

Are educational trajectories influenced by childhood and adolescent experiences of
bullying?

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Are educational trajectories influenced by childhood and adolescent experiences of bullying?

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Abstract

Bullying is a prevalent problem among school aged children. Short-term effects of bullying are depression, social anxiety, loneliness, and internalizing problems (Juvonen et al., 2003). This study examines the long-term effects of bullying in relation to obtaining a higher education degree. A self-report survey was created and distributed to Middle Tennessee residents via internet. No statistically significant results existed between bullying and degree status. However, themes identified from respondent comments indicated intense effects of bullying. Bullying within this sample was correlated with academic performance, and future implications for research are discussed.

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Introduction

The purpose of this research was to examine the relationship of childhood and adolescent experiences of bullying to educational trajectories. Bullying plagues many children in the United States. Middle schoolers report being bullied more than any other age group (Carlyle & Steinman, 2007). Espelage and colleagues (2015) reported “between 15% and 23% of elementary students and 20% and 28% of secondary school students report being bullied within a 6-month to 1-year period” (p. 1). Although bullying may seem minor compared to famine, war, natural disasters, and disease, being bullied and being a bully are both correlated with negative mental health, personality, or empathy outcomes (Ciucci & Baroncelli, 2014; Juvonen, Graham, & Schuster, 2003). Juvonen and colleagues (2003) found that victims of bullying experience more depression, social anxiety, loneliness, and internalizing problems than do their non-bullied peers. So, what happens when we fail to provide children with an environment free from bullying? How long can civilization survive in a kids-will-be-kids or it’ll-make-em-tougher world? This project aims to shed light on the long-term educational effects of the childhood aggression referred to as bullying.

As a society, it has been accepted that many things done in youth affect the rest of the lifespan, but for some reason bullying is not always taken seriously. Actions like not brushing our teeth or flossing lead to poor dental health, not eating properly leads to health complications such as heart disease, and not being exposed to enough stimuli as a child leads to cognitive developmental shortcomings. We also know that the human brain is not fully developed until individuals are in their mid-20s. In an NPR (2011) interview, neuroscientist Sandra Aamodt stated, “brain scans show clearly that the brain is not fully

finished developing until about age 25.” Everything children indulge in or interact with builds new neural pathways (Karmiloff-Smith, 1998). It is paramount that this be understood for many medical breakthroughs that have occurred. The majority of society accepts this and reaps the benefits of pain medication, antibiotics, and so on that could not exist without this knowledge. Society also puts action plans in effect and provides resources and support when disaster strikes.

Yet for some reason, it seems that some adults do not feel as though children are being victimized as much or as harshly as they are. “Staff [across 44 schools] were 4.6 times as likely to report feeling safe, as compared to students” (Waasdorp, Pas, O'brennan, & Bradshaw, 2011, p. 123). Delara (2012) found that students “cited lack of adequate adult action, worries over confidentiality, and not being taken seriously as indicators for not confiding in school personnel or parents” (p. 299). On a federal level, the term bullying does not exist; many states have laws that specifically address the issue, however at a federal level only actions considered harassment are of concern (U.S. Department of Health and Human Services, n.d.). The harassment laws that cover some instances of bullying follow these guidelines: “Severe, pervasive or persistent; creates a hostile environment at school. That is, it is sufficiently serious that it interferes with or limits a student’s ability to participate in or benefit from the services, activities, or opportunities offered by a school; based on a student’s race, color, national origin, sex, disability, or religion” (U.S. Department of Health and Human Services, n.d.).

A Brief History of Bullying Research

Bullying is a relatively new concept on the world stage, coined by University of Norway Professor of Psychology, Daniel Olweus, in the late 1900s (Hong & Espelage, 2012). Olweus defines bullying as follows:

a bully as someone who directly (e.g., pushing, shoving, hitting, kicking, or restraining another) or indirectly (e.g., teasing, taunting, threatening, calling names, or spreading a rumor) causes, or attempts to cause fear, discomfort, or injury upon another person (Hong & Espelage, 2012, p. 312).

Since the first studies on school aggression were completed in 1973 by Olweus, there has been immense growth in this area of research. However, research on bullying did not make its way into the United States until the 1990s to early 2000s (Cornell & Brockenbrough, 2004; Juvonen, et al., 2003; Loeber & Hay, 1997). The ground-breaking studies in the field have correlated bullying victimization with negative outcomes such as anxiety, depression, self-harm, suicide, and a wide array of other mental health ailments (Olweus, 1994; Cook, Williams, Guerra, Kim, & Sadek, 2010; Bifulco, Schimmenti, Jacobs, Bunn, & Rusu, 2014; Kodish et al., 2016; Arango, Opperman, Gipson, & King, 2016). Other studies have begun to look deeper into the discerning factors associated with bullying. One such study found school bullying to increase characterological self-blaming; this level of self-blame is associated with “depressive thoughts and feelings of low self-worth” (Schacter & Juvonen, 2015, p. 845).

Dimensions of Bullying

Various dimensions of bullying plague students. Bullying dimensions include form, location, age, perpetrator, response, frequency, severity, effects, and intervention. Bullying can occur in any setting: classroom, hallway, playground, sport events, church, etc. Perpetrators can be of any age, gender, race, socio-economic status, or peer group. Individuals experience a variety of emotions when being bullied: some are frightened, while others breakdown in sadness. Some instances of bullying are severe and happen on a daily basis while others are minor and happen only on rare occasions. All of these dimensions are known, researched, and discussed largely in the field of bullying. However, the definitions for the various dimensions vary greatly from study to study. What follows is a brief description of each dimension.

Forms. The most well-defined dimension of bullying is forms including physical, relational, verbal, prejudicial, and cyber. Physical bullying is simply any physically aggressive act that falls under the definition of bullying such as hitting, tripping, etc. (Center for Disease Control, 2016). Verbal bullying consists of name calling, teasing, and other basic verbal assaults. Relational aggression includes aspects such as rumors, exclusion from groups, exclusion from social aspects, and using other individuals to cause physical or emotional harm to victims (Smith, Cowie, Olafsson, & Liefoghe, 2002). There are various definitions for cyber-bullying and ample controversy surrounding whether it should hold true to the formal definition of bullying. All of the definitions include an internet or cellular component. Prejudicial bullying is a term used in this research to address issues often characterized solely as racism, discrimination, or hate crimes and is left out of analyses of bullying. It is imperative that researchers include

such aspects when discussing bullying. It is unethical to exclude occurrences that would generally fall into a category of bullying solely because they are based on race, heritage, culture, sexuality, or religion. Researchers must include these occurrences to accurately depict the effects and causes of bullying.

Location. Bullying can occur at any place or time: especially in today's society with social media. Cyberbullying is a unique "location." It is one that adolescents cannot escape. Hong and Espelage (2012) point out that classrooms are generally the target for bullying prevention programs. Perkins, Perkins, and Craig (2014) reviewed many of the locations in which students had experienced bullying: hallway (55%), classroom (48%), lunchroom (50%), gym (38%), bus (38%), playground (38%), and bathroom (20%).

Age. Bullying can occur at any grade level, but tends to be most common in middle school. The research shows various frequencies of bullying at the various stages of schooling. Approximately 20% of elementary students and 25% of middle school students reported being bullied (Espelage et al., 2015). Carlyle and Steinman (2007) report that prevalence of bullying peaks during middle school. Jankauskiene, Kardelis, Sukys, and Kardeliene (2008) found that "Students of the sixth and the eighth grade tended to be involved in teasing more than twice as much as the eleventh graders" (p. 150). It seems consistent across research that middle schoolers are bullied more than any other age group

Perpetrator. It is not often that bullies are younger than their victims. Beaty and Alexeyev (2008) reported that most bullies are "in the same grade and same class as the victims" (p. 3). Little to no available research has been done on teacher or administration involvement in bullying students.

Frequency and Severity. Research is mixed on how to accurately measure frequency and severity. Some studies have found possible correlates between the two aspects (Craig, Pepler, & Blais, 2007) while others report that there is little to no correlation between the two (Chen, 2015; Noorden, Bukowski, Haselager, Lansu, & Cillessen, 2016). What is discernable from the aforementioned studies is that severity seems to be correlated stronger to the type of bullying than to the frequency of occurrences. There also seem to be differences in perceived severity from elementary to middle/high school. Chen, Liu, and Cheng (2012) found that middle school and high school students rate cyber and relational bullying with a higher level of severity than other forms of bullying. However, Chen (2015) found that elementary students report physical bullying as more severe than any other form, and that verbal bullying has been reported as the most frequent form of bullying among elementary students, with relational being the second most common. The School Crime Supplement to the National Crime Victimization Survey found that 20.8% of students age 12 to 18 reported being bullied (National Center for Education Statistics, 2016).

Long-Term Effects of Bullying

Although a plethora of research studies have been conducted on bullying over the past 30 years, very few have attempted to look at the long-term effects of bullying. Olweus (1993) examined the long-term effects of bullying using 17 male participants; victims were more depressed and had lower self-esteem in young adulthood than males who were not bullied in childhood. Gilmartin (1987) studied “love-shyness” in males and attempted to correlate the instances with bullying and found that love-shy males recalled being victimized more than non-love-shy males. Carlisle and Rofes (2007) noted that

only miniscule amount of published works “have touched, either directly or indirectly, on the long-term effects of school-time bullying,” (p. 18).

Since Carlisle and Rofes (2007), Klomek and colleagues (2009) correlated victimization at age 8 to suicide attempts up to age 25 with variations in strength based on gender. Stapinski and colleagues (2014) linked experiencing bullying at the age of 13 to a heightened risk for anxiety disorders at the age of 18. Takizawa, Maughan, & Arseneault (2014) stated that, “to our knowledge, no study so far has examined whether the adverse effects of bullying persist beyond the early adult years” (p. 778).

The Great Smoky Mountain Study was used by Lereya, Copeland, Costello, and Wolke (2015) to draw connections between bullying and its long-term consequences. However, the participants were adolescents during every phase of the study. Therefore, the results do not adequately imply long-term effects outside of adolescents, and Takizawa and colleagues (2014) initial statement holds true: no known study exists that examines the adverse experience of bullying beyond the early adult years.

Takizawa and colleagues (2014) claimed that there were long-term negative effects of bullying based on a 50-year birth cohort in Britain. There are many problems with this study, the largest being that it unethically and deliberately misrepresented data. The study analyzed data collected during the National Child Development Study which was started in 1958, and follow up data is still being collected (Centre for Longitudinal Studies, 2016). This study was started over 30 years before Olweus defined the term bullying. However, Takizawa and colleagues (2014) claim that, “at each age parents were asked if their child was bullied by other children never, sometimes, or frequently” (p. 778). This statement is entirely false. The questionnaire asked if the children fight with

other students (Centre for Longitudinal Studies, 2016). Fighting is not equivalent to bullying. Not only do researchers discuss this difference (Smith, Cowie, Olafsson, & Liefoghe, 2002; Hellstram, Persson, & Hagquist, 2015), but the United States Department of Human and Health Services also makes it very clear that the two terms are not interchangeable (n.d.). More specifically, “It is not bullying when two kids with no perceived power imbalance fight, have an argument, or disagree” (United States Department of Human and Health Services, n.d.). Therefore, the conclusions set forth by Takizawa and colleagues (2014) do not accurately measure the outcomes of bullying.

The current study attempts to fill the knowledge gap by examining the long-term educational impact of bullying. Specifically, the relationship of childhood and adolescent experiences of bullying and educational path after high school is examined. Data were collected via self-report survey from people living in the Middle Tennessee area. The study was designed to be exploratory in nature. The measure Olweus (1993) used could not be replicated, therefore, a new survey was created. Respondents comments were analyzed for themes, and several relationships were hypothesized:

1. Individuals bullied during childhood or adolescence are less likely to obtain a higher education degree.
2. The various dimensions of bullying will have different effects on degree status.
3. Individuals more severely or frequently bullied are less likely to obtain a higher education degree.

Methods

This research was approved by the Middle Tennessee State University Institutional Review Board. All materials were prepared, collected, and analyzed under the supervision of Dr. Ariana Postlethwait. This section provides a detailed overview of the sample, measure, research design, and data analysis.

Sample

A non-probability sampling approach, specifically criterion sampling, was used. Criteria had to be met in order to be included in this study: respondents had to be 18 years of age or older and living in Middle Tennessee. A total of 220 individuals completed the online survey. Only two individuals started the survey and never submitted it. Fifteen of the respondents did not meet the age (18) or residency (Middle Tennessee) requirements. If the respondents did not meet age criteria, no further data were collected and no analyses were run on data from non-Middle-Tennessee residents. The final sample size for the study was 205. The participants provided informed consent prior to completion of the survey (Appendix A). Participants were then shown the aforementioned definition of bullying. Data collection was ended before any analyses were run and no additional responses were collected after data analyses began.

Research Design

A survey method was utilized for this research. The link to the survey was posted on various Middle Tennessee Facebook general community pages to attract a wide variety of participants. No treatment of any kind was utilized, and no tests were performed. A survey was utilized to gather quantitative data not easily attained via

interview methods. A true experiment was not needed because the effectiveness of a treatment or program was not in question. A survey allows for the current state of an individual to be analyzed and compared to previous occurrences they self-report.

Although self-report can cause discrepancies in the data due to different perceptions, McDaniel-Muldoon (2017) expressed the importance of perception in the outcomes trauma has on an individual during her presentation: “Using the Lens of Trauma to Understand the Effects of Bullying.”

Measures

A self-report survey was created that consisted of open- and close-ended items (Appendix B). The survey contained questions regarding bullying, education, academic performance, and sections for comments. Demographic data such as gender and race were not collected. A more comprehensive definition of bullying was included at the beginning of the survey to ensure all participants had the same understanding of the issue. The definition of bullying included in the survey was as follows:

- being hurt, harmed, or humiliated with words, actions, or behaviors;
- the behaviors, words, or actions are repeated, or have the potential to be repeated;
- the words, actions, or behaviors are completed intentionally; and the bully/bullies have, or are perceived to have, more power.

Academic performance and educational information were collected on every participant. Data in dimensions of bullying experienced were only collected from respondents who reported having been bullied anytime in grades K through 12.

Educational trajectory, or degree status, was defined as some high school, high school diploma, GED/HiSET, currently attending college, some college, trade school, associate's, bachelor's, master's, or doctorate. If a respondent indicated "some high school" as their highest level of education, then they were asked if bullying affected their decision not to complete high school. Similarly, if "some college" was the highest education level, respondents were then asked if bullying affected their decision not to finish college. Academic performance in grades K through 12 was rated as advanced, above average, average, below average, or fluctuated. If respondents indicated they were not above average or advanced, they were asked if bullying affected their school performance.

Multiple dimensions of bullying were measured at many different levels. A basic yes/no bullying measure was obtained as well as measures of severity, frequency, form, grade level, perpetrator, location, intervention, and response. Form, grade level, perpetrator, location, and response were "check all that apply" responses. The grades bullying occurred in were defined as pre-school, elementary, middle school, and high school. Age of the bully was categorized as younger, same, older, and teacher/administrator. The choices for location of bullying incidents were classroom, playground, hallways, lunchroom, school bus, after school program, sports team, sporting events, church, social media, and text/phone calls. The forms of bullying were separated into six categories: physical, verbal, rumors/social belittling, cyber bullying, intentional exclusion from groups/activities, and prejudicial. Frequency of bullying frequency was defined as either daily, 2-3 times per week, 1 time per week, monthly, or rarely. Severity of bullying was measured on a 1 to 10 scale with higher scores meaning more severe

bullying. Choices for emotions elicited by bullying were anger, sadness, amusement, frustration, shame, and self-pity.

Participants also indicated if the bullying occurrences still affected them, how often they were affected by previous bullying experiences, and if they noticed that these experiences affected their recent decisions or actions. Respondents reported whether stress, sadness/depression, or bullying being discussed elicited memories of bullying. Regarding intervention, participants were asked if anyone intervened, who intervened (friends, peers, teachers, administration, parents), if the intervention occurred in each instance, and how often intervention occurred if it did not occur each time (only in severe instances, rarely, only when seen).

Open-ended (qualitative) data were collected for several responses. If participants reported still being affected by bullying experiences in youth, they were asked to explain. Respondents also described how they responded to the bullying, provided examples of the instances they endured, and any additional comments they wished to share.

Data Analysis

IBM SPSS Statistics 23 was utilized for analysis of quantitative data. Bivariate relationships were examined using Pearson's Chi-Square and Binary Logistic Regression. Descriptive analyses were run including frequencies of responses along with measures of central tendency and dispersion where appropriate. The significance level used for evaluating each test was $p = .05$. The qualitative data were examined to assess themes and better understand quantitative analysis.

Missing Data

Due to extraneous factors, some participants did not provide responses on every question. SPSS recognizes and accounts for this while running all statistical analyses. Totals in tables throughout this report only include the number of responses used in the analyses. APA formatted tables include *n* only. Few of the variables were missing data. Almost all of the dimensions of bullying that tests were performed on had sufficient data for analysis.

Results

The average age of participants was 39.5 years. Table 1 below provides a more detailed description of the ages of participants and their relation to the two main variables (bullied and degree status). The age range was 18 to 75 years, and the standard deviation was 14.07. The largest age group of respondents was 31-year-olds to 40-year-olds.

Table 1

Respondents Current Age by Bullied Status

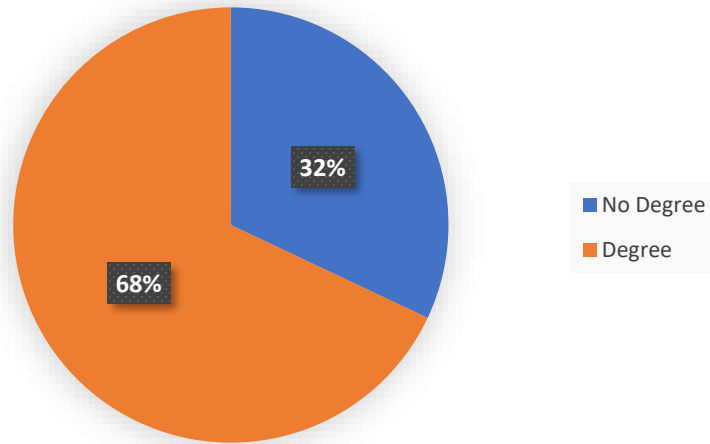
Variable	Bullied		Not Bullied		Total	
	n	%		%	n	%
18-24 years-old	23	17.0%	12	18.2%	35	17.4%
25-30 years-old	20	14.8%	7	10.6%	27	13.4%
31-40 years-old	40	29.6%	13	19.7%	53	26.4%
41-50 years-old	24	17.8%	9	13.6%	33	16.4%
51-60 years-old	19	14.1%	15	22.7%	34	16.9%
61+ years-old	9	6.7%	10	15.2%	19	9.5%
Total	135	100%	66	100%	201	100%

Note: Four participants did not provide actual age.

Frequencies were run on each of the variables in the study (Tables 2 and 3). Over half of the participants (67.8%) reported that they had been a victim of bullying (Figure 3).

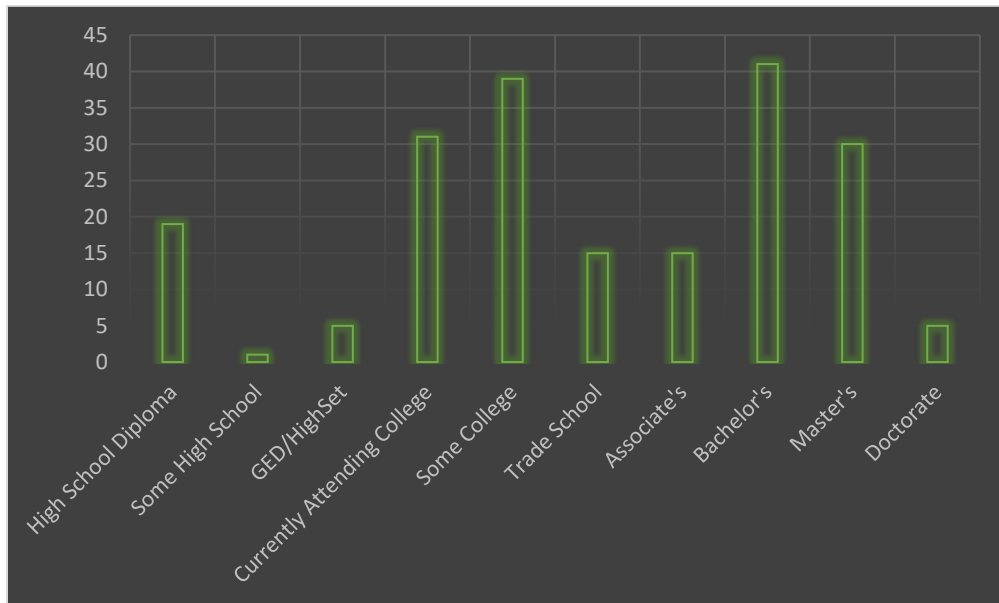
Over half of the respondents also reported having obtained a degree beyond the high school level (Figure 1). The distribution of respondents' degree type can be seen in Figure 2. Figure 3 depicts the distribution of individuals bullied.

Figure 1: Degree Status



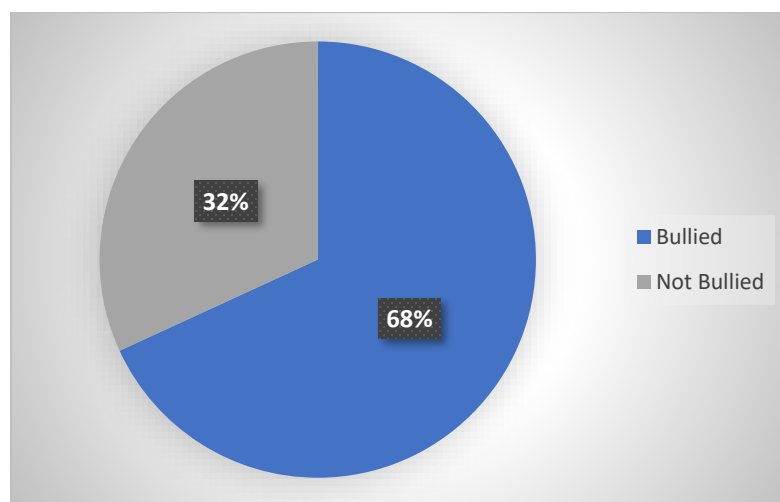
*n=201

Figure 2: Education Level



n=201

Figure 3: Bullied Status



*n=205

Table 2

Dimensions of Bullying Variable (frequencies and percentages)

Variable	Yes		No		Total	
	n	%	n	%	n	%
Grades Bullied						
Pre-K	3	2.2	136	97.8	139	100%
Elementary	53	38.1	86	61.9	139	100%
Middle School	107	77.0	32	23.0	139	100%
High School	72	51.8	67	48.2	139	100%
Grade of the Bully(ies)						
Younger	13	9.4	126	90.6	139	100%
Same	123	88.5	16	11.5	139	100%
Older	54	38.8	85	61.2	139	100%
Teacher/Administrator	27	19.4	112	80.6	139	100%
Location of Bullying						
Class	94	67.6	45	32.4	139	100%
Playground	62	44.6	77	55.4	139	100%
Hallway	82	59.0	57	4.01	139	100%
Lunchroom	73	52.5	66	47.5	139	100%
Bus	54	38.8	85	61.2	139	100%
After School Program	10	7.2	129	92.8	139	100%
Sports Team	9	6.5	130	93.5	139	100%
Sports Event	9	6.5	130	93.5	139	100%
Church	9	6.5	130	93.5	139	100%
Social Media	7	5.0	132	95.0	139	100%
Text/Phone Call	14	10.1	125	89.9	139	100%
In School	134	96.4	5	3.6	139	100%

Variable	Yes		No		Total	
	n	%	n	%	n	%
Out of School	30	21.6	109	78.4	139	100%
In School (Only)	89	64.0	50	36.0	139	100%
Cyber	19	13.7	120	86.3	139	100%
Multiple	45	32.4	95	67.6	139	100%
Form of Bullying						
Physical	45	32.4	94	67.6	139	100%
Verbal	124	89.2	15	10.8	139	100%
Rumor	88	63.3	51	36.7	139	100%
Cyber	13	9.4	126	90.6	139	100%
Exclusion	69	49.6	70	50.4	139	100%
Prejudicial	27	19.4	112	80.6	139	100%
Emotions Elicited						
Anger	81	58.3	58	41.7	139	100%
Sadness	118	84.9	21	15.1	139	100%
Amusement	2	1.4	137	98.6	139	100%
Frustration	84	60.4	55	39.6	139	100%
Shame	84	60.4	55	39.6	139	100%
Self-Pity	59	52.4	80	57.6	139	100%
Still Affected	65	46.8	74	53.2	139	100%
Decisions Affected	59	42.8	79	57.2	138	100%
Intervention Occurred	31	22.3	108	77.7	139	100%
Intervention by						
Friend	14	48.3	15	51.7	29	100%
Peer	4	13.8	25	86.2	29	100%
Teacher	9	31.0	20	69.0	29	100%
Admin	5	17.2	24	82.8	29	100%
Parent	10	34.5	19	65.5	29	100%
Consistent Intervention	2	6.7	28	93.3	30	100%
Severity*					5.55	2.012

*Severity is reported as n = mean and % = Standard Deviation

Notes: Yes = the respondents who were bullied and selected that the corresponding variable referred to them. No = the respondents who were bullied and did not select the corresponding variable as referring to them.

Table 3 presents severity of bullying in a grouped format. Low severity were scores from 1 to 3, medium scores were 4-6, and high scores were 7-10. Ten participants did not provide severity. The largest group of respondents (40.3%) reported moderate.

Table 3

Severity of Bullying

	Low		Moderate		High		Total	
	n	%	n	%	n	%	n	%
Severity	24	17.3%	56	40.3%	49	35.3%	129	100

Table 4 shows the relationship between academic performance and bullying status. This shows the variation of respondents in this study. Over half of the sample was Above average in academic performance.

Table 4

Academic Performance by Bullied Status

Variable	Bullied		Not Bullied		Total	
	n	%	n	%	n	%
Academic Performance						
Below Average	18	12.9%	4	6.1%	22	10.7%
Average	33	23.7%	26	39.4%	59	28.8%
Above Average	88	63.3%	36	54.5%	124	60.5%
Total	139	100%	66	100%	205	100%

Chi-square tests were used to analyze the associations between degree status and dimensions of bullying (Table 5). None of these tests were statistically significant. Additionally, the majority of the tests had an insignificant effect size. The only tests that presented notable effect sizes were the association of degree status to high school victimization, victimization on the bus, physical bullying, being exposed to multiple forms of bullying, responding with multiple emotions, and the frequency of bullying occurrences (Tables 5-10).

Table 5

Pearson's Chi-Square Results: Degree Status by Bullying Dimension

Bullying Dimension	df	n	χ^2	p	Cramer's V/Phi
bullied victimization	1	203	0.078	0.781	0.020
Grades Bullied					
elementary school	1	137	0.266	0.606	0.044
middle school	1	137	0.173	0.677	0.036
high school	1	137	1.874	0.171	0.117*
Age of Bully					
older bully	1	137	1.321	0.250	0.098
teacher/admin bully	1	137	0.297	0.586	0.047
Location					
classroom	1	137	0.509	0.475	0.061
playground	1	137	0.292	0.589	0.046
hallway	1	137	0.010	0.921	0.008
lunchroom	1	137	0.347	0.556	0.050
bus	1	137	3.621	0.057	0.163*
outside of school	1	137	0.397	0.528	0.054
cyber	1	137	0.000	0.984	0.002
in school only	1	137	0.070	0.791	0.023
Form					
physical bullying	1	137	0.693	0.405	0.405*
relational bullying	1	137	0.656	0.720	0.069
relational bullying ¹	1	137	0.057	0.812	0.020
relational bullying ²	1	137	0.245	0.621	0.042
prejudicial bullying	1	137	0.048	0.826	0.019
various forms	4	137	3.317	0.506	0.156*
Emotional Response					
anger	1	137	0.675	0.411	0.070
sadness	1	137	0.444	0.505	0.057
frustration	1	137	0.539	0.463	0.063
shame	1	137	0.157	0.692	0.034
self-pity	1	137	0.851	0.356	0.079
multiple emotions	5	137	3.539	0.618	0.161*
still affected	1	137	0.161	0.688	0.034
memories elicited	3	105	0.227	0.893	0.046
decisions affected	1	136	0.760	0.383	0.075
frequency of bullying	4	133	2.818	0.589	0.146*
intervention	1	137	0.579	0.447	0.065

* Cramer's V/Phi > .1; crosstabs presented in Tables 6-10

1 = rumors;

2 = exclusion from groups

Several associations between degree status and dimensions of bullying could not be tested due to a low cell count. The association between degree status and the following variables were not run: grade bullied (pre-k), age of bully (younger bullies, same-age) location (after school program, sports team, sporting event, church, school) form (teased, cyber bullied) emotional response (amused), and all of the dimensions of intervention measured.

Effect sizes for Cramer's V and Phi are as follows: "df=1 (small=.10, medium=.30, large=.50); df=2 (small=.07, medium=.21, large=.35); df=3 (small=.06, medium=.17, large=.29); df=4 (small=.05, medium=.15, large=.25); df=5 (small=.05, medium=.13, large=.22)" (Gülten Kartal, 2016). Table 5 lists Cramer's V/Phi for all tests. Tables 6-10 show the crosstabulations for the test with a effect size > .1. Sample size is the most likely cause for notable effect size with insignificant results (Wilcox & Serang, 2016). With a larger sample size, a statistically significant value could have been garnered.

Table 6

Crosstabs for Degree Status by High School Victimization

		High School Victimization				Total	
		Yes		No		n	%
Degree Status		n	%	n	%	n	%
	No Degree	17	25.8%	26	36.6%	43	31.4%
	Degree	49	74.2%	45	63.4%	94	68.6%
	Total	66	100%	71	100%	137	100%

Table 7

Crosstabs for Degree Status by Victimization on the Bus

		Victimization on the Bus		
		Yes	No	Total

		n	%	n	%	n	%
Degree Status	No Degree	21	25.3%	22	40.7%	43	31.4%
	Degree	62	74.7%	32	59.3%	94	68.6%
	Total	83	100%	54	100%	137	100%

Table 8

Crosstabs for Degree Status by Various Forms of Bullying

	Various Forms of Bullying										Total	
	1		2		3		4		5		n	%
	n	%	n	%	n	%	n	%	n	%		
Deg.Sta.												
NoDeg.	10	33.3%	10	30.3%	15	39.5%	5	18.5%	3	33.3%	43	31.4%
Degree	20	66.7%	23	69.7%	23	60.5%	22	81.5%	6	66.7%	94	68.6%
Total	30	100%	33	100%	38	100%	27	100%	9	100%	137	100%

Table 9

Crosstabs for Degree Status by Physical Bullying

		Physical Bullying				Total	
		Yes		No		n	%
		n	%	n	%		
Degree Status	No Degree	31	33.7%	12	26.7%	43	31.4%
	Degree	61	66.3%	33	73.3%	94	68.6%
	Total	92	100%	45	100%	137	100%

Table 10

Crosstabs for Degree Status by Frequency of Bullying

	Frequency of Bullying										Total	
	Daily		2-3 times per week		1 time per week		Monthly		Rarely		n	%
	n	%	n	%	n	%	n	%	n	%		
Deg.Sta.												
No Deg.	16	40.0%	14	32.6%	7	31.8%	1	14.3%	5	23.8%	43	32.3%
Degree	24	60.0%	29	67.4%	15	68.2%	6	85.7%	16	76.2%	94	67.7%
Total	40	100%	43	100%	22	100%	7	100%	21	100%	137	100%

A Binary Logistic Regression was used to analyze the relationship between degree status and severity of bullying. The results were not statistically significant at $p = 0.893$.

Additional Analyses

Additional patterns were noticed, and a few tests were run outside of the parameters of the hypothesis (Table 11 & 12). A significant association existed between academic performance in K-12 and degree status. This showed that the higher the respondents reported academic performance, the more likely they were to have obtained a higher education degree. A significant relationship also existed between K through 12 academic performance and bullied victimization. The association was that the higher the reported academic performance the more likely respondents were to have been bullied. The results can be viewed in Table 11 below. These findings seem to go against not only the hypotheses set forth in this study but what is thought to be an effect of bullying in youth: poor academics. These findings, although not generalizable, are important to understand and take into consideration for future research.

Table 11

Pearson's Chi-Square Results: Degree Status by Bullying Dimension

Test	df	n	χ^2	p	Cramer's V
degree status*academic performance	2	203	36.37	<0.001	0.423
bullied status*academic performance	2	205	6.36	0.042	0.176

The effect size for the association between degree status and academic performance was large, while the effect size for the association between bullied status and academic performance was small. Tables 12 and 13 show the cross tabs for the chi-

square results presented in Table 7. The percentages listed are within academic performance.

Table 12

Crosstabs for Degree Status by Academic Performance

		Academic Performance						Total	
		Below Average		Average		Above Average			
		n	%	n	%	n	%	n	%
Degree Status	NoDegree	9	40.9%	35	61.4%	21	16.9%	65	32.0%
	Degree	13	59.1%	22	38.6%	103	83.1%	138	68.0%
	Total	22	100%	57	100%	124	100%	203	100%

Table 13

Crosstabs for Bullied Status by Academic Performance

		Academic Performance						Total	
		Below Average		Average		Above Average			
		n	%	n	%	n	%	n	%
Bullied Status	Bullied	18	81.8%	33	55.9%	88	70.9%	139	67.8%
	Not Bullied	4	18.2%	26	54.1%	36	29.1%	66	32.2%
	Total	22	100%	59	100%	124	100%	205	100%

Binary logistic regression was also used outside of the original hypothesis to look for associations of bullying severity with three separate variables: academic performance, whether they felt they were still affected by bullying, whether or not respondents felt their decisions were still affected. The results can be found in Table 14.

Table 14

Binary Logistic Regression Results

	df	n	Exp(B)	p
still affected*severity	1	129	0.720	0.001
decisions affected*severity	1	128	1.199	0.056

Table 14 can be interpreted with odds ratios. The odds a participant reported being still affected were increased by 0.720 for every 1-point increase in severity. The odds a participant reported their decisions being affected were increased by 1.199 for every 1-point increase in severity.

Comments from Respondents

A few comment areas were included in the survey. Participants were asked to provide examples of bullying they experienced, discuss how these experiences still affected them, and how bullying effected their K through 12 academic performance.

Table 15 shows the themes in the qualitative data. Responses that fell under the theme of insecurities involved comments about self-esteem, doubting their intelligence, or feelings of insecurity. For comments to be classified as self-conscious, body image, ignored, or cried themes respondents had to explicitly state those effects. The mental health themed comments include only those that included mention of diagnosable disorder such as anxiety, depression, or PTSD. To be included in the retaliated theme respondents had to have mentioned fighting or bullying back. The school interference theme is categorized by participants who reported missing school, wanting to miss school, skipping class, or extremely disrupted their daily school life.

Table 15

Themes Identified from Respondent Comments

Theme	Yes		No		Total	
	n	%	n	%	n	%
Still Affected Themes						
Insecurities	25	42.4%	34	57.6%	59	100%
Self-Conscious	8	13.6%	51	86.4%	59	100%
Body Image	8	13.6%	51	86.4%	59	100%
Mental Health	6	10.2%	53	89.8%	59	100%

Response Themes						
Ignored	37	29.6%	88	70.4%	125	100%
Retaliated	17	13.6%	108	86.4%	125	100%
Cried	17	13.6%	108	86.4%	125	100%
School Interference	16	12.8%	109	87.2%	125	100%

Notes: Yes = the respondents who were bullied and selected that the corresponding variable referred to them. No = the respondents who were bullied and did not select the corresponding variable as referring to them.

Current effects of Bullying

Almost half of the respondents who reported being bullied reported that the occurrences still affected them (46.8%) and that their decisions were still affected as well (42.4%). Some of the respondents who said they were still affected had elaborate explanations.

Age: 53 Severity: 8.5 *I have always been short and overweight, except for a few times in my life when I lost weight. Even at my thinnest, I didn't see myself as skinny, I still saw myself as and felt fat. Now, I'm in my 50's with a lot of bad health issues, which include primary lymphedema. I have problems going out anymore because of it and have become almost agoraphobic. A lot of those feelings from my childhood are present again now. Part of my PTSD is a direct result.* **Body Image and Mental Health**

Age: 38 Severity: 7.6 *I'm still insecure about my appearance at times. Question my intelligence and doubt friends sincerity that they really like me.* **Body Image**

Age: 39 Severity: 6.2 *[Being bullied] as a kid doesn't affect my day to day life but I realize that a lot of things in life can tie back to it. Such as, I was in an abusive marriage for 15 years and I've realized that it was in part due to child*

hood bullying. I'm above average in physical appearance and intelligence yet because of being bullied my self esteem was severely damaged and, I always felt "ugly" and "stupid" so I accepted the abuse because I felt it was normal, despite not being raised in an abusive home. **Body Image**

Age: 34 Severity: 7 I no longer care what people think of me personally. I can be a little over protective with my children because of what I went through. I homeschool my 10 yr old because I don't want her to go through it too.

Age: 36 Severity: 5 Still dealing with anxiety, depression, borderline personality disorder. Still have difficulty making friends and trusting people so I don't have many. Self-harm when I feel especially bad. **Mental Health**

Age: 34 Severity: 8.9 I don't answer if someone calls my name and I don't recognize voice. Haven't attended reunions. fear it starting over as a result of mutual friends on social media, so I don't accept any Facebook friend requests from anyone that went to middle or high school with unless I know they're not "friends". Still am overly worried going to malls, etc. Have distanced myself from several friends as adult if they end up in a "clique". **Insecurities**

Age: No Response Severity: 10 I have suffered from major depression, suicidal thoughts, low self-esteem and confidence, and anxiety since middle school. There were things going on at home and at school so nowhere seemed like a safe place besides my aunt's house. **Mental Health and Insecurities**

Others used shorter descriptions such as, "I'm still very self-conscious," "Self confidence issues. Self image issues," "I have low physical self-esteem, and I am antisocial," "I feel

like every person I come in contact with is judging me and I try hard to be people pleaser because of it,” “personal insecurity,” and “I am very aware of how people treat each other and often question motives.”

What Causes Memories of Bullying to Resurface

Responses to what caused memories of bullying to resurface were just as elaborate as the responses to why they were still affected.

Age: 34 Severity: 5.5 *Im trying to help my daughter thru the bullying and its hard for me to show her when i went thru the something shes not the type of kid that deals well with this*

Age: 56 Severity: 8 *I have an issue in believing in myself in that I am good enough. I was repeatedly called a Polack by a teacher because my family moved to the South from the North (Pennsylvania). At the time, little did he know we were German.*

Age: 43 Severity: 4.1 *Those feelings are connected to how I felt when I was bullied so though I don't instantly remember those things every time I am sad, they do surface especially when the sadness is accompanied by feelings of loneliness or inadequacy.*

Age: 53 Severity: 5 *Whenever you hear of someone going through bullying in any form, it can bring back the words and people that hurt you. You wonder what type of adult they became, hopefully better than they were as young kids/young adults.*

Age: No Response Severity: 10 *I have to remind myself that I am worthy of love and beautiful even though no male has genuinely complimented me. I often feel overlooked. Ever since elementary school, guys would always have an interest in my best friends, while I was the one being teased. I struggle with commitment, confidence, and not feeling like I am a burden on others.*

Age: 23 Severity: 2 *I know that as a fellow human being, I need to watch what I say to others because bullying comes in different forms. You never know how someone is going to respond emotionally, physically etc. I try to be humble and accepting at all times.*

Age: 22 Severity: 8 *I've had bullies/emotional abusers break me down. Ruin all self worth and confidence I had. Made me feel like everything was my fault, that I was naturally shitty at everything, worthless, and a waste. I started telling myself that too.*

Examples of Bullying Endured

Respondents also provided examples of bullying they endured. The emotion can be felt through reading many of the responses. Below are 30 of the 108 responses. Age and severity are listed to give the reader parameters to identify the respondent with.

Age: 27 Severity: 6.9 *I was teased alot in school for my weight, I had changed schools in 7th grade due to moving to my father's house and was the new kid in school. I had things thrown at me on the school bus, including threatening letters and soda bottles.*

Age: 25 Severity: 5.6 *Made fun of for having facial and body hair as a young girl. Was described as a boy and my mannerisms mimicked boys. Was never good enough and would turn out like my mother.*

Age: 58 Severity: 4.5 *Exclusion from groups and activities - not included in conversations and parties. I remember conversations stopping abruptly as I approached a specific group of girls.*

Age: 31 Severity: No Response *Not invited to get together with other female peers, pointed out that my clothes were not name brand, made fun of bc I wasn't allowed to shave my legs yet etc.*

Age: 38 Severity: 7.6 *I was made fun of, called names, and often left out because I had severe psoriasis. A kid once drew a picture of me calling me Scelatore because my skin was covered in a rash that looked scaly. Also my family was poor and I was judged for that.*

Age: 48 Severity: 8.6 *Swears at, spit on, racially slurred, pushed, left out of gym activity*

Age: 55 Severity: 7.6 *Name-calling. Exclusion. people didn't want to be my friend. My stepmother made me dress differently than others. She made a lot of clothes for me and I was teased about it.*

Age: 57 Severity: 7 *Pushing, throwing me down to the ground, words, making me do things I did not want to do etc...*

Age: 34 Severity: No Response *name-calling, teasing, pushed into lockers, targeted physically in gym class (hit with balls, kicked, etc.), refused to allowed to sit at lunch tables, lost food to others*

Age: 34 Severity: 7.2 *One girl in particular would pick on me about. Stupid body parts. The same girl stole money and other things from me. Made fun of for not shaving legs. Clothes. In high school I was made fun of for who I associated with.*

Age: 52 Severity: 3 *Picked at for being overweight. Lit cigarette thumped into my hair. Malicious rumors*

Age: 56 Severity: 6 *Exclusion from groups. Talked/gossiped about. Made to feel less because of circumstances beyond my control. People picking fights with me to show there superiority.*

Age: 34 Severity: 7 *I was made fun of for my name, the way I spoke, my buck teeth, the way I dressed. I was threatened on the school bus everyday by a girl twice my size.*

Age: 36 Severity: 8.1 *Taunts, name-calling, nasty things written about me on bathroom walls, harrassive phone calls*

Age: 36 Severity: 5 *Exclusion, name-calling, personal property destroyed, one guy put dissected frog parts in my drink, teachers made public remarks that turned into mocking from others.*

Age: 34 Severity: 6.8 *Had my bike stolen while I was riding it. Was hung out of a second story window at school by my ankles.*

Age: 46 Severity: 5 *Mostly caddy things were said about me. I was always an outsider since I moved every 3-4 years during school years. In middle school there was a girl in one of my electives that was mean to me and I have no idea why. She threatened to beat me up for a month or so. I took her up on her offer to fight. She never hassled me again after that. She just left me alone. Not sure why it worked. But I was glad it did. . .*

Age: 31 Severity: 7.5 *Classmates would publicly mimic my actions/words, spread rumors, and laugh at serious things I would try to do in class.*

Age: 55 Severity: 7.2 *Name calling. Being excluded and never asked to join groups. Always last when teams on the playground were formed. Some sexual molestation.*

Age: 57 Severity: 7 *I am a 6' tall female and I was very self conscious of my height and she took advantage of my low self esteem and verbally abused me.*

Age: 26 Severity: 7 *I turned a peer in for bringing illegal drugs to school. The school had a zero tolerance policy, and the student was expelled. As I walked down the hall, people would yell "Narc!" at me. They spread rumors about me. I was excluded from many groups and lost a lot of friends.*

Age: 53 Severity: 5 *Mostly name calling, few rumors because I was a tomboy and related more to boys than girls. I loved sports, playing sports, etc. I made girls jealous at times because they thought I was interested in their boyfriends.*

Age: 23 Severity: 7 *Rumors that I was a lesbian. A lot of name calling and just making fun off. Other people not wanting to be near me because of the rumors.*

Age: 36 Severity: 5 *Being called "fat" Told I would never be popular because of my weight Physically abused because of the color of my skin Verbally abused because of the color of my skin*

Age: 22 Severity: 8 *Verbal, and some physical. In school, the principal et all would bully me for missing school even though I had doctor notes for everything. I was a very sick kid. My doctor even violated the Dr/patient privilege and talked about my medical records with said principal. It was a nightmare.*

Age: 42 Severity: 6 *I'm overweight...always have been. Typical name calling from the popular kids. I had a crush on a boy in Jr. High, he found out and the next day he wore a "no fat chicks" t-shirt. Laughing and name calling. Rumors a couple of times.*

Age: No Response Severity: 10 *I am African American who got bullied by other black, male classmates. I am darker skinned so boys would say how ugly I was and call me oreo. I still suffer with low self-esteem. I have to remind myself that I am lovable, pretty (even if no guy likes me or sees me as attractive), and that I can make a life I am proud of in spite of what I have endured.*

Age: No Response Severity: 1 *Name calling and pushing out of the way in the halls, also how she would fight me when I had done nothing. Have been told to go kill myself.*

Age: 34 Severity: 7.7 *Screaming. Throwing shaving cream at me. She brought a can on the bus just to use for me. Throwing used tampons at me. She pulled them out ON THE BUS. Torture everyday.*

Age: 21 Severity: No Response *People made fun of my disability, the way i dressed, how i looked, and spread rumors about relationships they pretended i was in. They also made fun of me for the things i liked.*

Age: 19 Severity: 5.1 *I used to be bullied because of my lips, my weight, and for being ugly in general. I'm sure there are more, but those were the biggest reasons. Those are the reasons that I'm insecure about my appearance. Sometimes I didn't even know why I was bullied.*

Response to Bullying

Age: 31 Severity: 7.2 *ignore, fight back, tell teacher, tell a parent* **Ignore**

Age: 34 Severity: 7 *Not well. My algebra teacher hit on me sexually every day when I was a freshman, but I just ignored it. I think it taught me bad things about men and relationships. An older student did horrible things to me on the bus for no reason. She even pulled her own tampon out on the bus and threw it at me. I tried to tell my mom. I even refused to get on the bus one afternoon. She was so mad at me because she had to come get me. At this point, I wish I had stood up for myself, but as a child that is so much easier said than done. I felt helpless. **Ignore***

Age: 39 Severity: 6.2 *I tried to ignore it at school and then went home and cried. I had an advantage over today's youth in that social media didn't exist so once I left school, I was "safe" and could go home and not have to deal with it until the next day. Kids today don't have that luxury, they are bullied relentlessly. **Ignored and Cried***

Age: 34 Severity: 8.9 *Elementary: ignored and avoided if possible. High school: left school campus for lunch each day, had friend or brother walk with me if possible on campus between classes, didn't go anywhere in public (mall, large stores, movie theater) without parent or brother. Graduated early to get away, did not attend any sports events or pep rallies. Lost trust in people, had nightmares, had only 1 friend, feared being attacked, depression increased I hit one guy. He stopped after **Avoid School, Fight Back, and Ignore***

Age: 53 Severity: 5 *Most of the time, would smart back off to the individual. Then I chose to ignore the few that were attempting to hurt me through words or rumors. Mostly, once the fun was taken away from them, they quit. I still remember the people and the words though, time doesn't erase those feelings. Now it's even worse for kids with the technology that is at their fingertips, I am concerned from my grandchildren and what they will go through. Hopefully, a strong family environment with lots of positive input will help. **Fight Back and Ignore***

Age: 34 Severity: No Response *Stopped eating lunch, hid in bathrooms, cried at home, stopped trying to engage in social activities, avoided physical activities in gym (tried to ask to keep score, stuck near a teacher), would go with my mother to her classroom early in the morning to avoid other students before classes started.*

Avoided School

Age: 48 Severity: 9.6 *Depression, stayed home at early age. As I I got older made me get into Martial Arts and excise helped my state of mind, depression and*

prevention of further physical bullying. By high school I fought back and stopped bullies. **Avoided School and Fought Back**

Age: 35 Severity: 6.5 Became depressed and drank and smoked to try to drown out my feelings regarding having to go to school everyday and deal with the bullying. **Avoided School**

Age: 36 Severity: 8.1 Withdrew, fought back, self harm, drank, did drugs. Depended on age and what form the bullying took. **Self-Harm and Fight Back**

Age: 31 Severity: 7.5 I tried to defend myself or diffuse rumors, but it did no good. After a while, I decided to become the person that everyone thought I was. I became a "bad girl," just because I was tired of defending myself. **Fight Back**

Age: 19 Severity: 5.1 In private I responded with self harm, depression, suicidal thoughts and behaviors. To the bullies, I sometimes tried to defend myself or just let it happen. **Self-Harm and Fight Back**

Age: No Response Severity: 10 Emotionally. I would cry in class and teachers didn't do anything effective to stop it. They would say stop it or pull us both aside to discuss the bad behavior but it didn't stop anything. I was distracted from class but I still managed to get A's because I didn't want to worry my family. **Cried**

Age: 48 Severity: 8.6 Secluded myself. Cried alot. Attempted suicide **Cried and Self-Harm**

Discussion

The primary goal of this study was to determine if being bullied in childhood and/or adolescence affects education beyond high school. The first three hypotheses were not supported. In this sample, bullying did not significantly relate to degree status. However, respondents' comments clearly indicate that some individuals do experience negative long-term consequences from bullying. Some of the themes identified in Table 15 were not addressed in this study but could affect educational trajectories.

Several limitations existed in this study. First, the sample was not selected by use of probability sampling, therefore, findings are not generalizable. For example, degree completers were over-represented in this sample. Approximately 68% of the current sample reported having a degree: bachelor's (20%), master's (14.6%), and doctorate (2.4%). That is a total of 37% with a bachelor's or higher compared to only 25.4% of Tennesseans holding a bachelor's degree or higher according to census data from 2012-2016 posted by the U.S. Department of Commerce (n.d.). This same Census data indicates that 14% of Tennesseans do not hold a high school diploma or equivalent compared to 0.5% of the current sample. The homeless, the imprisoned, and others not fortunate enough to have internet access were unable to participate in this survey. Sample size was also an issue. Despite the 205 respondents, some categories were underrepresented and prevented some analyses from accurately determining statistical significance. For example, the variable bullying location had 11 possible categories, and several categories had two few responses to be adequate for analysis.

Another limitation to this study was the survey itself. While it has face validity and is based off current themes in the literature, the psychometric validity cannot be

confirmed. It was not until the completion of data analysis that a pre-existing survey was discovered. This survey was created by Korn and colleagues (2004). The study was completed in Germany, Spain, and the United Kingdom. Current intentions are to improve upon the work done here by replicating Korn and colleagues (2004) study in the United States. This study was found through the Center for Disease Control's report on bullying measures (Hamburger, Basile, & Vivolo, 2011).

In this sample 67.8% reported being bullied which is much higher than what is currently reported by the research (Espelage, et al., 2015; National Center for Education Statistics, 2016). It is possible, although unlikely, that almost every child bullied is in this population and few to none end up homeless, imprisoned, or suicide victims. Not having a large enough scope in the study to include these subpopulations further limits the generalizability of the findings. Furthermore, 60.5% percent of the respondents reported being above average in academic performance. The status would not be considered above average if the majority of the population was able to obtain it. The data were self-report and we do not have access to academic records for respondents, however there was a significant association between academic performance and degree status (Table 7) which indicates that self-reported k-12 academic performance is related to later obtaining a degree. Moreover, it seems individuals of average academic performance may be under-represented in this study.

The comments from respondents point to several measures not considered in the survey. Specifically, comments highlight that individuals can face negative long-term consequences that they, at the least, perceive to be caused by bullying. Respondents descriptions of examples of bullying endured also shed light on the forms of bullying

experienced. The examples shared in findings highlight occurrences of bullying not generally thought about. For example, one respondent mentioned having used tampons thrown at them and another was instructed to kill themselves.

Implications for Future Research

The “nerd” throughout school is generally victimized and ostracized by their peers. (Hong & Espelage, 2012). Woods and Wolke (2004) found that higher achieving students were relationally victimized more than their counterparts. Current study qualitative findings seem to support Woods and Wolke’s (2004) findings. What happened to the individuals who are victimized for other reasons? Further studies will need to be conducted to adequately assess the long-term effects of bullying. Future studies must include data from populations not easily attainable such as the homeless, imprisoned, and active duty military. With these populations a more inclusive analysis can be completed on the effect being bullied in childhood and adolescence has on educational trajectories.

Future studies would be wise to include suicide rates and attempts due to bullying in their analyses. If an individual commits suicide due to bullying, then it is impossible for them to continue their education. However, including this aspect in a study would not be easy and would most likely require a longitudinal study. Not all suicides have reported causes. Measures on whether or not individuals considered themselves a bully could enable analysis of bully/victim status and its association with educational trajectories, and it would allow a comparison between the outcomes for bullies and victims. It would also add to the scope of the project if measures on personality, mental health, and self-esteem were included.

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Appendix A

Consent Form

22

Principal Investigator: Stephanie Carpenter

Study Title: Are life path trajectories affected by childhood and adolescent experiences of bullying?

Institution: Middle Tennessee State University

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully and feel free to ask any questions you may have about this study and the information given below. You will be given an opportunity to ask questions, and your questions will be answered. Also, you will be given a copy of this consent form.

Your participation in this research study is voluntary. You are also free to withdraw from this study at any time. In the event new information becomes available that may affect the risks or benefits associated with this research study or your willingness to participate in it, you will be notified so that you can make an informed decision whether or not to continue your participation in this study.

For additional information about giving consent or your rights as a participant in this study, please feel free to contact the MTSU Office of Compliance at (615) 494-8918.

1. Purpose of the study:

You are being asked to participate in a study about childhood experiences of bullying

2. Description of procedures to be followed and approximate duration of the study:

Participants will take a onetime survey that should take approximately 15 minutes to complete. The questions in the survey may cause feelings of unease. Participants may withdraw from the study at any point for any reason. Participant's responses will be stored securely by Qualtrics. The data will later be analyzed by the researchers.

3. Expected costs:

None.

4. Description of the discomforts, inconveniences, and/or risks that can be reasonably expected as a result of participation in this study:

Discomfort may be felt in remembering some childhood experiences of bullying. There will be a list of community resources at the end of the survey in case extreme discomfort is experienced.

5. Compensation in case of study-related injury:

MTSU will not provide compensation in the case of study related injury.

6. Anticipated benefits from this study:

- a) The potential benefit to science and humankind that may result from this study is providing information that can be used to create a strong bullying prevention and awareness program.
- b) The potential benefits to you from this study are contributing to this effort.

7. Alternative treatments available:

Resources will provided at the end of the survey for your benefit.

8. Compensation for participation:

Participants will not receive any financial compensation for participation in this study.

9. Circumstances under which the Principal Investigator may withdraw you from study participation:

If you are not currently residing in or attending university in Middle Tennessee.

10. What happens if you choose to withdraw from study participation:

If you decide to withdraw while filing in the survey the document will be destroyed. You have the right to stop at any point. You have the right to not answer. No negative consequences will result in withdrawing yourself.

Appendix B

Long-term effects of Bullying

Start of Block: Consent Form

Consent Form Thank you for your interest in this study. Please review the attached consent form.

[Click here to access the Consent Form or read below.](#)

Agree

Please click the 'Yes' below if you understand and agree to participate in this study.

Click 'No' below if you prefer not to participate in this student.

Thank you for your time.

Yes (1)

No (2)

Skip To: End of Survey If Please click the 'Yes' below if you understand and agree to participate in this study. Click 'No'... = No

End of Block: Consent Form

Start of Block: 18+

Age Criteria Are you 18 or older?

Yes (1)

No (2)

Skip To: End of Survey If Are you 18 or older? = No

End of Block: 18+

Start of Block: Block 3

Q36 Bullying

- The individual is being hurt, harmed, or humiliated with words, actions, or behaviors
- The behaviors, words, or actions are repeated, or have the potential to be repeated
- The words, actions, or behaviors are completed intentionally
- The bully/bullies have, or are perceived to have, more power

End of Block: Block 3

Start of Block: Survey Questions

1 Age

18 27 36 45 54 63 73 82 91 100

Place slider on your age (1)	
------------------------------	---

2 Residence

Resident of Middle Tennessee (1)

Attending College in Middle Tennessee (2)

Neither (3)

3 What was your academic performance in K-12?

Below Average (1)

Average (2)

Above Average (3)

Advanced (4)

Fluctuated (5)

Display This Question:

If What was your academic performance in K-12? = Fluctuated

3A Explain:

Display This Question:

If What was your academic performance in K-12? != Above Average

And What was your academic performance in K-12? != Advanced

3B Did bullying prevent you from being above average or advanced in K-12?

Yes (1)

No (2)

Somewhat (3)

Unsure (4)

4 Level of education completed?

Some High School (1)

High School Diploma (2)

GED/HiSet (3)

Currently attending college (4)

Some College (5)

Trade School (6)

Associate (7)

Bachelor's (8)

Master's (9)

Doctorate (10)

Other (11) _____

5 If you dropped out of high school, did you do so because of bullying?

Yes (1)

No (2)

Did not drop out (3)

6 If you did not attend college, was this because of bullying?

Yes (1)

No (2)

Not Applicable (3)

7 Were you bullied in any grades during K-12 schooling?

Yes (1)

No (2)

Skip To: End of Survey If Were you bullied in any grades during K-12 schooling? = No

8 What grades did the bullying occur in? (Click all that apply)

Pre-Kindergarten (1)

Elementary (K-4th) (2)

Middle School (5th-8th) (3)

High School (9th-12th) (4)

9 What grades were the bullies in? (Click all that apply)

Younger (1)

Same (2)

Older (3)

Teacher/Administrator (4)

Other (5) _____

10 Where did the bullying occur? (Check all that apply)

Classroom (1)

Playground (2)

Hallways (3)

Lunchroom (4)

School Bus (5)

After School Program (6)

Sports Team (7)

Sporting Events (8)

Church (9)

Social Media (10)

Text/Phone Call (11)

Other (12) _____

11 What forms of bullying did you endure? (Check all that apply)

- Physical (1)
- Teasing or Name Calling (Verbal Bullying) (2)
- Rumors/Social Belittling (Relational Bullying) (3)
- Cyber Bullying (Social Media, Text, Email, etc.) (4)
- Intentional Exclusion from Groups/Activities (Relational Bullying) (5)
- Prejudicial Bullying (Racially, Sexually, etc.) (6)
-

12 How often did the bullying occur?

- Daily (1)
- 2-3 times per week (2)
- 1 time per week (3)
- Monthly (4)
- Rarely (5)
-

13 How severe was the bullying?

Not at all Moderate Extreme

0 1 2 3 4 5 6 7 8 9 10

Click to write Choice 1 (1)	
-----------------------------	--

14 How did you respond to the bullying? (emotionally, physically, behaviorally, etc.)

15 What emotions were brought out by the bullying? (Click all that apply)

Anger (1)

Sadness (2)

Amusement (3)

Frustration (4)

Shame (5)

Self-Pity (6)

Other (7) _____

16 Do these occurrences of bullying still affect you today?

Yes (1)

No (2)

Display This Question:
If Do these occurrences of bullying still affect you today? = Yes

16A Explain:

Display This Question:
If Do these occurrences of bullying still affect you today? = Yes

16B How often do they affect you?

Frequently (1)

Occasionally (2)

Rarely (3)

Never (4)

17 Do any of the following situations cause memories of bullying to resurface?

- Stress (1)
- Sadness/Depression (2)
- When Bullying is discussed (3)

Display This Question:
If Have you noticed any ways that childhood occurrences of bullying have affected your recent action... = Yes

18A Explain:

18 Have you noticed any ways that childhood occurrences of bullying have affected your recent actions or decisions?

- No (1)
- Yes (2)

19 Examples of bullying you endured?

20 Did anyone intervene when you were bullied?

Yes (1)

No (2)

Display This Question:

If Did anyone intervene when you were bullied? = Yes

20A Who? (Click all that apply)

Friends (1)

Peers (Non-friend students) (2)

Teachers (3)

Administration (4)

Parents (5)

Other (6) _____

Display This Question:
If Did anyone intervene when you were bullied? = Yes

20B Did someone intervene every time you were bullied?

Yes (1)

No (2)

Display This Question:
If Did someone intervene every time you were bullied? = No

20BA How often did they?

Only in severe instances (1)

Rarely (2)

Only when seen (3)

Other (4) _____

21 Any other comments?

End of Block: Survey Questions

Appendix C

IRB Approval

IRB
INSTITUTIONAL REVIEW BOARD
 Office of Research Compliance,
 010A Sam Ingram Building,
 2269 Middle Tennessee Blvd
 Murfreesboro, TN 37129



IRBN001 - EXPEDITED PROTOCOL APPROVAL NOTICE

Wednesday, May 17, 2017

Principal Investigator **Stephanie Elise Carpenter (Student)**
 Faculty Advisor **Ariana Postlethwait**
 Co-Investigators **NONE**
 Investigator Email(s) **sec5i@mtmail.mtsu.edu; ariana.postlethwait@mtsu.edu**
 Department **Psychology (Student) & Social Work (FA)**

Protocol Title ***Are life path trajectories affected by childhood and adolescent experiences of bullying?***
 Protocol ID **17-2209**

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the EXPEDITED mechanism under 45 CFR 46.110 and 21 CFR 56.110 within the category (7) *Research on individual or group characteristics or behavior*. A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action	APPROVED for one year from the date of this notification
Date of expiration	5/31/2018
Participant Size	500 (FIVE HUNDRED)
Participant Pool	Adult Tennessee residents/
Exceptions	1. Online consent permitted.
Restrictions	1. Mandatory informed consent. 2. Study link: https://mtsu.ca1.qualtrics.com/jfe/form/SV_07oyZH22d1Kyx
Comments	Possibly seek URECA funding

This protocol can be continued for up to THREE years (**5/31/2020**) by obtaining a continuation approval prior to **5/31/2018**. Refer to the following schedule to plan your annual project reports and be aware that you may not receive a separate reminder to complete your continuing reviews. Failure in obtaining an approval for continuation will automatically result in cancellation of this protocol. Moreover, the completion of this study **MUST** be notified to the Office of Compliance by filing a final report in order to close-out the protocol.

Continuing Review Schedule:

Reporting Period	Requisition Deadline	IRB Comments
First year report	4/30/2018	TO BE COMPLETED
Second year report	4/30/2019	TO BE COMPLETED
Final report	4/30/2020	TO BE COMPLETED

Post-approval Protocol Amendments:

Date	Amendment(s)	IRB Comments
None	NONE	NONE

The investigator(s) indicated in this notification should read and abide by all of the post-approval conditions imposed with this approval. [Refer to the post-approval guidelines posted in the MTSU IRB's website.](#) Any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918 within 48 hours of the incident. Amendments to this protocol must be approved by the IRB. Inclusion of new researchers must also be approved by the Office of Compliance before they begin to work on the project.

All of the research-related records, which include signed consent forms, investigator information and other documents related to the study, must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data storage must be maintained for at least three (3) years after study completion. Subsequently, the researcher may destroy the data in a manner that maintains confidentiality and anonymity. IRB reserves the right to modify, change or cancel the terms of this letter without prior notice. Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board
Middle Tennessee State University

Quick Links:

[Click here](#) for a detailed list of the post-approval responsibilities.
More information on expedited procedures can be found [here](#).