes suggests that CIS has accomplished their mission or the long-term outcome in the logic model (i.e., addressing dropout problem) fairly well by what they have been implementing.

There are often misunderstandings on homeless accommodations that the school system needs to improve on understanding and executing (Sulowski, 2014). Although the results cannot be used to draw decisive conclusions due to the limitations of this study, there are still heavy implications from the results that allow for further understanding of CIS’s case-managed students.

**Implications**

**Practice**

The importance of school social workers was evident in the literature review and implied the importance of having community-based programs in schools (Dawes & Larson, 2011). There are still many schools that do not have programs such as CIS and do not have the additional help that is needed for this population. Homeless liaisons play a less direct role than other disciplines, and it was noted that they typically do not have a
role in homeless students academic needs, inferring that programs like CIS are needed for homeless students (Robson, 2016).

This research impacts CIS by allowing for specificity in the success rates of their interventions on two pre-experimental groups. CIS targets a larger number of students for academics, which corresponds with their mission and purpose of being a dropout prevention program. However, the students that are targeted for behavior need additional clarity in documentation of what interventions are being implemented on campuses and more detailed information on whether they are effective for the students.

**Policy**

Policies for homeless students should be more heavily enforced. School districts need to be aware of the regulations in the McKinney-Vento Act; it is the only act directly impacting homeless youth in the education system (Sulowski, 2014). A large amount of schools do not enforce all regulations from the MVA, which is causing homeless students to not benefit from these accommodations. The results of this study indicate that homeless students did receive more basic needs services than non-homeless students, which implies the higher need these students have for services.

**Research**

Further research could determine if there is a difference between CIS case-managed homeless students and students who are homeless but not case-managed. This research would show if CIS’s interventions have a direct impact on homeless students by providing a control group that was not receiving the interventions. Research could also further evaluate homeless youth interventions in schools and how to better help this population. This study revealed the significance of academic interventions on homeless
and non-homeless case-managed students. Further research could explore the same sample throughout their time with CIS to see if the interventions produce the same results each year. This could be vital for the agency to see a span of multiple years and the interventions impact on the students.

**Limitations of Study and Recommendations for Further Studies**

Several limitations were a factor to this study and impacted the results. There was no control group in this study, causing the true effect of the intervention to be unknown. While this is a limitation, it also serves as an implication for further study. Another limitation was the small sample size. The data provided by the agency was for the 2016-2017 school year, and there were 62 students who were case-managed and homeless. Even with the 62 case-managed non-homeless students, a sample size of 124 students is small in comparison to more reliable studies.

Self-reported data was another limitation to this study. The subjectivity of the CIS success coaches impacts the outcomes of the study based on the intervention they implemented and their documentation. When analyzing the data, there were times when it appeared unclear what intervention was implemented due to a lack of documentation or clarity. Behavior is more challenging to define in regards to CIS’s standards of “success,” which should be accounted for in this study. The success coaches are able to dictate if the student improves or regresses after the intervention, and there were some questions to why a student’s data was recorded a certain way.

Another limitation was the researcher’s assumptions. The researcher had a field practicum at CIS and worked closely with homeless students, which caused a direct connection to this study. However, the data was solely analyzed from the 2016-2017
year, causing this to be a very minimal limitation. However, it did come into effect when creating the hypothesis for this study: bias was a factor to the creation due to working with homeless students and the CIS interventions.

**Conclusion**

CIS is located inside schools across the nation with the purpose to “work directly inside schools, building relationships that empower students to succeed inside and outside the classroom” (Communities In Schools, n.d.). This study analyzed CIS interventions as a way to understand the significance of the interventions intended to empower students and help motivate them to advance on to the next grade level. These interventions are targeted towards low-socioeconomic students but not specifically for homeless students. The goal of this study was to determine if the impact of these interventions are effective for homeless students and how it compared to their impact on non-homeless students.

This quantitative exploratory study evaluated the direct effect of CIS interventions on homeless youth and their non-homeless youth counterparts. Interventions for academics, absences, tardies, and behavior were analyzed and pretest/posttests were compared to see if the interventions were statistically significant in regards to impacting homeless students. While homeless students were not impacted significantly more than non-homeless students, they were still positively impacted by the interventions. Academic interventions showed the highest amount of significance in comparison to the three other intervention areas, inferring that this intervention in particular is benefitting the majority of CIS case-managed students. In conclusion, this study emphasized the additional need for homeless youth interventions in school settings and provided a basis for the need of continual research in this area.
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APPENDIX A

IRB Approval

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World
Office of Research and Sponsored Programs
320 Harlín Administration Building, ACU Box 29103, Abilene, Texas 79699-29103
325-674-2885
12/18/2017

Kaitlyn Tudor
Department of Social Work
ACU Box # 27866
Abilene Christian University

Dear Katie,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled “An Evaluation of Interventions and their Effect on Homeless Students in Middle Schools” (IRB # 17-111) is exempt from review under Federal Policy for the Protection of Human Subjects as:

- [ ] Non-research (45 CFR 46.102(d))
- [x] Non-human research (45 CFR 46.102(f))

Based on:
The information is not individually identifiable (i.e., the identity of the subject is not or may not readily be ascertained by the investigator or associated with the information) [45 CFR 46.102(f)(2)]

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs
APPENDIX B

Absence Intervention

Never Been Absent
Goal Sheet

Baseline: Student was absent ______ times during ______ (#) ______ (time period)

Goal 1:

Date Started: ___________ Date Completed: ___________
Incentive Earned: ___________

Goal 2:

Date Started: ___________ Date Completed: ___________
Incentive Earned: ___________

Goal 3:

Date Started: ___________ Date Completed: ___________
Incentive Earned: ___________

Goal 4:

Date Started: ___________ Date Completed: ___________
Incentive Earned: ___________

Goal 5:

Date Started: ___________ Date Completed: ___________
Incentive Earned: ___________
APPENDIX C

Tardy Intervention

Never Found Late
Goal Sheet

Student Name: __________

Baseline: Student was tardy _______ times during __________________________.

# (time period)

Goal 1:

Date Started: __________ Date Completed: __________
Incentive Earned: __________

Goal 2:

Date Started: __________ Date Completed: __________
Incentive Earned: __________

Goal 3:

Date Started: __________ Date Completed: __________
Incentive Earned: __________

Goal 4:

Date Started: __________ Date Completed: __________
Incentive Earned: __________

Goal 5:

Date Started: __________ Date Completed: __________
Incentive Earned: __________
APPENDIX D

Academic Intervention

Student Name: 

Academics Goal Sheet

BASELINE:

Goal 1:

Date Started: ____________  Date Completed: ____________

Incentive Earned: 

Goal 2:

Date Started: ____________  Date Completed: ____________

Incentive Earned: 

Goal 3:

Date Started: ____________  Date Completed: ____________

Incentive Earned: 

Goal 4:

Date Started: ____________  Date Completed: ____________

Incentive Earned: 

Goal 5:

Date Started: ____________  Date Completed: ____________

Incentive Earned: 

(A+)
APPENDIX E

Behavior Intervention

Behavior Goal Sheet

Student Name: __________________________

BASELINE: __________________________

Goal 1: __________________________

Date Started: __________________________ Date Completed: __________________________ Incentive Earned: __________________________

Goal 2: __________________________

Date Started: __________________________ Date Completed: __________________________ Incentive Earned: __________________________

Goal 3: __________________________

Date Started: __________________________ Date Completed: __________________________ Incentive Earned: __________________________

Goal 4: __________________________

Date Started: __________________________ Date Completed: __________________________ Incentive Earned: __________________________

Goal 5: __________________________

Date Started: __________________________ Date Completed: __________________________ Incentive Earned: __________________________