The Impact of Character Education Programs on Middle School Bullying Behavior

Kelly M. Amshey
*Western Michigan University, kamshey@rockfordschools.org*

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Educational Leadership Commons

**Recommended Citation**

Amshey, Kelly M., "The Impact of Character Education Programs on Middle School Bullying Behavior" (2019). *Dissertations*. 3532.
https://scholarworks.wmich.edu/dissertations/3532

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.
THE IMPACT OF CHARACTER EDUCATION PROGRAMS
ON MIDDLE SCHOOL BULLYING BEHAVIOR

by

Kelly M. Amshey

A dissertation submitted to the Graduate College
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
Educational Leadership, Research, and Technology
Western Michigan University
December 2019

Doctoral Committee:

Brett Geier, Ed.D. Chair
Dennis McCrumb, Ed.D.
Michael Shibler, Ph.D.
ACKNOWLEDGEMENTS

I would like to thank my dissertation advisor, Dr. Brett Geier. Dr. Geier has provided wisdom, guidance, and support throughout as I worked through the doctoral program. He demonstrated patience and helped me balance this work with the demands of my family and profession. Most importantly, Dr. Geier remained positive throughout my journey, prompting me to do the same.

I would also like to thank the other members of my dissertation committee. Both Dr. Dennis McCrumb and Dr. Michael Shibler provided their time, knowledge, and expertise to guide me to completion. Dr. McCrumb participated in my program interview many years ago, and therefore, contributed to my admission to the program. Dr. Shibler has served as a mentor and constant support over many years. He encouraged me to pursue the Ph. D. program at Western and supported me every step of the way.

Lastly, I thank my husband, Jeremy, and my children, Molly, Brody, and Bryce. These four people inspire me to be my best and to achieve that which is difficult. Their patience, understanding, and support have been critical to my success and I am so grateful for their love. Thank you!

Kelly M. Amshey
THE IMPACT OF CHARACTER EDUCATION PROGRAMS ON MIDDLE SCHOOL BULLYING BEHAVIOR

Kelly M. Amshey, Ph.D.
Western Michigan University, 2019

Bullying is recognized as a barrier that must be addressed by schools to ensure that all students have access to educational opportunities. Due to high accountability with limited resources, schools must identify strategies to address issues such as bullying in a manner that provides the maximum benefit to students. Character education (CE) programs, which contribute to the bullying deterrent of positive school climate, may also lessen bullying through explicit teaching of character traits and prosocial skills.

The purpose of this study is to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors that may impact the relationship between character education and bullying, and to investigate elements of character education programs that are associated with reduced prevalence of bullying. Data was collected through self-administered surveys and logistic regression techniques were used to answer the research questions.

This study found that name-calling, rumor-spreading, and physical bullying were the most common forms of bullying reported by middle school students. Cyberbullying through rumors and threats were least common. The results of this study do not support the use of character education as a strategy to reduce the prevalence of bullying in middle schools. The school-level variables of socioeconomic status, size, and locale predict the likelihood of physical bullying,
threats, and rumors, respectively. The student-level variables of grade, gender, and race/ethnicity were significantly related to several forms of bullying. With respect to reported bullying in CE schools, the most impactful character education program component was staff training.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................ ii  

LIST OF TABLES .................................................................................................................. viii  

LIST OF FIGURES ................................................................................................................ ix  

CHAPTER

1. INTRODUCTION .................................................................................................................. 1  
   Background on Bullying ...................................................................................................... 2  
   The Role of School Climate in Reducing Bullying ............................................................... 5  
   The Role of Character in Bullying ...................................................................................... 6  
   Schools Have Limited Resources for Bully-prevention ..................................................... 8  
   Problem Statement ............................................................................................................ 9  
   Purpose Statement ........................................................................................................... 10  
   Research Questions .......................................................................................................... 10  
   Conceptual Framework .................................................................................................... 11  
   Methods Overview ........................................................................................................... 15  
   Delimitations and Limitations .......................................................................................... 15  
   Chapter 1 Closure ............................................................................................................. 16  

2. LITERATURE REVIEW ...................................................................................................... 17  
   Bullying .............................................................................................................................. 17  
   Types of Bullying .............................................................................................................. 18  
   Bullying – Prevalence and Concerns ................................................................................. 19  
   Impact of Bullying ........................................................................................................... 21
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Laws Regarding Bullying</td>
<td>23</td>
</tr>
<tr>
<td>School Factors and Associated Bullying</td>
<td>25</td>
</tr>
<tr>
<td>Bullying and school socioeconomic status</td>
<td>25</td>
</tr>
<tr>
<td>Bullying and school size</td>
<td>26</td>
</tr>
<tr>
<td>Bullying and school locale</td>
<td>27</td>
</tr>
<tr>
<td>Student Factors and Associated Bullying</td>
<td>28</td>
</tr>
<tr>
<td>Bullying and grade level</td>
<td>29</td>
</tr>
<tr>
<td>Bullying and gender</td>
<td>30</td>
</tr>
<tr>
<td>Bullying and race/ethnicity</td>
<td>31</td>
</tr>
<tr>
<td>Perceptions of Bullying</td>
<td>32</td>
</tr>
<tr>
<td>Anti-Bullying Program Examples</td>
<td>35</td>
</tr>
<tr>
<td>Anti-Bullying Program Selection</td>
<td>37</td>
</tr>
<tr>
<td>The Role of School Climate</td>
<td>38</td>
</tr>
<tr>
<td>Benefits of a Positive School Climate</td>
<td>39</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>39</td>
</tr>
<tr>
<td>Engagement and motivation</td>
<td>40</td>
</tr>
<tr>
<td>High school graduation</td>
<td>41</td>
</tr>
<tr>
<td>Discipline</td>
<td>41</td>
</tr>
<tr>
<td>Conditions that Affect School Climate</td>
<td>42</td>
</tr>
<tr>
<td>School climate and socioeconomic status</td>
<td>42</td>
</tr>
<tr>
<td>School climate and school size</td>
<td>43</td>
</tr>
</tbody>
</table>
# Table of Contents—continued

## CHAPTER

- School climate and school locale ........................................... 44
- Improving School Climate ......................................................... 45
- Character Education ................................................................. 45
- Benefits of Character Education ............................................... 46
- Character Education and School Climate .................................. 48
- Character Traits and Bullying .................................................... 49
- Character Education Programs for Schools ............................. 51
  - Origin of character education program .................................. 53
  - Staff training for character education program ....................... 54
  - Instructional strategy for character education program ............. 55
  - Parent component for character education program ................. 56
  - Evaluation for character education program ............................. 56
  - Summary of Character Education and Its Role in Bully-prevention 57
- Chapter 2 Closure ................................................................... 57

## 3. METHODS ............................................................................. 59

- Research Questions .................................................................... 59
- Research Design, Approach and Rationale ............................... 60
- Population, Sample, and Setting .............................................. 62
- Instrumentation ........................................................................ 66
- Data Collection Procedures ..................................................... 70
- Data Analysis ........................................................................... 71
Table of Contents—continued

CHAPTER

Limitations and Delimitations ........................................................................................................... 74

Chapter 3 Closure ................................................................................................................................. 75

4. RESULTS ........................................................................................................................................... 76

Descriptive Statistics ......................................................................................................................... 76

   School Sample Characteristics ........................................................................................................ 76
   Student Sample Characteristics ....................................................................................................... 77
   Reported Bullying ........................................................................................................................... 78

Research Question 1 ............................................................................................................................ 79

Research Question 2 ............................................................................................................................. 80

Research Question 3 ............................................................................................................................. 85

Research Question 4 ............................................................................................................................. 93

Chapter 4 Closure ................................................................................................................................. 101

5. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS ................................................. 102

Introduction ........................................................................................................................................ 102

Overview of Findings .......................................................................................................................... 102

   Prevalence of Bullying as Reported by Sample ........................................................................... 103
   Impact of Character Education on the Prevalence of Bullying ..................................................... 104
   Impact of School-Level Factors on the Prevalence of Bullying in CE Schools ......................... 106
   Impact of Student-Level Factors on Prevalence of Bullying in CE Schools............................... 107
   Impact of CE Program Components on the Prevalence of Bullying in CE Schools...................... 109
Table of Contents—continued

CHAPTER

Current Findings Compared with Existing Research .......................................................... 111

Impact of Character Education on the Prevalence of Bullying in CE Schools ..... 111

Impact of School-Level Factors on the Prevalence of Bullying in CE Schools .... 112

Impact of Student-Level Factors on Prevalence of Bullying in CE Schools ....... 114

Impact of CE Program Components on Prevalence of Bullying in CE Schools ... 115

Implications for Current Practice ......................................................................................... 117

Recommendations for Further Study .................................................................................. 118

APPENDICES

A. Human Subjects Institutional Review Board Approval Letter ........................................ 120

B. Recruitment Script ........................................................................................................ 122

C. Survey to Building Administrator ................................................................................ 124

D. Student Survey ............................................................................................................. 128

BIBLIOGRAPHY .................................................................................................................. 132
**LIST OF TABLES**

1. Eleven Principles of Character Education ................................................................. 52
2. Descriptive Statistics for School SES and Size ......................................................... 77
3. Crosstabulation Bullied and Cyberbullied ................................................................. 78
4. Percent of Student Reporting Various Types of Bullying ........................................... 79
5. Significance Values for Character Education Variable ............................................... 80
6. Significance Values by School-Level Variable ......................................................... 81
7. Solutions for Fixed Effects by School Socioeconomic Status .................................... 82
8. Solutions for Fixed Effects for School Size ................................................................ 83
9. Solutions for Fixed Effects for Rumor-spreading by School Locale ........................... 84
10. Significance Values for Student-Level Variables ...................................................... 86
11. Solutions for Fixed Effects by Grade-Level ............................................................... 87
12. Solutions for Fixed Effects Gender with Significant Values ...................................... 89
13. Solutions for Fixed Effects Race/Ethnicity ............................................................... 91
14. Significance Values for Character Education Program Variables ............................. 94
15. Fixed Effects for Character Education Program Staff Training Variable .................. 95
16. Fixed Effects for Being Excluded by CE Program Variables .................................... 97
17. Fixed Effects for Character Education Program Evaluation Variable ........................ 99
LIST OF FIGURES

1. Conceptual Framework ................................................................. 12
CHAPTER 1

INTRODUCTION

Article VIII in the Michigan Constitution states, “schools and the means of education shall forever be encouraged” (para. 1). Additionally, this document declares that all pupils shall have the opportunity to receive a free and public education (Mich. Const. Art. VIII, 1963). It is the responsibility of schools to provide an environment that allows all students the opportunity to receive their education as outlined in the Michigan Constitution. Schools are also responsible to identify and respond to factors that impede educational opportunities. Bullying is one such impediment.

Bullying and its impact on educational opportunities are familiar topics within our schools and culture. Bullying behavior—such as verbal harassment, social exclusion, physical threats/harm, or cyberbullying—is problematic in schools. Anecdotally, it can be said that most students experience one or more forms of bullying at some point in their education, and some of these students will struggle to get the full benefit of school as a result. In recognition of the problems associated with bullying, Michigan legislators enacted Section 380.1310b of the Revised School Code to compel local school boards in Michigan public schools to address bullying (Matt Epling Safe School Law, 2017).

From an ethical and legal standpoint, schools will benefit from strategies to reduce and eliminate bullying behavior, allowing students to achieve the most from their years in school. But what is the best way for schools to address bullying while balancing other responsibilities?
What strategy will provide the most “bang for the buck?” Might a program intended to promote good character and shared values, referred to as character education, provide multiple benefits to students and also result in reduced bullying? This study examined the potential of character education curriculum to serve as a mechanism to reduce bullying in schools.

**Background on Bullying**

The prevalence of bullying among youth is noteworthy. Over five million student respondents, or 20.8%, reported that they had been bullied on the National Crime Victimization Survey (Lessne & Yanez, 2016). Even more striking is the percentage of students who witness bullying in school. In one study, 65.2% of elementary students, 75.9% of middle school students, and 71.5% of high school students reported witnessing bullying (Bradshaw, Sawyer, & O’Brennan, 2007). While these numbers at all grade levels are striking, it is worth noting that middle school students witnessed more bullying than elementary or high school students. In other studies, middle school students out-reported their elementary or high school counterparts for bullying others (Gendron, Williams, & Guerra, 2011) and also being bullied (Lessne & Yanez, 2016). This preliminary review indicates that bullying is a significant concern in middle schools.

Bullying is prevalent and may interfere with educational opportunities. According to results of the National Crime Victimization Survey in 2011, students who reported being bullied were also more likely to report skipping school and class. Victims reported other school-related problems, including increased fear, avoidance of school activities, and avoiding specific places within the school when compared to non-victims (Gendron et al., 2011). The prevalence of bullying, in conjunction with the potential negative impact on educational opportunity, makes bullying a major concern of schools.
The concept of bullying is not new, but the elements and definitions of bullying have transformed over time. Older definitions describe bullying as physical harm or intimidation (Olweus, 1978), whereas modern descriptions additionally include a broad range of behaviors (Olweus, 2003). The federal government website stopbullying.gov, which is managed by the U.S. Department of Health & Human Services (stopbullying.gov, 2018), provides an inclusive description of bullying, including actions that may result in physical harm, fear of physical harm, isolation, embarrassment, loss of friends, loss of social status, or emotional harm. The array of behavior that fits this description is vast and helps to demonstrate the difficulty that schools find when working to prevent and address bullying.

Adding to the complexity of the issue are differences between staff and student perceptions of bullying. Bradshaw et al. (2007) noted that 23.2% of students reported frequent victimization while school staff estimated that only 15% of students were victimized frequently. The variance may be due in part to differing views about the behaviors that constitute bullying. School staff often define bullying with the following criteria: intentionality, repetition, and power imbalance, but students’ definitions are more focused on the impact of the victim than specific criteria (Hellström, Persson, & Hagquist, 2015).

The discrepancy in perceptions of bullying between staff and students explains, in part, why students fail to report bullying to adults and why few report that staff satisfactorily handle reports of bullying. In a 2002 survey of 198 middle school students, Harris and Petrie (2002) found that middle school students were reluctant to report bullying. Nearly half of bullied students indicated that they would not tell anyone and fewer than three percent stated they would tell a teacher. Only 23% of students who did tell reported that the bullying got better. Seventy-three percent of students in this study also indicated that school staff were indifferent about bullying in
their school (Harris & Petrie, 2002). The failure of students to trust school staff with reports of bullying is a factor that allows this problematic behavior to persist.

Research has shown a correlation between bullying and negative experiences for victims and bullies (Swearer, Espelage, Vaillancourt, & Hymel, 2010). Victims of bullying have increased risk of anxiety (Carney, Hazler, Oh, Hibel, & Granger, 2010), loneliness (Nansel et al., 2001), difficulty making friends (Nansel et al., 2001), reduced life satisfaction (Flaspohler, Elfstrom, VanderZee, Sink, & Birchmeier, 2009), increased depression (Uusitalo-Malmivaara, 2013), aggressive impulses, and lower rates of attendance (Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004). Students who bully others are more likely to use alcohol or tobacco (Nansel et al., 2001), experience less academic success (Nansel et al., 2001), report reduced life satisfaction (Flaspohler et al., 2009), and become involved in violence (Bradshaw, Waasdorp, Goldweber, & Johnson, 2013). In some cases, violent behavior and suicide have been linked to bullying, highlighting the need for schools to address bullying as a top priority (stopbullying.gov, n.d.).

All 50 states have anti-bullying laws in place (StopBullying.gov, 2018). In 2010, the U.S. Education Secretary Arne Duncan provided a set of key components for states to use in the development of law and policy, highlighting the importance of defining prohibited conduct, requiring local districts to develop and implement policies, and defining necessary training and accountability mechanisms (U.S. Department of Education, 2010). In December of 2011, the Matt Epling Safe School Law became effective; this legislation requires Michigan schools to create anti-bullying committees, document incidents of bullying, and provide annual reports on bullying to the state (Matt Epling Safe School Law, 2017).

Despite the clear need to address the bullying, there is no simple solution to the problem. Bully-prevention programs have been created and utilized, but none have eradicated bullying
In fact, one study found that students attending schools with bully-prevention programs actually reported higher rates of peer victimization than those in schools without a program (Jeong & Lee, 2013). It has been established that it is important for schools to address bullying, yet bully-prevention programs are not a reliable solution. It is important, therefore, to expand the view and consider other strategies to reduce and prevent bullying.

**The Role of School Climate in Reducing Bullying**

While there is inconsistent evidence regarding the success of bully-prevention programs, there is consistent evidence that bullying does not thrive well in schools with overall positive school climate (O’Brennan, Waasdorp, & Bradshaw, 2014; Richard, Schneider, & Mallet, 2012; Waasdorp, Pas, O’Brennan, & Bradshaw, 2011). According to the National School Climate Center (n.d.), a positive school climate is one with established values that supports learning as well as social, emotional, physical well-being. In these schools, students, families, and staff work together to promote the shared vision of the school and all are valued for their contributions (National School Climate Center, n.d.). This supportive structure is deleterious to bullying behavior, and therefore a natural deterrent.

As with many school initiatives, strategies used toward development of a positive school climate must account for the needs of the school and its community, but the careful planning is worthwhile. Schools with a positive climate demonstrate lower rates of bullying and increased feelings of student safety (Bradshaw et al., 2014). Positive climate is also linked with academic outcomes including student engagement and motivation (Berg & Aber, 2015), higher grade point averages (O’Malley, Voight, Renshaw, & Eklund, 2015), and improved standardized test scores
(Kwong & Davis, 2015) and lower drop-out rates (Barile et al., 2012; Lee & Burkam, 2003). Efforts to improve school climate will result in a host of potential benefits.

**The Role of Character in Bullying**

Not all bullies or victims possess an identical set of characteristics; however, there are certain features that are associated with individuals who are involved in bullying. Victims may demonstrate lower social inclusion (Lovegrove, Henry, & Slater, 2012) and negative self-concept (Cook, Williams, Guerra, Kim, & Sadek, 2010). Bullies may have negative views about others (Cook et al., 2010) and be more likely to express anger, aggression, and hostility (Carney, Hazler, & Higgins, 2002; Navarro, Larranaga, & Yubero, 2011). Both victims and bullies are noted to possess limited social skills, vulnerability, low ability to solve social problems, and inadequacy or fear of inadequacy (Carney et al., 2002; Cook et al., 2010). The literature notes underdevelopment of certain prosocial skills in students involved in bullying, which indicates that there may be an opportunity to reduce bullying through development of these skills through character education.

The United States Department of Education describes character education as the teaching of actions and thoughts that support positive communities, and suggests that schools have the opportunity to teach character (U.S. Dept. of Education, 2005). Character education programs have been implemented in many schools, providing instruction to students in values and actions that are promoted by society at large (Deitte, 2002; Esch, 2008; Hollingshead, Crump, Eddy, & Rowe, 2009; McCaffrey, 2008; Richards & Deuel, 2001). The popularity of character education is ongoing (Glanzer & Milson, 2006), even receiving funding support from the U.S. Department of Education in the early part of the 21st century (U.S. Department of Education, 2014). In
addition, there has been support at the state level of government, as many states have passed laws or adopted policy in support of character education (Glanzer & Milson, 2006).

In line with most other states, the State Board of Education in Michigan adopted a policy on character education in 2004. The Michigan policy communicates support of character education in schools and suggests that school health programs should be used to promote relationships and prosocial behaviors. Additionally, the Michigan policy outlines recommended guiding principles for the public schools’ work. The policies are derived from the Eleven Principles of Effective Character Education (character.org, n.d.), which will be described in detail later in this paper (Michigan State Board of Education, 2004).

Character education programs exist in a variety of forms, and may be locally developed or purchased in a program (character.org, n.d.). Despite the origin, or whether these programs were created by schools or a purchased program, character education efforts embody a similar philosophy, based upon the work of Lickona, Schaps, and Lewis (1997). This evidence-based model has been repeatedly published as a framework for schools by Character.org (n.d.) and defines eleven principles for schools to embed character education through systematic and consistent teaching, promotion, and modeling of qualities that have been identified as appropriate and meaningful by the school and community.

There has been historically limited research regarding the value of character education, perhaps because the value seemed obvious. For example, Peterson and Skiba (2001) stated that character education programs have a “logical and common-sense value” (p. 159) with regard to violence prevention, drawing on the assumed connection between violence and poor moral judgment. The authors also noted that, despite the common support of character education programs, there was a lack of empirical evidence regarding efficacy in improving behavior.
Since that time, the body of literature has grown regarding character education and the positive impact on behavior and school climate (Izfanna & Hisyam, 2012; James, 2016; Schwartz, Beatty, & Dachnowicz, 2006; Skaggs & Bodenhorn, 2006).

Schools Have Limited Resources for Bully-prevention

While the importance of addressing bullying in schools is clear, the matter can be complicated as bully-prevention is just one of many mandates, suggestions, and goals that schools must consider. Schools are also advised and/or held accountable for graduation rate, attendance, disciplinary practices, technology integration, post-secondary preparation, achievement on standardized tests, and provision of co-curricular opportunities. Schools have also become the location for some families to receive help in the areas of nutrition, mental health, social work services, and health services. The breadth of school responsibilities continues to grow, placing demands on school officials to be creative and thoughtful with resources that will best serve all students.

Limited resources and vast expectations dictate that schools consider programming that will provide a wide range of benefit. Character education is one such program. As described by the U.S. Department of Education (2005), character education “teaches the habits of thought and deed that help people live and work together as families, friends, neighbors, communities and nations” (para. 4). Improvements in the habits of thought and deed would therefore be expected, but Character.org notes that schools who collaborate to provide a comprehensive character education program also report improved academic achievement, school climate, teacher retention and parental involvement as well (Character.org, n.d.).
Character education has the potential to impact bullying in two ways. Character education programs provide instruction to support development of prosocial skills, which would be counteractive to bullying behavior. Second, there is evidence to support the connection between character education and a positive school climate, another deterrent to bullying behavior (Character.org, n.d.). This connectedness provides support for the notion that character education may be an effective tool for schools to utilize in bully-prevention efforts. If effective, schools may be able to derive benefits of improved student character traits, improved school climate, and decreased prevalence of bullying behavior through implementation of an effective character education curriculum.

**Problem Statement**

My researchable problem is that bullying exists in schools, and it is a difficult problem to resolve, given the complexity of the behavior and the multitude of issues that require the time, attention, and resources of school districts.

As summarized earlier, involvement in bullying is associated with negative outcomes for students (Nansel et al., 2001) and school avoidance concerns (Hutzell and Payne, 2012). As a result, Michigan has adopted anti-bullying legislation (Matt Epling Safe School Law, 2017). Bully-prevention programs are available for schools (Dwyer & Osher, 2000; Mihalic, Irwin, Elliott, Fagan, & Hansen, 2001; Ross & Horner, 2009; Seaman, 2012), but there are issues with ongoing effectiveness (Go & Murdock, 2003; Jeong & Lee, 2013; Ross & Horner, 2009; Seaman, 2012).

As an alternative to traditional bully-prevention programs, character education programs may deter or prevent bullying in schools. Research suggests an inverse relationship between school climate and bullying (O’Brennan et al., 2014; Richard et al., 2012; Waasdorp et al., 2011).
and a positive relationship between school climate and character education (Cleary, 2008; Go & Murdock, 2003; Haye, 2012; Lickona, 1995; Maxwell, 2009; Ricca, 2010; Smith, 1999).

Despite the connection between character education and bullying by way of improved school climate, there is limited research that investigates the use of character education as a strategy to reduce bullying (Hoffman, 2010; Shapiro, 2012). Therefore, this study is important to school districts, as they seek to identify the most efficient and effective ways to reduce bullying behavior in schools. Character education programs boost school climate and academic outcomes. To support schools in decision-making about the best programs to implement, it is important to add to the body of empirical evidence that connects character education with decreased bullying.

**Purpose Statement**

The purpose of this study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors on the prevalence of bullying in character education schools, and to investigate the impact of character education program elements on the prevalence of bullying.

**Research Questions**

The research questions for the study are as follows:

1. Is there a difference in the prevalence of bullying reported by students in character education (CE) schools and non-CE schools?
2. Do school factors impact the prevalence of bullying in CE schools?
   2a. Does the school socioeconomic status impact the prevalence of bullying in CE schools?
2b. Does school size impact the prevalence of bullying in CE schools?

2c. Does the school’s locale impact the prevalence of bullying in CE schools?

3. Do student factors impact the prevalence of bullying in CE schools?

3a. Does student grade level impact the prevalence of bullying in CE schools?

3b. Does student gender impact the prevalence of bullying in CE schools?

3c. Does student race/ethnicity impact the prevalence of bullying in CE schools?

4. Do specific elements of character education (CE) programs impact the prevalence of bullying in CE schools?

4a. Does the CE program origin impact the prevalence of bullying in CE schools?

4b. Does staff training for the CE program impact the prevalence of bullying in CE schools?

4c. Does the instructional strategy for CE impact the prevalence of bullying in CE schools?

4d. Does the parent component of CE impact the prevalence of bullying in CE schools?

4e. Does the frequency of CE program evaluation impact the prevalence of bullying in CE schools?

Conceptual Framework

The conceptual framework describes the variables that are included in this particular study. Figure 1 provides a visual representation of student-level factors, school-level factors, school climate, and character education program elements that impact student bullying behavior.
Figure 1 – Conceptual Framework
The primary purpose of the study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools. This study also investigated the impact of student-level factors of grade level, gender, and race/ethnicity. Research suggests that the prevalence of bullying varies by grade level (DeVoe & Murphy, 2011) and between gender (DeVoe & Murphy, 2011; Espelage, Bosworth, & Simon, 2000; Jeong & Lee, 2013). There is inconsistent research regarding the relationship between race/ethnicity and student experiences with bullying (DeVoe & Murphy, 2011; Jeong & Lee, 2013; Lessne & Harmalkar, 2013; Lipson, 2001), and therefore this study may contribute to the understanding of this student-level variable.

This study also examined school-level variables of socioeconomic status (SES), school size, and locale. These variables are not directly descriptive of any individual student, but are influential on the settings in which individual students directly participate. The literature provides inconsistent information about relationships between the prevalence of bullying and school-level factors of socioeconomic status (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013), school size (Bowes et al., 2009; Lessne & Harmalkar, 2013; Lleras, 2008), and locale (DeVoe & Murphy, 2011; Goldweber, Waasdorp, & Bradshaw, 2013; Lessne & Harmalkar, 2013). According to Social Learning Theory, behavior is shaped in a social context through reciprocal interactions between the individual and the environment (Bandura, 1978). This understanding underlies the assumption that character education is a strategy for reduction and/or prevention of bullying behavior. Through the explicit teaching, modeling, and reinforcement of character education, students will develop desired skills, behaviors, and qualities. This study suggested that character education programs will promote the development of character in students, thereby promoting positive school climate and desirable (non-bullying) behaviors.
The wide variability of character education programs likely impacts the outcomes; therefore, this study investigated the association between specific character education program qualities and the prevalence of bullying. For the purposes of this study, the *Eleven Principles of Effective Character Education* were condensed into five broad categories, or program qualities (character.org, n.d.). The five CE program qualities are program origin, staff training, instructional strategy, parent component, and program evaluation. Program origin identifies the CE program as a packaged program, a packaged program that has been modified, or a locally developed program. Staff training distinguishes programs that include training of all staff, some staff, or no staff. Instructional strategy describes the explicit teaching of character through building strategies only, classroom strategies only, or a combination of strategies. The parent component variable describes CE programs that provide parents with information only, information and opportunities to participate, or neither. Program evaluation refers to the number of times that the school evaluates the effectiveness of the CE program per year.

Though not a variable in this study, school climate was included in the conceptual framework. The inclusion of school climate was purposeful, as the inverse relationship between school climate and bullying is established in the literature (O’Brennan et al., 2014; Richard et al., 2011; Waasdorp et al., 2011). The literature also suggests a positive correlation between character education and school climate (Crider, 2012; Karaburk, 2017; McCaffrey, 2008). School climate, therefore, is important to acknowledge in the investigation of character education and bullying in schools and was included in the conceptual framework for this study.
Methods Overview

To answer the research questions, quantitative methods were employed to analyze data from a self-administered survey. Data was collected from a building administrator and the students in each of 35 Michigan middle schools, resulting in a sample of 35 administrators and approximately 10,000 students. To support generalizability of findings, a layer of geographic stratifications was included in the sampling process, in which one middle school from each county was asked to participate. Descriptive statistics were employed to define characteristics of the sample. Ordinal logistic regression techniques were employed to determine if students in CE schools perceive less bullying than those in non-CE schools, and to determine which factors from research questions two, three, and four, predict bullying in CE schools.

Delimitations and Limitations

The goal of quantitative research is to provide findings that are generalizable (Creswell, 2014). To support the generalizability of the findings, strategies were employed to support a large, representative sample, and to support validity and reliability. This study collected data from thousands of students who are enrolled in 35 school districts. Care was taken to ensure that the participating sample included schools with varied school size, socioeconomic status and locale (city, suburb, town, rural). Data was collected from students in grades six, seven, and eight. Within each school, all students in the identified grade levels were invited to participate, resulting in a robust sample. The survey instruments were carefully designed to maximize participation, support reliability, and ensure validity.

There are limitations to the generalizability of this study. First, this study examined schools within Michigan, therefore caution should be used in the application of findings to other
states. Additionally, data collection was restricted to middle schools including only students in grades six, seven, and eight, therefore the utility of the outcomes in elementary or high schools has not been established. The population of middle school students in Michigan is too large to study. Therefore, sampling procedures were utilized, and the final sample includes students from only 35 schools. As a result, findings from this sample may not apply to every school in Michigan.

**Chapter 1 Closure**

The impact of bullying on students is a recognized problem within the United States and Michigan. Schools have a moral, practical, and legal obligation to address the problem. Bully-prevention programs have not been consistently successful in addressing the problem, and schools have pressure to meet many other objectives, one of which is the provision of character education. While character education programs have not commonly been studied for their impact on bully-prevention, the literature demonstrates that character education may be useful in reducing bullying, through the intermediary of school climate. Both character education and reduced bullying are supported through a positive school climate. Therefore, the purpose of this study was to utilize survey data from sixth-, seventh-, and eighth-grade students and their building administrator to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools. Additionally, the study examined the influence of school and student factors that impact the relationship between character education and bullying. Finally, this study investigated common features of character education programs and their effect on the prevalence of bullying behavior.
There is ample empirical research regarding the topic of bullying, but less on character education. This chapter will be used to review bullying, its ill effects, and to provide a comprehensive description of empirical research to support the methods for this study, including the inclusion of specific variables. Additionally, to justify the value of this study, the literature review will summarize research in the areas of school climate and character education as they relate to bullying and behavior.

**Bullying**

Definitions of bullying have been shaped over many years. In the seminal work, *Aggression in the Schools: Bullies and Whipping Boys*, Dan Olweus (1978) conducted a review and analysis of several empirical studies. Each of these studies were focused on active aggression, whether through picking fights or teasing, that had occurred for some time. In this early work, Olweus (1978) defined aggression as behavior intended to cause discomfort and he provided specific descriptions of the bullies and the victims, which he referred to as whipping boys.

Since that time, the definition of bullying has changed. In a 2003 article for *Educational Leadership*, Olweus expanded the parameters for bullying to include non-physical actions. In this article, he also described the power imbalance, whether real or perceived, between bully and victim (Olweus, 2003). Parault, Davis, and Pellegrini (2007) assert that bullying includes...
physical aggression, threatening behavior, and verbal aggression. Recently, passive forms of bullying have been noted, including social exclusion, rumor-spreading, etc. (Luxenberg, Limber, & Olweus, 2015). To add yet another layer to the complicated web of bullying, increased use of social media, text messaging, and other electronic communication has provided an avenue for bullying independent of school walls. This is referred to as cyberbullying, a form which may have an even greater impact on student health and wellness than bullying that occurs in person (Kessel Schneider, O’Donnell, & Smith, 2015).

**Types of Bullying**

Students experience several types of bullying, including physical bullying. Physical bullying describes actions which hurt a person or his/her possessions. The harm can take the form of hitting, punching, tripping, pushing, pinching, spitting, kicking, or damaging property (stopbullying.gov, 2018). Physical bullying may be the easiest to observe and is the most common form portrayed in the media, but nonphysical harassment is the most prevalent (Lipson, 2001).

Verbal bullying is another form that causes harm to students. Verbal bullying describes actions which cause hurt through spoken or written words, such as teasing, name-calling, provoking, threatening, or making inappropriate comments (stopbullying.gov, 2018). Verbal bullying can sometimes be difficult to distinguish from joking, and is sometimes perceived differently by those involved (Lipson, 2001).

Another form of bullying is social bullying, which is also referred to as relational bullying. Social bullying describes actions that hurt one’s relationships or reputation. This could occur through excluding, damaging friendships, spreading rumors, or publicly embarrassing
Cyberbullying is bullying that takes place over digital devices. This may occur through social media, text messages, instant messages, e-mail, gaming, websites, or anywhere that people can share content. Cyberbullying includes the sharing of information, real or false, that is mean and harmful. Cyberbullying raises unique concerns because it perpetuates bullying outside of the school day, can form a permanent record, can be spread with remarkable speed, and is difficult for adults to know about (stopbullying.gov, 2018).

Bullying – Prevalence and Concerns

In the 1978 book, *Aggression in the Schools: Bullies and Whipping Boys*, Dan Olweus described a long-standing recognition of bullying and aggression in schools. Despite the known existence of the behavior at that time, bullying and aggression were not common subjects of empirical research and the studies that were the subject of his 1978 book seemed to draw significant attention from the scholarly community.

Despite the empirical research and literature in the time since, the problem of bullying in schools persists. Espelage et al. (2000) surveyed 558 middle school students and found that only 19.5% reported no bullying in the past month. In another study, college students were surveyed about the frequency of observed bullying while in high school. Survey data indicated that 73% had witnessed bullying two or more times per month and 10% had witnessed bullying every day (Oh & Hazler, 2009). Similarly, Carney, Jacob, and Hazler (2011) found that many students (12%) experience or witness bullying behavior every day, as reported by 91 sixth-grade students. This number is striking as it relates to the prevalence of bullying in schools.
Luxenberg et al. (2015) authored a status report based upon quantitative data that was collected during the 2013-14 school year with the Olweus Bullying Questionnaire (OBQ). Student reports from a stratified random sample of 2,000 per grade level indicate that 14% of students are bullied by others two to three times per month or more and 5% bully others two to three times per month or more. Of those students who report being bullied, more than 50% indicated that the bullying has lasted six months or more (Luxenberg et al., 2015).

Adults, too, show concern about bullying. The 2014 Bright Horizons Modern Family Index survey of 1,005 full-time parents in the United States found that nearly 80% of parents worry about bullying, making it the top parental concern about schools (Bright Horizons, 2014). In a 2017 survey of 1,505 adult parents for C.S. Mott Children’s Hospital, 61% of parents noted that bullying and cyberbullying are a “big problem” for children (C.S. Mott Children’s Hospital, 2017).

Teachers also express concern about bullying, noting that the behavior occurs in a variety of places at school (Stockdale, Hangaduambo, Duys, Larson, & Sarvela, 2002). Caldwell (2013) conducted interviews with ten middle-school teachers, each of whom noted that they observed bullying and felt that bullying was a problem. In a summary of survey data from 21 teachers, Waters and Mashburn (2017) reported that teachers had witnessed a “great deal” of various forms of bullying. Despite the wide observation of bullying behavior, teachers did not report bullying as a top concern from their professional perspective, which Waters and Mashburn (2017) attribute to the myriad of accountability systems in place that detract teachers’ attention.
Impact of Bullying

Bullying in contemporary society is viewed as a significant issue, one that can interfere with the attainment of education for the victims, and one that has immediate and lasting effects on those involved. This concern has been heightened in recent years as bullying has been identified as a common factor in some teen suicides and homicides (Bauman, Toomey, & Walker, 2013; Romero, Bauman, Ritter, & Anand, 2017; Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2004). The following paragraphs will be used to describe the research that defines the impacts of bullying.

Involvement with bullying has been associated with a host of negative outcomes. The most compelling stories are those of young lives cut short by suicide, for which a contributing factor was exposure to bullying. Bauman et al. (2013) conducted a study using questionnaire responses from 1,491 high school students and found that bullying and cyberbullying experiences are associated with suicidal behaviors. Interestingly, the same study found that the likelihood of making a suicide attempt is increased for males who perpetrate cyberbullying demonstrating that the risk is not confined to the victims (Bauman et al., 2013). Meltzer, Vostanis, Ford, Bebbington, and Dennis (2011) analyzed interview survey data from 7,461 individuals and found that the risk of suicide attempt in adulthood was twice as likely for those who reported childhood bullying than those who did not report being bullied.

Bullying has been linked to self-harm, but may also contribute to injury or death through aggression to others. The U.S. Secret Service reviewed 37 incidents of deliberate school attacks that occurred between 1974 and 2000. The incidents included attacks that employed a lethal means and were intentionally conducted in the school. The investigation included interviews with some
of the perpetrators, in addition to a thorough analysis of records from the investigations, schools, courts, and mental health agencies. The investigation concluded that 71% of attackers reported being bullied or otherwise harmed by others. In some cases, the experiences of bullying and harm were a significant factor in the decision to conduct the attack (Vossekuil et al., 2004). Reports of this nature have cast a new light on bullying and the importance of managing it more effectively.

Incidents of this severity are not a common outcome of involvement with bullying behavior; however, there are more common ill effects for victims, bullies, and bystanders. Reijntjes, Kamphuis, Prinzie, and Telch (2010) conducted a meta-analysis which revealed that peer victimization was a significant predictor of internalizing problems, such as anxiety or depression. Also through a meta-analysis, Gini and Pozzoli (2013) concluded that bullied students are more likely than non-bullied peers to exhibit psychosomatic problems, such as pain, headache, or stomach ache. Nansel, Haynie, and Simons-Morton (2004) obtained self-report data from middle school students at three points of middle school and found that victimization in sixth-grade was a risk factor for poor adjustment to middle school and that bullied students perceived a poorer school climate than non-bullied peers. Young-Jones, Fursa, Byrket, and Sly (2015) analyzed survey data from 130 college students and noted that those who had experienced current or past victimization also reported lower academic motivation. These studies demonstrate that victims of bullying may be negatively impacted in a variety of ways.

There are also negative associations for students who bully others. Ma, Phelps, Lerner, and Lerner (2009) conducted a longitudinal study over a three-year period, and found that bullies self-report lower grades than peers who do not bully. Also, bullies self-report lower academic competence than uninvolved peers (Ma et al., 2009). In a five-year longitudinal study, Feldman
et al. (2014) analyzed Olweus Bully-Victim Questionnaire results as well as school records, and found that bullying behavior in girls is associated with lower academic achievement, lower attendance, and higher disciplinary issues. A longitudinal study in Finland, which collected data from the same boys at ages eight and eighteen, found that childhood bullying behavior was predictive of illicit drug use (Niemelä et al., 2011). After conducting analyses of survey data from 16,302 high school students, Bradshaw et al. (2013) noted that students involved in bullying were more likely to engage in violent behaviors such as gang involvement or weapon carrying, when compared with low involvement students. Those who bully were also more likely to skip school (Bradshaw et al., 2013). Research highlights negative outcomes for victims and bullies, but the impact of bullying affects others as well.

One must not necessarily be involved in bullying to be affected by the behavior; in fact, bystanders are not exempt from the harm of bullying. In a study by Janson, Carney, Hazler, and Oh (2009) in which 587 young adults completed self-administered surveys, it was found that witnessing repetitive abuse of peers resulted in psychological trauma. Hutchinson (2012) also explored the impact of bullying on bystanders through qualitative analysis of interviews of eight students of ages twelve and thirteen. The students reported feelings of isolation, shame, and confusion (Hutchinson, 2012). The literature provides a framework of potential difficulties for victims, bullies, and bystanders. All groups are impacted, but not necessarily in the same way.

Laws Regarding Bullying

The literature makes a very clear case that exposure to bullying is harmful to students in a variety of ways. As noted by President Obama at the White House Conference on Bullying
Prevention in 2010, it was time to “dispel the myth that bullying is just a harmless rite of passage or an inevitable part of growing up” (Lee, 2011, para. 1).

At the time of the aforementioned conference, many schools were working strategically to reduce bullying in schools. Lawmakers were also getting involved, passing state legislation to require specific actions related to preventing and addressing bullying in the schools. In December of 2011, Section 380.1310b was added to the Revised School Code for the State of Michigan, which explicitly defines the requirement for publicly funded schools to create and implement anti-bullying policies. Section 380.1310b outlines the minimum requirements for these policies which must include: the anti-bullying stance of the district, description of protections in place for students, procedures for reporting bullying, and steps that the district will take in response to complaints of bullying. Lastly, Section 380.1310b explicitly states that this section shall be known as “The Matt Epling Safe School Law” (Matt Epling Safe School Law, 2017), named in memory of a Michigan teenager who died by suicide just forty days after a hazing incident (mattepling.com, 2006). The law has been amended in recent years to require that school board policies explicitly define cyberbullying as a prohibited behavior prohibited by the school and to require that reports of bullying incidents be available to the public and reported to the state annually (Matt Epling Safe School Law, 2017).

Michigan law is clear that schools have responsibility for addressing bullying. In this, Michigan is not unique. In fact, all 50 United States have laws to address bullying. Additionally, 42 states have published model policies to guide schools in their efforts. Though laws and regulations vary from state to state, most share common features with the law in Michigan (stopbullying.gov, 2018).
School Factors and Associated Bullying

Ecological Systems Theory indicates that behavior is a function of multiple interrelated systems, affecting one another (Brofenbrenner, 1977). Students, therefore, will be affected by individual factors, but their behavior may also be related to more encompassing systems, such as their school. School level factors, such as school socioeconomic status, size, and locale, may impact the prevalence of bullying behaviors in schools. The literature on these factors will be explored in the following sections.

Bullying and school socioeconomic status.

Socioeconomic status (SES) of a school is represented as the proportion of students within that school that qualify for government-subsidized lunch programs, often referred to as free and reduced price lunch. In order to qualify for school lunch programs, families must report financial information and meet eligibility criteria. This proportion is frequently used because the information is readily available for public schools and provides an estimate of financial circumstances that may affect students (Snyder & Musu-Gillette, 2015). Socioeconomic status has a multitude of impacts on individuals. The American Psychological Association (n.d.) notes, “SES is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health.” Empirical research suggests that bullying may be one of the related outcomes.

An analysis of survey data from 6,758 students, ages eight through eleven, by Whitney and Smith (1993) showed that social disadvantage was correlated to bullying behavior. Goess (2015) conducted analyses of survey data from professional staff members in 109 elementary
schools and found that SES was a strong predictor of bullying. Data from three administrations of the National Crime Victimization Survey suggests that students attending schools in which 50% or more students are eligible for free or reduced lunch price are more likely to report being bullied than those attending schools with fewer than 20% of students eligible (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). However, an analysis of survey data from building administrators in 28 countries noted that administrator-reported bullying in homogeneously low SES schools did not differ from that in homogeneously high SES schools (Menzer & Torney-Purta, 2012).

**Bullying and school size.**

There is a wide range of student enrollment in Michigan middle schools. The smallest traditional public school in Michigan enrolls fewer than 20 middle school students, whereas the largest public middle (grades six through eight) school enrolls 1,231 (Niche, n.d.). Intuition might suggest that large schools provide less direct supervision than small schools, thereby resulting in poorer student behavior, but research is not conclusive about the relationship between school size and the prevalence of bullying (Bowes et al., 2009; Lleras, 2008; Peguero & Williams, 2013).

For example, Lleras (2008) conducted analyses of data from the National Educational Longitudinal Survey including information from 10,061 students and found that students in smaller schools reported feeling more safe that those in larger schools. However, the same study revealed that students in small schools were not less likely to experience verbal harassment than those in larger schools (Lleras, 2008).
Bowes et al. (2009) utilized data from the Environmental Risk Longitudinal Twin Study as well as school characteristic data and found that increased school size was correlated to decreased bullying behavior but increased victimization at the elementary level. Peguero and Williams (2013), however, reviewed data from 22,320 students that was collected for the Educational Longitudinal Study and found that school size was associated with less bullying victimization.

Data from the National Crime Victimization Survey revealed that students attending the largest schools, with enrollment of 2,000 students or more, reported being bullied the least (16.5%). Among those large-school students who reported being bullied, 81% reported being bullied only once or twice in a school year and the percentage of these students who reported daily or weekly bullying was not adequate to meet reporting standards (Lessne & Yanez, 2016). The same study found that mid-enrollment schools, with 600-999 students, were home to students who reported the most of all forms of verbal, physical, and social bullying. Those bullied from these mid-sized schools were also more likely than other groups to report weekly or daily bullying (Lessne & Yanez, 2016).

**Bullying and school locale.**

The Michigan Department of Education identifies a locale categorization for each school on its data website, mischooldata.org. Schools are classified as city, suburban, town, or rural, based upon their community.

It is unclear if school locale can predict bullying, though it has been a subject of empirical studies. For example, in the analysis of data from the Educational Longitudinal Study of 2002, Peguero and Williams (2013) found less reported bullying in urban schools. Other studies found no significant difference in reported bullying based upon locale. For example,
Waasdorp et al. (2011) collected and analyzed survey data from students, parents, and staff in 44 schools, and did not find a decreased sense of safety or increased reports of bullying in urban schools. In another study, which examined self-report data from 16,302 adolescents ages 12 to 21, there was no difference in violence within urban schools when compared to non-urban schools (Bradshaw et al., 2013). Likewise, analysis of data from the 2,270 principals for the School Survey on Crime and Safety revealed no differences in reports of violent incidents between urban and rural schools (Larsen, 2003).

Data from the National Crime Victimization Survey provides contradictory information on this topic. Students in city schools reported being bullied more often than those in rural schools in one administration (Lessne & Yanez, 2016), but the opposite was true in the 2009 and 2011 surveys, where students attending rural schools reported more bullying than those attending city schools (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013).

**Student Factors and Associated Bullying**

Given the abundance of research on the topic of bullying, there is little argument that bullying is a problem in schools. Bullying is prevalent and state laws recognize the importance of preventing and addressing bullying, but it seems that there is no simple solution because the manifestation of bullying is not always the same. The specific characteristics of the bullying may vary widely between situations and the schools in which they occur. Schools and the students within them are incredibly diverse, and the variation can make it difficult to predict and prevent bullying. The literature that relates bullying to the student factors of grade level, gender, and race/ethnicity will be summarized in the following sections.
Bullying and grade level.

Research often cites a relationship between bullying and grade level. For example, Luxenberg et al. (2015) analyzed data from a representative sample of more than 150,000 students in grades three through twelve via the Olweus Bullying Questionnaire. The analysis indicated that the percentage of students who reported being bullied multiple times per month decreased as grade level increased. Likewise, Bradshaw et al. (2007) collected survey data from over 15,000 students in grades 4-12 in one district, and found that elementary school students reported frequent victimization (multiple times per month) at higher rates than middle or high school students did. These studies agree that the risk of frequent victimization decreases as grade level increases, but other studies point toward middle school as a time of concern for bullying.

In the same study mentioned above, Bradshaw et al. (2007) reported that middle school students (75.9%) were more likely to report being witness to bullying than counterparts in elementary (65.2%) or high school (71.5%). Whitney and Smith (1993) analyzed survey data from 6,758 students in middle and high school and noted that middle school students are more likely to report bullying others (12%) than high school students (6%). In yet another study, an analysis of survey data from 7,299 students in grades five, eight, and eleven, found that middle-school age students were more likely to report bullying others than those in other age groups (Gendron et al., 2011). Similar results were uncovered in analysis of data from multiple administrations of the National Crime Victimization Survey, which indicate that middle school students are bullied overall more often than high school students (DeVoe & Murphy, 2011;
Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). These studies from three different decades indicate that middle school students are most likely to report bullying.

The National Crime Victimization Survey results have also provided information about specific types of bullying among middle and high school students. These data sets showed that high school students reported more cyberbullying, but middle school students reported greater experience with all other forms of physical, verbal, and relational bullying (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). Luxenberg et al. (2015) report that students in high school were more likely than students in lower grades to experience verbal bullying and cyberbullying, suggesting that these particular forms of bullying may require more attention at the middle and high school levels. Although the risk of frequent victimization decreases for older students, the risk of victimization and prevalence of specific forms of bullying do not decrease as predictably. Overall, these studies indicate that middle school students may be at the greatest risk to be affected by a myriad of bullying behaviors when compared with elementary or high school students.

**Bullying and gender.**

Gender also influences bullying involvement. Data from multiple administrations of the National Crime Victimization Survey shows that female students in grades six through twelve were more likely to be bullied than male students (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). Luxenberg et al. (2015) also concluded that female students are more likely to be bullied, but also noted that males are more likely to bully others. These studies agree that female students were more likely to experience verbal bullying, relational bullying, and cyberbullying, whereas male students were more likely to experience physical bullying.
Bullying and race/ethnicity.

Another student-level variable that may impact experience with bullying is race/ethnicity, though the impact is not as predictable as gender. For example, Peguero and Williams (2013) analyzed data from 10,440 public school students which was collected as part of the Educational Longitudinal Study (ELS) of 2002 and found that white American students reported bullying victimization more frequently than Black/African American, Latino American, or Asian American peers. Earlier administrations of the National Crime Victimization Survey also found that white students were more likely to be bullied than nonwhite students (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013). However, the most recent data from this broad survey indicate that students who identify as “all other races” are most likely to experience bullying (Lessne & Yanez, 2016; Seldin & Yanez, 2019). These studies indicate that vulnerable racial groups may change over time.

Utilizing the data from the aforementioned Educational Longitudinal Study (ELS) of 2002, Peguero, Popp, and Koo (2015) reviewed 880 cases with a more detailed look at typology of victimization, and found that White Americans were more likely than Asian American or Latino American students to report violent victimization and that Black/African American students were most likely to report property victimization at school (Peguero et al., 2015). Reports from the National Crime Victimization Survey also indicate the prevalence of various forms of bullying. Based on the most recent data, black students are most likely to report verbal bullying, white students are most likely to report rumor-spreading, students of “all other races”
were most likely to report threats, physical bullying, exclusion, and property damage (Seldin & Yanez, 2019). Asian students reported the least bullying in every form, but reported the highest perceptions that the experienced bullying is related to race, religion, or ethnic origin (Seldin & Yanez, 2019).

Two reports related to the National Crime Victimization Survey included cyberbullying data (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013). Cyberbullying included experiences of having hurtful information shared online, unwanted contact through any electronic means, or purposeful exclusion from an online community. White students reported the most cyberbullying in 2008-09 (6.8%) and 2010-11 (10.6%). Black students reported the next most cyberbullying in 2008-09 (5.5%) and Hispanic/Latino students had the second highest reports in 2010-11 (7.6%). Asian students and students who selected “all other races” reported the least cyberbullying (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013).

**Perceptions of Bullying**

Although students and staff have a shared concern around bullying, and research has demonstrated that bullying is a widespread problem with devastating impacts, there is often a distinct difference in how each of these groups perceive bullying. Research has established that adults and students do not utilize the same definitions of bullying. The following paragraphs will summarize the literature pertaining to perceptions of bullying.

Varjas et al. (2008) used qualitative methods to analyze interviews with 30 students in grades four through eight. Students indicated frustration with the manner in which school staff addressed bullying behaviors. Students reported inconsistency between staff in response to bullying and felt that staff often confused bullying behavior with non-bullying behavior. By
their accounts, many staff would overreact to physical non-bullying behavior and would not address behavior that students considered bullying. Probably most importantly, in these interviews, students reported that staff often did not respond quickly enough and, when they did, the actions did little to future bullying behavior (Varjas et al., 2008).

In another example, De La Rosa (2013) used existing data from a survey that was administered in Oklahoma to a sample including 7,848 students and 689 teachers in grades three, five, and seven to gather data regarding the similarities and differences in student and staff perceptions of bullying. After examining and analyzing the quantitative data, De La Rosa found that teachers overestimate student reports of bullying and that seventh-grade students perceive bullying in the school to be worse than the teachers (De La Rosa, 2013).

The Council of Urban Boards of Education (CUBE) collected survey data from students and teachers in an urban setting. Data from 4,700 teachers and administrators in twelve urban school districts indicated that 72% of teachers agree that they can discourage bullying (Perkins, 2007). Only 33% of students agree that teachers could stop bullying (Perkins, 2006). Perkins (2006) noted differences in the belief that teachers could stop bullying between grades and races. Students in grades 4-6 were more likely to agree that teachers could stop bullying than students in middle and high school grades. White respondents were more likely to agree that teachers could stop bullying than African-American students (Perkins, 2006).

The confusion does not exist only between students and school staff. There are also differences between the views of school staff and research experts in the field. Carney et al. (2002) surveyed 251 teachers and counselors regarding their descriptions of bullies and victims. This study was conducted in follow up to a similar study that was used with those who are considered scholarly experts. The same tool was used in both studies, and contained 70 items
that could be noted by the school staff member as characteristic of a bully, victim, both, or neither. They also had the option to mark “don’t know.” The researchers found that the school and expert groups agreed on many characteristics, but also noted that teachers and counselors reported a view of bullying that is more traditionally male, with a focus on outward and direct aggression (Carney et al., 2002).

Researchers and students may also define bullying differently. As defined in research, bullying is characterized by intentionality, repetition, imbalance of power, and harm done to victim (Olweus, 1993). However, students may not define bullying the same way. Guerin and Hennessy (2002) conducted a study in which 166 students in Ireland were interviewed to elicit their definitions of bullying. They used the data collected to determine if student descriptions were aligned with the defining characteristics used by researchers. When students were asked about these characteristics as they related to bullying, the largest groups of students did not concur with the characteristics from the research. More than 60% of students did not feel that the bully must have intended harm. The largest group of students (43%) felt that repetition was not necessary—in other words, behavior that occurs once or twice can still be bullying. Students did not consistently agree that an imbalance of power was a requirement for bullying behavior (Guerin & Hennessy, 2002).

More recent studies provide additional support to the discrepancy between criteria used in research and considerations of students (Byrne, Dooley, Fitzgerald, & Dolphin, 2015; Hellström et al., 2015). Byrne et al. (2015) used content-analysis methodology to uncover themes from student-generated definitions of bullying. Definitions were provided from 4,358 Irish students ages 12 to 19. Researchers found that students’ definitions were dependent on age, gender, and experience with bullying. Younger students tended to describe bullying as “mean.” Older female
students and the older students who had been bullied described bullying by the feeling it causes. Older male students and older students who had not been bullied defined bullying by providing examples. But the groups did not make note of the criteria that researchers use to clarify bullying separate from other aggressive behavior: intentional, power imbalance, and repeated (Byrne et al., 2015).

A mixed-methods study by Hellström et al. (2015) provided similar results. In this study, questionnaires were used to collect data from 128 seventh and ninth grade students in two schools. The questions described a behavior and then asked students to note whether this was bullying behavior or not. This data was analyzed quantitatively to allow the researchers to make comparisons between groups. Additionally, 21 student volunteers participated in focus group interviews, which provided the researchers with the ability to develop a deeper understanding of the students’ views of bullying. Results from this study indicated that students did identify with the traditional criteria of repetition and imbalance of power, but did not feel that those are requirements for behavior to be considered bullying. More important, according to students, is how the victim felt as a result of the behavior. The researchers conclude that the inconsistency between students’ views about bullying “could be the critical missing component in the undertaking of understanding and addressing bullying in schools” (Hellström et al., 2015, p. 7).

**Anti-Bullying Program Examples**

It has been established that bullying is a complex issue and that schools have a responsibility to address bullying behavior. Therefore, anti-bullying programs have been designed to support schools in their efforts; however, outcomes of the programs vary. For example, Jeong and Lee (2013) analyzed data from 7,001 students in 195 schools and found more victimization
in schools with bully-prevention programs than in schools without. There are programs with empirical support, including the Olweus Bully-prevention Program and KiVa Anti-Bullying Program. Both programs involve data collection to identify problem locations, behaviors, and times of the day. Additionally, both programs emphasize the importance of training staff to provide clear messages about bullying and addressing bullying in a manner that is consistent. The following section will be used to summarize empirical research related to these anti-bullying programs.

The Olweus Bully-prevention Program has been the subject of several empirical studies. Black and Jackson (2007) used data collected through observations by an independent evaluator and the Olweus Bully-Victim Questionnaire (OBVQ) over four years of program participation. The study included data from six elementary and middle schools in a large, urban district. The results indicated that, on average, observations revealed lower bullying density (events per number of students). However, the same study noted that student-reported bullying actually increased over the years of the study (Black & Jackson, 2007).

Purugulla (2011) conducted mixed-methods research in a suburban middle school to compare data from pre-implementation and at the conclusion of one year of implementation of the Olweus Bully-prevention Program. Data included discipline records, student survey data, and teacher survey responses. Discipline records revealed no reduction in documented incidents of bullying, but student survey results revealed decreases in student reports of bullying and fear of bullying. Seventh-grade students reported increases in teacher and student responses to bullying while eighth-grade students reported decreases in these areas over the same time frame. The study showed that 53.8% of teachers noted no improvement in school climate as a result of the program, and in the open-ended portion of the teacher survey, teachers expressed frustrations
with the lack of administrative guidelines and the need for more resources. In summary, the program had a positive impact on bullying as perceived by students, but did not have an impact on bullying that warranted discipline, and was not highly supported by staff (Purugulla, 2011).

Bowllan (2011) conducted a study in a small, Catholic school for seventh- and eighth-grade students over the time period just preceding and after one year of implementation of the Olweus Bully-prevention Program. Analysis of data from student and teacher questionnaires noted that seventh-grade females reported significantly less bullying and less exclusion after one year of the program (Bowllan, 2011).

Karna et al. (2013) reported on the effectiveness of the KiVa antibullying program. To accomplish this, the researchers examined data from students enrolled in Finland schools with and without the KiVa program. The sample included 6,927 students in grades one through three and 16,503 students in grades seven through nine enrolled in Finland schools. Questionnaire data was collected prior to program implementation and then twice during the year of program implementation. Results of the analyses indicate that the KiVa Anti-bullying program was effective in reducing bullying and victimization in grades one through three, but results were more variable for the older students.

**Anti-Bullying Program Selection**

As summarized in the previous section, outcomes of two well-known anti-bullying programs vary between and within schools. With limited time and money to address bullying, choosing the best program is of the utmost importance. This section will summarize empirical research related to anti-bullying program selection.
Cunningham et al. (2009) conducted survey research with 1,176 educator participants to obtain their preferences for bully-prevention programs. Educators had the opportunity to choose between conceptualized programs, which provided researchers with information about the preferred attributes of the teachers. They found that not all educators valued the same program attributes. For example, 31% identified simplicity and sustainability as most important, 51% sought programs that would maximize the role of adults, and 16% felt that cost was the most critical factor in choosing a program (Cunningham et al., 2009).

Bell et al. (2010) administered a survey to 52 teachers in grades six through eight related to the implementation of an abbreviated version of the Bully Busters program and found that teachers reported increased effectiveness in handling bullying behavior. However, 488 students who completed pre-and posttest measures indicated higher perpetration of bullying behavior (Bell et al., 2010). The findings of this study reinforce the disagreement in perceptions of staff and students and also demonstrate that downsizing an existing program may support staff buy-in, but not improve student experiences related to bullying behavior.

The literature suggests that it may be difficult to find a packaged bully-prevention program that meets the needs of teachers, students, and the district with regard to requirements of time for training, financial resources, and effectiveness as perceived by students. Therefore, there is merit in investigating alternatives that may yield the result of reducing bullying.

The Role of School Climate

The literature is clear that positive school climate is correlated to reduction of bullying behavior (O’Brennan et al., 2014; Richard et al., 2012; Waasdorp et al., 2011). This relationship indicates that schools may address bullying through efforts to create a positive school climate,
which is one where the school’s values support student learning and well-being, and where all
members of the school community contribute toward achieving the shared vision (National School
Climate Center, n.d.). In a publication for the National Association of Elementary School
Principals, Loukas (2007) states, “The feelings and attitudes that are elicited by a school’s
environment are referred to as school climate” (p. 1). Loukas (2007) goes on to say that there are
physical, social, and academic dimensions that affect the feelings and attitudes of staff, students,
and others who spend time in the school. Both descriptions demonstrate the breadth of school
climate, and with that general understanding established, the following two sections will be used
to describe empirical research related to the benefits of a positive school climate and the condi-
tions that affect school climate.

**Benefits of a Positive School Climate**

In his 1999 book on school climate, Freiberg compares the climate of the school to the air
in that it is often not given attention until something is wrong. The reactive approach described
by Freiberg is a mistake, however, as empirical studies demonstrate the multiple advantages of a
positive school climate. The following paragraphs will describe several studies related to the
benefits of a positive school climate.

**Academic achievement.**

Eacho (2013) analyzed school and student survey data from 18,112 high school students
in 52 Maryland high schools. Analysis of the data in this non-experimental study indicated that
students who identified a more positive school climate also indicated increased feelings of physical
safety at school and improved academic achievement as indicated by report card grades (Eacho,
Likewise, Kwong and Davis (2015) examined data from the Educational Longitudinal Study of 2002. Data from 16,258 students indicated a positive relationship between perception of a positive learning environment and math achievement on standardized tests (Kwong & Davis, 2015).

The impact of school climate on academic achievement may be even greater for students in family structures outside of the two-parent home. O’Malley et al. (2015) analyzed existing survey data from a sample of over 400,000 students in grades nine and eleven. The survey asked students to self-report on their family/living situation, school climate, and grades on report cards. There was a clear link between improved school climate and improved grades, and the association was stronger for homeless students and students living in one-parent homes than it was for students living in two-parent homes (O’Malley et al., 2015). This demonstrates the value of school climate in mitigating the negative academic outcomes for certain family/living situations.

**Engagement and motivation.**

The studies described above demonstrate that positive school climate is linked to academic achievement and school safety, but other relationships exist as well. Berg and Aber (2015) examined data that was collected over a three-year period from a sample of 4,245 school children. Some of the schools participated in a whole-school, social emotional learning (character education) program and others did not. Students participated by answering items on a survey at the start and end of the three-year period. Survey items were used to assess student perceptions of school climate and other factors in an attempt to identify associations. Additional data was collected through survey of the teachers, and this data was included in the development of the school-level interpersonal climate measure. The researchers found a direct, positive relationship between
school-level interpersonal school climate, student engagement, and motivation (Berg & Aber, 2015).

**High school graduation.**

Barile et al. (2012) examined data from 7,779 students attending 431 public high schools, which was collected as part of the Educational Longitudinal Study of 2002. The data was collected during spring of the tenth-grade year and again during spring of the twelfth grade year and analyzed using an ordinal logistic model. Barile et al. (2012) noted that schools which fostered improved teacher-student relationship climate as perceived by students also had lower student dropout rates. Pearson (2016) studied the impact of various school culture elements on graduation and dropout rates. Multiple regression techniques were used to analyze survey data from teachers and counselors in 33 public high schools, as well as graduation and dropout rates. The results indicated that improved culture is positively associated with high school graduation and negatively associated with dropout (Pearson, 2016).

**Discipline.**

Positive school climate is also associated with lower rates of discipline. Nelson, Martella, and Marchand-Martella (2002) utilized pretest/posttest data from seven schools in one district related to implementation of a comprehensive program to address multiple elements of the school climate. Data from participating schools in the district were also compared with that from non-participating schools in the same district and found that participating schools boasted decreases in disciplinary referrals and suspensions while these actions increased in non-participating schools during the same time period (Nelson et al., 2002).
Conditions that Affect School Climate

As noted above, development of a positive school climate is correlated with a range of benefits including reduced bullying (O’Brennan et al., 2014), increased feelings of safety (Eacho, 2013), improved academic achievement (Kwong & Davis, 2015), increased student engagement (Berg & Aber, 2015), lower dropout rates (Barile et al., 2012; Pearson, 2016), and reductions in discipline (Nelson et al., 2002). School climate is complex, including physical, social, and academic factors that impact the feelings and attitudes of students, staff, and others (Loukas, 2007) and the prescription for accomplishing a positive climate may vary, depending on school levels factors. The following sections will summarize empirical research related to the impact of socioeconomic status, school size, and school locale on school climate.

School climate and socioeconomic status.

Studies indicate that economically disadvantaged students have a less positive perception of school climate than those who are not economically disadvantaged. Edwards (2010) analyzed school and survey data from 109 eighth-grade students to determine the impact of various school and student factors on their perceptions of school climate. This study revealed that students who qualified for subsidized-meal programs rated school climate more poorly than those who did not qualify (Edwards, 2010). In a study that included analyses of data from 7,779 public high school students obtained through the Educational Longitudinal Study and input from building administrators, Barile et al. (2012) noted a direct and positive relationship between student socioeconomic status (SES) and perception of school climate. Both studies show that economically disadvantaged
students are less likely to perceive a positive school climate than students that are not economically disadvantaged.

Lleras (2008) explored the impact of SES, both student and school level, on school climate. The study utilized data from the Educational Longitudinal Study and explored different measures of school climate, including students’ sense of safety, students’ reports of being put down, and students’ reports of classroom disruptions. Analysis of data from the sample of 10,061 tenth grade students indicated that less affluent students and students in high-poverty schools reported more “hostile” school climate measures (Lleras, 2008).

As noted by Lleras, socioeconomic status at the building level also impacts school climate. In the study described above, Barile et al. (2012) found that teachers in schools with higher SES reported higher climate scores than those in schools with lower SES. Another quantitative study of school climate data from 69 elementary schools in one school district similarly confirmed the negative correlation between school SES and school climate (Cleary, 2011). In this study, school climate data was gathered from surveys of 715 participating teachers and was analyzed in comparison to school data on school size and percentage of free/reduced-lunch students, or SES. These studies demonstrate the correlation between socioeconomic status (SES) and school climate, as perceived by teachers and students, across grade levels (Cleary, 2011).

**School climate and school size.**

Empirical research has also investigated the impact of school size on school climate. In the studies noted in the previous section, both Lleras (2008) and Cleary (2011) demonstrated a negative correlation between school size and school climate. In other words, both of these studies found that school climate was perceived as less positive in schools with more students. However,
a study which explicitly sought to connect school size to school climate provided less consistent results (Gettys, 2003). This study analyzed the impact of school size on several different indicators of school climate and found that school size was negatively correlated with teacher perceptions of home-school partnership and student perceptions of the school learning environment and the physical/social environment. There was no correlation between school size and other climate indicators such as student attendance and suspension/expulsion rates. In contrast with the results of Lleras (2008) and Cleary (2011), this study concluded that school size was not predictive of the overall school climate (Gettys, 2003).

**School climate and school locale.**

There are also studies to suggest that school climate may vary between schools in urban and rural settings. Caleris (2014) collected perception data through surveys to 206 teachers across four school districts in Ohio. Analysis revealed that teachers in urban districts were less likely to make positive reports on school climate and were less likely to report that colleagues support learning and achievement than teachers in non-urban settings (Caleris, 2014).

The National School Boards Association’s Council for Urban Boards of Education (CUBE) collected survey data from 32,000 students in 15 districts. Student responses related to perceptions of school climate were analyzed with respect to gender, ethnicity, and age. Overall, students in these urban districts identified several concerns about school climate. For example, only 64.3% of students indicated that teachers cared about their success. Additionally, many students reported that teachers are not fair to everyone, including 34.6% of all students and 42.6% of African American students. Lastly, 23.3% of students reported that they did not trust teachers
and 19.2% noted that teachers do not respect students (Perkins, 2006). These student responses raise concerns about urban school climates.

**Improving School Climate**

Research suggests that improving school climate may result in less prevalence of bullying, while also supporting positive outcomes for students in regard to achievement, engagement, motivation, graduation, and behavior. However, given the variability among schools, creating a positive school climate may be complicated. Improving school climate requires development of strong interpersonal relationships and feelings of connectedness for staff and students (Blum, 2005). Development of these relationships may be supported through character education programs that teach prosocial skills. Improvements in school climate or connectedness have been correlated to character education programs (Crider, 2012; James, 2016; McCaffrey, 2011).

**Character Education**

In his 1991 book, Dr. Thomas Lickona provided a thorough review of the need for character education in schools, stating, “Schools cannot be ethical bystanders at a time when our society is in deep moral trouble” (p. 5). The importance of character education in schools is rarely questioned in contemporary society, though there is limited empirical research related to its effectiveness. Lickona (1995) described the spectra, including programs that are packaged, developed, dependent on staff training, aimed to develop intrinsic motivation, highly reliant on extrinsic rewards and consequences, embedded in academic curriculum, or distinct lessons focused on character. This section will describe empirical research focused on benefits of
character education (CE), the relationship between CE and school climate, and the relationship between character traits and bullying. Finally, this section will review best practices for CE in schools.

**Benefits of Character Education**

Character education programs provide instruction to students on core values, but given the wide use of these programs, relatively few studies were found to confirm the benefits of these programs. The studies that have been conducted indicate that character education or social emotional learning may impact behavior skills/traits, willingness to intervene in bullying, staff perceptions, attendance, and discipline. This section will describe studies that have investigated benefits of character education programs.

Skaggs and Bodenhorn (2006) conducted a longitudinal panel study of character education in five school districts over a period of four years. Based on survey data collected from staff, students, and parents, as well as review of behavior indicator data, improvement in behavior was noted following the establishment of character education programs. Improvements were noted for offering apologies, being kind to younger students, solving conflicts in appropriate manner, attempting to stop mean behavior, and refraining from put-downs. As expected, the greatest improvements were found in schools with strong implementation, as well as staff and community buy-in (Skaggs & Bodenhorn, 2006).

DeVoogd, Lane-Garon, and Kralowec (2016) studied benefits of a peer mediation program in seven elementary and middle schools. The program was designed to teach students to utilize empathy and perspective taking when dealing with conflict. Results from the one-year study indicate that direct instruction in empathy and perspective-taking resulted in development of
those skills for peer mediators. Reports of bullying and unexcused absences decreased during the year of implementation, while students reported feelings of a sense of safety and belonging increased during the implementation year.

Espelage, Rose, and Polanin (2016) conducted a study in twelve middle schools to investigate the effects of teaching prosocial skills to middle school students with disabilities. During the three-year study, students were explicitly taught important skills such as empathy, communication, and problem-solving. Data were collected at various time points during the study. The results indicate that, after two years, the students who received direct instruction in these skills were more likely to intervene in bullying situations than those who did not. The benefits of the program also extended to academics, where report card grades for these students improved over the course of the three-year study.

Another study utilized a mixed-methods approach to compare the relative impact of school-wide positive behavior support and character education programming on student behavior in two middle schools within the same district (James, 2016). The study included analysis of four years of quantitative discipline data, including pre- and post- with respect to implementation, which revealed a correlation between character education programs and improved behavior. Staff perception data, gathered through open-ended questionnaires, indicated that staff attributed program success to consistent and school-wide expectations for behavior that apply to all students in varied situations (James, 2016).

Sutter (2009) utilized data reported by 49 high school administrators through a self-assessment tool used to assess effectiveness of character education programming. On a scale 0-4, the mean score was 2.13, which indicated good implementation per the instrument. Of the 49 schools, the highest reported rating was 3.69 and the lowest was 0.49, which demonstrated the
vast range of effectiveness among schools with character education programming. Sutter subsequently used this data to designate schools as “effective” or “ineffective” in their character education efforts and further analyzed demographic data, suspension rates, and attendance rates. Schools with “effective” character education programs boasted higher attendance rates and lower suspension rates than schools that were “ineffective” (Sutter, 2009).

**Character Education and School Climate**

Research demonstrates a correlation between character education (CE) and improved school climate. Schneider and Duran (2010) noted that “The creation of an enhanced school climate is one important outcomes of programs supporting character development in students” (p. 25). Schneider and Duran (2010) reviewed survey responses from 2,500 middle school students in schools supported by the Institute for Character Education and noted strong alignment between the principals of the character education program and the dimensions of supportive school climate as outlined by the National School Climate Council.

The correlation between CE and positive school climate has also been identified in other studies using various methodologies. A quantitative study by Crider (2012) utilized data from the Character Education Quality self-assessment survey and school climate measures from the Organizational Health Inventory. Data from two rural elementary schools (one with CE and one without) were compared. The CE school had a higher overall health index and scored higher in four of five dimensions of school climate, compared with the non-CE school (Crider, 2012).

The relationship between character education and school climate has also been investigated using other methods, including mixed-methods and qualitative research. McCaffrey (2011) conducted a mixed-methods study with middle school students, and utilized data from
open-ended response questions as well as pre- and post-surveys with respect to implementation of a packaged character education program. The student perception data indicated a significant positive change in loyalty to their school (McCaffrey, 2011). In a qualitative study by Karaburk (2017), all four middle school teachers who were interviewed reported that CE had positively affected the school climate. Three themes emerged from analysis of interview data: positive impact of CE on development of social skills, personal development, and safe school environment (Karaburk, 2017).

Character education has been shown to contribute positively to schools through improved behavior (James, 2016; Skaggs & Bodenhorn, 2006), improved attendance, reduced suspension (Sutter, 2009), and improved school climate (Crider, 2012; Karaburk, 2017; McCaffrey, 2011). The overall value of CE is inherent, and there is limited research to support its contributions to schools, but does it also reduce bullying behavior?

**Character Traits and Bullying**

It is necessary to establish the connection between character education and bullying. Character is described as the principles that influence the emotional experience of an individual (Stolorow, 2012). An individual’s character, therefore, may influence involvement in and response to bullying behavior. Character traits can be changed over time because they are based upon beliefs (Lickerman, 2011). Character education (CE) aims to explicitly teach values and traits that will influence responsive behavior. Because they are not fixed, character traits common to bullies, victims, and bystanders can be taught as a strategy to reduce and prevent bullying. The following paragraphs will summarize research that identifies character traits that are common to bullying participants.
Hennard (2015) collected survey data from 685 students in grades 7 and 8 to assess the relationship between students involved in bullying and character traits. Data were collected using the Adolescent Peer Relations Instrument and the Values in Action Inventory of Strengths for Youth. Self-report data revealed significant negative correlations between students who identified as bullying perpetrators and the character traits of prudence, fairness, and self-regulation. Victimization had significant negative correlations with self-regulation, gratitude, and hope.

In another quantitative study by Gagnon (2012), 226 middle school students provided data through three instruments: the Interpersonal Reactivity Index, BIS/BAS scales, and Peer Nomination Inventory. Those involved in bullying, as perpetrator or victim, had deficits in empathy compared with uninvolved peers. Students who were identified as bullies by their peers reported lower scores for affective empathy, which indicates struggle with the ability to put themselves in the place of another. Students who were identified as bullies by their peers reported lower scores for cognitive empathy, or difficulty inferring the thoughts and feelings of others.

Cook et al. (2010) conducted a meta-analytic review of research. Their study involved analysis of factors that predict bullying and victimization, utilizing data from 153 related studies. Victims, bullies, and bully-victims all demonstrate low social competence and difficulty solving social problems and also have low self-esteem. The authors of this study suggest that teaching in the areas of these deficits is a beneficial component to include in efforts to reduce and prevent bullying (Cook et al., 2010).

Another study by Viding, Simmonds, Petrides, and Frederickson (2009) analyzed data from 704 youths between the ages of eleven and thirteen, including self-reported measures of callous-unemotional traits and peer report measure of bullying. The researchers describe
individuals with callous-unemotional traits as those lacking empathy and guilt and note that these individuals often exhibit conduct problems, which might include bullying. The regression analysis revealed that the measure of callous-unemotional traits was predictive of direct forms of bullying beyond that which would be predicted from conduct problems alone (Viding et al., 2009).

The value of character may also be important for bystanders. Gendron et al. (2011) collected self-report data from 7,299 students in grades five, eight, and eleven. Regression techniques were used to analyze the data, which provided a correlation between positive self-esteem and being likely to report bullying (Gendron et al., 2011). Pozzoli and Gini (2010) investigated factors affecting the bystander response through survey of 462 students and their teachers in four middle schools in Italy. Results indicated that individuals with higher self-reliance/problem-solving are more likely to defend bullying victims than to act as a passive bystander (Pozzoli & Gini, 2010).

**Character Education Programs for Schools**

Character.org, formerly known as the Character Education Partnership, provides schools with guiding principles in their efforts to create and sustain effective character education. The principles, first developed in 1997 by Lickona, Schaps, and Lewis, were identified through empirical research of practices used in effective character education schools. The principles allow schools to identify or create a program that is most suited to their unique school, district, and community, while adhering to practices that work well in character education on the whole. The principles have changed little since 1997, despite an ongoing process of review and revision. Table 1 is used to present the 2018-2020 Revision of The Eleven Principles of Character Education (Character.org, 2016, p. 4-10).
Table 1

*Eleven Principles of Character Education*

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle 1</td>
</tr>
<tr>
<td>Principle 2</td>
</tr>
<tr>
<td>Principle 3</td>
</tr>
<tr>
<td>Principle 4</td>
</tr>
<tr>
<td>Principle 5</td>
</tr>
<tr>
<td>Principle 6</td>
</tr>
<tr>
<td>Principle 7</td>
</tr>
<tr>
<td>Principle 8</td>
</tr>
<tr>
<td>Principle 9</td>
</tr>
<tr>
<td>Principle 10</td>
</tr>
<tr>
<td>Principle 11</td>
</tr>
</tbody>
</table>

The Eleven Principles of Effective Character Education are consistent with the suggestions from other resources. Elkind and Sweet (2004) published an article titled “Are You a Character Educator” which remains today, as a guide for educators on the website goodcharacter.com. In the article, Elkind and Sweet emphasize the importance of the whole-school approach, creation of a caring community, embedding character education (CE) in the academic curriculum, explicit instruction in character and values, and evaluation of the CE program. Likewise, the Collaborative
for Academic, Social, and Emotional Learning (CASEL) suggests that this type of education requires a systematic approach, overt instruction on social and emotional skills, instruction integrated into curriculum, partnerships with families and the community, professional learning for staff, and progress monitoring. All of these resources suggest that the whole-school approach is best, but also leave room for schools to personalize their efforts to teach character.

As comparison of the recommendations made by these organizations reveals some trends that were utilized in the development of this study. First, all three support the whole-school approach, selection or development of programs to meet the school’s needs, CE instruction that is explicit and part of the classroom, and ongoing assessment. Additionally, CASEL and Character.org both identify family partnerships as a key component. Based on this synthesis and existing research on character education, the eleven principles have been condensed into fewer categories, or variables, which will be described in the following sections.

**Origin of character education program.**

Character.org (2016) does not promote one particular program for character education. Schools may purchase packaged programs, utilize free resources available online, or create their own program. The first character education principle identifies the importance of the school community’s effort to select the values they most want students to learn and then commit to using these values as the foundation for behavior. In principle three, the organization is explicit in noting that stand-alone programs may be useful for start-up, but should not replace a locally-developed character education program (Character.org, 2016).

Packaged character education programs may benefit schools that are strictly time-limited. Character Counts! is an example of a packaged program that was perceived as positive due to the
establishment of a common vocabulary for use among staff, students, families, and communities (Shapiro, 2012). Another example of a packaged program is the Webster’s Always Talking Together (WATTs UP) character education program, which utilizes short film clips and related lesson plans designed to teach values and character (McCaffrey, 2011).

Whether to limit expenditures or to promote staff buy-in, some schools will choose to build their own character education program. In a case study of a school-initiated character education program, teachers reported positively on the program, but struggled with implementation due to constraints with time and training (Sheppard, 2002). It takes time and effort to develop a program, but this strategy allows a school to address the needs of their school with respect to the resources available. This may promote staff buy-in, according to England (2009), who found that programs developed by staff may receive greater support from staff. Purchased and school-developed character education programs each have advantages for implementation, but it is unclear if the program origin is influential in bullying prevalence.

**Staff training for character education program**

Within the *Eleven Principles of Effective Character Education*, there are many references to the value of staff training. Principle six describes the role of teachers in promoting social-emotional skills and performance values. Principle seven notes that staff will be able to respond to behavior consistently to promote the core values and one of the indicators for this principle explicitly states that the school will provide the appropriate training to accomplish this. Principle eight describes the value of providing opportunities for training and development to all school staff. The importance of staff training is also included in principle nine, which states that adequate staff development is critical for long-range support of character education (Character.org,
In line with the principles, the United States Department of Education provided a summary of character education pilots related to grant funding over a number of years, and found that every report identified the importance of training staff (U.S. Dept. of Education, 2008).

Inclusion of professional development may seem obvious, but time constraints can interfere. For example, a case study of character education within a school revealed positive teacher reports, but low integrity of the program. Teacher responses indicated that lack of consistent training and time were the most significant barriers to program integrity (Sheppard, 2002).

**Instructional strategy for character education program.**

There are several principles that outline the nature of how character is taught to students in the most successful examples. Principles two, three, five, six, and seven include a consistent message that, in those schools which most successfully implement character education, students are provided with multiple opportunities to learn, reflect on, and practice the core values throughout all aspects of the school. This would include classroom instruction, role-modeling, school-wide messaging (i.e., posters, recognitions), as well as opportunities for service learning, conflict resolution, and making restitution (Character.org).

Comprehensive approaches to character education are supported in the literature (Skaggs & Bodenhorn, 2006; Sojourner, 2014; U.S. Dept. of Education, 2008) but for any number of reasons, some schools utilize programs with different instructional approaches (Sojourner, 2014). Even packaged programs that are intended to be implemented in a comprehensive manner may be scaled back due to resource constraints.
Parent component for character education program.

An important aspect of character education is role-modeling. As noted in Social Learning Theory, learning occurs through a variety of processes including attention, retention, reproduction, and reinforcement (Bandura, 1978). This view would indicate that students will learn behavior in the home as well as within the school and seems to point toward the value of including parents in character education. This indication was supported by the summary of findings from the U.S. Dept. of Education (2008), which reported that CE programs that provided opportunities for family involvement were more likely to be perceived as successful. Based upon an extensive literature review including 78 studies, Berkowitz and Bier (2005) also pointed to including a component for families such as parent training or provision of coordinated home activities. Additionally, principles nine and ten from Character.org (2016) describe the importance of outreach and communication about character education to parents, families, and communities.

Lickona (1991) dedicated an entire chapter to describing the need for parents and schools to work together in educating for character. However, he and others have suggested that the decline of values in the home is the impetus for the need for character education in the school (Lickona, 1991, 1995; Sojourner, 2014). It is, therefore, important to ensure that families and schools are working together to determine the strategies to promote character both in school and at home.

Evaluation for character education program

As with any initiative, ongoing evaluation of character education programs is important to help schools assess their strengths and areas for improvement. Character.org (2016) devotes
principle eleven entirely to the consistent assessment of programming. Most comprehensive assessment includes data from all stakeholders, relates to a variety of character-education related aspects, and includes qualitative and quantitative data. Additionally, effective character education schools use this data to make necessary adjustments of modifications to their programs (Character.org, 2016). In a school setting, lack of evaluating programs and making related adjustments can equate to ineffective practices, which resource-limited schools cannot afford.

**Summary of Character Education and Its Role in Bully-prevention**

Character Education programs exist in a variety of forms, including packaged programs and also those which are locally developed. Character Education programs are most effective when comprehensive and involve a transformation of school culture (Izfanna & Hisyam, 2012). Schwartz et al. (2006) also found that character education programs are linked with improved school climate. The connection between character education, school climate, and bullying may provide an opportunity for schools to reap multiple benefits from the implementation of a character education program.

**Chapter 2 Closure**

In order to provide all students with the opportunity to learn, promote student success, minimize harm to students, and to comply with state laws, schools must continue to address the issue of bullying. There is a consistent theme in the literature to show that positive school climate reduces bullying behavior and its negative impacts on students, which suggests that schools may address bullying through efforts to create a positive school climate.
Bully-prevention is just one of many mandates, suggestions, and goals that schools must consider. Schools are also advised and often accountable for graduation rate, attendance, disciplinary practices, provision of co-curricular opportunities, technology integration, post-secondary preparation, and academic achievement as well. In recent decades, legislators have also encouraged the provision of character education in schools. The research has demonstrated that effective character education provides a transformation of the school culture and climate (Izfanna & Hisyam, 2012; Schwartz et al., 2006).

The literature demonstrates that an inclusive and positive school climate is related to decreased bullying behaviors, and also that effective character education involves transformation of the school climate. This connectedness provides support for the notion that character education may be an effective tool for schools to utilize in bully-prevention efforts. If effective, schools may be able to derive benefits of improved student character traits, improved school climate, and decreased prevalence of bullying behavior through implementation of an effective character education curriculum. These outcomes will ultimately have a positive impact on the main goal of schools, to promote student learning and achievement.
CHAPTER 3

METHODS

The purpose of this study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors on the prevalence of bullying in character education schools, and to investigate the impact of character education program elements on the prevalence of bullying. This chapter will present and explain the design of this study including the research design, sample, instrumentation, data collection, and data analysis. Lastly, the limitations and delimitations associated with the design of this study will be described.

Research Questions

The research questions for the study are as follows:

1. Is there a difference in the prevalence of bullying reported by students in character education (CE) schools and non-CE schools?

2. Do school factors impact the prevalence of bullying in CE schools?

   2a. Does the school socioeconomic status impact the prevalence of bullying in CE schools?

   2b. Does school size impact the prevalence of bullying in CE schools?

   2c. Does the school’s locale impact the prevalence of bullying in CE schools?

3. Do student factors impact the prevalence of bullying in CE schools?
3a. Does student grade level impact the prevalence of bullying in CE schools?
3b. Does student gender impact the prevalence of bullying in CE schools?
3c. Does student race/ethnicity impact the prevalence of bullying in CE schools?
4. Do specific elements of character education (CE) programs impact the prevalence of bullying in CE schools?
4a. Does the CE program origin impact the prevalence of bullying in CE schools?
4b. Does staff training for the CE program impact the prevalence of bullying in CE schools?
4c. Does the instructional strategy for CE impact the prevalence of bullying in CE schools?
4d. Does the parent component of CE impact the prevalence of bullying in CE schools?
4e. Does the frequency of CE program evaluation impact the prevalence of bullying in CE schools?

**Research Design, Approach and Rationale**

The current study was designed with the post-positivist perspective. Post-positivism supports empirical research to connect outcomes with the variables that affect them, while acknowledging that we cannot be completely certain of knowledge gained about human actions (Creswell, 2014). The post-positivist viewpoint often influences the design of quantitative research as it will in this study, by recognizing and working to mitigate bias and error. Consistent with post-positivism, this study analyzed the influence of variables on the outcome of bullying with the intent to provide generalizable results, while accepting that human behavior such as bullying is not completely predictable.
Quantitative data may be gathered through either experimental or non-experimental research. Creswell (2009) describes experimental research as that which provides a treatment to one group but not the other and subsequently reviews the outcome, whereas non-experimental research is conducted through the review of data without the assignment of treatments. A common non-experimental approach is the review of survey data. The non-experimental style of research is more reflective of the post-positivist approach, by allowing the researcher to collect information about various factors that may influence the outcome (Creswell, 2014). Therefore, this study utilized a non-experimental review of survey data and school demographic information obtained from the Michigan Department of Education.

This study employed two surveys: one designed for building administrators and another for students. The survey was identified as the appropriate method to collect data for this study because it elicits necessary information from those who are participating in the school. Fowler (2002) describes the use of surveys to collect numerical data by asking questions to people who comprise a sample of the population. Quantitative data is desirable, providing findings that may be generalizable to the population, given that the sample is of adequate size and selected appropriately to represent the population (Dillman, Smyth, & Christian, 2009).

The survey allows the researcher to gain access to the “subjective feelings” of the participants (Fowler, 2002). The student survey in this study allowed students to report their own experience with bullying behavior, as opposed to other sources of data (such as discipline referrals) which largely rely on adult knowledge of or interpretation of students’ experience. Student perceptions of bullying often differ from the perception of adults (Bradshaw et al., 2007), so the survey is an important tool to understand how students perceive bullying.
Similarly, the survey to administrators was used to collect direct information regarding the school’s experience with character education.

The surveys were self-administered. Fowler (2002) suggests that this format allows the participants to report on sensitive topics with less concern about judgment, and therefore, will support honest answers to the survey questions. Additionally, the self-administered survey with relatively few questions provides ease of use to the participant, and will support response rate (Fowler, 2002).

Finally, the survey captured the types of bullying behavior that students experience, with questions that relate to verbal, relational, cyber, and physical experiences, all of which are included in the most current definitions of bullying (stopbullying.gov, 2018). The survey instruments provided the data required to answer the research questions more directly than attempting to obtain the data from other sources.

**Population, Sample, and Setting**

The population for this study includes students in grades six, seven, and eight in Michigan public middle schools. The Michigan Department of Education (MI School Data, n.d.) reported that number as 338,761 for the 2017-18 school year. Of this total, 33.2% were enrolled in sixth-grade, 33.0% in seventh-grade and 33.8% in eighth grade. Females accounted for 48.7% of students, slightly less than males who accounted for 51.3%. One half of students were classified as economically disadvantaged. The Michigan Department of Education also reported the race/ethnicity of students, including 0.7% American Indian or Alaskan Native, 3.3% Asian, 17.4% African American, 8.0% Hispanic/Latino, less than 0.1% Native Hawaiian or Other Pacific Islander, 3.8% Two or More Races, and 66.8% White (MI School Data, n.d.).
A population of this magnitude is too large to survey; therefore a sample was utilized in an effort to gain information about the population at large. Dillman et al. (2009) suggested that the size of the sample will affect precision more than the proportion of the population sampled. Fowler (2002) also stated that simply sampling a fraction of the population is not adequate. He goes on to describe that the more appropriate strategy is to create a data analysis plan through identification of subgroups and their relative frequency in the population, and use of the information to determine the sample size (Fowler, 2002). Based on the demographic breakdown of the population in this study, the Native Hawaiian or Other Pacific Islander group is not prevalent enough to target via survey. The smallest remaining subgroup is the Native American or Alaska Native, which comprises 0.7% of the population of Michigan. A target sample of 15,000 students was set to provide just over 100 individuals in this subgroup. Data obtained from the survey has been compared to verify that the sample is representative of the population. A representative sample provides support for generalization of study results to the population of Michigan middle school students.

The target number of participating schools for this study was set for 30-81 schools. The minimum number of 30 schools was identified by considering the target sample of 15,000 students, and the estimate of 513 pupils per middle school (National Center for Education Statistics, 2001). The maximum is based upon the number of counties in the state of Michigan. Creswell (2009) recommends the selection of a random sample to support generalizability to the population. Before the schools were randomly selected in this study, stratification was used. A stratified sampling approach is commonly used to obtain data that is geographically representative of the population of interest (Fowler, 2002). To achieve a sample that is geographically representative of Michigan, the first step was the organization of Michigan public middle schools into 81 groups, based upon
their location in the counties of Michigan. School names were placed in a sandwich bag, labeled with a number to represent their county location. One school was drawn from each bag until a school from each county had been selected. This technique will ensure that the data is representative of varied geographic areas and levels of urbanization within the state.

The design of the current study involves human subjects. Therefore, approval was required by the Human Subjects Institutional Review Board (HSIRB) for Western Michigan University (see Appendix A). The HSIRB required an explanation of the design of the study, potential risks and benefits of the research, as well as copies of the survey instruments, and scripts that are used for recruitment. The HSIRB granted approval for one year as shown in the letter in Appendix A, after which the study was officially closed.

School websites were used to obtain contact information for the building administrator at each randomly selected middle school. Contact was made with the building administrator via e-mail. The script that was used for e-mail contact is found in Appendix B. The e-mail included information about the study and a request for school participation. Follow-up e-mails were sent if there was no response. If a school administrator did not respond after the second e-mail, another school from that county was randomly selected. This process was repeated until more than 30 schools had agreed to participate. In rare instances, a school from a county agreed to participate after another school had agreed. In these few instances, the data set includes two schools from the same county. As expected, securing participation was a challenge and took months of inquiry.

Following agreement to participate, the building administrator was given the option for student surveys to be administered online (through Survey Monkey) or via paper survey. Providing both options was purposeful, to avoid the unintentional selection of a sample with greater school resources related to technology. In schools where every student has an electronic learning
device, the online survey was easily administered. However, in a school where devices are not readily available within the classroom, the online survey requirement may pose an additional burden of time and inconvenience. Offering the choice of survey format was intended to maximize participation and minimize harm (i.e., time, convenience) to participants.

Participating schools received required materials, either in electronic or paper form, as indicated by the building administrator. Materials included a link to the administrator survey, letter to the administrator with suggested timeline (see Appendix C), letter to facilitating teachers, instructions on taking the administrator survey, and student surveys or link (see Appendix D). Each school that selected an online survey received a unique link. The creation of school-specific links provided a simple mechanism to keep data from all students within a school connected. Only two schools selected paper materials, which were sent via United States Postal Service. They were also provided with postage-paid return envelopes.

Within each participating school, all sixth-, seventh-, and eighth-grade students were asked to take the anonymous survey. Student survey responses provided the following demographic information: gender, grade level, and race/ethnicity. Characteristics of the sample have been compared to the population, to confirm generalizability of the study. School demographic data was gathered from the Michigan Department of Education website at mischooldata.org, including school size (pupil enrollment), the school’s locale (city, suburban, town, or rural), and school socioeconomic status (proportion of students enrolled in free/reduced lunch). Participation from schools in a variety of counties also contributes to generalizability of the results. The demographic characteristics are also variables in the study so the data has been included in analysis to answer the research questions.
**Instrumentation**

The survey instrument is of the utmost importance as it relates to the usefulness of the data collected (Creswell, 2014). The reliability and validity of the survey are important features, as they explain whether the questions are posed in such a way that the respondent will provide the correct information and also that the questions measure what they are intended to measure (Creswell, 2014). Reliability and validity were established through a pilot process, in which the survey was administered to a group that is not included in the study. Pilot participants completed the survey, after which they were asked to describe how they understood survey items and answer choices. Participants’ input was used to make adjustments to the survey and to confirm the time required to participate.

The surveys were designed to provide a set of questions that are clear, can be answered honestly, and provide minimal risk to the participants (Fowler, 2002). Self-administration of the surveys supported participants’ honesty in responding, particularly around this sensitive topic (Fowler, 2002). Each survey instrument required a time investment of ten minutes or less, so the risk of time loss was mitigated. To protect privacy, the student survey was anonymous and data reports do not include any individual student responses or school-level data. No names of students, names of schools, or identifying information about either group will be reported. These factors are used to support honesty in responses and to maximize participation by minimizing risk.

Two survey instruments were used: one to gather school data from the building administrator (Appendix C), and the other to gather student data directly from the students (Appendix D). Development of the student survey instrument was driven largely by an existing survey, utilized by the Michigan Department of Education (MDE) to gather data on the overall health and
wellness of school pupils. The MDE survey includes a set of questions related to bullying, including separate items for various types of bullying behavior: physical, verbal, relational, and cyberbullying.

Of the ten bullying items from the larger MDE survey, the first two questions are global questions that prompt students to respond “yes” or “no” to questions that ask if they have been bullied at school or online. The remaining eight questions prompt students to identify the number of observations of each of the following bullying behaviors: physical contact at school, name-calling at school, rumor-spreading at school, exclusion at school, threats at school, property damage at school, rumor-spreading online, and threats online. The MDE survey includes eight response choices for these bullying items, which correlate to the number of times the behavior has been observed during the twelve-month period. The state survey administrator of the MDE survey granted permission to modify and use the questions for this research, with the directive that the survey not be referenced to by name.

Modifications to the survey questions were made with the purpose of supporting reliability and validity. First, the bullying items ask middle school students to report on their experiences in the previous two months, whereas the state survey asked students about the previous twelve months. This change supports reliability by asking participants to recount information over a short time period (Fowler, 2002) and is better aligned to the timeframe used for the well-known Olweus Bully Victim questionnaire (Solberg & Olweus, 2003). Second, items that ask students to recount the prevalence of bullying have four possible answer responses; this number has been reduced from eight possible responses in the original survey. This adjustment supports the participants’ ability to answer honestly, as it is difficult to distinguish the factual answer when too many choices are provided (Fowler, 2002).
In addition to the changes made to support validity and reliability, additional adjustments were made to meet the specific purpose of this study. In the existing survey, the eight bullying items ask students to report prevalence of observing different types of bullying. Because multiple students can witness the same bullying behavior, the response data will include overlap between students who witness the same bullying event, but the degree of overlap would be variable. For example, in a school where one or two bullying events occurred in a very public setting, many students would report the observation and give a sense of inflated bullying for that particular school. Therefore, in this study the eight bullying items that address specific forms of bullying behavior, asked students to report prevalence being a victim, thereby eliminating potential overlap, and providing data that can be used to compare schools. Lastly, three items were added to gather the demographic information for individual students (grade level, gender, and racial/ethnicity) necessary to answer research question three.

The Michigan Department of Education website will provide the needed demographic information from schools and a survey instrument was used to gather information about the character education program components employed in each school (Appendix A). The character education (CE) survey was developed specifically for the purposes of this study. The first item asks simply if the school uses a character education program, with two response choices, “yes” or “no”. Responses from this question were included in the analysis for research question one and were also used for identification of schools that will be included in analysis for research questions two, three, and four. Only building administrators who responded yes to the CE question were asked to complete the remainder of the CE survey, which included questions about elements of their CE program.
The remaining survey items will gather the necessary information about the components of the character education (CE) program. Item two asked the administrator to identify the CE program origin as one of three options: fully implemented packaged CE program, modified version of a packaged CE program, or a locally developed CE program. Item three inquired about staff training for the CE program, with response options for schools that provide training to all staff, some staff, or no staff. The fourth item asked the building administrator to identify the delivery of CE instruction to students. There are three response options for item four, for schools that deliver CE instruction through building strategies only, classroom strategies only, or both. Item five probes about the presence of a parent component in the CE program, with three response options including programs that provide information only to parents, those that provide information and opportunities for parent involvement, and those which do not have a parent component. The sixth and final item inquires about the frequency of evaluation of the school’s CE program with four response options: the program is evaluated multiple times per year, one time per year, less than once per year (ex: every other year), or not at all.

A pilot study was conducted for each survey. The administrator survey was piloted with three building administrators who were not asked to participate in the study. Once the administrator had taken the survey, a phone conversation affirmed that the survey items were easy to answer accurately. Additionally, the student survey was piloted in one middle school that was not asked to participate in the study. Within the pilot school, the student survey was administered to students in sixth, seventh, and eighth grades. Students were given as much time as needed to complete the survey. Once all students were finished, they were asked to rate any discomfort that resulted from participating. This step was taken to ensure that the survey did not cause significant stress to middle school participants. Students were given the opportunity to ask
questions about the survey items. This action revealed that most students had not read the definition of bullying provided. As a result, a survey item was added to ask students if they read and understood the definition of bullying. Corresponding response data for students who indicate they did not read and understand the definition was removed. Lastly, the pilot survey administration provided an accurate assessment of time required. A pilot is used to support the reliability and validity of the instrument by ensuring that students understand the questions and felt they were able to answer them accurately (Fowler, 2002).

**Data Collection Procedures**

Data was collected from students and building administrators through one of two possible methods: online or paper/pencil version. The methods for data collection were designed to allow schools to select the option that requires the least effort and causes minimal disruption to scheduled instructional time. The building administrator selected the most suitable method for their student population and technology resources. Only two schools chose to utilize the paper/pencil version, presumably due to limited computers and/or internet access. The online survey was utilized by 33 of the 35 participating schools.

A unique link to the student survey was sent to each online survey school. The separate links provided the capability to keep all student data from the same school together. Survey data from each school was first exported into a Microsoft Excel document, after which school-level data was added. Data from paper surveys was added to the Excel document manually. Student responses from the paper survey were entered and then checked for accuracy, prior to adding the school-level fields, which included school SES, school size, school locale, and responses about the character education program from CE schools.
In order to achieve the target sample of schools, the data collection process required approximately five months. In order to achieve a geographically representative sample, one school per county in the state of Michigan was invited to participate through direct contact with the building administrator. Most of the original e-mail invitations went unanswered, which prompted follow-up e-mails. Once a school declined, or did not respond to two invitations, another school from the same county was invited, until the minimum number of 30 participating schools was reached. As the deadline for data collection drew close, approval was granted from HSIRB to provide a $30 gift card to schools that completed the survey. This incentive supported the timely completion of the data collection phase for this study.

Data Analysis

Preliminary review of the data revealed issues to address prior to analysis. As noted previously, the student survey included one item to ensure that students had read and understood the definition of bullying. Data from students who did not read or understand the definition were excluded. Additionally, contradictory response data was excluded. This was achieved by comparing the response of the global questions to the type-specific bullying questions. As noted previously, the survey included two global questions about bullying and cyberbullying, for which students answered “yes” if they had been bullied or “no” if they had not. Data were excluded for item analysis when the global response was “no” but the response to type-specific bullying questions indicated they had been bullied.

Descriptive statistics were computed to provide general information about the student sample, the types of bullying reported through the survey, school characteristics, and character education program elements. Statistical techniques were used to analyze the data and answer the
research questions. For all tests conducted, the level of statistical significance will be set at 0.05. All tests within this study utilized ordinal logistic regression to predict the outcome of bullying. The response options were 0 times, 1 time, 2-4 times, and 5 or more times, and therefore have a distinct order, making ordinal logistic regression the most appropriate technique. The remainder of this section is used to describe the independent variables for each research question. For each question, the associated independent variables and statistical techniques used for analysis will be described.

Research question one asks, “Is there a difference in the prevalence of bullying reported by students in character education (CE) schools and non-CE schools?” The independent variable is dichotomous with two categories: CE schools and non-CE schools. Ordinal logistic regression was used to predict the likelihood of a student reporting a lower value for the frequency of bullying for students who attend CE and non-CE schools. Ordinal logistic regression was selected due to the ordered responses related to the frequency of bullying reported by students.

The second research question is, “Do school factors impact the prevalence of bullying in CE schools?” School socioeconomic status (SES), school size, and school locale are the independent variables for research question two. School SES is a continuous measure of the proportion of students who participate in free or reduced lunch programs. School size is a continuous measure of the number of students enrolled at a school. School locale is a categorical variable used to describe the area where a school is located as city, suburban, town, or rural. Ordinal logistic regression was used to predict the likelihood that a student attending a CE school will report a lower frequency of bullying based upon school level variables.

Research question three asks, “Do student factors impact the prevalence of bullying in CE schools?” Student grade, gender, and race/ethnicity are the independent variables. Grade
level is a categorical variable, with three categories: sixth-grade, seventh-grade, and eighth grade. Gender is a dichotomous variable with categories of male and female. Race/ethnicity is also a categorical variable with the following categories: American Indian or Alaskan Native, Asian, Black or African American, Hispanic or Latino, White, and Two or More Races. Due to a low number of respondents \((n = 56)\), Native Hawaiian or Other Pacific Islander was excluded in analysis of race/ethnicity. Ordinal logistic regression techniques were employed to identify predictive impact of the three independent variables on the prevalence of bullying in CE schools.

The fourth and final research question is, “Do specific elements of the character education (CE) program impact the prevalence of bullying in CE schools?” Ordinal logistic regression was used to predict the likelihood that a student would report a lower value for the prevalence of a type of bullying based on the CE program features. The CE program features (program origin, staff training, instructional strategy, parent component, and program evaluation) are the independent, categorical variables for research question four. Program origin is included to understand the nature of the program as either purchased and used as is, a purchased program that was modified for local use, or a program that developed by the school. The staff training variable describes if and which staff were trained in the character education program with possible responses being all staff were trained, only teachers were trained, or no staff were trained. Instructional strategy is the third CE variable with response options to capture the method by which character is explicitly taught in the school, either within the classroom lessons; through building methods such as announcements, posters, and assemblies; or through a combination of classroom and building strategies. The variable parent component identifies the level of parental involvement in the CE program with three response options: parents are informed and invited to participate in school activities, parents receive information only, or parents are not directly
informed or invited to participate. The final variable evaluation is used to identify the frequency of CE program evaluation with four possible responses: two or more times per year, one time per year, less than one time per year (i.e., every other year), or not at all.

**Limitations and Delimitations**

The study was designed with intention to provide generalizable results. The literature shows that prevalence and types of bullying vary by grade level (Lessne & Yanez, 2016; Luxenberg et al., 2015). This study was limited to students in the middle school grades, defined as six, seven, and eight; therefore, findings should not be generalized to elementary and/or high school grades. Additionally, data was collected from traditional public schools only. Parochial, charter, homeschool, and online schools were intentionally excluded in this research and, therefore, one should not presume the results will be reflective of these other school environments.

The State of Michigan was selected due to familiarity, as well as accessibility to school data and administrator contact information. Consideration was also given to the notion that educators may feel more compelled to agree to participation for research in their home state. Because the culture within and around schools may vary by state and/or region, one should use caution in generalizing findings across the United States. Data was collected from thousands of students who are enrolled in 35 Michigan school districts. Care was taken to ensure that the participating sample includes schools with varied school size, socioeconomic status, and locale. The data was analyzed according to these school-level variables, with the goal of allowing practitioners to predict the impact of character education programs in their school setting.

The goal of this study was to report the impact of student-level variables (grade, race/ethnicity, and gender) and school-level variables (size, SES, locale). The large sample size,
including 35 schools and 9,824 students, was intended to ensure an adequate sample from each of the identified groups for analysis. Despite the large sample size, one category for race/ethnicity was excluded from that analysis due to low number students who identified as Native Hawaiian or Other Pacific Islander ($n = 56$).

**Chapter 3 Closure**

The non-experimental, quantitative approach of this study was appropriate to answer the research questions while respecting the authentic practices that are in place in schools across the state. The self-administered survey approach was chosen to gather genuine perspectives from students and administrators who work in each of the participating schools. The final sample of 9,824 middle school students is a representative sample of the population of 1.6 million middle school students within the state. The 35 schools in the sample provided a representation of schools that vary by size, socioeconomic status, and locale. Ordinal logistic regression techniques were selected to show the predictive impact of various independent variables on the prevalence of bullying. The analysis will answer the research questions and provide data that may be useful to schools seeking to reduce bullying.
CHAPTER 4

RESULTS

This chapter is used to display the findings from this research study. First, descriptive statistics are presented to demonstrate characteristics of the student sample, characteristics of schools in the sample, and to depict the frequencies of various types of bullying reported by students. Following the descriptive statistics, analysis related to the research questions will be presented in order.

Descriptive Statistics

Descriptive statistics provide useful information with regard to the sample. IBM SPSS Statistics 25 was used to describe the relative frequencies of student sample characteristics (grade level, gender, and race/ethnicity), school sample characteristics (school SES, school size, and school locale), and also the frequency of reports of various types of bullying. This introductory information will provide a broad overview before presenting results of the ordinal logistic regression.

School Sample Characteristics

Thirty-five schools participated in the study. Data for school size, school socioeconomic status (SES), and school setting for participating schools were identified through the Michigan Department of Education (MI School Data, n.d.). School SES represents the proportion of students using the free/reduced lunch program. The mean value for school SES in the sample is
0.51 (50.64%), with a minimum of 0.16 and a maximum value of 0.88. Skewness and kurtosis are presented in Table 2 and support normal distribution for school SES. School size is reported in terms of student enrollment. The mean value for school size is 500.74 students, the minimum is 114, and the maximum is 881. School size also fits the normal distribution, as indicated by values for skewness and kurtosis, which are presented in Table 2. Of the 35 schools in this sample, five are situated in a “city”, eleven are in a “town”, seven are classified as “suburban,” and twelve are “rural”.

Table 2

Descriptive Statistics for School SES and Size

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Std. Error</th>
<th>Kurtosis</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>School SES</td>
<td>0.16</td>
<td>0.88</td>
<td>0.51</td>
<td>0.19</td>
<td>0.36</td>
<td>0.40</td>
<td>-0.44</td>
<td>0.78</td>
</tr>
<tr>
<td>School Size</td>
<td>114</td>
<td>881</td>
<td>500.74</td>
<td>215.61</td>
<td>0.15</td>
<td>0.40</td>
<td>-0.78</td>
<td>0.78</td>
</tr>
</tbody>
</table>

Student Sample Characteristics

The final sample included 9,824 students that self-reported grade, gender, and race/ethnicity. Of the total sample, 26.5% are in sixth-grade, 38.5% in seventh-grade, and 35.1% in eighth grade. The sample included slightly more females (51.4%) than males (48.6%). Of 9,824 students in the final sample, 8% reported their race/ethnicity as American Indian or Alaskan Native, 2.3% Asian, 6.7% Black or African American, 6.4% Hispanic or Latino, 0.5% Native Hawaiian or Pacific Islander, 63.6% White, and 12.6% Two or More Races.
Reported Bullying

After reading the definition of bullying, students were asked if they had been bullied or cyberbullied in the previous two months, and then eight additional questions about the type of bullying they experienced: physical, verbal, exclusion, rumors, threats, property damage, cyber rumors, and cyber threats. Responses to these additional questions were coded on a 4-point scale (1 = 0 times, 2 = 1 time, 3 = 2-4 times, 4 = 5 or more times). Of the students in the final sample, 22.6% noted that they had been bullied and 12.7% of the sample stated that they had been cyberbullied. As shown in Table 3, crosstab analysis revealed that 32.8% of bullied students also reported that they had been cyberbullied.

Table 3

*Crosstabulation Bullied and Cyberbullied*

<table>
<thead>
<tr>
<th>Bullied</th>
<th>Cyberbullied</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Bullied</td>
<td>Not Bullied</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>723</td>
<td>1481</td>
<td>2204</td>
</tr>
<tr>
<td></td>
<td>% within Bullied</td>
<td>32.8%</td>
<td>67.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Cyberbullied</td>
<td>59.0%</td>
<td>17.4%</td>
<td>22.6%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>7.4%</td>
<td>15.2%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Not bullied</td>
<td>Count</td>
<td>503</td>
<td>7037</td>
<td>7540</td>
</tr>
<tr>
<td></td>
<td>% within Bullied</td>
<td>6.7%</td>
<td>93.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Cyberbullied</td>
<td>41.0%</td>
<td>82.6%</td>
<td>77.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>5.2%</td>
<td>72.2%</td>
<td>77.4%</td>
</tr>
</tbody>
</table>

Table 4 displays the percentage of students who reported each type of bullying. Name-calling occurred most frequently, with 31% of students reporting that they had been called mean...
names or teased two or more times in the past two months. Physical bullying (21.8%) and rumor-spreading (20.7%) were the next most common for repeated bullying. Students were least likely to report experience with being threatened online (8.1%), having rumors spread about them online (17.6%), having their property damaged (20.5%), and being threatened (21.3%).

Table 4

Percent of Student Reporting Various Types of Bullying

<table>
<thead>
<tr>
<th></th>
<th>0 times</th>
<th>1 time</th>
<th>2-4 times</th>
<th>5 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>61.9%</td>
<td>16.3%</td>
<td>12.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Called Names</td>
<td>52.9%</td>
<td>16.1%</td>
<td>16.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Rumors</td>
<td>59.1%</td>
<td>20.3%</td>
<td>13.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Excluded</td>
<td>71.4%</td>
<td>13.8%</td>
<td>9.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Threatened</td>
<td>78.7%</td>
<td>11.6%</td>
<td>6.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Property Damage</td>
<td>79.5%</td>
<td>12.9%</td>
<td>5.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>82.4%</td>
<td>9.0%</td>
<td>5.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>91.9%</td>
<td>4.7%</td>
<td>2.2%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Research Question 1

The first research question is “Is there a difference in the prevalence of bullying reported by students in character education (CE) schools and non-CE schools?” The null hypothesis asserts that there will be no significant difference in reported bullying between students who attend schools with character education programs and those who attend schools without character education programs. SAS Version 9.4 was used to conduct ordinal logistic regression (OLR).
OLR was used to explore the prevalence of bullying in CE and non-CE schools. The acceptable level of significance for this study was set at 0.05. Table 5 displays the significance values based on the ordinal logistic regression model for various forms of bullying in CE schools compared with the reference group, non-CE schools. No values met the established level of significance ($p < 0.05$); therefore, data from the OLR supports the null hypothesis that the prevalence in bullying is not significantly different in CE schools than in non-CE schools.

Table 5

**Significance Values for Character Education Variable**

<table>
<thead>
<tr>
<th>Type of Bullying</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>0.3930</td>
</tr>
<tr>
<td>Called Names</td>
<td>0.7373</td>
</tr>
<tr>
<td>Rumors</td>
<td>0.9917</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.5525</td>
</tr>
<tr>
<td>Threatened</td>
<td>0.8098</td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.8382</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>0.7744</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>0.1175</td>
</tr>
</tbody>
</table>

* $p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

**Research Question 2**

The second research question is “Do school factors impact the prevalence of bullying in CE schools?” The school factors explored in this study include school socioeconomic status (SES), school size (number of students enrolled), and school location (i.e., city, town, suburban, rural). The null hypotheses assert that reports of bullying in CE schools will not be significantly different on the basis of school SES, size, or location. To test the hypotheses, OLR techniques.
OLR techniques are used to explore the predictive power of each independent variable (i.e., school SES, size, and location) on the outcome, the number of times that students had experienced a particular form of bullying in the previous two months. Table 6 presents the significance values for each school-level variable as a predictor of various types of bullying. Significant relationships will be explained further.

Table 6

*Significance Values by School-Level Variable*

<table>
<thead>
<tr>
<th>Type of Bullying</th>
<th>Locale $p$</th>
<th>School SES $p$</th>
<th>School Size $p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>0.2584</td>
<td>0.0054**</td>
<td>0.1550</td>
</tr>
<tr>
<td>Called Names</td>
<td>0.2074</td>
<td>0.6107</td>
<td>0.3403</td>
</tr>
<tr>
<td>Rumors</td>
<td>0.0076**</td>
<td>0.1074</td>
<td>0.0806</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.5153</td>
<td>0.3869</td>
<td>0.4312</td>
</tr>
<tr>
<td>Threatened</td>
<td>0.1109</td>
<td>0.0033**</td>
<td>0.0500</td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.3249</td>
<td>0.2309</td>
<td>0.2742</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>0.5302</td>
<td>0.5098</td>
<td>0.7886</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>0.1905</td>
<td>0.0700</td>
<td>0.2149</td>
</tr>
</tbody>
</table>

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 7 shows only significant values related to school socioeconomic status (SES). The *Estimate* column in the results tables displays the log odds regression coefficients. The coefficients produced via logistic regression range from negative infinity to positive infinity, and explain the predicted change in outcome that would correspond with a one unit change in the predictor. A negative estimate reflects that an increase in the variable corresponds with a lower likelihood of less bullying. More simply put, a more negative estimate would predict more frequent bullying.
Table 7

Solutions for Fixed Effects by School Socioeconomic Status

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked Punched</td>
<td>-1.21</td>
<td>0.43</td>
<td>6553</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-2.44</td>
<td>-0.49</td>
</tr>
<tr>
<td>Called Names</td>
<td>-0.21</td>
<td>0.40</td>
<td>6538</td>
<td>0.61</td>
<td>0.05</td>
<td>-1.00</td>
<td>0.59</td>
</tr>
<tr>
<td>Rumors</td>
<td>-0.49</td>
<td>0.30</td>
<td>6542</td>
<td>0.11</td>
<td>0.05</td>
<td>-1.08</td>
<td>0.11</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.35</td>
<td>0.40</td>
<td>6549</td>
<td>0.39</td>
<td>0.05</td>
<td>-0.44</td>
<td>1.13</td>
</tr>
<tr>
<td>Threatened</td>
<td>-1.46</td>
<td>0.50</td>
<td>6552</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-2.27</td>
<td>-0.37</td>
</tr>
<tr>
<td>Property Damage</td>
<td>-0.65</td>
<td>0.22</td>
<td>6546</td>
<td>0.23</td>
<td>0.05</td>
<td>-0.17</td>
<td>0.68</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>0.23</td>
<td>0.35</td>
<td>6548</td>
<td>0.51</td>
<td>0.05</td>
<td>-0.46</td>
<td>0.92</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>-0.93</td>
<td>0.51</td>
<td>6561</td>
<td>0.07</td>
<td>0.05</td>
<td>-1.93</td>
<td>0.08</td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; *** p < 0.001.

The significance values indicate that school socioeconomic status can predict the likelihood of being hit, kicked, punched or threatened. The negative estimate for physical bullying (being hit, kicked, or punched) indicates that an increase in the proportion of economically (ED) students corresponds with a decrease in the log odds of reporting lower values for this form of bullying. Likewise, an increase in the proportion of ED students correlates with decreased odds of being threatened less often. Most simply, students attending schools with higher proportion of free-reduced lunch recipients are predicted to report more bullying through physical means and threats than those in more affluent schools.
The second school-level variable explored in this study was school size, or the number of students enrolled. Table 8 displays the estimates, or log odds regression coefficients, only one of which is significant. The model indicates a negative and very small estimate for threats, meaning that school size is predictive of bullying through threats. The small negative value of the estimate means that, for a one-unit increase in the size of the school, one would predict a very small decrease in the log odds of being threatened. In other words, there is a slightly greater risk of being threatened in a larger school.

Table 8

_Solutions for Fixed Effects for School Size_

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>-0.0005</td>
<td>0.0004</td>
<td>6553</td>
<td>0.16</td>
<td>0.05</td>
<td>-0.001</td>
<td>0.0002</td>
</tr>
<tr>
<td>Called Names</td>
<td>-0.0003</td>
<td>0.0004</td>
<td>6538</td>
<td>0.34</td>
<td>0.05</td>
<td>-0.001</td>
<td>0.0004</td>
</tr>
<tr>
<td>Rumors</td>
<td>-0.0005</td>
<td>0.0003</td>
<td>6542</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.001</td>
<td>0.00006</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.0003</td>
<td>0.0003</td>
<td>6549</td>
<td>0.43</td>
<td>0.05</td>
<td>-0.0004</td>
<td>0.0009</td>
</tr>
<tr>
<td>Threatened</td>
<td>-0.00085</td>
<td>&lt;0.001</td>
<td>6552</td>
<td>0.05</td>
<td>0.05</td>
<td>-0.0017</td>
<td>&lt;-0.001</td>
</tr>
<tr>
<td>Property Damage</td>
<td>-0.0005</td>
<td>0.0005</td>
<td>6546</td>
<td>0.27</td>
<td>0.05</td>
<td>-0.001</td>
<td>0.0004</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>-0.00009</td>
<td>0.0003</td>
<td>6548</td>
<td>0.79</td>
<td>0.05</td>
<td>-0.0007</td>
<td>0.0005</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>-0.0005</td>
<td>0.0004</td>
<td>6561</td>
<td>0.21</td>
<td>0.05</td>
<td>-0.001</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; *** p < 0.001.
Table 9 shows the estimates for various types of bullying with “town” as the reference group. School locale (city, suburb, town, or rural) overall was significantly related to the reported frequency of rumor-spreading \((p = 0.0076)\) in CE schools. Only rural schools produced a significant estimate (-0.34) when compared with town schools. The negative estimate predicts that rural school students will experience more rumor-spreading than town school students. The other significant finding was for cyber threats in city schools again with town as the reference group. The positive estimate (0.64) for city schools predicts that city school students are less likely to report cyber threats than those in town schools.

Table 9

*Solutions for Fixed Effects for Rumor-spreading by School Locale*

<table>
<thead>
<tr>
<th></th>
<th>Locale</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked</td>
<td>City</td>
<td>0.17</td>
<td>0.32</td>
<td>6553</td>
<td>0.60</td>
<td>0.05</td>
<td>-0.46</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-0.33</td>
<td>0.17</td>
<td>6553</td>
<td>0.06</td>
<td>0.05</td>
<td>-0.67</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Suburb</td>
<td>-0.02</td>
<td>0.17</td>
<td>6553</td>
<td>0.93</td>
<td>0.05</td>
<td>-0.36</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Called Names</td>
<td>City</td>
<td>0.38</td>
<td>0.30</td>
<td>6538</td>
<td>0.20</td>
<td>0.05</td>
<td>-0.20</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-0.13</td>
<td>0.16</td>
<td>6538</td>
<td>0.43</td>
<td>0.05</td>
<td>-0.44</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Suburb</td>
<td>0.25</td>
<td>0.16</td>
<td>6538</td>
<td>0.13</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>City</td>
<td>0.21</td>
<td>0.20</td>
<td>6542</td>
<td>0.29</td>
<td>0.05</td>
<td>-0.18</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-0.34</td>
<td>0.12</td>
<td>6542</td>
<td>&lt;0.01*</td>
<td>0.05</td>
<td>-0.58</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>Suburb</td>
<td>0.12</td>
<td>0.12</td>
<td>6542</td>
<td>0.29</td>
<td>0.05</td>
<td>-0.11</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locale</td>
<td>Estimate</td>
<td>Std. Error</td>
<td>df</td>
<td>p</td>
<td>Alpha</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>------------</td>
<td>-----</td>
<td>--------</td>
<td>-------</td>
<td>-------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td>City</td>
<td>0.37</td>
<td>0.28</td>
<td>6549</td>
<td>0.19</td>
<td>0.05</td>
<td>-0.18</td>
<td>0.93</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.09</td>
<td>0.16</td>
<td>6549</td>
<td>0.57</td>
<td>0.05</td>
<td>-0.41</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>0.09</td>
<td>0.16</td>
<td>6549</td>
<td>0.56</td>
<td>0.05</td>
<td>-0.22</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>0</td>
<td>0.00</td>
<td>6552</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Threatened</td>
<td>City</td>
<td>0.62</td>
<td>0.36</td>
<td>6552</td>
<td>0.09</td>
<td>0.05</td>
<td>-0.09</td>
<td>1.33</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.30</td>
<td>0.20</td>
<td>6552</td>
<td>0.12</td>
<td>0.05</td>
<td>-0.69</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>0.15</td>
<td>0.20</td>
<td>6552</td>
<td>0.44</td>
<td>0.05</td>
<td>-0.24</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>0</td>
<td>0.00</td>
<td>6552</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>City</td>
<td>0.70</td>
<td>0.40</td>
<td>6546</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.09</td>
<td>1.48</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.01</td>
<td>0.21</td>
<td>6546</td>
<td>0.96</td>
<td>0.05</td>
<td>-0.43</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>0.26</td>
<td>0.11</td>
<td>6546</td>
<td>0.23</td>
<td>0.05</td>
<td>-0.17</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>0</td>
<td>0.00</td>
<td>6546</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>City</td>
<td>0.15</td>
<td>0.21</td>
<td>6548</td>
<td>0.48</td>
<td>0.05</td>
<td>-0.27</td>
<td>0.57</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.13</td>
<td>0.14</td>
<td>6548</td>
<td>0.37</td>
<td>0.05</td>
<td>-0.41</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>0.11</td>
<td>0.13</td>
<td>6548</td>
<td>0.42</td>
<td>0.05</td>
<td>-0.15</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>0</td>
<td>0.00</td>
<td>6548</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>City</td>
<td>0.64</td>
<td>0.30</td>
<td>6561</td>
<td>0.04*</td>
<td>0.05</td>
<td>0.05</td>
<td>1.24</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.03</td>
<td>0.21</td>
<td>6561</td>
<td>0.88</td>
<td>0.05</td>
<td>-0.45</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>0.06</td>
<td>0.18</td>
<td>6561</td>
<td>0.72</td>
<td>0.05</td>
<td>-0.29</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>0</td>
<td>0.00</td>
<td>6561</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; ***p < 0.001.

**Research Question 3**

The third research question is “Do student factors impact the prevalence of bullying in CE schools?” The student factors explored in this study include grade level, gender, and race/ethnicity. Students included in this study reported their grade level as sixth, seventh, or
Categories of race/ethnicity include American Indian or Alaskan Native, Asian, Black or African American, Hispanic or Latino, White, and Two or More Races. The category of Native Hawaiian or Other Pacific Islander was deleted from the analysis due to the limited number of students included in this group. The null hypotheses state that student factors of grade level, gender, and race/ethnicity are not significant predictors of the frequency of specific types of bullying. OLR techniques were used to explore the predictive power of the student level factors. As shown in Table 10, many significant relationships were revealed with the regression analyses. Table 10 was used to present the overall significance for the three student variables. The overall effects of grade level with respect to name-calling, rumors, exclusion, cyber rumors, and cyber

Table 10

<table>
<thead>
<tr>
<th></th>
<th>Grade Level p</th>
<th>Gender p</th>
<th>Race/Ethnicity p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>0.9385</td>
<td>&lt;0.0001***</td>
<td>0.0116*</td>
</tr>
<tr>
<td>Called Names/Teased</td>
<td>0.0038**</td>
<td>&lt;0.0001***</td>
<td>0.1798</td>
</tr>
<tr>
<td>Rumors Spread</td>
<td>0.0460*</td>
<td>&lt;0.0001***</td>
<td>0.0007***</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.0378*</td>
<td>&lt;0.0001***</td>
<td>0.0203*</td>
</tr>
<tr>
<td>Threatened</td>
<td>0.7509</td>
<td>0.0116*</td>
<td>0.0182*</td>
</tr>
<tr>
<td>Property Damaged</td>
<td>0.3063</td>
<td>0.8912</td>
<td>0.1731</td>
</tr>
<tr>
<td>Cyber Rumors Spread</td>
<td>&lt;0.0001***</td>
<td>&lt;0.0001***</td>
<td>0.1020</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>0.0191*</td>
<td>&lt;0.0001***</td>
<td>0.0001***</td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; *** p < 0.001.
threats are all significant. Table 11 presents the solutions for grade level fixed effects for various types of bullying with eighth grade as the reference group. The results indicate significance for the name-calling estimate among sixth-grade students (0.21) when compared to the eighth-grade reference group. Therefore, the model predicts a 0.21 increase in the log odds of a sixth-grade student reporting a lower value for name-calling, as compared to an eighth-grade student. The estimate for seventh-grade students was not significant when compared with the eighth-grade reference group for name-calling. As shown in the estimates in Table 11, the same pattern was present for cyber rumors and cyber threats. Both produced significant estimates for sixth-grade, when compared to the eighth-grade reference group. The positive estimates predict that students in sixth-grade are more likely to report less cyber rumors and threats, in other words, they are less likely to be bullied online.

Table 11

_Solutions for Fixed Effects by Grade-Level_

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>6</td>
<td>-0.02</td>
<td>0.07</td>
<td>6388</td>
<td>0.74</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>-0.02</td>
<td>0.06</td>
<td>6388</td>
<td>0.79</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>0.06</td>
<td>6372</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Called Names</td>
<td>6</td>
<td>0.21</td>
<td>0.06</td>
<td>6372</td>
<td>0.13</td>
<td>0.05</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0.04</td>
<td>0.06</td>
<td>6372</td>
<td>0.46</td>
<td>0.05</td>
<td>-0.17</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>0.06</td>
<td>6377</td>
<td>0.30</td>
<td>0.05</td>
<td>-0.17</td>
</tr>
<tr>
<td>Grade Level</td>
<td>Estimate</td>
<td>Std. Error</td>
<td>df</td>
<td>p</td>
<td>Alpha</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>------------</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>-0.15</td>
<td>0.074</td>
<td>6385</td>
<td>0.04</td>
<td>0.05</td>
<td>-0.30</td>
<td>-0.00</td>
</tr>
<tr>
<td>7</td>
<td>-0.15</td>
<td>0.07</td>
<td>6385</td>
<td>0.02</td>
<td>0.05</td>
<td>-0.28</td>
<td>-0.02</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.02</td>
<td>0.08</td>
<td>6380</td>
<td>0.77</td>
<td>0.05</td>
<td>-0.14</td>
<td>0.19</td>
</tr>
<tr>
<td>7</td>
<td>0.11</td>
<td>0.07</td>
<td>6380</td>
<td>0.14</td>
<td>0.05</td>
<td>-0.04</td>
<td>0.25</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.50</td>
<td>0.09</td>
<td>6383</td>
<td>&lt;.01</td>
<td>0.05</td>
<td>0.32</td>
<td>0.69</td>
</tr>
<tr>
<td>7</td>
<td>0.08</td>
<td>0.08</td>
<td>6383</td>
<td>0.32</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.23</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.38</td>
<td>0.15</td>
<td>6394</td>
<td>0.01</td>
<td>0.05</td>
<td>0.08</td>
<td>0.68</td>
</tr>
<tr>
<td>7</td>
<td>-0.01</td>
<td>0.12</td>
<td>6394</td>
<td>0.91</td>
<td>0.05</td>
<td>-0.25</td>
<td>0.23</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < 0.0001; ** p < 0.01; * p < 0.05

The other significant effects display different trends than name-calling, cyber threats, and cyber rumors. As an overall effect, grade level was shown to be a significant predictor of rumor-spreading ($p = 0.0460$); however, neither the sixth- nor seventh-grade estimate was significant when compared to the eighth-grade reference category. Finally, with regard to exclusion, the estimates for sixth- and seventh-grades are negative and significant. In fact, both estimates are the same, -0.15. The negative estimates represent a 0.15 decrease in the log odds that sixth- and seventh-grade students would report less exclusion. In other words, exclusion is more likely among sixth- and seventh-graders than students in eighth grade.
The OLR results indicate that gender is a significant predictor of all forms of bullying except property damage. As shown in Table 12, the model produced negative estimates for physical bullying (hit, kicked, punched) and threats. Females are the reference category; therefore, the negative values predict that males will report more physical bullying and threats.

Table 12

*Solutions for Fixed Effects Gender with Significant Values*

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>male</td>
<td>-0.34</td>
<td>0.05</td>
<td>6388</td>
<td>&lt;0.0001**</td>
<td>0.05</td>
<td>-0.44</td>
<td>-0.24</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Called Names</td>
<td>male</td>
<td>0.29</td>
<td>0.05</td>
<td>6386</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.20</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>male</td>
<td>0.51</td>
<td>0.05</td>
<td>6391</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.41</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td>male</td>
<td>0.54</td>
<td>0.06</td>
<td>6399</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.43</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threatened</td>
<td>male</td>
<td>-0.15</td>
<td>0.06</td>
<td>6401</td>
<td>0.02*</td>
<td>0.05</td>
<td>-0.27</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>male</td>
<td>0.01</td>
<td>0.06</td>
<td>6380</td>
<td>0.89</td>
<td>0.05</td>
<td>-0.11</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>male</td>
<td>0.93</td>
<td>0.07</td>
<td>6397</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.79</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>male</td>
<td>0.76</td>
<td>0.11</td>
<td>6408</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.54</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.0001.
The six other types of bullying had positive estimates: name-calling, rumors spreading, exclusion, cyber rumors, and cyber threats, indicating that males are less likely than females to report these five forms of bullying.

The final student-level factor explored was race/ethnicity, which is a significant predictor for some forms of bullying. The overall effects indicate that race/ethnicity is a significant predictor for physical bullying (hit, kicked, punched), rumors, exclusion, threats, and cyber threats. Table 13 displays the estimates, or log odds coefficients, produced by the ordinal logistic regression with “white” as the reference group. This table reveals that, while the overall effects were not significant for name-calling, property damage, or cyber rumors, the estimates for specific racial/ethnic groups were significant when compared with the reference category of white students. In summary, all types of bullying had some significant result. The following paragraphs will describe the results by race/ethnicity.

Estimates are significant in six of eight types of bullying for students of two or more races. Estimates were negative for physical bullying (-0.28), name-calling (-0.14), rumors (-0.24), exclusion (-0.24), threats (-0.31), cyber rumors (-0.25), and cyber threats (-0.48). The analysis procedure modeled the probabilities of lower values for bullying, therefore, the negative estimates indicate that students of two or more races have an increased risk of experiencing these six types of bullying, as compared to white students.

Significant estimates were reported for the category American Indian or Alaskan Native, when compared to the white reference category. Estimates were negative for rumors (-0.24), exclusion (-0.23), property damage (-0.29), and cyber threats (-0.44). The model predicts that students who are American Indian or Alaskan Native are more likely to be bullied in these four ways than white students.
Table 13

Solutions for Fixed Effects Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>AmInd</td>
<td>-0.14</td>
<td>0.10</td>
<td>6388</td>
<td>0.14</td>
<td>0.05</td>
<td>-0.33</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>-0.01</td>
<td>0.19</td>
<td>6388</td>
<td>0.96</td>
<td>0.05</td>
<td>-0.39</td>
</tr>
<tr>
<td></td>
<td>BlackAA</td>
<td>-0.09</td>
<td>0.12</td>
<td>6388</td>
<td>0.47</td>
<td>0.05</td>
<td>-0.33</td>
</tr>
<tr>
<td></td>
<td>HisLat</td>
<td>-0.13</td>
<td>0.11</td>
<td>6388</td>
<td>0.23</td>
<td>0.05</td>
<td>-0.34</td>
</tr>
<tr>
<td></td>
<td>2More</td>
<td>-0.28</td>
<td>0.08</td>
<td>6388</td>
<td>&lt;0.001***</td>
<td>0.05</td>
<td>-0.43</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Called Names</td>
<td>AmInd</td>
<td>-0.07</td>
<td>0.09</td>
<td>6372</td>
<td>0.46</td>
<td>0.05</td>
<td>-0.25</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>-0.07</td>
<td>0.17</td>
<td>6372</td>
<td>0.68</td>
<td>0.05</td>
<td>-0.41</td>
</tr>
<tr>
<td></td>
<td>BlackAA</td>
<td>0.18</td>
<td>0.12</td>
<td>6372</td>
<td>0.12</td>
<td>0.05</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>HisLat</td>
<td>-0.02</td>
<td>0.10</td>
<td>6372</td>
<td>0.84</td>
<td>0.05</td>
<td>-0.23</td>
</tr>
<tr>
<td></td>
<td>2More</td>
<td>-0.14</td>
<td>0.07</td>
<td>6372</td>
<td>0.05</td>
<td>0.05</td>
<td>-0.29</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>AmInd</td>
<td>-0.24</td>
<td>0.10</td>
<td>6377</td>
<td>0.01*</td>
<td>0.05</td>
<td>-0.43</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>0.17</td>
<td>0.20</td>
<td>6377</td>
<td>0.39</td>
<td>0.05</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>BlackAA</td>
<td>-0.22</td>
<td>0.12</td>
<td>6377</td>
<td>0.06</td>
<td>0.05</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>HisLat</td>
<td>-0.27</td>
<td>0.11</td>
<td>6377</td>
<td>0.01*</td>
<td>0.05</td>
<td>-0.48</td>
</tr>
<tr>
<td></td>
<td>2More</td>
<td>-0.24</td>
<td>0.08</td>
<td>6377</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.39</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td>AmInd</td>
<td>-0.23</td>
<td>0.11</td>
<td>6385</td>
<td>0.03*</td>
<td>0.05</td>
<td>-0.44</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>-0.29</td>
<td>0.20</td>
<td>6385</td>
<td>0.14</td>
<td>0.05</td>
<td>-0.67</td>
</tr>
<tr>
<td></td>
<td>BlackAA</td>
<td>0.02</td>
<td>0.13</td>
<td>6385</td>
<td>0.87</td>
<td>0.05</td>
<td>-0.24</td>
</tr>
<tr>
<td></td>
<td>HisLat</td>
<td>-0.10</td>
<td>0.12</td>
<td>6385</td>
<td>0.43</td>
<td>0.05</td>
<td>-0.34</td>
</tr>
<tr>
<td></td>
<td>2More</td>
<td>-0.24</td>
<td>0.08</td>
<td>6385</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.40</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threatened</td>
<td>AmInd</td>
<td>-0.06</td>
<td>0.12</td>
<td>6387</td>
<td>0.64</td>
<td>0.05</td>
<td>-0.29</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Estimate</td>
<td>Std. Error</td>
<td>df</td>
<td>p</td>
<td>Alpha</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>------------</td>
<td>-----</td>
<td>-----</td>
<td>-------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.13</td>
<td>0.23</td>
<td>6387</td>
<td>0.56</td>
<td>0.05</td>
<td>-0.58</td>
<td>0.32</td>
</tr>
<tr>
<td>Black AA</td>
<td>-0.18</td>
<td>0.14</td>
<td>6387</td>
<td>0.21</td>
<td>0.05</td>
<td>-0.45</td>
<td>0.10</td>
</tr>
<tr>
<td>HisLat</td>
<td>0.05</td>
<td>0.14</td>
<td>6387</td>
<td>0.73</td>
<td>0.05</td>
<td>-0.23</td>
<td>0.32</td>
</tr>
<tr>
<td>2 More</td>
<td>-0.31</td>
<td>0.09</td>
<td>6387</td>
<td>&lt;0.001***</td>
<td>0.05</td>
<td>-0.49</td>
<td>-0.14</td>
</tr>
<tr>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>AmInd</td>
<td>-0.29</td>
<td>0.12</td>
<td>6380</td>
<td>0.01*</td>
<td>-0.52</td>
<td>-0.06</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.30</td>
<td>0.22</td>
<td>6380</td>
<td>0.18</td>
<td>0.05</td>
<td>-0.72</td>
<td>0.13</td>
</tr>
<tr>
<td>Black AA</td>
<td>&lt; -0.001</td>
<td>0.15</td>
<td>6380</td>
<td>&gt;0.99</td>
<td>0.05</td>
<td>-0.29</td>
<td>0.29</td>
</tr>
<tr>
<td>HisLat</td>
<td>-0.03</td>
<td>0.14</td>
<td>6380</td>
<td>0.86</td>
<td>0.05</td>
<td>-0.30</td>
<td>0.25</td>
</tr>
<tr>
<td>2 More</td>
<td>-0.05</td>
<td>0.10</td>
<td>6380</td>
<td>0.59</td>
<td>0.05</td>
<td>-0.24</td>
<td>0.14</td>
</tr>
<tr>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>AmInd</td>
<td>0.08</td>
<td>0.15</td>
<td>6383</td>
<td>0.60</td>
<td>-0.21</td>
<td>0.36</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.25</td>
<td>0.24</td>
<td>6383</td>
<td>0.31</td>
<td>0.05</td>
<td>-0.72</td>
<td>0.23</td>
</tr>
<tr>
<td>Black AA</td>
<td>-0.003</td>
<td>0.16</td>
<td>6383</td>
<td>0.98</td>
<td>0.05</td>
<td>-0.32</td>
<td>0.31</td>
</tr>
<tr>
<td>HisLat</td>
<td>-0.20</td>
<td>0.14</td>
<td>6383</td>
<td>0.16</td>
<td>0.05</td>
<td>-0.49</td>
<td>0.08</td>
</tr>
<tr>
<td>2 More</td>
<td>-0.25</td>
<td>0.10</td>
<td>6383</td>
<td>0.01*</td>
<td>0.05</td>
<td>-0.45</td>
<td>-0.06</td>
</tr>
<tr>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>AmInd</td>
<td>-0.44</td>
<td>0.20</td>
<td>6394</td>
<td>0.03*</td>
<td>-0.84</td>
<td>-0.05</td>
</tr>
<tr>
<td>Asian</td>
<td>-1.09</td>
<td>0.29</td>
<td>6394</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-1.65</td>
<td>-0.52</td>
</tr>
<tr>
<td>Black AA</td>
<td>-0.13</td>
<td>0.25</td>
<td>6394</td>
<td>0.60</td>
<td>0.05</td>
<td>-0.61</td>
<td>0.35</td>
</tr>
<tr>
<td>HisLat</td>
<td>-0.44</td>
<td>0.21</td>
<td>6394</td>
<td>0.03*</td>
<td>0.05</td>
<td>-0.85</td>
<td>-0.03</td>
</tr>
<tr>
<td>2 More</td>
<td>-0.48</td>
<td>0.15</td>
<td>6394</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.78</td>
<td>-0.19</td>
</tr>
<tr>
<td>White</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.001.
The model produced negative estimates for rumors and cyber threats among Hispanic and Latino students. The negative estimates indicate that Hispanic and Latino students are more likely than white peers to be victimized through rumors, with the estimate of -0.27, and cyber threats, with the estimate of -0.44. Lastly, Asian students are more likely than white peers to be victimized through cyber threats, with the estimate -1.09.

**Research Question 4**

The final research question is “Do specific elements of the character education program influence the prevalence of bullying in character education schools?” The null hypotheses state that there will be no significant difference in bullying based upon CE program origin, staff training, instruction, parent involvement, or evaluation. Ordinal logistic regression was used to explore the predictive impact of five variable features of character education programs. Table 14 displays the significance values. Results were significant for the variable staff training for all types of bullying except cyber threats. The model identified origin of the program, training, instruction, and evaluation as significant predictors of being excluded. In addition to the relationship with being excluded, program evaluation is also a significant predictor of name-calling, property damage, and cyber rumors.
Table 14

Significance Values for Character Education Program Variables

<table>
<thead>
<tr>
<th></th>
<th>Origin $p$</th>
<th>Training $p$</th>
<th>Instruction $p$</th>
<th>Parent $p$</th>
<th>Evaluation $p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked, Punched</td>
<td>0.6964</td>
<td>0.0473*</td>
<td>0.4924</td>
<td>0.6890</td>
<td>0.3537</td>
</tr>
<tr>
<td>Called Names</td>
<td>0.3637</td>
<td>0.0020**</td>
<td>0.4779</td>
<td>0.7292</td>
<td>0.0453*</td>
</tr>
<tr>
<td>Rumors</td>
<td>0.5229</td>
<td>0.0440*</td>
<td>0.2015</td>
<td>0.6022</td>
<td>0.1892</td>
</tr>
<tr>
<td>Excluded</td>
<td>0.0337*</td>
<td>&lt;0.0001***</td>
<td>0.0365*</td>
<td>0.2903</td>
<td>0.0006***</td>
</tr>
<tr>
<td>Threatened</td>
<td>0.8964</td>
<td>0.0092**</td>
<td>0.5034</td>
<td>0.5754</td>
<td>0.4481</td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.4865</td>
<td>0.0135*</td>
<td>0.6818</td>
<td>0.5558</td>
<td>0.0517</td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>0.0780</td>
<td>0.0087**</td>
<td>0.0869</td>
<td>0.1687</td>
<td>0.0095**</td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>0.3095</td>
<td>0.1632</td>
<td>0.8598</td>
<td>0.1958</td>
<td>0.3720</td>
</tr>
</tbody>
</table>

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The model indicates that staff training is a predictor of several types of bullying, and Table 15 is used to display the results of the staff training analysis. The model used “no staff training” as the reference category, to which the training of “all staff” and training of “some staff” were compared. Estimates for the training of “all staff” were not significant, but there were several significant and positive estimates for the training of “some staff”. The positive estimates indicate a predicted log odds increase of reporting lower values for bullying. Therefore, students attending schools in which “some staff” received character education program training are predicted to report less frequent name-calling, rumor-spreading, exclusion, property damage, and cyber rumors than in schools where “no staff” were trained.
Table 15

**Fixed Effects for Character Education Program Staff Training Variable**

<table>
<thead>
<tr>
<th></th>
<th>Staff Training</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Hit, Kicked</td>
<td>All Staff</td>
<td>0.13</td>
<td>0.27</td>
<td>6554</td>
<td>0.64</td>
<td>0.05</td>
<td>-0.40</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.50</td>
<td>0.28</td>
<td>6554</td>
<td>0.07</td>
<td>0.05</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Called Names</td>
<td>All Staff</td>
<td>0.26</td>
<td>0.20</td>
<td>6539</td>
<td>0.18</td>
<td>0.05</td>
<td>-0.13</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.61</td>
<td>0.21</td>
<td>6539</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>All Staff</td>
<td>0.16</td>
<td>0.19</td>
<td>6543</td>
<td>0.39</td>
<td>0.05</td>
<td>-0.21</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.41</td>
<td>0.20</td>
<td>6543</td>
<td>0.04*</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td>All Staff</td>
<td>0.32</td>
<td>0.16</td>
<td>6550</td>
<td>0.05</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.73</td>
<td>0.18</td>
<td>6550</td>
<td>&lt;.0001***</td>
<td>0.05</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threatened</td>
<td>All Staff</td>
<td>-0.02</td>
<td>0.31</td>
<td>6553</td>
<td>0.95</td>
<td>0.05</td>
<td>-0.62</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.56</td>
<td>0.32</td>
<td>6553</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>All Staff</td>
<td>0.31</td>
<td>0.30</td>
<td>6547</td>
<td>0.29</td>
<td>0.05</td>
<td>-0.27</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.75</td>
<td>0.31</td>
<td>6547</td>
<td>0.01*</td>
<td>0.05</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>All Staff</td>
<td>0.19</td>
<td>0.17</td>
<td>6549</td>
<td>0.27</td>
<td>0.05</td>
<td>-0.15</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.46</td>
<td>0.19</td>
<td>6564</td>
<td>0.01*</td>
<td>0.05</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Threatened</td>
<td>All Staff</td>
<td>0.04</td>
<td>0.28</td>
<td>6562</td>
<td>0.88</td>
<td>0.05</td>
<td>-0.51</td>
</tr>
<tr>
<td></td>
<td>Some Staff</td>
<td>0.38</td>
<td>0.32</td>
<td>6562</td>
<td>0.24</td>
<td>0.05</td>
<td>-0.25</td>
</tr>
<tr>
<td></td>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; ***p < 0.001.
Table 14 showed significant relationships between exclusion and character education program variables including program origin, staff training, instructional strategy and program evaluation. Table 16 shows the fixed effects generated through ordinal logistic regression for exclusion. While the first variable of program origin was identified as a significant predictor of exclusion overall, the estimate were not significant when this model used “locally developed” as the reference category. The significance values did not meet selection criteria, indicating that the estimates for purchased programs and programs that are purchased and modified are not significantly different than programs that are locally developed.

The second variable related to the character education program was the method of staff training. This is a categorical variable, with three categories to indicate if the school provided training to all staff, some staff, or no staff. As noted previously, staff training had a significant impact on the prevalence of most types bullying, including exclusion. The estimate for the training of some staff is positive, indicating that staff training would predict a decrease in exclusion. In the fact, the model predicts a 0.73 increase in the log odds for decreased bullying in a school that trained some staff, compared with the reference category of schools that trained no staff.

The third variable related to the CE program was the instructional strategy. This variable originally had three categories to describe how schools delivered CE instruction to students. The options described whether the schools provided CE instruction through building strategies such as posters or announcements, through classroom strategies, or through a combination of building and classroom strategies. Since no schools provided instruction only in the classroom, that category was removed and the reference category was set as building and classroom strategies. Therefore, the negative estimate for schools using building strategies only predicts a decrease of 0.71 in the log odds that students in these schools would report lower exclusion when
Table 16

*Fixed Effects for Being Excluded by CE Program Variables*

<table>
<thead>
<tr>
<th>Character Education Program Variable</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased</td>
<td>0.53</td>
<td>0.39</td>
<td>6550</td>
<td>0.18</td>
<td>0.05</td>
<td>-0.24</td>
<td>1.30</td>
</tr>
<tr>
<td>Modified</td>
<td>-0.21</td>
<td>0.12</td>
<td>6550</td>
<td>0.09</td>
<td>0.05</td>
<td>-0.45</td>
<td>0.03</td>
</tr>
<tr>
<td>Locally Developed</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Staff</td>
<td>0.31</td>
<td>0.16</td>
<td>6550</td>
<td>0.05</td>
<td>0.05</td>
<td>0.02</td>
<td>0.65</td>
</tr>
<tr>
<td>Some Staff</td>
<td>0.73</td>
<td>0.18</td>
<td>6550</td>
<td>&lt;0.0001***</td>
<td>0.05</td>
<td>0.41</td>
<td>1.10</td>
</tr>
<tr>
<td>No Staff</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>-0.71</td>
<td>0.34</td>
<td>6550</td>
<td>0.04*</td>
<td>0.05</td>
<td>-1.37</td>
<td>-0.04</td>
</tr>
<tr>
<td>Building and Classroom</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parent Component</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information and Participation</td>
<td>-0.15</td>
<td>0.16</td>
<td>6550</td>
<td>0.36</td>
<td>0.05</td>
<td>-0.47</td>
<td>0.17</td>
</tr>
<tr>
<td>Information Only</td>
<td>0.09</td>
<td>0.12</td>
<td>6550</td>
<td>0.49</td>
<td>0.05</td>
<td>-0.16</td>
<td>0.33</td>
</tr>
<tr>
<td>No Information or Participation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2+/ Year</td>
<td>-0.51</td>
<td>0.14</td>
<td>6565</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.78</td>
<td>-0.23</td>
</tr>
<tr>
<td>1/ Year</td>
<td>-0.44</td>
<td>0.14</td>
<td>6565</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.72</td>
<td>-0.16</td>
</tr>
<tr>
<td>&lt;1/Year</td>
<td>-1.74</td>
<td>0.49</td>
<td>6565</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-2.70</td>
<td>-0.78</td>
</tr>
<tr>
<td>No Evaluation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01; *** p < 0.001.
compared with the reference group. In other words, less bullying is predicted in schools which deliver CE instruction through building and classroom strategies, than through building strategies alone.

The fourth variable for the CE program is the parental component, which is not a significant predictor of exclusion or other forms of bullying for that matter. The fifth and final variable related to the CE program is program evaluation. This is a categorical variable with four categories that describe the frequency of CE program evaluation. As noted in Table 16, the evaluation variable is a significant predictor of exclusion. The model utilized the category of “no evaluation” as the reference group, resulting in negative estimates for program evaluation occurring less than once per year, once per year, or two or more times per year. The negative estimates indicate a decrease in the log odds of less exclusion in schools that conduct CE program evaluations, when compared to the reference group of schools that do not evaluate the CE programs.

In addition to predicting exclusion, the program evaluation variable predicts name-calling and cyber rumors. Fixed effects for the character education program evaluation variable and related types of bullying are shown in Table 17. The model used “no evaluation” as the reference category, so estimates show a predicted increase (positive) or decrease (negative) in the log odds of students reporting less frequent bullying. Estimates for “two or more times per year” and “less than one time per year” produced negative estimates that met the criteria for significance. The model would, therefore, predict that students in schools which evaluate CE programs are less likely to report less bullying than students in schools that do not evaluate CE programs.
Table 17

**Fixed Effects for Character Education Program Evaluation Variable**

<table>
<thead>
<tr>
<th>Program Evaluation</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit, Kicked</td>
<td>2+/ Year</td>
<td>-0.20</td>
<td>0.23</td>
<td>6554</td>
<td>0.38</td>
<td>0.05</td>
<td>-0.65</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>0.11</td>
<td>0.24</td>
<td>6554</td>
<td>0.65</td>
<td>0.05</td>
<td>-0.36</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-0.95</td>
<td>0.73</td>
<td>6554</td>
<td>0.19</td>
<td>0.05</td>
<td>-2.37</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name-calling</td>
<td>2+/ Year</td>
<td>-0.38</td>
<td>0.17</td>
<td>6539</td>
<td>0.03*</td>
<td>0.05</td>
<td>-0.72</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>-0.14</td>
<td>0.17</td>
<td>6539</td>
<td>0.42</td>
<td>0.05</td>
<td>-0.48</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-1.40</td>
<td>0.56</td>
<td>6539</td>
<td>0.01*</td>
<td>0.05</td>
<td>-2.48</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>2+/ Year</td>
<td>-0.17</td>
<td>0.16</td>
<td>6543</td>
<td>0.31</td>
<td>0.05</td>
<td>-0.49</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>-0.18</td>
<td>0.16</td>
<td>6543</td>
<td>0.27</td>
<td>0.05</td>
<td>-0.50</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-1.10</td>
<td>0.53</td>
<td>6543</td>
<td>0.04*</td>
<td>0.05</td>
<td>-2.14</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded</td>
<td>2+/ Year</td>
<td>-0.49</td>
<td>0.14</td>
<td>6550</td>
<td>&lt;0.001***</td>
<td>0.05</td>
<td>-0.78</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>-0.43</td>
<td>0.14</td>
<td>6550</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-0.71</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-1.71</td>
<td>0.50</td>
<td>6550</td>
<td>&lt;0.001***</td>
<td>0.05</td>
<td>-2.69</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threatened</td>
<td>2+/ Year</td>
<td>-0.03</td>
<td>0.27</td>
<td>6553</td>
<td>0.90</td>
<td>0.05</td>
<td>-0.56</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>0.30</td>
<td>0.28</td>
<td>6553</td>
<td>0.27</td>
<td>0.05</td>
<td>-0.24</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-0.58</td>
<td>0.84</td>
<td>6553</td>
<td>0.49</td>
<td>0.05</td>
<td>-2.22</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>2+/ Year</td>
<td>-0.51</td>
<td>0.26</td>
<td>6547</td>
<td>0.05</td>
<td>0.05</td>
<td>-1.01</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>0.07</td>
<td>0.26</td>
<td>6547</td>
<td>0.80</td>
<td>0.05</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>&lt;1/Year</td>
<td>-1.06</td>
<td>0.82</td>
<td>6547</td>
<td>0.20</td>
<td>0.05</td>
<td>-2.67</td>
</tr>
<tr>
<td>No Evaluation</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Rumors</td>
<td>2+/ Year</td>
<td>-0.33</td>
<td>0.15</td>
<td>6549</td>
<td>0.02*</td>
<td>0.05</td>
<td>-0.63</td>
</tr>
<tr>
<td></td>
<td>1/ Year</td>
<td>-0.25</td>
<td>0.15</td>
<td>6549</td>
<td>0.09</td>
<td>0.05</td>
<td>-0.54</td>
</tr>
</tbody>
</table>
Another significant finding for the CE program evaluation variable is related to rumor-spreading, for which the model produced a negative estimate (-1.1) for the category of “less than one time per year” when compared with the reference group “no evaluation”. Negative estimates indicate a decreased likelihood of reporting less bullying, so students in schools that evaluate CE programs infrequently (less than one time per year) are predicted to be bullied through rumors slightly more often than those in schools that do not evaluate CE programs. The estimates for other categories, representing more frequent CE evaluations, did not meet the significance criteria set forth for this study.

As described previously, estimates are negative and significant for being excluded with respect to the character education evaluation variable. The estimate is also negative and significant for property damage when the program is evaluated two or more times per year. Estimates for cyber rumors are also significant when the CE program is evaluated two or more times per year or less than one time per year. The negative estimates indicate that the log odds of reduced bullying through exclusion, property damage, and cyber rumors are decreased when CE programs are evaluated, as compared to the reference group of no CE program evaluation.

<table>
<thead>
<tr>
<th>Program Evaluation</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>p</th>
<th>Alpha</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1/Year</td>
<td>-1.66</td>
<td>0.51</td>
<td>6549</td>
<td>&lt;0.01**</td>
<td>0.05</td>
<td>-2.66 -0.66</td>
</tr>
<tr>
<td>No Evaluation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Threats 2+ Year</td>
<td>0.05</td>
<td>0.25</td>
<td>6562</td>
<td>0.85</td>
<td>0.05</td>
<td>-0.43 0.53</td>
</tr>
<tr>
<td>1/Year</td>
<td>0.32</td>
<td>0.26</td>
<td>6562</td>
<td>0.22</td>
<td>0.05</td>
<td>-0.19 0.83</td>
</tr>
<tr>
<td>No Evaluation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1/Year</td>
<td>-0.84</td>
<td>0.84</td>
<td>6562</td>
<td>0.32</td>
<td>0.05</td>
<td>-2.48 0.81</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01; ***p < 0.001.
Research question four asks if CE program elements influence the prevalence of bullying in middle schools. The ordinal logistic regression produced no significant results related to parental involvement, supporting the null hypothesis that the parent component in CE programs does not impact the prevalence of bullying. The null hypothesis for CE program staff training is rejected, as staff training estimates indicate that staff training predicts many forms of bullying. Likewise, the null hypothesis for CE program evaluation is rejected. Character education program origin and instruction are significant only for exclusion, but the significant findings result in rejection of those null hypotheses as well.

Chapter 4 Closure

Ordinal logistic regression was used to model the impact of several variables on the prevalence of eight different types of bullying: physical bullying (being hit, kicked, or punched), verbal bullying (being called mean names or teased), social bullying (having rumors spread or being excluded), bullying through threats, bullying through property damage, and cyberbullying (rumor-spreading or making threats online). Several findings were significant.
CHAPTER 5

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors on the prevalence of bullying in character education schools, and to investigate the impact of character education program elements on the prevalence of bullying. Previous studies have found that positive school climate is associated with decreased bullying behavior. Studies also indicate that effective character education programs involve a transformation of the school climate (Izfanna & Hisyam, 2012; Schwartz et al., 2006). Additionally, research reveals a connection between character traits and the individuals involved in bullying (Cook et al., 2010; Gagnon, 2012; Hennard, 2015; Viding et al., 2009). The apparent relationship between bullying, school climate, and character education was the impetus for this study, which investigated the impact of character education on the prevalence of bullying in middle schools, as well as the impact of school factors, student factors, and CE program components on bullying within CE schools.

Overview of Findings

This section will describe findings from the descriptive statistics and data analyses. The sample for this study includes 9,824 students from 35 Michigan middle schools. Detailed
demographic information is presented in Chapter IV. All research questions were investigated through ordinal logistic regression and confidence levels were set at 95%.

**Prevalence of Bullying as Reported by Sample**

Descriptive statistics were used to gain an initial understanding of the types of bullying reported by the students in this sample. As described earlier, student participants were prompted to answer two global bullying questions to identify if they had experienced bullying or cyber-bullying in the previous two months. Following these global questions, students responded to eight questions about specific types of bullying. These questions prompted students to indicate the number of times they had experienced that particular bullying type in the previous two months and the information compiled will be described in the following paragraphs.

Data showed that 22.6% of students indicated on the global question that they had been bullied. When prompted about more specific types of bullying, however, those numbers are not aligned. More than 22.6% of students in the sample reported experiencing several types of bullying one or more times in the previous two months. Student responses indicate that 38.1% of students had been hit, kicked, or punched at least once, 47.1% had been called names or teased, 40.9% had rumors spread about them, and 28.6% had been excluded. Similar to bullying, 12.5% of students indicated that they had been cyberbullied on the global question but 17.6% of students stated that rumors had been spread about them online. It is possible that the more specific questions provided clarity for students, allowing them to more accurately identify that they had been bullied. However, these discrepancies could also indicate that students do not qualify the described behavior as bullying.
Another interesting point from the descriptive statistics was revealed in the crosstab calculation. While only 12.7% of the sample reported that they had been cyberbullied, 32.8% of students who reported they had been bullied, also reported that they had been cyberbullied. This indicates that students who are victims of bullying are also more likely to be victimized online than those who are not otherwise victims.

Descriptive statistics reveal that the three forms of bullying most reported by student participants are name-calling or teasing, rumor-spreading, and being hit, kicked, or punched. In the previous two months, 47.1% of students reported name-calling or teasing one or more times, while 40.9% reported this frequency of rumor-spreading and 38.1% for being hit, kicked, or punched. Students were also most likely to report name-calling or teasing (15%), rumor-spreading (7.3%), and being hit, kicked or punched (9.4%). It is striking that so many students are experiencing these acts overall, but perhaps even more alarming is the percentage of students experiencing them regularly (five or more times in the previous two months).

**Impact of Character Education on the Prevalence of Bullying**

The first research question asks if there is a difference in reported bullying between students in CE schools compared to students in non-CE schools. To address this question, each student in the sample self-reported the number of times that he/she had experienced eight different types of bullying through anonymous survey. Also through survey, each school administrator indicated whether their school did or did not utilize a formal character education program. The student and school data were joined, allowing a comparison of student responses between those attending CE schools and those attending non-CE schools. Ordinal logistic regression was used to determine if the use of character education was a significant predictor that
students would report lower levels of bullying, but the results were not significant for any of the eight forms of bullying from the survey. The results of this study do not support the use of character education as a strategy to reduce the prevalence of bullying in middle schools.

Data from this study suggests that students attending CE schools are not less likely than those attending non-CE schools to report any form of bullying, and perhaps teaching values through a character education program does not impact bullying, but we should consider other explanations as well. The first consideration is the procedure for sampling schools. While the procedure to select schools was random, only some of the invited schools volunteered to participate. The motivation to volunteer could be linked to a school issue with bullying, interest in character education, or other factors that may have unintentionally created a sample that is not representative of the school population at large. The second consideration has to do with the administrator survey instrument. Administrators were provided with the definition of character education and then prompted to indicate if their school does or does not use character education. According to survey data from school administrators, the vast majority of participating schools are utilizing a character education program to explicitly teach values (77%). This high number prompts one to consider if administrators read the definition (practices used to explicitly teach values that are widely valued in society), and whether the definition was adequate. The two issues identified here (school sampling procedure and survey instrument design) should be considered before accepting the results of this study, which indicate that character education is not effective for addressing middle school bullying.
Impact of School-Level Factors on the Prevalence of Bullying in CE Schools

The second research question asks if school factors impact the prevalence of bullying in schools that explicitly teach character. To address this question, the Michigan Department of Education website was used to gather data on school socioeconomic status (proportion of students with free/reduced lunch), school size (student enrollment), and school locale (city, suburban, town, or rural). This school data was joined with survey response data from students attending CE schools. Ordinal logistic regression (OLR) was used to determine if school size, socioeconomic status, or locale were significant predictors that students would report lower levels of bullying in CE schools. Significant relationships were identified in the analyses.

OLR revealed that school socioeconomic status (SES) is a significant predictor of physical bullying (hit, kicked, punched) and threats in CE schools. The model predicts that students attending CE schools that serve a high percentage of low-income families are less likely to report a lower frequency of bullying through physical means or threats. In other words, one would expect more instances of both physical bullying and threats in CE schools with a high proportion of economically disadvantaged students.

OLR results indicate that school size, or the number of students enrolled, is a significant predictor of bullying through threats in CE schools. The relationship is significant, but the estimate is very small, indicating a small effect. As CE school size increases, the probability that a student will report a lower value for the number of times he/she was threatened decreases. One would, therefore, expect that students in larger CE schools are threatened more often than students in smaller schools.
Among CE schools, school locale is a significant predictor of rumor-spreading. Students attending rural schools are less likely than students attending town schools to report a lower value for the number of times that rumors had been spread about them. In other words, rumor-spreading is more prevalent for students attending rural CE schools than students attending CE schools situated in towns. When compared with town schools, OLR did not identify significant differences between suburban schools or city schools.

**Impact of Student-Level Factors on Prevalence of Bullying in CE Schools**

The third research question asks if student factors impact the prevalence of bullying in middle schools that teach character. To answer this question, student survey data was collected from students in grades six, seven, and eight. Through the anonymous student survey, each student self-reported grade level, gender (male or female), and race/ethnicity, and also reported the number of times he/she was bullied in the previous two months. Student response categories for race ethnicity were “American Indian or Alaskan Native,” “African American or Black,” “Asian,” “Hispanic or Latino,” “Native Hawaiian or Other Pacific Islander,” “White,” and “Two or more races.” “Native Hawaiian or Other Pacific Islander” responses were omitted from the analyses due to low numbers. There were four response categories for the number of times bullying was experienced: “0 times.” “1 time.” “2-4 times.” or “5 or more times.” Ordinal logistic regression revealed significant relationships, which will be described below.

The OLR model indicates that, within CE schools, grade level is a significant predictor of name-calling, rumor-spreading, exclusion, and cyberbullying through rumors and threats. When compared with the eighth-grade reference group, the model predicts that sixth-grade students will report less frequent name-calling, cyber rumors, and cyber threats. The analysis reveals that
sixth- and seventh-grade students are predicted to report a higher frequency of exclusion than eighth-grade students.

Within CE schools, significant relationships were found between gender and all forms of bullying except property damage. Data indicate that male students in CE schools are less likely to report lower values for physical bullying (hit, kicked, punched) and threats. One would predict, therefore, that males experience more physical bullying and threats than females. The converse is true for name-calling, rumor-spreading, exclusion, online rumor-spreading, and online threats. Males are more likely to report lower values for these types of bullying. In other words, the model predicts that female students in CE schools experience more name-calling, rumor-spreading, exclusion, cyber rumors, and cyber threats than males.

Overall, race/ethnicity is a significant predictor of several forms of bullying in CE schools: physical bullying (hit, kicked, and punched), rumor-spreading, exclusion, threats, and online threats. The model shows that students of two or more races are less likely to report lower values than their white peers for seven of the eight forms of bullying in this study. Students who are Native American or Alaskan Native would be more likely than white peers to report higher levels of rumor-spreading, exclusion, property damage, and cyber threats. Similarly, Hispanic or Latino students are more likely than white peers to report high levels of rumor-spreading, exclusion, and cyber threats. The model also predicts that Asian students are much more likely than white peers to report high levels of cyber threats, but were not significantly different for any other forms of bullying. There were no significant differences between students who are Black or African American and white students.
Impact of CE Program Components on the Prevalence of Bullying in CE Schools

The final research question asks if elements of the CE program impact the prevalence of bullying in CE schools. To address this question, an anonymous survey was administered to a building administrator from each CE school. Responses from this survey provided information about five specific elements of each school’s character education program. The five program elements are program origin, staff training, instructional strategy, parent component, and program evaluation. The data on CE program elements was joined with student data and ordinal logistic regression was used to identify CE program elements that are significant predictors of the various forms of bullying reported by students. The following paragraphs will describe the program elements and the results of the ordinal logistic regression.

As noted previously, character education programs vary widely, and may be purchased or created locally. The program origin variable was created to evaluate whether the source of the character education program was impactful as related to the prevalence of bullying reported by students. Through the survey, administrators identified the school’s CE programs as purchased and used as is, purchased and then modified for local use, or locally developed. The model indicates that program origin is a significant predictor of exclusion, but there were no other significant results related to program origin.

The second variable related to the character education program is staff training. Through the survey, administrators were asked to identify which, if any, staff populations received training related to the character education program. Administrators indicated one of the following: all staff were trained, only teachers were trained, or no staff were trained. Ordinal logistic regression analysis revealed that staff training was a significant predictor of all forms of bullying except
online threats. Results indicate that attending CE schools that trained their staff around the CE program report lower levels of bullying than those attending schools that did not train their staff.

The third variable related to the CE program is the instructional strategy. A character education program is used to explicitly teach values, and this variable was created to identify how the instruction took place within each CE school. Administrators indicated, on the survey, if their students were taught about character traits through building methods (i.e., announcements, posters, assemblies), classroom methods (i.e., lesson plans within the classroom), or a combination of building and classroom methods. Instruction was only a significant predictor of being excluded. The model predicts that students in schools which provide character lessons through building strategies only are less likely to report lower values of being excluded. In other words, students are less likely to be excluded frequently in schools that utilize a combination of building and classroom strategies to teach character than in schools that utilize building strategies alone.

The fourth variable related to the character education program is the parent component. On the survey, administrators were also asked to identify which, if any, strategies were utilized to engage parents in the character education program. The survey item included three response choices: parents/guardians were provided with CE program information and invited to participate in CE program activities, parents/guardians were provided with CE program information but were not invited to participate in CE program activities, and parents/guardians are not directly involved or notified about the CE program. The analysis indicated that the parent/guardian component is not a significant predictor of any form of bullying reported by students in CE schools.

The final CE program variable is program evaluation, or how often the school reviewed the effectiveness of the CE program. The survey item prompted administrators to select the
frequency of evaluation as two or more times per year, one time per year, less than one time per year, or not at all. Ordinal logistic regression indicates that CE program evaluation is a significant predictor of bullying through name-calling, exclusion, property damage, and online spreading of rumors. Surprisingly, students in schools that conduct evaluations of the CE program effectiveness are less likely than those in schools that do not, to report lower frequency of these types of bullying. In other words, students attending a school that implements a CE program without evaluating program effectiveness, are least likely to report instances of being called mean names or teased, being excluded, having their property damaged, and having rumors spread about them online.

**Current Findings Compared with Existing Research**

This purpose of this study is to identify relationships between character education programs and the prevalence of bullying in schools. While analyses found no significant difference in the bullying reported by students in CE schools when compared with student in non-CE schools, there were significant findings related to school-level factors, student-level factors, and character education program elements. This section will explore the outcome of this study with respect to existing research.

**Impact of Character Education on the Prevalence of Bullying in CE Schools**

The main objective of this study is to determine if schools might utilize character education programs as an avenue to reduce the prevalence of bullying. Similar to Shapiro (2012) and Gordon (2014), the current study found that the prevalence of bullying does not differ significantly in CE schools versus non-CE schools. However, other studies on the topic have yielded
different results. In a study of five schools over a period of five years of character education program implementation, Skaggs and Bodenhorn (2006) found that put-downs decreased and attempts to stop mean behavior increased. DeVoogd et al. (2016) found that reports of bullying decreased during the year of implementation of a social skills program. Espelage et al. (2016) noted that middle school students with disabilities reported an increased willingness to intervene in bullying situations and also experienced academic gains as well. Each of the studies that found improvements in bullying behavior employed a pre- and post- methodology within the same schools, whereas the current study compared data from students in different schools. It is possible that the variance in results is due to the variance in study design.

**Impact of School-Level Factors on the Prevalence of Bullying in CE Schools**

Another aim of the current study is to identify the impact of school socioeconomic status (SES), school size, and school locale on the prevalence of bullying in CE schools. School SES is a continuous measure of the proportion of students enrolled in free or reduced lunch programs. An increase in the proportion of students in lunch programs would indicate a poorer school. The current study found that students in poorer schools report more physical bullying (hit, kicked, or punched) and threats than students in affluent schools. The current study did not reveal a statistically significant impact of school socioeconomic status on verbal bullying (name-calling or teasing), relational bullying (rumor-spreading or exclusion), property damage, or cyber bullying (cyber rumors or cyber threats). Existing research provides similar results.

The National Crime Victimization Survey data provides national data on victimization including bullying. The results are presented by various student and school characteristics. Reports from the survey administrations display school SES categorically, with three categories
of schools: 50% and above students eligible for free or reduced-lunch programs, 20% to less than 50%, and 0% to less than 20%. Data from various administrations of the National Crime Victimization Survey indicate that the least total bullying was reported by students in the least poor schools (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). This trend was not consistent across all forms of bullying. Similar to the current study, students in the poorest schools reported highest rates of physical bullying but other forms of bullying were consistently highest in the poorest schools (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016). In the current study, the model predicts that increased school poverty would predict increased reports of threats, but this was not consistently the case in the national survey (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016).

School size is the second school factor that was investigated in the current study. School size is a continuous measure of student enrollment. Data from the current study suggests that students in large CE schools are more likely to report threats than those in small CE schools, but found no other significant relationships between bullying behavior and school size. Existing research indicates that students in large schools are least likely to report threats (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016), verbal harassment (Lleras, 2008), or overall victimization (Lessne & Yanez, 2016; Peguero & Williams, 2013). One explanation is that the current study, focused on data from students in CE schools only, yielded different results related to the CE program.

The final school-level variable that was explored is school locale. Schools are identified as city, suburban, town, or rural and these categories were used for the data analysis, for which the category town was the reference group. The current study found that locale was significant only with respect to reports of rumor-spreading, which was found to be more prevalent in rural
CE schools than town CE schools. Existing studies have examined the impact of school locale on the prevalence of bullying, with varied results. Several studies found less bullying in urban schools than rural (DeVoe & Murphy, Lessne & Harmalkar; Peguero & Williams, 2013). However, one study found that students in city schools reported more bullying than those in rural schools (Lessne & Yanez, 2016) and others found no significant relationship between school locale and bullying (Bradshaw et al., 2013; Larsen, 2003; Waasdorp et al., 2011).

**Impact of Student-Level Factors on Prevalence of Bullying in CE Schools**

This study includes analysis of student grade, gender, and race/ethnicity on the prevalence of bullying in CE schools. With regard to grade level, the current study indicates that grade level is a significant predictor of verbal bullying (name-calling and teasing) and cyberbullying (cyber rumors and cyber threats) and that students in sixth-grade are less likely to report these behaviors than eighth-grade peers. Grade level is also predictive of rumor-spreading and exclusion. Students in sixth and seventh-grades are more likely to report exclusion than their eighth-grade peers. Existing studies have examined bullying according to school grouping (i.e., elementary, middle, high school), whereas the current study compared individual grades. These studies indicate that middle school students may be most at-risk for involvement in bullying (Gendron et al., 2011; Lessne & Yanez, 2016; Whitney & Smith, 1993), but that the risk of frequent victimization in bullying overall decreases for older students (Bradshaw et al., 2007; Luxenberg et al., 2015).

The second student factor that was explored in the current study is gender. Results of the current study confirm existing research, which consistently shows that males and females report different forms of bullying. Males are more likely to report physical and racial bullying and females are more likely to report bullying in the form of mean comments, rumor-spreading,
being excluded, and cyberbullying (DeVoe & Murphy, 2011; Lessne & Harmalkar, 2013; Lessne & Yanez, 2016; Luxenberg et al., 2015).

The final student factor explored in this model is race/ethnicity. The current study found that students of “two or more races” are more likely to report being bullied in all forms, with the exception of property damage, than the reference group of students of white students. These results align with Lessne and Yanez (2016), who reported the highest rates of bullying for students in the racial/ethnic category “all other races”. However, studies by DeVoe and Murphy (2011), Lessne and Harmalkar (2013), and Peguero and Williams (2013) found that white students reported more bullying than non-white students. Peguero et al. (2015) found that relationships between race/ethnicity and bullying varied by the type of bullying, noting that white students reported the most violent victimization and black students reported the most property damage.

**Impact of CE Program Components on Prevalence of Bullying in CE Schools**

Character education programs vary widely between schools. One aim of this study was to identify character education program features that might be most influential on bullying. There is little research around the effectiveness of character education programs as it relates to bullying, and no studies were found that explicitly explored the relationship between bullying and specific CE program elements. Existing studies do suggest an association between CE and improvements in behavior (Skaggs & Bodenhorn, 2006), overall school health (Crider, 2012), teacher perceptions of school climate (Karaburk, 2017), and student perceptions of loyalty to school (McCaffrey, 2011).
The current study included analyses of the prevalence of bullying with respect to five elements of character education programs: program origin, staff training, instructional strategy, parent component, and program evaluation. The current study found that program origin and instructional strategy were significant predictors of bullying by exclusion. Students were more likely to report lower levels of bullying if they attend a school that teaches character through building and classroom instruction than students that attend a school that utilizes building instructional strategies only. No other studies were found that explore the impact of the CE program features on bullying.

The current study found that staff training was related to lower reports of the following types of bullying: physical (hit, kicked, punched), name-calling, rumors, exclusion, threats, property damage, and cyber rumors. Only cyber threats were not significant in the results. Though not specifically related to bullying, the value of staff training for CE programs has been recognized in existing research (Sheppard, 2002; U.S. Dept. of Education, 2008) as an important aspect of CE. Data from the current study supports the existing stance that staff training is a critical component in the effectiveness of character education programs.

The current study found no significant impact of the parent component of the CE program on the prevalence of bullying. This result is counter to the literature, which supports a parent component for character education programs (Berkowitz & Bier, 2005; Character.org, 2016; U.S. Dept. of Education, 2008). This outcome may be somewhat related to the age group targeted in this study. At the middle school level, parental involvement is not as common. It may be that the inclusion of parents in middle school activities is not significant enough to have an impact on the program success.
The final variable in this study is the frequency of CE program evaluation. The current study identified program evaluation as a significant predictor of name-calling, exclusion, property damage, and the spreading of rumors online, but not in the way one would expect. The data suggests that these behaviors occur more frequently in schools that evaluate two or more times per year than in schools that do not evaluate the program effectiveness. This result conflicts with existing recommendations for character education programs (Character.org, 2016). To mitigate a negative impact, schools who utilize and evaluate their CE programs regularly should review and adjust the program evaluation method to include data on bullying from the student perspective.

**Implications for Current Practice**

The purpose of this study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors on the prevalence of bullying in character education schools, and to investigate the impact of character education program elements on the prevalence of bullying. The practical implication of this work is to support school leaders in determining if character education may be a useful strategy to reduce bullying.

The results of this study do not support the use of character education programs as a means to reduce bullying. However, schools that utilize character education programs may benefit from the knowledge of school factors, student factors, and CE program features that are significantly related to bullying. Rural schools may be most vulnerable to rumor-spreading, whereas large schools may be more affected by physical bullying and threats and poor schools may also be vulnerable to threats. School leaders should be aware of differences in reported bullying of students by grade, gender, and race/ethnicity and apply this knowledge based on their
student population. Data from the current study also identifies the priority that CE school leaders must place on staff training for the CE program. The current study also revealed that bullying by exclusion is related to CE program features, which indicates that a school-wide issue with exclusion can be addressed through adjustments or enhancements to the CE program.

**Recommendations for Further Study**

The purpose of this study was to determine if there is a relationship between utilization of character education and prevalence of bullying in middle schools, to examine the influence of school and student factors on the prevalence of bullying in character education schools, and to investigate the impact of character education program elements on the prevalence of bullying. The results of this study do not support the implementation of character education as a strategy to reduce the prevalence of bullying, but additional studies would be useful.

The method of random school sampling through voluntary participation may have caused an unintentional selection of schools who volunteered to participate because of struggles with bullying or frustration with their CE program. The first suggestion is to investigate the relationship between CE schools and the prevalence of bullying by collecting data before, during, and after implementation within the same schools. A longitudinal study may provide a more accurate indication of the impact of CE on bullying, as it will eliminate the variables that inherently exist between schools, and allow for a more defined exploration of the relationship between CE and bullying.

The current study did not collect data regarding the character traits that were taught in participating CE schools. Existing research indicates that fairness and self-regulation (Hennard, 2015), empathy (Gagnon, 2012; Viding et al., 2009), and problem-solving (Cook et al., 2010) are
character traits that impact bullies, victims, and bystanders. Therefore, a second suggestion is to investigate the prevalence of bullying with respect to the character traits that are taught in the CE curriculum. Research could explore the impact of programs focused on fairness, self-regulation, empathy, and problem-solving on the prevalence of bullying.

A third suggestion is to include a measurement of CE program fidelity as a variable in the analysis of the relationship between CE and the prevalence of bullying. Strong implementation is important to the overall impact of CE programs (James, 2016; Skaggs & Bodenhorn, 2006; Sutter, 2009). Fidelity may be measured by including one or more items in the student survey to ensure that students confirm that character is “explicitly taught” at their school. A second strategy is to provide additional administrator survey items to explore program fidelity. Finally, a staff survey should be utilized to confirm the program features and fidelity reported by students and administrators.

Staff training proved to be impactful on the prevalence of bullying. Future studies should investigate the staff training in CE schools, to gain a better understanding of staff training practices and how those practices impact bullying. This work might uncover the most efficient and effective practices as they relate to quality of the CE program and reduction of bullying.

The last recommendation is to further explore the relationship between exclusion and character education program elements. In contrast to the other types of bullying, exclusion was significantly related to CE program features. More focused study on the relationship between bullying by exclusion and character education may support an understanding of the relationship between bullying and character overall.
Appendix A

Human Subjects Institutional Review Board Approval Letter
Date: September 13, 2018

To: Brett Geier, Principal Investigator
    Kelly Amshey, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 18-08-26

This letter will serve as confirmation that your research project titled “The Impact of Character Education on Middle School Bullying Behavior” has been approved under the exempt category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., you must request a post-approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study”). Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: September 12, 2019
Appendix B

Recruitment Script
Dear (Insert Individual’s Title and Name),

I hope that your school year is off to a terrific start and that you are looking forward to the year ahead. My name is Kelly Amshey and, like you, I am a building administrator in a Michigan school. I currently serve as the assistant principal in a ninth-grade building in Rockford and I am currently enrolled in a doctoral program through Western Michigan University. In order to fulfill the requirements of this program, I am conducting a study and am asking for your help.

As you know, bullying is a hot topic in middle schools, one that places tremendous demands on school staff, and one that negatively impacts students as well. I am interested in learning if schools that explicitly teach about character through character education programs have less bullying than those that do not. Furthermore, I’d like to learn about specific student, school, and program characteristics that might affect the relationship. **My goal is to help administrators determine whether or not character education would be a useful tool in reducing bullying, based upon individual school and student characteristics.**

Knowing just how busy our staff and students are, I have worked to design a study that will minimize the effort and time required to participate. I can also assure you that the identity of your school and students will not be revealed in the publication of findings. Here is what you can expect:

- All materials and postage (if applicable) will be provided. There will absolutely no cost to your school or district.
- You will be asked to complete a short (less than five minutes), online survey.
- Your students in grades 6, 7, and/or 8 will be asked to complete a short (ten minutes or less) survey, provided in online or paper/pencil format per your request.
- **In return for your participation, you will receive analysis of data from your students related to bullying behavior that has occurred this year.** This will include comprehensive information about specific types of bullying and how they are experienced by students, based upon grade level, gender, and race/ethnicity. This data can be used to support your school culture and climate initiatives and will be provided to you in a timely fashion.
- Findings from the entire study, once completed, will also be provided to you to drive your work in future school years.

I ask that you consider participating for the benefit of our schools and students. **Please respond to this e-mail to let me know if you will or will not be able to help.** Thank you so much for taking the time to read this e-mail and consider assisting with the study. Have a great day!

Sincerely, Kelly
Appendix C

Survey to Building Administrator
To Building Administrator,

You are invited to participate in a research project entitled "The Impact of Character Education on Middle School Bullying Behavior". The purpose of the study is to learn about relationships between character education programs and the prevalence of bullying behavior. The study is being conducted by Dr. Brett Geier and Kelly Amshey from Western Michigan University, Department of Educational Research and Technology. This research is being conducted as part of the dissertation requirements for Kelly Amshey. You are being invited because your school was randomly selected to participate in this study. Your survey responses will provide the researchers with the knowledge of whether or not your school utilizes character education and, if so, which elements are included in your school’s program.

This survey is comprised of 2 or 7 multiple choice questions (depending on your first response) and will take approximately 5 minutes to complete. You do not have to participate in the survey, but if you have changed your mind and decided not to participate, please inform Kelly Amshey (616-581-1436) before administering any surveys to students. There will be no negative consequences if you decide not to participate. Completion of the survey indicates your consent for use of the answers you supply. Neither your name nor the name of your school will be used in the study. Your answers may help us learn about how schools can reduce bullying, but we do not know for sure that this will happen.

If you have any questions, you may contact Dr. Brett Geier (269-387-3490), Kelly Amshey at (616-581-1436), the Human Subjects Institutional Review Board (269-387-8293) or the vice president for research (269-387-8298). This study was approved by the Western Michigan University Human Subjects Institutional Review Board as indicated by the date and signature of the board chair. Please do not participate in this study if the stamped date is older than one year.
For the purpose of this survey, a character education program is defined as “practices used to explicitly teach values that are widely held by society”.

1. What is the name of your school? ____________________________________________

2. Does your school currently use a character education program?
   a. Yes ⇒ PROCEED TO QUESTION 3
   b. No ⇒ SURVEY FINISHED, THANK YOU

3. Which of the following best describes the origin of your school’s character education program?
   a. Packaged program implemented “as is”
   b. Packaged program implemented with adjustments (i.e. reduced, supplemented, varied, etc.)
   c. Program locally developed by school staff

4. Which of the following best describes the staff training component for your school’s character education program?
   a. Staff training is/was provided for teachers and support staff.
   b. Staff training is/was provided for teaching staff, but not support staff.
   c. No training was provided to staff for this program.

5. Which of the following best describes the instructional strategy for your school’s character education program?
   a. Students receive character education instruction through building strategies only (i.e. assemblies, posters, announcements).
   b. Students receive character education instruction through classroom strategies only (i.e. classroom lessons).
   c. Students receive character education instruction through both building and classroom strategies.
6. Which of the following best describes the parent/guardian component of your school’s character education program?
   a. Parents/guardians are provided with information about the character education program and are invited to participate in related student activities.
   b. Parents/guardians are provided with information about the character education program (i.e. e-mails, newsletter, parent informational meeting), but are not invited to participate in related student activities.
   c. Parents/guardians are not directly involved or notified about the character education program.

7. Which of the following best describes the method used to evaluate your school’s character education program?
   a. Outcomes of the program are evaluated two or more times per year.
   b. Outcomes of the program are evaluated one time per year.
   c. Outcomes of the program are evaluated less than one time per year (ex: every other year).
   d. Outcomes of the program have not been evaluated.
Appendix D

Student Survey
DR. BRETT GIEIER

DEPARTMENT OF EDUCATIONAL LEADERSHIP, RESEARCH, AND TECHNOLOGY

PRINCIPAL INVESTIGATOR: BRETT GIEIER, ED. D.

STUDENT INVESTIGATOR: KELLY AMSHEY

PROJECT TITLE: THE IMPACT OF CHARACTER EDUCATION ON MIDDLE SCHOOL BULLYING BEHAVIOR

We are doing a research study, a special way to find out about something. We want to find out if schools that teach about character have more or less bullying than schools that do not teach about character. When we are done with the study, we will write a report about what we found.

You can be in this study if you want to. If you want to be in this study, you will be asked to answer the survey questions. The survey includes 14 multiple choice questions and will take about 10 minutes of your time. The survey is anonymous. That means that you will not write your name anywhere on the survey. This also means that no one will know how you answered the questions.

While completing the survey, you will need to think about bullying that has happened to you or your classmates. This might make you feel upset. If you decide to be in this study, your answers may help us learn about how schools can stop bullying, but we don’t know for sure that this will happen.

You do not have to be in the study. You can say “no” or leave your survey blank. If you say “yes” and then change your mind that is okay too. Just tell your teacher that you want to stop, write “cancel” on your paper, or close the survey on your computer. Nothing bad will happen if you decide not to take or finish the survey. Completing and submitting the survey indicates your consent for use of the answers you supply.

If you have any questions or concerns about this study, you may call either Dr. Brett Geier at (269) 387-3490 or Kelly Amshey at (616) 581-1436. This study was approved by the Western Michigan University Human Subjects Institutional Review Board as indicated by the date and signature of the board chair. Do not participate in the study if the stamped date is older than one year.
1. What is your grade level?
   a. 6th  b. 7th  c. 8th

2. What is your gender?
   a. Male  b. Female

3. What is your race? You may choose more than one.
   a. American Indian or Alaskan Native  
   b. Asian  
   c. Black or African American  
   d. Hispanic or Latino  
   e. Native Hawaiian or Other Pacific Islander  
   f. White or Caucasian

The next questions ask about bullying. **Bullying is** when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when two students of about the same strength or power argue or fight. It is also not bullying when students tease each other in a friendly way.

4. Did you read the description of bullying shown above?
   a. Yes  b. No

5. During the past 2 months, have you been bullied on school property?
   a. Yes  b. No

6. During the past 2 months, have you been electronically bullied? (Include being bullied through e-mail, group chats, instant messaging, web sites, texting, or social media.)
   a. Yes  b. No

7. During the past 2 months, how many times at your school have you been pushed, hit, kicked, or punched on purpose?
   a. 0 times  c. 2–4 times
   b. 1 time  d. 5 or more times

8. During the past 2 months, how many times at your school have you been called mean names or get "put down"?
   a. 0 times  c. 2–4 times
   b. 1 time  d. 5 or more times
9. During the past 2 months, how many times at your school have rumors or lies been spread about you?
   a. 0 times
   b. 1 time
   c. 2–4 times
   d. 5 or more times

10. During the past 2 months, how many times at your school have you been left out of activities or games on purpose?
    a. 0 times
    b. 1 time
    c. 2–4 times
    d. 5 or more times

11. During the past 2 months, how many times at your school have you been threatened by other students?
    a. 0 times
    b. 1 time
    c. 2–4 times
    d. 5 or more times

12. During the past 2 months, how many times at your school have your things been wrecked or damaged on purpose?
    a. 0 times
    b. 1 time
    c. 2–4 times
    d. 5 or more times

13. During the past 2 months, how many times at your school have rumors been spread about you through e-mail, group chats, instant messaging, web sites, texting, or social media been used to spread rumors about you?
    a. 0 times
    b. 1 time
    c. 2–4 times
    d. 5 or more times

14. During the past 2 months, how many times at your school have e-mail, group chats, instant messaging, web sites, texting, or social media messages contained threats toward you?
    a. 0 times
    b. 1 time
    c. 2–4 times
    d. 5 or more times
BIBLIOGRAPHY


Cleary, M. F. (2008). *Teacher perceptions of changes in middle school student behavior after implementation of a character education program.* (ERIC Document Reproduction Service No. ED527458)


James, K. M. (2016). *Schoolwide positive behavior support and character education in grades 6-8* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database. (UMI No. 10106277)


Sojourner, R. (2014). It’s unanimous: “Effective character education is not quick or superficial, and it begins with caring relationships.” *Journal of Character Education, 10*(1), 69-75.

(ERIC Document Reproduction Service No. EJ1149290)


