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College Students' Perceptions of Professor Bullying

Marisa E. Marraccini
University of Rhode Island, marisa.marraccini@gmail.com

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COLLEGE STUDENTS' PERCEPTIONS OF PROFESSOR BULLYING

BY

MARISA E. MARRACCINI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE

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MARISA E. MARRACCINI

APPROVED:

Thesis Committee:

Major Professor Lisa L. Weyandt

Joseph S. Rossi

Annemarie Vaccaro

Nasser H. Zawia

DEAN OF THE GRADUATE SCHOOL

UNIVERSITY OF RHODE ISLAND

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Abstract

Although bullying research has burgeoned over the past two decades, only recently have studies begun to explore bullying of students by teachers. Preliminary findings suggest that teacher bullying and the maltreatment of students may result in loss of trust, feelings of hopelessness and depression, oppositional behavior and increased fighting amongst peers (Pottinger & Stair, 2009). To date, only one study (Chapell et al., 2004) has addressed the prevalence of teacher (professor/instructor) bullying in college student populations. Given the impact professor/instructor relations can have on college student outcomes (Wilson et al., 2010) and the severe consequences teacher bullying can have on primary and secondary students, it is important to identify whether college students report bullying by their professors/instructors. The present study examined the self-reported prevalence of instructor bullying among college students. Results revealed that 51% of students endorsed seeing another student being bullied by a professor/instructor at least once and 18% endorsed being bullied by a professor/instructor at least once. The findings also revealed a relationship between teacher bullying and professor/instructor bullying. Additional characteristics of student victims of teacher and professor/instructor bullying were explored; however, no significant differences were demonstrated between male and female students or between students with and without disabilities in their self-reported ratings of being bullied by teachers and professors/instructors. Finally, the psychometrics of a newly formed questionnaire addressing student perceptions of professor/instructor and teacher bullying were

explored and established. Implications for universities and colleges are discussed and suggestions for future research are advanced.

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Table of Contents

Abstract.....	ii
Acknowledgements.....	iv
Table of Contents.....	v
List of Tables.....	viii
List of Figures.....	x
Chapter I: Introduction.....	1
Statement of the Problem.....	1
Critical Review of the Literature.....	2
Bullying.....	2
Definition.....	3
Types of Bullying.....	5
Roles.....	7
Prevalence.....	11
Outcomes.....	11
Measurement Of Bullying.....	13
Self-reports.....	14
Peer & Teacher Nominations.....	16
Teacher & Student Relations.....	17
Teacher & Professor/Instructor Bullying.....	18
Definition.....	19
Roles.....	20
Prevalence.....	21
Outcomes.....	22
Purpose of the Present Study.....	23
Chapter II: Method.....	26
Pilot Study Procedure.....	26

Table of Contents (Continued)

Main Study Procedure.....	27
Participants.....	27
Informed Consent.....	30
Measures.....	30
Design.....	31
Chapter III: Results.....	33
Psychometrics – Item Analysis & Dimensionality.....	33
Professor/Instructor Bullying – SPPBQ.....	34
Teacher Bullying – SPPBQ.....	39
Psychometrics – Cross-Validation.....	44
Professor/Instructor Bullying – SPPBQ.....	45
Teacher Bullying – SPPBQ.....	48
Prevalence.....	51
Teacher & Professor/Instructor Bullying Relationship.....	57
Sex, Disability Status & Bullying.....	62
Post Hoc Analysis – Sex as a Moderator.....	65
Chapter IV: Discussion.....	70
Psychometric Findings of SPPBQ.....	70
Prevalence Rates of Bullying in College.....	74
Characteristics of Victims of Teacher & Professor/Instructor Bullying.....	77
Implications.....	82
Limitations.....	84
Future Directions.....	87
Summary & Conclusions.....	91
Appendices.....	93
Appendix A: Interview Script.....	93

Table of Contents (Continued)

Appendix B: Pilot Informed Consent.....	95
Appendix C: Power Analysis.....	97
Appendix D: Informed Consent Form.....	98
Appendix E: Demographic Questionnaire.....	100
Appendix F: SPPBQ.....	102
Appendix G: Participant Debriefing.....	112
Bibliography.....	113

List of Tables

Table	Page
Table 1. URI 2011-2012 Ethnicity & Sex Distribution.....	28
Table 2. Participants by Year in College, Ethnicity & Sex.....	29
Table 3. Initial PCA – Professor/Instructor Bullying.....	35
Table 4. Item & Total-Item Correlations – Professor/Instructor Bullying.....	36
Table 5. Eigenvalues – Professor/Instructor Bullying.....	37
Table 6. Final PCA – Professor/Instructor Bullying.....	39
Table 7. Initial PCA – Teacher Bullying.....	40
Table 8. Item & Total-Item Correlations – Teacher Bullying.....	41
Table 9. Eigenvalues – Teacher Bullying.....	42
Table 10. Final PCA – Teacher Bullying.....	44
Table 11. Summary of Fit Indices of Variant Models for SPPBQ – Professor/Instructor Bullying.....	46
Table 12. Factor Loadings & Effect Sizes for Correlated Model – Professor/Instructor Bullying.....	48
Table 13. Summary of Fit Indices of Variant Models for SPPBQ – Teacher Bullying.....	49
Table 14. Factor Loadings & Effect Sizes for Correlated Model – Teacher Bullying.....	51
Table 15. Frequency of Response of Students for Bullying Questions...	52
Table 16. Number of Professor/Instructor & Teacher Bullies.....	53
Table 17. Number of Years Students were Bullied by Teachers/Professors/Instructors.....	54
Table 18. Frequency of Bullying Incidents in Primary/Secondary School and College.....	55

List of Tables (Continued)

Table	Page
Table 19. Teacher & Professor/Instructor Bullying by Sex & Disability Status.....	56
Table 20. Frequency of Most Recent Bullying Incident by a Teacher Before College.....	58
Table 21. Means & Standard Deviations of Global SPPBQ – Professor Ratings.....	60
Table 22. Teacher Bullying & Professor/Instructor Bullying ANOVA	61
Table 23. Means and Standard Deviations of Global Scores on Teacher and Professor/Instructor Bullying.....	63
Table 24. Disability Status & Sex X Teacher Bullying & Professor/Instructor Bullying MANOVA	64
Table 25. Disability Status X Professor/Instructor Bullying ANOVA ...	65
Table 26. Sex X Professor/Instructor Bullying ANOVA.....	65
Table 27. Professor/Instructor & Teacher Bullying Endorsements.....	66
Table 28. Means & Standard Deviations of Global SPPBQ for Teacher Bullying & Sex.....	67
Table 29. Teacher Bullying & Sex X Professor/Instructor Bullying ANOVA	68
Table 30. Teacher Bullying & Sex X Professor/Instructor Bullying Simple Effects.....	69

List of Figures

Figure	Page
Figure 1. Standardized Maximum Likelihood Parameter Estimates for Correlated Model – Professor/Instructor Bullying.....	47
Figure 2. Standardized Maximum Likelihood Parameter Estimates for Correlated Model – Teacher Bullying.....	50
Figure 3. Professor/Instructor & Teacher Bullying by Sex.....	56
Figure 4. Professor/Instructor & Teacher Bullying by Disability Status.....	57
Figure 5. Box Plot of Teacher Bullying Status Prior to College X Global Professor Bullying.....	61
Figure 6. Teacher Bullying Interaction with Sex & Professor/Instructor Bullying	69

Chapter 1: Introduction

Statement of the Problem

While bullying research has burgeoned over the past two decades, very few studies have explored students' perceptions of teachers as bullies. Although the topic of teacher bullying has been described as a "delicate issue" (Twemlow & Sacco, 2008, p. 117), the extant literature suggests that teacher bullying does indeed exist (Chapell et al., 2004; Olweus, 1996 as cited in Brendgen, Wanner & Vitaro, 2006; Pottinger & Stair, 2009; Twemlow, Fonagy, Sacco & Brethour, 2006) and maltreatment of students should be explored more closely in the United States (Khoury-Kassabri, Astor & Benbenishty, 2008). Teacher bullying may have severe consequences for student victims, including negative psychosocial and behavioral outcomes such as loss of trust, feelings of hopelessness and depression, oppositional behavior and increased fighting amongst peers (Pottinger & Stair, 2009).

Although bullying behaviors (Chapell et al., 2004) and being bullied (Whitney & Smith, 1993) have traditionally been thought to lessen with age, social forms of bullying may remain relatively stable (Crick, Grotpeter, & Bigbee, 2002; Cohn & Canter, 2003). In fact, research involving workplace bullying has demonstrated that bullying often continues into adulthood (Chapell et al., 2004) and has also been shown to exist within higher education settings amidst administrators, senior managers, skilled and unskilled staff, and academicians (e.g. Simpson & Cohen, 2004). Research assessing professor/instructor bullying of college students, however, has been largely overlooked in the literature. Increasing knowledge about professor and instructor

bullying is important given research findings that college students' perception of rapport with their professors/instructors predicts motivation, perceptions of learning, and perceived grades (Wilson, Ryan & Pugh, 2010). To date, only one study (Chapell et al., 2004) has assessed the prevalence of teacher (professor/instructor) bullying in a college population and the study found that approximately 30% of the sampled college students witnessed another student being bullied by a teacher (professor/instructor) at least once. Furthermore, no studies have investigated the relationship of teacher bullying during childhood to professor/instructor bullying in college. Therefore, the proposed study seeks to identify the self-reported prevalence of professor and instructor bullying among college students as well as college students' perspective of being bullied by teachers in elementary, middle, and high school.

Critical Review of the Literature

This critical review explores the definition, roles, prevalence, and outcomes of both teacher and professor/instructor bullying and peer bullying. The importance of teacher and student relations is also discussed and the review provides an overview and critique of measurement methods currently available to investigate bullying.

Bullying

Bullying has been covered extensively in the literature since 2000 (Berger, 2006) and may be the most prevalent form of violence within the schools (Batsche, 2002). It is clear that bullying has a negative affect on both victims and bullies (Cohn & Canter, 2003; Nansel et al., 2001; Salmivalli, Lagerspetz, Björkqvist, Österman & Kaukiainen, 1996; Troop-Gordon & Ladd, 2005), and is associated with increased

school dropout (Cohn & Canter, 2003), criminal activity (Cohn & Canter, 2003; Olweus, 1993), and poorer relationships with peers (Nansel et al., 2001).

Definition. Perhaps the greatest difficulty in the empirical study of bullying involves the definition of bullying, which has varied across studies (Bauman & Del Rio, 2006; Espelage & Swearer, 2003). Dan Olweus, who coined the term “mobbing” to first describe bullying in 1972 (Espelage & Swearer, 2003, p. 365), more recently defined bullying or victimization as the following: “A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons” (Olweus, 1993, p. 9).

Upon reviewing the definitions of bullying over the previous ten years, Espelage and Swearer (2003) concluded that bullying involves repeated physical and verbal aggression that is enacted by an individual or group to attain a goal. Other definitions have followed similar formats. Twemlow, Sacco & Williams (1996) provided a definition that they explained is similar to Olweus’s:

The exposure of an individual, over and over again, to negative interactions on the part of one or more dominant persons, who gain in some way from the discomfort of the victims. These negative actions are intentional inflictions of injury or discomfort and may involve physical contact, words, or insulting gestures. Essential to the phenomenon of bullying is that there is an imbalance of strength, an asymmetrical coercive power relationship, and that the victims have problems defending themselves. Thus, fighting between two persons of similar strength and skill would not be defined as bullying. Forms of bullying

may be quite direct, that is, physical conflict, and others more indirect, such as ostracism, teasing, and other forms of social isolation (p. 2).

Bauman & Del Rio (2006) offered another definition where bullying was defined as “a subset of more general aggression, distinguished by an intent to harm, the repetitive nature of the acts, and the power imbalance between bully and target” (p. 219).

Finally, Beran (2006) described bullying as “repetitive negative behaviors against another child who is unable to defend himself or herself” (p. 241).

Although a universally accepted definition of bullying is lacking in the literature (Espelage & Swearer, 2003), there are widely agreed upon aspects within most definitions (Nansel et al., 2001). For example, Nansel et al. (2001) highlighted three common aspects of bullying:

Bullying is a specific type of aggression in which (1) the behavior is intended to harm or disturb, (2) the behavior occurs repeatedly over time, and (3) there is an imbalance of power, with a more powerful person or group attacking a less powerful one. This asymmetry of power may be physical or psychological, and the aggressive behavior may be verbal (e.g., name-calling, threats), physical (e.g., hitting), or psychological (e.g., rumors, shunning/exclusion) (p. 2094).

Both Olweus (2011) and Beran (2006) emphasized similar commonalities to Nansel et al. (2001), but Olweus expanded on the first aspect as unwanted and negative behavior that is aggressive and Beran described it as a “different affect between the aggressor and the targeted child” (p. 242).

Bullying, therefore, can be defined as a subset of aggression, which involves an imbalance of power, with unwanted incidents occurring repeatedly across time (Bauman & Del Rio, 2006; Beran, 2006; Carter & Spencer, 2006; Espelage & Swearer, 2003; Nansel et al., 2001; Olweus, 1993; Twemlow, Sacco & Williams, 1996).

Types of Bullying. Bullying can be direct/overt, involving in-person physical or verbal confrontations, or it can be indirect/covert, including rumor spreading, indirect name-calling (Espelage & Swearer, 2003; Olweus, 1993) or relational bullying, which involves the disruption of social relationships between victims and their peers (Berger, 2006). Bullying has also been subdivided into different types of aggression throughout the literature. Raine and colleagues (2006) described two forms of aggression, proactive and reactive, and Espelage & Swearer (2003) concluded that bullying fits into the former form of aggression. Proactive aggression involves aggression to attain a goal; bullying as a type of proactive aggression is unprovoked and used to attain a social goal (Beran, 2006). Olweus (2011) further delineated that bullying may be expressed in one of nine forms: verbal, social exclusion or isolation, physical, lying and rumor spreading, stealing or damaging, threatening, racially related, sexually related, or cyber incidents.

Four consistent categories of bullying identified within the literature include physical, verbal, cyber, and relational bullying. Physical bullying, a type of overt bullying, may be the easiest type of bullying to identify (Bauman & Del Rio, 2006). It typically involves hitting, kicking, or beating victims (Smith, 2011). Behavioral bullying, which is related to physical bullying, might include behaviors such as

stealing a peer's lunch, ruining homework, or holding one's nose while interacting with a peer (Berger, 2006).

Verbal bullying, especially name-calling (Whitney & Smith, 1993) occurs more commonly than other types of bullying and is even more prevalent in children of older ages (Berger, 2006; Wang, Iannotti & Nansel, 2009). Verbal bullying often involves teasing, taunting or threatening the victim (Smith, 2011). A similar construct identified in the literature involves verbal abuse, which includes ridiculing and teasing, name-calling, or yelling (Brendgen, Wanner & Vitaro 2006). Schaefer (1997) conducted a survey with mental health professionals and found that rejection, verbal put-downs, perfectionism, negative prediction, scapegoating, shaming, cursing or swearing, threats and guilt trips were generally agreed upon as parental verbalizations classified as verbal abuse.

A type of bullying that has become a prominent issue more recently is cyberbullying, sometimes referred to as electronic bullying (Smith & Slonje, 2010). Cyberbullying has been defined as “the use of any electronic means to harm another person” (Trolley & Hanel, 2010, p. 33) and may involve the electronic spreading of inappropriate photographs of a victim or the online harassment on a webpage or social networking site (Berger, 2006; Swearer, Espelage & Napolitano, 2009). What is distinct about the operational definition of cyber bullying compared to other forms of bullying is that it can meet the criteria for repetitive occurrence through multiple viewings of one webpage or email (Smith & Slonje, 2010).

Relational bullying, which is a type of covert bullying, involves the disruption of social relationships between victims and their peers (Berger, 2006) and includes

ignoring or excluding children or spreading humiliating rumors about a victim (Bauman & Del Rio, 2006; Smith, 2011). Crick (1996) defined relational bullying to also include planned manipulation or sabotage of a peer relationship to obtain desired goals.

Roles. The roles involved within bullying are not necessarily exclusive to the traditional dyad of bully and victim (Salmivalli et al., 1996), but instead may fall on an intrinsically dynamic continuum (Espelage & Swearer, 2003). Bullies have been categorized as sadistic, depressed, or agitated (Twemlow et al., 1996) and described as aggressive towards peers and sometimes adults (Olweus, 1997).

Victims have been classified by Olweus (1997) as either passive/submissive or provocative/aggressive victims. The more common type of victims include passive victims, who are characterized as more anxious and insecure than average students and may be cautious, sensitive and quiet (Olweus, 1997). Research also indicates that passive victims may demonstrate lower levels of social skills and nonassertive behaviors compared to children not classified as any type of bully or victim by their peers (Toblin, Schwartz, Gorman, & Abou-ezzedine, 2005). A far less common type of victim, the provocative victim, displays anxious and aggressive reactions and is characterized by irritating behaviors, quick tempers and hyperactive behaviors (Olweus, 1997). Provocative victims have been shown to be more likely to carry weapons, use alcohol, and become involved in physical fights than non-victims or victims who have nonaggressive attitudes (Brockenbrough, Cornell, & Loper, 2002) and to display impairments in self-regulation, such as higher levels of impulsivity, emotional dysregulation, and hyperactivity (Toblin et al., 2005). Additionally,

provocative victims have been shown to be more likely to use physical forms of bullying above verbal forms of bullying and more likely than passive victims to be victims of physical bullying (Unnever, 2005).

Preliminary evidence also suggests that children with physical disabilities (Dawkins, 1996), learning disabilities (Luciano & Savage, 2007; Martlew & Hodson, 1991; Norwich & Kelly, 2004), and attention problems (Brendgen et al., 2006; Brendgen, Wanner, Vitaro, Bukowski & Tremblay 2007; Unnever & Cornell, 2003) are more prone to being bullied. Specifically, children with physical disabilities have been shown to be twice as likely to be bullied compared to children without physical disabilities (Dawkins, 1996) and children with mild learning difficulties have been shown to be more prone to bullying (Luciano & Savage, 2007; Martlew & Hodson, 1991), teasing (Martlew & Hodson, 1991), and having fewer friends than students in mainstream classrooms (Martlew & Hodson, 1991). In one study, approximately half of students with learning difficulties who endorsed high rates of bullying reported the bullying was related to their learning difficulties (Norwich & Kelly, 2004). On the other hand, Kaukiainen and colleagues (2002) found that students with learning disabilities were more likely to be bullies, but not victims. Unnever and Cornell (2003) reported that students with ADHD were more likely to report bullying because of their difficulties with self-control, and more likely to report being bullied independent of any difficulties with self-control. Instead, Unnever and Cornell suggested that students with ADHD may be more vulnerable to being bullied because of their social status and tendency toward aggressive behavior with their peers.

Salmivalli and colleagues (1996) reported that bullying involves all school children and suggested that interventions should therefore address all students, not just bullies and victims. Specifically, children not directly involved in the bullying incident may play an important role in the acceptance of bullying (Salmivalli et al, 1996). Although Whitney and Smith (1993) reported that children may find it difficult to understand why others bully, the researchers also reported that only half of junior/middle school students and only one-third of high school students in their study reported trying to help a student victim of bullying and 20% of all students reported doing “nothing” (Whitney & Smith, 1993, p. 17). When bystanders do nothing to stop an incident of bullying, an acceptance of bullying behaviors may be conveyed (Espelage & Swearer, 2003; Salmivalli et al, 1996).

School and teacher roles in peer bullying have also been well documented. The attitudes adopted by the school concerning bullying may impact student bullying (Baker, 1998) and if adults in the school accept bullying behaviors – these behaviors may be more accepted by the students (Espelage & Swearer, 2003; Salmivalli et al., 1996). Teachers may play a part in bullying if they do not encourage appropriate interactions or neglect to stop a bullying behavior (Espelage & Swearer, 2003). For example, Stockdale, Hangaduambo, Duys, Larson and Sarvela (2002) reported that teachers and parents endorsed lower rates of bullying than students reported. Teachers of older students may not always identify bullies correctly and their ratings of bullies and victims do not well match student ratings (Leff, Kupersmidt, Patterson & Power, 1999). Multiple studies have found that teachers may misperceive the degree of seriousness of bullying (Craig, Henderson & Murphy, 2000; Bauman & Del Rio,

2006). Yoon & Kerber (2003) reported that teachers tended to have less empathy and become less involved when victims experienced social exclusion compared to physical or verbal bullying. Specifically, teachers were asked how they would respond to certain situations depicting different types of bullying. For social exclusion, only 10% of teacher responses involved interventions, but for physical and verbal bullying, 50% of teacher responses included interventions (Yoon & Kerber, 2003). Bauman & Del Rio (2006) reported similar results within a sample of pre-service teachers. Specifically, when pre-service teachers were presented with situations involving relational bullying they were less likely to intervene and demonstrated less empathy compared to situations involving physical or verbal bullying (Bauman & Del Rio, 2006).

Ellis & Shute (2007) reported that while a teacher's moral orientation as measured by the Sanctioning Voice Index (SVI; Caputo, 2000) does affect the way teachers intervene and if they comply with bullying policies, seriousness of the incidence may have a greater impact. Teachers may misperceive physical conflicts as more severe forms of bullying, whether meeting the criteria for bullying or not (Hazler, Miller, Carney & Green, 2001) and may underrate the number of students involved in bullying (Bradshaw, Sawyer, & O'Brennan, 2007). Bradshaw et al., (2007) reported that students were less likely than their teachers to believe their school had adequate preventative efforts in place and more likely to report teachers observing and not intervening on bullying. Similarly, Hazler, Hoover and Oliver (1991) reported that the majority of students (69%) felt their school professionals responded poorly towards incidents of bullying and some students felt this was due to ignorance or lack

of awareness.

Prevalence. Bullying within primary and secondary school systems unfortunately is a common problem (Espelage & Swearer, 2003) and may be the most pervasive forms of violence within the schools (Batsche, 2002). One of the first studies to assess bullying prevalence reported that a total of 15% of students in primary and secondary Norwegian schools were involved in bullying – 9 % as victims and 7 % as bullies (Olweus, 1993). Reporting much larger figures, a retrospective study by Hoover, Oliver and Hazler (1992) conducted in the Midwestern and Southeastern parts of the United States with junior and high schools reported that 77% of students endorsed being bullied and 14% experienced severe reactions to the bullying. Nansel and colleagues (2001) assessed a large nationally representative sample of students in grades six through ten and reported that 29.9% of students endorsed being involved in bullying frequently; thirteen percent as a bully sometimes, 10.6% as a victim, and 6% as both. These findings were stable across schools located in towns, suburban areas, and urban areas. More recently, another nationally representative study conducted by Vaughn et al. (2010) reported that six percent of the population, based on interviews with over forty thousand individuals, reported life-long bullying of others.

Outcomes. Negative psychosocial functioning outcomes for both victims and bullies have been well documented (Cohn & Canter, 2003; Nansel et al., 2001; Salmivalli et al., 1996; Troop-Gordon & Ladd, 2005). Having a history of being either a victim or a bully has been associated with school dropout (Cohn & Canter, 2003), criminal activity (Cohn & Canter, 2003; Olweus, 1993), fighting (Nansel et al., 2001),

poorer relationships (Nansel et al., 2001), psychosocial adjustment difficulties (Cohn & Canter, 2003), lower self-esteem (Boulton & Smith, 1994; Hawker & Boulton, 2000; Troop-Gordon & Ladd, 2005), and increased loneliness (Nansel et al., 2001; Tritt & Duncan, 1997). Recently, Vaughn et al. (2010) reported that adults who endorsed lifetime bullying demonstrated higher incidences of bipolar disorder, alcohol and marijuana use disorders, nicotine dependence, conduct disorder, antisocial disorder, paranoid disorder, and histrionic personality disorder compared to adults without a lifetime history of bullying. Regarding relational bullying specifically, research has demonstrated that it may be linked to psychological difficulties such as loneliness (Crick & Bigbee, 1998; Crick & Grotepeter, 1995; Crick & Grotepeter, 1996), depression (Crick & Grotepeter, 1995; Crick & Grotepeter, 1996), both internalizing and externalizing adjustment (Crick, 1997), and negative peer treatment or peer rejection (Crick, 1996; Crick & Bigbee, 1998; Crick & Grotepeter, 1995; Crick & Grotepeter, 1996).

Preliminary research also indicates that student perception of teacher response to bullying may impact psychosocial functioning (Troop-Gordon & Quenette, 2010). Troop-Gordon and Quenette (2010) found that student perceptions may moderate the relationship between harassment and internalizing symptoms and school avoidance. Specifically, male students showed greater internalizing difficulties as bully victims only when they perceived that their teachers were encouraging independent coping strategies and avoidance or assertive behavior in response to aggressive peers. Female students, on the other hand, demonstrated a relationship between emotional dysfunction and victimization only when they saw their teachers encouraging

independent coping strategies and avoidance or assertive behavior in response to aggressive peers at low levels or rarely (Troop-Gordon and Quenette, 2010).

Measurement of Bullying

Although bullying was first operationalized in the 1970s, psychometric problems often characterize bullying assessment measures (Beran, 2006). Solberg & Olweus (2003) explain that prevalence reports of bullying may differ for six reasons: varying data sources, variability in reference and time periods, variability in the response categories, differing scores (composite versus single items), differing thresholds or cut-off points for identifying a bully, and finally, some questionnaires provide a definition of bullying while others do not. Additional problems with current measures include inconsistencies in the operationalization of bullying, ambiguity in what is socially acceptable and discrepancies in whether both direct and indirect observations of negative behaviors are included (Beran, 2006). Finally, the divergences in the scope of the questions across studies may result in divergent prevalence rates (Stockdale et al., 2002).

Selecting the appropriate method of assessment may help address these psychometric problems. Espelage & Swearer (2003) identify four ways of assessing bullying: self-report, peer and teacher nominations, and behavioral observations. Teachers, parents, students, peers, and researchers are all possible sources for data collection (Espelage & Swearer, 2003) and bullying can be assessed with a global scale or it can comprise specific, behavior related questions gauging frequency (Stockdale et al., 2002). Solberg & Olweus (2003) argued that for the purposes of determining prevalence rates of bullying, a single item question, with a well-

operationalized definition, is the best method of choice for a number of reasons. First, presenting a clear operational definition reduces the variability and subjectivity of participants' interpretations of bullying. Additionally, composite scores can be derived through various techniques, resulting in prevalence estimates that are difficult to reproduce. Solberg & Olweus also argued that composite scores generate prevalence estimates that are more abstract than estimates generated from a single item.

Self-reports. In general, self-reports are the most commonly type of psychological instruments used within psychological research (Constantine & Ponterotto, 2006). Bullying self-report measures typically ask students to report their perceptions about bullying behaviors and bully-victim experiences over a specific length of time (Espelage & Swearer, 2003). An important limitation of self-report measures is that they may inflate and/or underrepresent the prevalence of bullying. Salmivalli et al. (1996) reported that only 23.9% of the students identified by their peers to be victims of bullying self-identified themselves as victims, suggesting self-report measures for victims of bullying may underrepresent prevalence rates. Similarly, bullies themselves may misreport their actions either as too high if they are proud of their actions or too low if they are ashamed (Berger, 2006). Finally, students may be more inclined to endorse being the victim of a verbal or physical bullying behavior than they are to endorse being bullied overall (Stockdale et al., 2002), suggesting students may be hesitant to self-endorse that they are victims of bullying. These findings support the supplemental use of peer and/or teacher reports, as well as the use of questionnaires with multiple items, opposed to dichotomous self-report questionnaires alone.

The most frequently used self-report measure in the bullying literature is the Olweus Bully/Victim Questionnaire (BVQ, Olweus, 1989; Schafer, Werner & Crick, 2002), which can be administered anonymously or confidentially (Olweus, 2010). The BVQ measures two global constructs: bullying and victimization (Solberg & Olweus, 2003). Furthermore, the BVQ includes a detailed definition of bullying and specifies a reference period of the past couple of months to ensure its sensitivity to change (Olweus, 2010), with questions clearly identifying the context of the school (Solberg & Olweus, 2003). After an initial question for each construct is asked (e.g. “How often have you been bullied at the school in the past couple of months?”), seven to eight follow-up questions are asked to specify how often specific aspects of bullying occur (Solberg & Olweus, 2003). The questions address verbal, relational, and physical bullying (Solberg & Olweus, 2003). Questions also address the behaviors and reactions of others witnessing bullying events (Olweus, 2010). Answer choices are represented on a Likert-scale from *never* to *several times a week* and the sum of the items is used as an overall measure of bullying level (Beran, 2006). Solberg & Olweus (2003) identified the cut-off point to be two to three times per month for both bullying and victimization, although other cut-off points have been reported (e.g., Dawkins, 1996).

Studies assessing the validity and reliability of the BVQ have reported mixed results. Solberg and Olweus (2003) reported acceptable convergent and divergent validity as well as strong construct validity and psychometric properties. Solberg and Olweus also concluded that there was a linear relationship between internalizing problems and victimization and externalizing problems and bullying. Beran (2006), on

the other hand, concluded that the BVQ demonstrated adequate convergent validity, but inadequate divergent validity because it did not distinguish between reactive aggression and bullying. Students and teachers also appeared to perceive bullying differently and therefore Beran (2006) suggested that questionnaires should include more items with a clearer definition of bullying.

Another self-report questionnaire that has been used to assess bullying is the Negative Acts Questionnaire-Revised (NAQ-R; Einarsen, Hoel & Notelaers, 2009), which assesses exposure to workplace bullying. The NAQ-R encompasses three underlying factors: personal, work-related and physically intimidating forms of bullying and may also generate a single item measure of bullying. Questions pertain to specific behaviors and answer choices appear on a Likert-scale for frequency, from *never* to *daily*. Einarsen and colleagues (2009) concluded that the NAQ-R demonstrated high internal stability for all three factors and for one single factor, as well as satisfactory criterion validity in relation to a single question assessing bullying. Construct validity was also established by Einarsen et al. through correlating psychosocial variables with the instrument.

Peer & Teacher Nominations. Measures using peer and teacher nominations involve asking teachers and/or students to identify a specified or recommended number of students, sometimes off of a roster, and sometimes from pictures, as examples of persons who fit specific descriptors of bullying (Espelage & Swearer, 2003; Solberg, Olweus, 2003). Nomination measures will either require a minimum number of nominations or specify a certain standard deviation above the mean to classify a student as a bully or victim (Solberg & Olweus, 2003). Solberg and Olweus

(2003) argued against using this method for prevalence rate estimations, because the cut-off points are often arbitrary and difficult to reproduce. Nomination measures have similar limitations to self-report measures; students' reports may be influenced by reputation rather than personal experience (Berger, 2006) and adults may not be reliable nominators as they may misperceive the severity of situations (Bauman & Del Rio, 2006; Yoon & Kerber, 2003).

An example of a nomination measure is Salmivalli and colleague's (1996) peer nomination questionnaire. The nomination instructions included a definition of bullying and students were instructed to identify how well each classmate fit bully behaviors on a scale from one to three. The questionnaire next instructed students to identify peers who might be victims of bullying; students were considered victims if at least 30% of the students identified them. A final component of this questionnaire assessed sociometric qualities; students identified peers they liked the most and liked the least (Salmivalli et al., 1996).

Teacher & Student Relations

Although literature directly addressing teacher bullying is sparse, the importance of teacher and student relations (Ladd, Birch, & Buhs, 1999; Liljeberg, Eklund, Fritz, & Klinteberg, 2011; Rueger, Malecki, & Demaray, 2010) and tension between students and teachers (Buxton & Brichard, 1973) have been well documented. For example, teachers have described students with attention difficulties (Batzle, Weyandt, Janusis, & DeVietti, 2009; Eisenberg & Schneider, 2007), antisocial tendencies (Ladd et al., 1999), and learning disabilities (Woodcock & Vialle, 2011) more negatively than students without these conditions and consequently

these students may be more at-risk for verbal abuse (Brendgen et al., 2006; Brendgen et al., 2007). A study conducted by Buxton & Brichard in 1973 reported that 81% of high school students believed their teachers were violating the rights of students by not respecting their opinion. These negative perceptions are especially concerning given difficult teacher-child relationships developed early on have been shown to have a negative connection with academic achievement (Hamre & Pianta, 2001; Ladd et al., 1999) and an even greater relationship with behavioral outcomes (Hamre & Pianta, 2001). Furthermore, research has found that negative teacher-student relationships are difficult to change by teachers later on (Howes, Phillipsen, Peisner-Feinberg, 2000; Jerome, Hamre, Pianta, 2008), possibly because of negative attributions and stereotypes developed by teachers based on early conflict (Ladd et al., 1999).

Teacher & Professor/Instructor Bullying

There is a body of literature suggesting that teacher bullying of students exists (Chapell et al., 2004; Olweus, 1996 as cited in Brendgen et al., 2006; Pottinger & Stair, 2009; Twemlow et al., 2006), although professor/instructor bullying of college students has been relatively unexplored. In addition to research addressing student perceptions of teacher bullying, the extant research includes teacher perceptions of teacher bullying (Twemlow et al., 2006) and student perceptions of psychological (Casarjian, 2000) and verbal abuse (Brendgen et al., 2006; Brendgen, et al., 2007) by teachers. Furthermore, there is a substantial body of research relating to physical and verbal maltreatment of students by school staff and students bullying teachers in other countries such as Israel (Benbenishty, Zeira, Astor, & Khoury-Kassabri, 2002;

Khoury-Kassabri, 2006; Khoury-Kassabri, 2009; Khoury-Kassabri, 2011; Khoury-Kassabri et al., 2008; Terry, 1998).

Definition. The definition of teacher bullying varies among studies. For example, Olweus (1996 as cited by Brendgen et al., 2006) defined bullying as repeated sarcastic or arrogant acts or hurtful comments to a student. Psychological abuse (a form of bullying) by teachers was defined by Casarjian (2000) as verbal attacks, such as name-calling or public ridicule, or acts of neglect. Most recently, Twemlow et al. (2006) defined a teacher bully as “a teacher who uses his/her power to punish, manipulate or disparage a student beyond what would be a reasonable disciplinary procedure” (191). Teacher bullying has also been described to include sexual harassment and hate crimes (McEvoy, 2005), although most definitions do not include them explicitly.

While various definitions of teacher bullying exist, currently there is no definition specific to professor/instructor bullying available in the literature. Therefore, the definition of professor/instructor bullying used in the present study draws on definitions of teacher bullying provided by previous researchers (Twemlow et al., 2006; Olweus, 1996 as cited in Brendgen et al., 2006) and the broader definition of peer bullying (Olweus, 1993). Specifically, professor/instructor bullying of students is defined in the current study as the use of power to punish, manipulate or belittle a student beyond what would be a reasonable disciplinary procedure. For example, professor/instructor bullying may include saying hurtful things in general or specific to the student’s character or ability, making obscene gestures to the student, ignoring or neglecting the student, physical actions or attacks that may involve hurting or pushing

a student around, or telling lies or secrets that make others dislike the student or that get the student into trouble. For the present study, the definition of a professor includes academicians who are involved in teaching and research at a college or university and the definition of an instructor includes persons holding a teaching role at a college or university.

Roles. Although specific roles within professor/instructor bullying have not been explored, research investigating the roles within teacher bullying in primary and secondary education has been conducted. Twemlow and colleagues (2006) reported that teachers who endorsed being bullied by their students and teachers who reported being bullied as children were more likely to bully their own students. A study by Pottinger & Stair (2009) found that male teachers were more likely to bully students than female teachers were and that students reported embarrassment or humiliation and physical bullying as a worst experience.

Research investigating teacher verbal abuse of students, a closely related construct to teacher bullying, has shown that students with higher likelihoods of being verbally abused by teachers may comprise 15% of school children, and even as students change teachers from grade to grade, the probability of teacher verbal abuse remains relatively stable for these children (Brendgen et al., 2006). Boys appear to be more likely than girls to perceive themselves as victims of teacher maltreatment (Benbenishty et al., 2002; Casarjian, 2000; Khoury-Kassabri, 2009; Khoury-Kassabri et al., 2008) and female students from families with a high Socioeconomic Status (SES) are less frequently victims of teacher verbal abuse (Brendgen et al., 2007). Additionally, students with prominent inattention and antisocial behaviors have been

shown to be at more risk to teacher verbal abuse than students without learning disabilities as these behaviors may jeopardize a teacher's efficiency and systematic management of the classroom (Brendgen et al., 2006; Brendgen et al., 2007). Khoury-Kassabri (2011) most recently reported a relationship between students being bullied by other students and being maltreated by teachers and school staff. Finally, students who are both bullies and victims and students who are bullies alone, may be more likely to be maltreated by school teachers and staff than victims of bullying (Khoury-Kassabri, 2009).

Prevalence. Olweus (1996 as cited in Brendgen et al., 2006) reported that 1.67% of school-aged children endorsed being bullied by teachers. Twemlow et al. (2006) reported that over 70% of teachers have recognized teacher bullying as a problem and 45% of teachers admitting to bullying students. In 1998, Terry reported that 37% of teachers reported that their students may have viewed their (teacher) behaviors as bullying at least once during the course of one term. In 2005, McEvoy investigated current and former high school students' perceptions of teacher bullying and reported that 93% of the respondents identified at least one teacher as a bully in their school. When asked about emotional and physical maltreatment by teachers and school staff, one-third of Israeli students endorsed being emotionally maltreated (Benbenishty et al., 2002; Khoury-Kassabri, 2009) and one-fifth endorsed being physically maltreated by teachers and school staff (Benbenishty et al., 2002; Khoury-Kassabri, 2006; Khoury-Kassabri, 2009). In the United States, Casarjian (2000) reported that nearly two-thirds of middle school students reported at least one occurrence of teacher psychological abuse during the school year. Similarly, Whitted

and Dupper (2008) investigated teacher bullying among adolescent students in alternative education programs in an urban school district in the United States and reported that the majority of students endorsed being physically (86%) and psychologically (88%) mistreated by an adult. In a study investigating teacher (professor/instructor) bullying of college students, approximately 30% of college students reported witnessing teacher (professor/instructor) bullying at least once, 12.8% reported witnessing it occasionally and 2% reported witnessing it very frequently (Chapell et al., 2004). Fifteen percent reported being bullied by college teachers (professors/instructors) once or twice, 4% reported being occasionally, and 2% reported being bullied frequently (Chapell et al., 2004).

Outcomes. Students who have been bullied by teachers have demonstrated greater risk for oppositional behavior, increased fighting, loss of trust, feelings of hopelessness and suicidality, post-traumatic stress disorder (PTSD) and depression (Pottinger & Stair, 2009). Teacher bullying has also been shown to be related to oppositional defiant disorder for male students who endorse feeling threatened by teacher bullies and for female students who endorse being verbally humiliated by teacher bullies (Pottinger & Stair, 2009). Finally, Pottinger & Stair (2009) reported that the more frequently a student reports being bullied by a teacher the higher their perceived pathological symptoms may be. While the long-term negative effects of teacher bullying during childhood into early adulthood have been documented (Pottinger & Stair, 2009), to date, no studies have addressed the impact of professor/instructor bullying within the college student population.

Purpose of the Present Study

Although the negative impact of peer bullying and teacher maltreatment of students in primary and secondary education have been clearly documented, only one study has addressed the prevalence of teacher (professor/instructor) bullying in college populations (Chapell et al., 2004). Given the impact professor/instructor relations can have on college student outcomes and the severe consequences teacher bullying has on primary and secondary students, it is important to identify whether college students report bullying by their professors/instructors. Therefore, the primary purpose of the present study was to examine self-reported prevalence of instructor bullying among college students.

Additionally, the present study explored whether specific student characteristics were associated with professor bullying. For example, previous research suggests that male students compared to female students may be more susceptible to teacher bullying (Pottinger & Stair, 2009) and students with learning disabilities may be especially at risk to peer bullying in primary and secondary school (e.g., Brendgen et al., 2006). Consequently, the present study examined the effects of sex and disability status on college student victimization of instructor bullying.

Previous research has also indicated that school-aged children have reported being bullied by teachers (McEvoy, 2005; Olweus, 1996 as cited in Brendgen et al., 2006) and teachers have recognized teacher bullying as a problem (Twemlow et al., 2006). Furthermore, students more prone to teacher verbal abuse, a construct similar to teacher bullying, appear to be more likely to be verbally abused over time (Brendgen

et al., 2006). Therefore, the present study also explored college students' perspectives of being bullied by teachers in elementary, middle, and high school.

Although a few studies have addressed similar constructs to teacher bullying (e.g., verbal abuse, psychological abuse, maltreatment), the extant literature specifically addressing teacher bullying has relied on measures assessing similar constructs (Pottinger & Stair, 2009; Whitted & Dupper, 2008) or has not made the questionnaires available (Olweus, 1996 as cited in Brendgen et al., 2006). In addition, the only published study addressing teacher (professor/instructor) bullying of college students relied on dichotomous yes/no questions (Chapell et al., 2004). Therefore, the final purpose of the present study was to examine the psychometric properties of a newly formed questionnaire, the Student Perception of Professor/Instructor Bullying Questionnaire – SPPBQ, designed to assess professor/instructor bullying.

In summary, the purposes of the present study were to:

1. Examine the relationship between college students' history of being bullied by teachers prior to college and current self-ratings of being bullied by professors/instructors in college. It was hypothesized that students who reported a history of being bullied by teachers prior to college were more likely to report being bullied by professors/instructors in college as measured by a global professor bullying score on the SPPBQ.
2. Explore the relationship between disability status and a) self-reported ratings of being bullied by teachers prior to college and b) self-reported ratings of being bullied by professors/instructors during college. It was hypothesized that students who reported having a current disability, including physical and learning

disabilities, were more likely to report a history of being bullied by teachers prior to college as measured by a question about frequency of teacher bullying on the SPPBQ and report being bullied by professors/instructors in college as measured by a global professor bullying score on the SPPBQ.

3. Investigate the relationship between sex and a) self-reported ratings of being bullied by teachers prior to college and b) self-reported ratings of being bullied by professors/instructors during college. It was hypothesized that male students were more likely to report being bullied by teachers prior to college as measured by a question about frequency of teacher bullying on the SPPBQ and report being bullied by professors/instructors in college as measured by a global professor bullying score on the SPPBQ.
4. Further explore sex as a potential moderator on the relationship between teacher bullying in high school and professor bullying in college. It was hypothesized that the relationship between student report of being bullied by teachers prior to college and student perceptions of being bullied by professors/instructors in college would be moderated by sex.

Chapter II: Method

Pilot Study Procedure

Prior to use in the exploratory study, the properties of a newly formed questionnaire, the SPPBQ, were explored via a pilot study. The SPPBQ includes nine questions that inquire about experience of peer, teacher, and professor/instructor bullying and 17 questions that inquire about exposure to different types of bullying, including personal, academic and physically intimidating forms of bullying; this set of questions is repeated for each bullying incident reported by the participant. The purpose of the pilot study was to address any unanticipated problems with the questionnaire before beginning the main study as suggested by Ary, Jacobs, Razavieh & Sorensen (2006). Revisions included rewriting any poorly written or misleading questions to refine any abstract ideas and ensure a complete understanding of the intended content (Redding, Maddock & Rossi, 2006). A script to elicit feedback in the questionnaire from participants (See Appendix A) was used during this phase of the research.

For the pilot study, a convenience sample of four undergraduate students was recruited from the University of Rhode Island (URI). This number was based on a sample size used in a pilot study by Chen et al. (2002) that also modified questions of a new questionnaire. Participants contacted the student investigator who explained the purpose of the pilot study and reviewed the informed consent (see Appendix B). Participants who provided consent then completed the SPBBQ and answered questions about their understanding of specific questions and their experience of completing the questionnaire based on a cognitive script to elicit feedback (see

Appendix A). Minor wording changes were made to the SPPBQ based on participant feedback and one question was added to address the number of teachers and/or professors/instructors by whom students endorsed being bullied.

Main Study Procedure

Participants for the proposed study included 337 college students recruited from general education courses, upper level college courses, emails through listservs, and flyers posted throughout campus at the URI. Courses that included students of all majors and years were targeted, but based on the majors endorsed by participants, it appears that psychology and communication courses in particular yielded the most participants. Information directed participants to a secure and encrypted screen hosted by the website for SurveyMonkey where the online survey was accessible. Once students accessed the site, they were instructed to read a consent form and confirm they understood the contents by clicking on a statement of endorsement. Participants who provided consent were then presented with electronic forms of the SPPBQ and a demographic questionnaire designed by the researcher. At the end of the survey, participants were provided with information about how to contact the researcher if desired.

Participants. A convenience sample of 337 participants was recruited and included college students from URI at different levels of education and with varying majors. A minimum sample size of 300 was chosen based on a power analysis (see Appendix C) and Nunnally's (1978) recommendation for a sample of at least 300 participants in assessments of internal reliability. Participants were expected to be representative of the sex and ethnicity demographics of the undergraduate population

at URI; the majority of participants were therefore expected to be white, and males and females were expected to be approximately even (Table 1 provides the URI 2011-2012 ethnicity and sex distribution).

Table 1. *URI 2011-2012 Ethnicity & Sex Distribution*

<i>Category</i>	<i>Percent</i>
Sex	
Male	45
Female	55
Ethnicity	
White	71
Black or African American	5
Latino/Hispanic	7
Asian/Asian American	2.6
Pacific Islander	< 1
Multiethnic	1.3

The final sample consisted of 337 students, including 260 females and 65 males, of which 80.7% were white (n = 272), 5.6% were black or African American (n = 19), 6.8% were Latino/Hispanic (n = 23), 2.9% were Asian/Asian American (n = 10), and 3.5% self-identified as another ethnicity including American Indian or Alaskan (n = 3), Pacific Islander (n = 1), multiethnic (n = 5), and other (n = 3). The students ranged in age from 18 to 35, although the majority of students (90.8%) were between the ages of 18 and 22 and the mean age was 20. Eight percent of the participants were freshmen (n = 27), 18.7% were sophomores (n = 63), 37.4% were juniors (n = 126), and 32.1% were seniors (n = 108). Forty-seven percent of students

had declared majors in the Arts & Sciences (n = 158), of which 53.8% were psychology majors (n = 85) and 24.7% were communications majors (n = 39); the remaining students represented majors across all colleges of the university (Business, n = 20; Education, n = 15, Engineering, n = 4; Human Science and Services, n = 64; Nursing, n = 17; Pharmacy, n = 6, Sciences, n = 30, and Undecided or Other, n = 12). The mean GPA reported by participants was 3.129. Table 2 presents participants by year in college, ethnicity and sex.

Table 2. *Participants by Year in College, Ethnicity & Sex*

<i>Category</i>	n	Percent
Sex		
Male	65	19.3
Female	260	77.1
Academic Level		
Freshmen	27	8.0
Sophomores	63	18.7
Juniors	126	37.4
Seniors	108	32.1
Ethnicity		
White	272	80.7
Black or African American	19	5.6
Latino/Hispanic	23	6.8
Asian/Asian American	10	2.9
American Indian or Alaskan	3	0.9
Pacific Islander	1	0.3
Multiethnic	5	1.5
Other	3	0.9

Twenty participants reported having a documented disability of which 7 students reported having a Learning Disability, 11 students reported having ADHD, 2 students reported having dyslexia, and 3 students reported having a mental disability (anxiety, Post-Traumatic Stress Disorder, and depression). One participant reported having a physical disability. The majority of students (approximately 80%) reported attending a public elementary school (n = 266) and a public high school (n = 270). The remaining students endorsed attending private and religious schools.

Informed Consent. Students who accessed the website to participate in the present study were required to document that they had read and understood the consent form and were of at least eighteen years of age before beginning the surveys. The consent form included a basic description of the project as well as any potential for harm, confidentiality, and benefits of participating. Participants were made aware that they could discontinue their involvement at any time by ending the survey. No identifying information was collected; however, participants were provided with the project director's contact information if they had any questions or concerns. Informed consent is presented in Appendix D and debriefing is provided in Appendix G.

Measures. Two measures were used in the present study. All participants completed a questionnaire assessing their experience of being bullied by teachers and professors/instructors and a questionnaire including demographic information.

To assess the prevalence of professor/instructor bullying among a sample of college students as well as the perception of teacher bullying retrospectively throughout primary and secondary education, a self-report questionnaire (SPPBQ) was developed. The SPPBQ includes a working definition of teacher and professor/instructor bullying followed by three questions inquiring about teacher and professor/instructor bullying experiences that were used by Chapell et al. (2004) to address student perceived prevalence of teacher (professor/instructor) bullying. Follow-up questions then address when self-reported bullying incidents occurred and two questions address student intervention in situations of professor/instructor bullying. The remainder of the questionnaire follows a similar format to the NAQ-R (Einarsen et al., 2009) – a previously validated measure designed to assess exposure to

workplace bullying. This questionnaire encompasses three underlying factors: personal, work-related (revised to academic-related) and physically intimidating forms of bullying and has been found to generate a single item measure of bullying (Einarsen et al., 2009). Questions address specific behaviors and answer choices are on a Likert-scale for frequency, from *never* to *daily*. The SPPBQ ends with a definition of peer bullying followed by three questions that inquire about peer bullying experiences, which were used by Chapell et. al (2004). The SPPBQ is presented in Appendix F.

A demographic questionnaire included questions regarding student sex, age, years of education, GPA, ethnicity, disability status, and major. Although age, years of education, GPA, ethnicity and major were not variables included in the hypotheses, they were included in the demographic questionnaire for descriptive information, post hoc analyses, and potential covariates in future studies. The demographic questionnaire is presented in Appendix E

Design

The present research study a) investigated the psychometric properties of the SPPBQ, b) examined prevalence rates of bullying based on descriptive findings, c) explored the relationship between teacher bullying and professor/instructor bullying, and d) explored the characteristics of student victims of teacher and professor/instructor bullying. SPSS and EQS were used to conduct the data analyses.

To investigate the psychometric properties of the SPPBQ, internal consistency and dimensionality were assessed with an exploratory principal component analysis (PCA), followed by an item analysis and final PCA including 50% of the final sample. Additionally, cross-validation was assessed with a split-half technique in which a

Confirmatory Factor Analysis (CFA) including the remaining 50% of the final sample was conducted.

The assessment of the relationship between teacher bullying prior to college and professor/instructor bullying in college was conceptualized as a one-way between subjects design with one dichotomous independent variable (victimization status before college) and self-perceived professor/instructor bullying as measured by the SPPBQ's global bullying score as the dependent variable. A 2 x 2 factorial design was conceptualized for the assessment of the relationship between student characteristics and report of teacher and professor/bullying. Two dichotomous independent variables (disability status and sex) were included with two continuous dependent variables of self-perceived bullying by teachers prior to college and self-perceived professor/instructor bullying in college as measured by the global bullying scores from the SPPBQ. Finally, a 2 x 2 factorial design was conceptualized for the assessment of sex as a moderator of the relationship between student report of being bullied by teachers prior to college and student perceptions of bullying by professors/instructors in college. Two dichotomous independent variables (teacher bullying status and sex) were included with one continuous dependent variable of self-perceived bullying by professors/instructors in college as measured by the global bullying scores from the SPPBQ.

Chapter III: Results

Six different sets of analyses were conducted; the first two analyses related to the exploration of the psychometric properties of the SPPBQ, the third analysis was conducted to provide descriptive statistics of prevalence rates, and the final three analyses related to the four hypotheses of the study. Specifically, the analyses included: a) an analysis of the internal consistency and dimensionality of the *SPPBQ* for the professor bullying section and the teacher bullying section of the *SPPBQ*, b) a cross-validation of the *SPPBQ* for the professor bullying section and the teacher bullying section of the *SPPBQ*, c) prevalence analyses including descriptive data of students' reports of professor and instructor bullying, d) an analysis of the relationship between teacher bullying before college and professor/instructor bullying during college, e) a group comparison analysis between sex and bullying as well as disability status and bullying, and f) post hoc analyses to address some of the inconsistencies within the preliminary findings, exploring the role of sex as a potential moderator in the relationship between teacher bullying and professor/instructor bullying.

Psychometrics – Item Analysis & Dimensionality

SPSS version 21 was used to conduct the item analyses and PCAs on 50% of the sample completing all questions on the SPPBQ (n = 153). Items involving the professor/instructor section of the SPPBQ were assessed first and items involving the teacher section of the SPPBQ were conducted second. For both sets of analyses, Horn's parallel analysis and Velicer's MAP were run as outlined by O'Connor (2000) to assess the number of components to be specified within the PCA. Items that were complex (loading on more than one component with coefficients greater than .40), did

not load onto any dimensions with coefficients greater than .40, and loaded on components that did not make conceptual sense in the initial PCA were removed. Next, an item analysis involving a comparison of item and total-item correlations was conducted, where items that correlated with the total-item correlation less than .40 were removed. A final PCA with an orthogonal (varimax) rotation was run on the remaining items and yielded the final version of the questionnaire. Internal consistency was assessed with Cronbach's alpha and Pearson's bivariate correlation was then conducted to assess the criterion validity of the professor and teacher sections of the SPPBQ.

Professor/Instructor Bullying – SPPBQ. Horn's parallel analysis and Velicer's MAP identified three components within the professor/instructor bullying section of the SPPBQ. Factor loadings from the initial PCA are presented in Table 3. Seven items were removed at this stage. Items 3, and 14 were removed because they did not load strongly on any component and items 4, 8, 9, 11, and 18 were removed because they were complex.

Table 3. *Initial PCA – Professor/Instructor Bullying*

<i>Item</i>	Component 1	Component 2	Component 3
1. A professor/instructor withholding information that affects your performance.	-.145	.412	.314
2. Being humiliated or ridiculed by a professor/instructor in connection with your course.	.070	.681	.274
3. Spreading of gossip and rumors about you by a professor/instructor.	.198	.330	.373
4. Being ignored by a professor/instructor.	-.093	.532	.436
5. Being excluded by a professor/instructor.	.001	.116	.673
6. Having insulting or offensive remarks made about you by a professor/instructor.	.204	.838	.161
7. Having insulting or offensive remarks made about your attitudes by a professor/instructor.	.149	.840	.053
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a professor/instructor.	.692	.544	-.110
9. Being shouted at or being the target of spontaneous anger by a professor/instructor.	.434	.148	.491
10. Having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.	.835	.307	.157
11. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way by a professor/instructor.	.533	.252	.426
12. Being told or hinted by a professor/instructor that you are incompetent.	.167	.127	.577
13. Repeated reminders of your mistakes by a professor/instructor.	.161	.214	.688
14. Being ignored or facing a hostile reaction when you approach a professor/instructor.	.336	.348	.286
15. Persistent criticism of your mistakes by a professor/instructor.	.213	.062	.703
16. Having your comments ignored by a professor/instructor.	.126	.131	.751
17. Having false allegations made against you by a professor/instructor.	.696	.126	.230
18. Being the subject of excessive teasing or sarcasm by a professor/instructor.	.500	.666	.181
19. Threats of violence or physical abuse by a professor/instructor.	.928	-.054	.102
20. Acts of violent or physical abuse by a professor/instructor.	.945	-.008	.157
21. Having insulting or offensive remarks made about your private life by a professor/instructor.	.181	.734	.096

Table 4 depicts the item and total-item correlations based on the global component of professor/instructor bullying. Although two items demonstrated item-total correlations below the criteria of .40, deleting any of these items would result in the elimination of the second component as Noar (2003) recommends retaining at least four items per construct. Therefore, items 17 and 19 were retained. During this stage items that were redundant were also removed; specifically items 7, 15 and 21 were removed because they represented similar constructs to other items within the same factor.

Table 4. *Item & Total-Item Correlations – Professor/Instructor Bullying*

<i>Item</i>	Corrected Item-Total Item Correlation	Alpha if Item Deleted
1. A professor/instructor withholding information that affects your performance.	.399	.872
2. Being humiliated or ridiculed by a professor/instructor in connection with your course.	.598	.859
5. Being excluded by a professor/instructor.	.432	.868
6. Having insulting or offensive remarks made about you by a professor/instructor.	.720	.852
7. Having insulting or offensive remarks made about your attitudes by a professor/instructor.	.621	.858
10. Having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.	.500	.865
12. Being told or hinted by a professor/instructor that you are incompetent.	.593	.860
13. Repeated reminders of your mistakes by a professor/instructor.	.674	.855
15. Persistent criticism of your mistakes by a professor/instructor.	.584	.860
16. Having your comments ignored by a professor/instructor.	.601	.860
17. Having false allegations made against you by a professor/instructor.	.389	.870
19. Threats of violence or physical abuse by a professor/instructor.	.345	.871
20. Acts of violent or physical abuse by a professor/instructor.	.424	.870
21. Having insulting or offensive remarks made about your private life by a professor/instructor.	.621	.860

A final PCA was run on the remaining 11 items and only two factors were supported. Table 5 shows the eigenvalues for each component; together, the two components accounted for 61% of the variance.

Table 5. *Eigenvalues – Professor/Instructor Bullying*

Eigenvalues			
Component	Total	% of Variance	Cumulative %
1	4.259	38.714	38.714
2	2.463	22.388	61.102

The results of the PCA, shown in Table 6, revealed two components within the SPPBQ involving professor/instructor bullying. The first component, labeled Academic Bullying, accounted for 38.7% of the variance and encompassed academic forms of bullying that occur within the classroom and are related to course performance or participation. A total of seven items loaded on the Academic Bullying component; examples included, “A professor/instructor withholding information that affects your performance,” “Being humiliated or ridiculed by a professor/instructor in connection with your course,” and “Repeated reminders of your mistakes by a professor/instructor.” The second component, labeled Physical Bullying, encompassed physical and sexual bullying, as well as bullying with severe consequences (e.g., “Having false allegations made against you by a professor/instructor”) and accounted for 22.4% of the variance. A total of four items loaded on the Physical Bullying component and they included, “Threats of violence or

physical abuse by a professor/instructor” and “having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.”

Analyses revealed that Cronbach’s alpha was satisfactory based on Nunnally’s (1978) recommendation of at least 0.70 for the components: Academic Bullying, which was made up of seven items ($\alpha = .901$), Physical Bullying, which was made up of four items ($\alpha = .883$) and a global component for all 11 items encompassing both components ($\alpha = .909$). In addition to the strong overall alpha rating including all 11 items, Pearson’s bivariate correlation between Academic Bullying and Physical Bullying was significant ($r = .564, p < 0.001$), suggesting the justification for a global component of professor bullying. Additionally, Pearson’s bivariate correlation between the total score on the professor section of the SPPBQ and the frequency of being a victim of professor bullying was strong [$r = .553, p < 0.001$], indicating that having a high score on the professor section of the SPPBQ was related to labeling oneself as a victim of professor bullying. Criterion validity was also satisfactory for Academic Bullying ($r = .591, p < 0.001$) and Physical Bullying ($r = .289, p < 0.001$) with frequency of being bullied by professors.

Table 6. *Final PCA – Professor/Instructor Bullying*

<i>Item</i>	Component 1 Academic Bullying	Component 2 Physical Bullying
1. A professor/instructor withholding information that affects your performance.	.595	-.074
2. Being humiliated or ridiculed by a professor/instructor in connection with your course.	.724	.035
5. Being excluded by a professor/instructor.	.619	.060
6. Having insulting or offensive remarks made about you by a professor/instructor.	.747	.159
12. Being told or hinted by a professor/instructor that you are incompetent.	.694	.153
13. Repeated reminders of your mistakes by a professor/instructor.	.756	.188
16. Having your comments ignored by a professor/instructor.	.711	.186
10. Having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.	.201	.871
17. Having false allegations made against you by a professor/instructor.	.162	.752
19. Threats of violence or physical abuse by a professor/instructor.	.016	.944
20. Acts of violent or physical abuse by a professor/instructor.	.066	.963

Teacher Bullying – SPPBQ. Horn’s parallel analysis and Velicer’s MAP

specified two components within the teacher bullying section of the SPPBQ. Factor loadings from the initial PCA are presented in Table 7. Item 21 ("having insulting or offensive remarks made about your private life by a professor/instructor"), which was included in the professor/instructor section of the SPPBQ, was omitted from the teacher section due to a clerical error. Item 21 was one of the first items eliminated in the professor/instructor section (it loaded with two other similar items on the same component and was considered redundant); therefore, this omission is considered only a minor limitation. Four items were removed at this stage. Items 3, 11, 14, and 17 were removed because they were complex.

Table 7. *Initial PCA – Teacher Bullying*

<i>Item</i>	Component 1	Component 2
1. A teacher withholding information that affects your performance.	.677	-.059
2. Being humiliated or ridiculed by a teacher in connection with your course.	.829	.024
3. Spreading of gossip and rumors about you by a teacher.	.465	.461
4. Being ignored by a teacher.	.862	.093
5. Being excluded by a teacher.	.782	.206
6. Having insulting or offensive remarks made about you by a teacher.	.864	.158
7. Having insulting or offensive remarks made about your attitudes by a teacher.	.786	.123
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a teacher.	.112	.836
9. Being shouted at or being the target of spontaneous anger by a teacher.	.810	.089
10. Having a teacher gossip about your sex life or spread rumors about your sexual activities.	-.034	.751
11. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way by a teacher.	.631	.453
12. Being told or hinted by a teacher that you are incompetent.	.851	.208
13. Repeated reminders of your mistakes by a teacher.	.891	.211
14. Being ignored or facing a hostile reaction when you approach a teacher.	.678	.504
15. Persistent criticism of your mistakes by a teacher.	.844	.267
16. Having your comments ignored by a teacher.	.869	.172
17. Having false allegations made against you by a teacher.	.439	.397
18. Being the subject of excessive teasing or sarcasm by a teacher.	.714	.215
19. Threats of violence or physical abuse or actual abuse by a teacher.	.204	.808
20. Acts of violent or physical abuse by a teacher.	.070	.922

Table 8 depicts the item and total-item correlations based on the global component of teacher bullying. Although three items demonstrated item-total correlations below the criteria of .40, deleting any of these items would result in the

elimination of the second component as Noar (2003) recommends retaining at least four items per construct. Therefore, items 8, 10, and 20 were retained. During this stage items that were redundant were also removed; specifically items 7 and 15 were removed because they represented similar constructs to other items within the same factor.

Table 8. *Item & Total-Item Correlations – Teacher Bullying*

<i>Item</i>	Corrected Item- Total Item Correlation	Alpha if Item Deleted
1. A teacher withholding information that affects your performance.	.583	.942
2. Being humiliated or ridiculed by a teacher in connection with your course.	.765	.938
4. Being ignored by a teacher.	.806	.937
5. Being excluded by a teacher.	.763	.938
6. Having insulting or offensive remarks made about you by a teacher.	.826	.936
7. Having insulting or offensive remarks made about your attitudes by a teacher.	.760	.938
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a teacher.	.350	.946
9. Being shouted at or being the target of spontaneous anger by a teacher.	.747	.939
10. Having a teacher gossip about your sex life or spread rumors about your sexual activities.	.183	.947
12. Being told or hinted by a teacher that you are incompetent.	.851	.936
13. Repeated reminders of your mistakes by a teacher.	.896	.935
15. Persistent criticism of your mistakes by a teacher.	.866	.936
16. Having your comments ignored by a teacher.	.857	.936
18. Being the subject of excessive teasing or sarcasm by a teacher.	.704	.940
19. Threats of violence or physical abuse or actual abuse by a teacher.	.420	.945
20. Acts of violent or physical abuse by a teacher.	.338	.946

A final PCA with the remaining 14 items was run and two factors were supported. Table 9 shows the eigenvalues for each component; together, the two components accounted for 71% of the variance.

Table 9. *Eigenvalues – Teacher Bullying*

Eigenvalues			
Component	Total	% of Variance	Cumulative %
1	7.313	52.233	52.233
2	2.618	18.701	70.934

The results of the PCA, shown in Table 10, revealed two components within the SPPBQ teacher section involving retrospective teacher bullying. The first component, also labeled Academic Bullying, encompassed academic forms of bullying that occur within the classroom and are related to course performance or participation just as the first component for professor/instructor bullying did. The Academic Bullying component included ten items and accounted for 52.2% of the variance. Examples of items that loaded on the Academic Bullying component included, “A teacher withholding information that affects your performance,” “Being humiliated or ridiculed by a teacher in connection with your course,” “Repeated reminders of your mistakes by a teacher,” and “Being the subject of excessive teasing or sarcasm by a teacher.” The second component, labeled Physical Bullying, encompassed physical and sexual bullying only, and did not include the item on the SPPBQ involving false allegations being made; this component accounted for 18.7% of the variance. A total of four items loaded on the Physical Bullying component and they included, “Threats of violence or physical abuse by a teacher,” “Acts of violent or

physical abuse by a teacher,” and “Having a teacher gossip about your sex life or spread rumors about your sexual activities.”

Analyses revealed that Cronbach’s alpha was satisfactory based on Nunnally’s (1978) recommendation of .70 for the each component: Academic Bullying, which was made up of ten items ($\alpha = .942$), Physical Bullying, which was made up of four items ($\alpha = .862$) and a global component, which included all 14 items from both factors ($\alpha = .923$). In addition to the strong overall alpha rating including all 14 items, Pearson’s bivariate correlation between Academic Bullying and Physical Bullying was significant ($r = .321, p < 0.001$), suggesting the justification for a global component of teacher bullying. Furthermore, Pearson’s bivariate correlation between the total score on the teacher section of the SPPBQ and the frequency of being a victim of teacher bullying was strong [$r = .502, p < 0.001$], indicating that having a high score on the teacher section of the SPPBQ was related to labeling oneself as a victim of teacher bullying. Criterion validity was also satisfactory for Academic Bullying ($r = .519, p < 0.001$) and Physical Bullying ($r = .155, p < 0.01$) with frequency of being bullied by teachers.

Table 10. *Final PCA – Teacher Bullying*

<i>Item</i>	Component 1 Academic Bullying	Component 2 Physical Bullying
1. A teacher withholding information that affects your performance.	.675	-.040
2. Being humiliated or ridiculed by a teacher in connection with your course.	.838	.018
4. Being ignored by a teacher.	.869	.071
5. Being excluded by a teacher.	.797	.186
6. Having insulting or offensive remarks made about you by a teacher.	.868	.131
9. Being shouted at or being the target of spontaneous anger by a teacher.	.815	.038
12. Being told or hinted by a teacher that you are incompetent.	.847	.196
13. Repeated reminders of your mistakes by a teacher.	.888	.194
16. Having your comments ignored by a teacher.	.879	.164
18. Being the subject of excessive teasing or sarcasm by a teacher.	.742	.190
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a teacher.	.133	.854
10. Having a teacher gossip about your sex life or spread rumors about your sexual activities.	-.006	.740
19. Threats of violence or physical abuse or actual abuse by a teacher.	.232	.825
20. Acts of violent or physical abuse by a teacher.	.098	.946

Psychometrics – Cross-Validation

A CFA was conducted in EQS as a cross-validation procedure, which allows for more confidence in a measure’s psychometric structure (Redding et al., 2006). Specifically, a split-half cross-validation technique as recommended by Redding and colleagues (2006) was used, where data gathered from the second half of the participants completing all items on the SPPBQ (n = 151) was used. CFAs were conducted separately for the professor/instructor bullying section and the teacher bullying section. For each section, four models were tested: 1. A null model suggests

no relationship between the items and factors. 2. A one-factor model encompasses all items under one global factor. 3. An uncorrelated two-factor model tests if the two factors are unrelated. 4. A correlated two-factor model tests if the two factors are correlated. For each model, the first factor loading was fixed at one in order to allow the factor variance to be freely estimated. Based on the results of the PCA, the best fitting model was hypothesized to be the correlated model encompassing two factors. The best fit for the models was based on previous theory and research and parsimony as recommended by Noar (2003) and measures of good fit for the models were established by a chi-square to degrees of freedom ratio of no more than two to one, a Comparative Fit Index (CFI) of at least .90 (Noar, 2003) or .95 (Hu & Bentler, 1999). Additionally, models with Root Mean Square Error of Approximation (RMSEA) less than .05 also indicated a good fit and lower Type II error rates (Hu & Bentler, 1999).

Professor/Instructor Bullying – SPPBQ. Table 11 displays a summary of the measures of fit for each model within the Professor/Instructor Bullying section of the SPPBQ. Although the correlated two-factor model appears to fit the data better than the other models, none of the models fit the data according to the standards described previously. Within all of the models, all of the chi-square to degrees of freedom ratios are higher than two to one, the CFIs are lower than 0.90 and the RMSEAs are above .05. The difference in chi-square values from the correlated model and the uncorrelated model is significant [$\chi^2(1) = 19.39, p < 0.001, \Delta CFI = .018$], indicating the correlated model fits the data the best over the uncorrelated model. Additionally, the correlated two-factor model yielded the closest results to the CFI (.870) and RMSEA [.141, 90% CI (.119, .162)] standards, suggesting the data fits the correlated

model better than the other models. The correlated model only yielded one standardized residual above .20, suggesting an unaccounted relationship between items 6 and 10, which involves items from two different factors and therefore does not make conceptual sense. The one-factor model and the uncorrelated two-factor model, however, yielded many standardized residuals above .20, further strengthening the conclusion that the best-fit model is the correlated two-factor model.

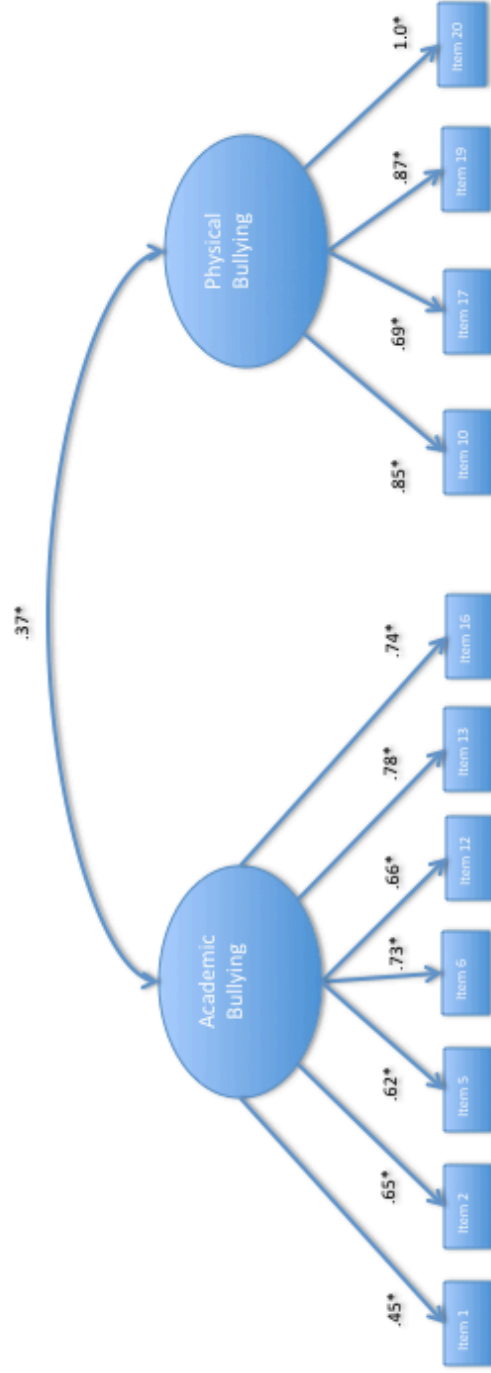
Table 11. *Summary of Fit Indices of Variant Models for SPPBQ – Professor/Instructor Bullying*

Models	χ^2	df	Fit Indexes			
			χ^2/df Ratio	CFI	RMSEA	RMSEA 90% CI
Null	1083.53*	55	19.70	—	—	—
One-Factor	487.81*	44	11.09	0.568	0.254	(0.233, 0.274)
Uncorrelated Factors	195.79*	44	4.45	0.852	0.149	(0.127, 0.170)
Correlated Factors	176.40*	43	4.10	0.870	0.141	(0.119, 0.162)

χ^2 = Chi-Square; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error Approximation; * $p < 0.001$

Figure 1 displays the standardized maximum likelihood parameter estimates and Table 12 displays the factor loadings and error variances for the correlated model, which demonstrates how well the measured variables represent each of the two factors (Harlow & Newcomb, 1990). The factor loadings are all significant ($p < .001$) and the error variances are reasonably low.

Figure 1. Standardized Maximum Likelihood Parameter Estimates for Correlated Model – Professor/Instructor Bullying



* $p < 0.05$

Table 12. *Factor Loadings & Effect Sizes for Correlated Model – Professor/Instructor Bullying*

<i>Primary Factor Variables</i>	<i>Factor Loadings</i>	<i>Error Variance</i>
Academic Bullying		
1. A professor/instructor withholding information that affects your performance.	.452	.796
2. Being humiliated or ridiculed by a professor/instructor in connection with your course.	.655	.571
5. Being excluded by a professor/instructor.	.619	.617
6. Having insulting or offensive remarks made about you by a professor/instructor.	.726	.473
12. Being told or hinted by a professor/instructor that you are incompetent.	.657	.568
13. Repeated reminders of your mistakes by a professor/instructor.	.781	.389
16. Having your comments ignored by a professor/instructor.	.738	.456
Physical Bullying		
10. Having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.	.854	.271
17. Having false allegations made against you by a professor/instructor.	.685	.530
19. Threats of violence or physical abuse by a professor/instructor.	.870	.243
20. Acts of violent or physical abuse by a professor/instructor.	1.000	.000
<i>Note: R² can also be calculated by subtracting the error variances from 1</i>		

Teacher Bullying – SPPBQ. Table 13 displays a summary of the measures of fit for each model within the teacher bullying section of the SPPBQ that are similar to the results of the professor/instructor bullying section. Although none of the models fit the data according to the standards described earlier, the correlated two-factor model appears to fit the data the best. For all of the models, the chi-square to degrees of freedom ratios are higher than two to one, the CFIs are lower than 0.90 and the RMSEAs are above .05. The difference in chi-square values from the correlated model and the uncorrelated model is significant [$\chi^2(1) = 13.77, p < 0.001, \Delta CFI = .008$],

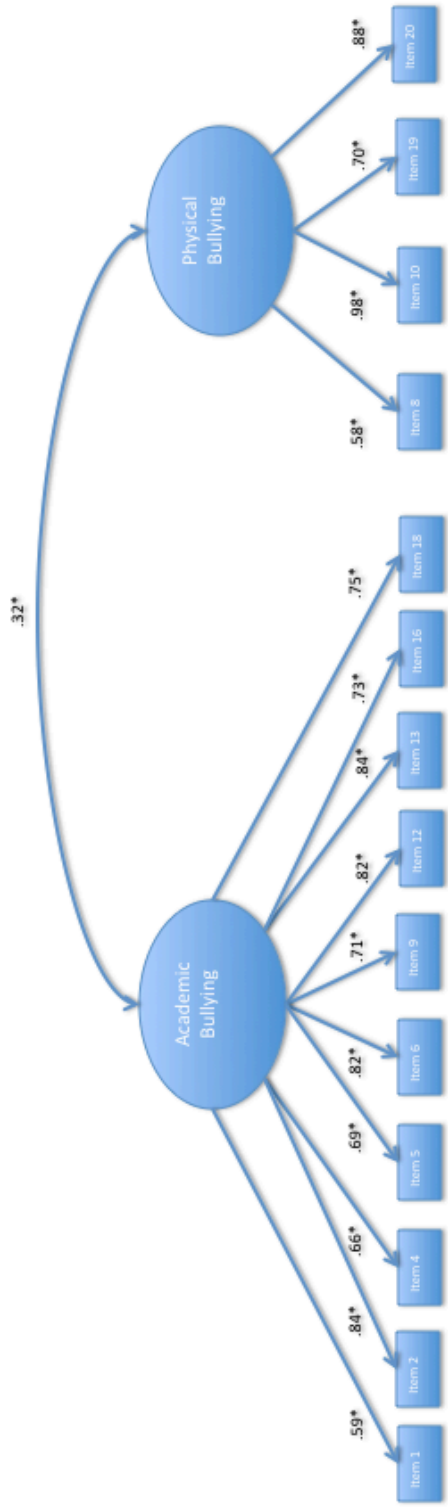
indicating the correlated model fits the data the best over the uncorrelated model. Additionally, the correlated two-factor model yielded the closest results to the CFI (.812) and RMSEA [.158, 90% CI (.141, .174)] standards, suggesting the data fits the correlated model better than the other models. The correlated model yielded several standardized residuals above .20, suggesting unaccounted relationships between items loading on the Academic Bullying component and items loading on the Physical Bullying component, which would result in complex loadings. The one-factor model and the uncorrelated two-factor model, however, yielded even more standardized residuals above .20, further strengthening the conclusion that the best-fit model is the correlated two-factor model.

Table 13. *Summary of Fit Indices of Variant Models for SPPBQ – Teacher Bullying*
Fit Indexes

<i>Models</i>	χ^2	<i>df</i>	χ^2/df <i>Ratio</i>	<i>CFI</i>	<i>RMSEA</i>	<i>RMSEA 90% CI</i>
Null	1611.28*	91	17.71	—	—	—
One-Factor	647.68*	77	8.41	0.625	0.222	(0.206, 0.237)
Uncorrelated Factors	375.18*	77	4.87	0.804	0.161	(0.144, 0.176)
Correlated Factors	361.41*	76	4.76	0.812	0.158	(0.141, 0.174)

Figure 2 displays the standardized maximum likelihood parameter estimates and Table 14 displays the factor loadings and error variances for the correlated model, which demonstrates how well the measured variables represent each of the two factors (Harlow & Newcomb, 1990). The factor loadings are all significant ($p < .001$) and the error variances are reasonably low.

Figure 2. Standardized Maximum Likelihood Parameter Estimates for Correlated Model – Teacher Bullying



* $p < 0.05$

Table 14. *Factor Loadings & Effect Sizes for Correlated Model – Teacher Bullying*

<i>Primary Factor Variables</i>	<i>Factor Loadings</i>	<i>Error Variance</i>
Academic Bullying		
1. A teacher withholding information that affects your performance.	.591	.651
2. Being humiliated or ridiculed by a teacher in connection with your course.	.836	.301
4. Being ignored by a teacher.	.664	.559
5. Being excluded by a teacher.	.690	.524
6. Having insulting or offensive remarks made about you by a teacher.	.817	.333
9. Being shouted at or being the target of spontaneous anger by a teacher.	.715	.489
12. Being told or hinted by a teacher that you are incompetent.	.816	.335
13. Repeated reminders of your mistakes by a teacher.	.837	.299
16. Having your comments ignored by a teacher.	.734	.461
18. Being the subject of excessive teasing or sarcasm by a teacher.	.749	.439
Physical Bullying		
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a teacher.	.577	.667
10. Having a teacher gossip about your sex life or spread rumors about your sexual activities.	.984	.031
19. Threats of violence or physical abuse or actual abuse by a teacher.	.701	.508
20. Acts of violent or physical abuse by a teacher.	.875	.234

Prevalence

The primary purpose of the present study was to explore the prevalence estimates of professor/instructor bullying on a college campus. The following section provides prevalence estimates of bullying based on descriptive findings of the study. Prevalence estimates of how often students have witnessed and experienced professor/instructor, teacher, and student bullying were assessed and are displayed in

Table 15. Approximately half of the participants (51%) endorsed seeing another student being bullied by a professor/instructor at least once, but only 18% endorsed being bullied by a professor/instructor themselves at least once. Nearly half of the participants (44%), however, reported being bullied by a teacher in elementary, middle or high school at least once. Very few students reported a time when another student stopped or attempted to stop a professor/instructor from bullying them (7%) or a time when they stopped or attempted to stop another student from being bullied by a professor/instructor (14%). Additionally, prevalence rates of peer bullying and peer attempts at preventing bullying were analyzed. Although the majority of students reported witnessing peer bullying in college at least once (64%), only 33% endorsed being bullied by a peer in college and only 15% endorsed bullying their peers in college.

Table 15. *Frequency of Response of Students for Bullying Questions*

<i>Item</i>	<i>Never</i>		<i>Only once or twice</i>		<i>Occasionally</i>		<i>Very Frequently</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Seen a Professor/Instructor Bullying*	159	49.2	118	36.5	38	11.8	8	2.5
Been Bullied by a Professor/Instructor*	265	81.5	47	14.5	10	3.1	3	0.9
Been Bullied by a Teacher	180	55.7	106	32.8	31	9.6	6	1.9
Had Student Stop or Attempted to stop Professor/Instructor Bullying*	297	93.4	15	4.7	5	1.6	1	0.3
Stopped or Attempted to Stop Professor/Instructor Bullying*	275	85.9	33	10.3	8	2.5	4	1.3
Seen Peer Bullying in College*	113	36.2	101	32.4	79	25.3	19	6.1
Been Bullied by Peer in College*	208	66.9	75	24.1	23	7.4	5	1.6
Been Bully of Peer in College*	266	85.3	34	10.9	11	3.5	1	0.3

*since college

If participants endorsed being bullied by a professor/instructor or a teacher, they were also asked to identify the number of professors/instructors and teachers who bullied them. As can be see by Table 16, for professor bullying (n = 57) answers

ranged from 1 (n = 31) to 6 (n = 1) professors/instructors, with a median and mode of 1 professor/instructor. For teacher bullying before college, students (n = 161) reported being bullied by between 1 (n = 67) and 7 (n = 1) teachers, with a median of 2 teachers and a mode of 1 teacher.

Table 16. Number of Professor/Instructor & Teacher Bullies

No. of Professors/Instructors or Teachers	Frequency for Professor/Instructor Bullying	Frequency for Teacher Bullying
1	31	67
2	19	40
3	4	16
4	1	2
5	1	5
6	1	0
7	0	1
Total	57	161

Participants were also asked the grade in school or year in college in which they were bullied by a teacher or professor/instructor; these results are shown in Table 17. More than half of the participants (51%, n = 158) reported at least one grade or year in which they were bullied. Because students were instructed to report as many grades in which they recalled being bullied, a total of 335 endorsements of grades and years were given by the 158 students. Students endorsed between 1 (n = 68) and 9 (n = 1) different grades and years in which they reported being bullied by teachers or professors/instructors; the median number of grades/years students endorsed was 2 and the mode was 1.

Table 17. *Number of Years Students were Bullied by Teachers/Professors/Instructors*

No. of Grades/Years	Frequency	Percent	Cumulative Percent
1	68	21.9	21.9
2	46	14.8	36.7
3	21	6.8	43.5
4	13	4.2	47.7
5	5	1.6	49.3
6	3	1.0	50.3
7	0	0.0	50.3
8	1	2.6	51.9
9	1	2.9	54.8
Never bullied (0)	152	49.0	100
Total	310	100	100

Table 18 displays the grades and years in which students reported being bullied by teachers and professors/instructors. The median grade specific to teacher bullying was 8th grade and the mode was 10th grade and the median and mode year in college specific to professor/instructor bullying was sophomore year of college (note that the second year of college was the most common even when including a sample of first year students who had not yet experienced their second year).

Table 18. *Frequency of Bullying Incidents in Primary/Secondary School and College*

<i>Grade/Year Students Reported being Bullied by a Teacher, Professor or Instructor</i>	<i>N</i>
K	3
1	10
2	18
3	12
4	11
5	18
6	20
7	28
8	21
9	30
10	34
11	30
12	24
1 st year of college	23
2 nd year of college	35
3 rd year of college	17
4 th year of college	1
Total	335

Finally, prevalence rates of teacher or professor/instructor bullying of students by sex and disability status are presented in Table 19 and Figures 3 and 4 respectively. While 47% of female participants endorsed being bullied by teachers prior to college at least once, only 34% of male participants endorsed being bullied by teachers; these differences yielded a small effect size ($d = .272$). Similarly, 21% of female participants endorsed being bullied by a college professor/instructor at least once and only 9% of male participants endorsed being bullied by a college professor/instructor, yielding a small effect size ($d = .331$).

Although limited by the small sample of students with disabilities ($n = 20$), the descriptive differences between students with and without disabilities are notable. Seventy-five percent of students with a documented disability, compared to 42% of students without disabilities, reported being bullied by a teacher prior to college and fifty percent of students with disabilities, compared to 16% of students without disabilities reported being bullied by a college professor/instructor in college. The

differences between students with and without disabilities and their endorsement of teacher and professor/instructor bullying yielded large effect sizes ($d = .676$ and $d = .737$ respectively).

Table 19. *Teacher & Professor/Instructor Bullying by Sex & Disability Status*

Bullying Frequency	Sex				<i>d</i>	Disability Status				<i>d</i>
	Male		Female			Yes		No		
	n	%	n	%		n	%	n	%	
Teacher bullying prior to college					.272					.676
Never	43	66.2	136	52.9		5	25.0	174	57.6	
At least once	22	33.8	121	47.1		15	75.0	128	42.4	
Professor/Instructor bullying in college					.331					.737
Never	59	90.8	205	79.2		10	50.0	254	83.6	
At least once	6	9.2	54	20.8		10	50.0	50	16.4	

Figure 3. *Professor/Instructor & Teacher Bullying by Sex*

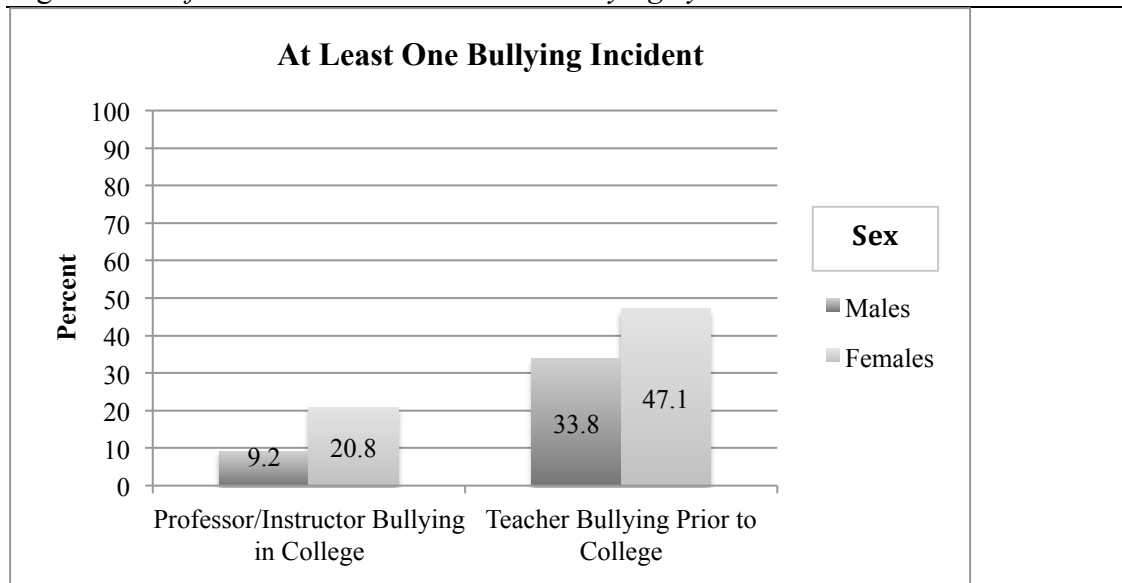
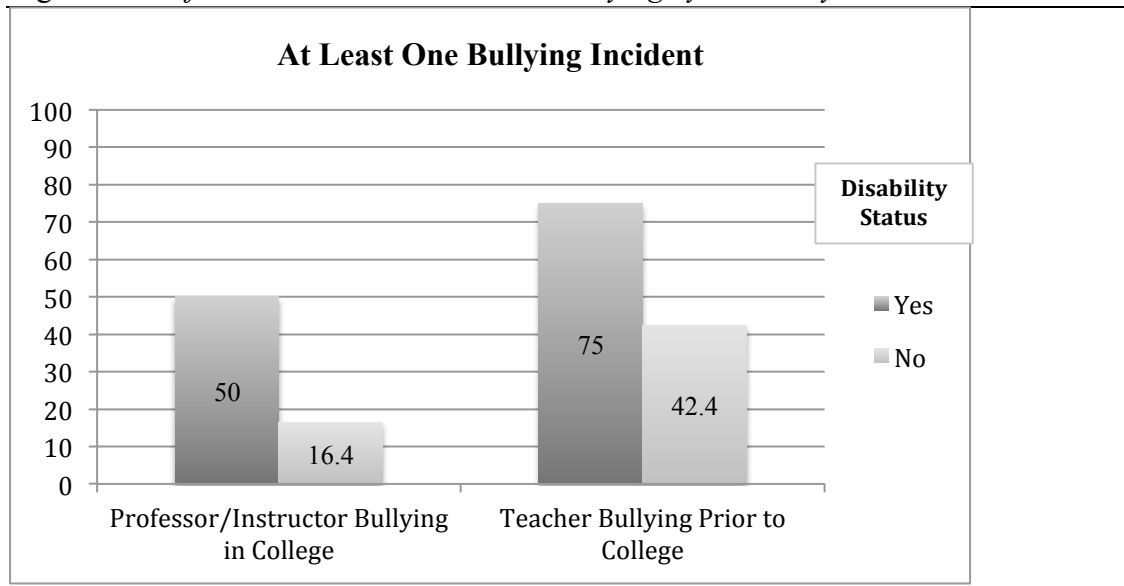


Figure 4. *Professor/Instructor & Teacher Bullying by Disability Status*



Teacher & Professor/Instructor Bullying Relationship

The hypothesis that students who report a history of being bullied by teachers prior to college were more likely to report being bullied by professors/instructors in college was tested via a one-way between subjects ANOVA with one dichotomous independent variable (victimization status before college) and self-perceived professor/instructor bullying as measured by the SPPBQ's global bullying score as the dependent variable. Additionally, Cohen's *d* was calculated to measure effect size.

Participants were instructed to identify the most recent time they were bullied by a teacher prior to college. Table 20 displays the grades in which students identified being bullied by teachers most recently; grades range from kindergarten to 12th grade.

Table 20. *Frequency of Most Recent Bullying Incident by a Teacher Before College*

<i>Most recent bullying incident before college</i>	<i>N</i>
K	3
1	1
2	7
3	4
4	8
5	8
6	10
7	7
8	9
9	12
10	21
11	30
12	26
Total	146

Assumptions of the F test, used to assess an ANOVA, include independence, normality, homogeneity of variance, and consistent data to the underlying structural model (Myers, Well & Lorch, 2010). The assumption of independence refers to randomly assigning each participant to a group (Myers et al., 2010). A second assumption, involving normality (including skewness and kurtosis), is commonly violated by researchers within between groups designs (Myers et al., 2010). Although there is ample evidence that breaking this assumption has a relatively small impact on the validity of conclusions (Cohen, 1983) and in particular, Myers and colleagues (2010) explain non-normal data has little impact on the Type I error rate with moderately large sample sizes, breaking the normality assumption may reduce the statistical power of the study (Myers et al., 2010). For the present analysis, however, post hoc power was relatively strong ($1 - \beta = .727$) even though the assumption of normality was broken. Homogeneity of variance is the assumption that the variability within the data is related to the intervention or independent variable (Myers et al., 2010); this assumption is broken when the unequal variance is related to another a difference in variability between groups, or when the data are subject to floor or

ceiling effects (Myers et al., 2010). The structural model assumption reflects the assumption that the only manipulated factor influencing the data is the factor of interest and that the residual variability reflects random error (Myers et al., 2010).

Due to the purpose of the present study, it was impossible – and unethical – to assign participants to groups of being bullied by teachers or not being bullied by teachers, and this correlational design reflects a violation of the assumption of independence. Means, standard deviations, skewness and kurtosis of overall global ratings of the SPPBQ – Professor/Instructor, which is a composite score on students’ perceptions of being bullied by professors/instructors in college, are shown by teacher bullying status prior to college in Table 21. The table demonstrates that the data within the present study also breaks the violation of normality due to leptokurtic variation, but no transformations were made because of the low potential impact on Type I error rate and the importance of maintaining the nature of the relationships. Another limitation of this analysis is related to the structural model assumption and involves the potential influence of the imbalance of males and females within the two groups of students endorsing being bullied by a teacher prior to college and students reporting having never been bullied by a teacher prior to college, which were reported in Table 19. Finally, homogeneity of variance was assessed via Levene’s test. A significant statistic on this procedure indicates that there is variation between groups and, thus, the homogeneity of variance assumption is violated. The results of the Levene’s test were significant at the .05 level [$F(1, 306) = 5.276, p = 0.022$] indicating this violation was broken. Therefore, Welch’s F test, an alternative to the standard F test that deals with heterogeneity of variance and works best when the data is not

highly skewed and has group sizes larger than 10 (Myers et al., 2010), was run in addition to the standard F test to account for this violation.

Table 21. Means & Standard Deviations of Global SPPBQ – Professor Ratings

Teacher Bullying Status	n	Mean	SD	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
Never Bullied by Teacher Prior to College	170	0.155	0.287	4.12	0.186	23.55	0.370
Been Bullied by Teacher Prior to College (at least once)	138	0.260	0.429	4.57	0.206	29.51	0.410

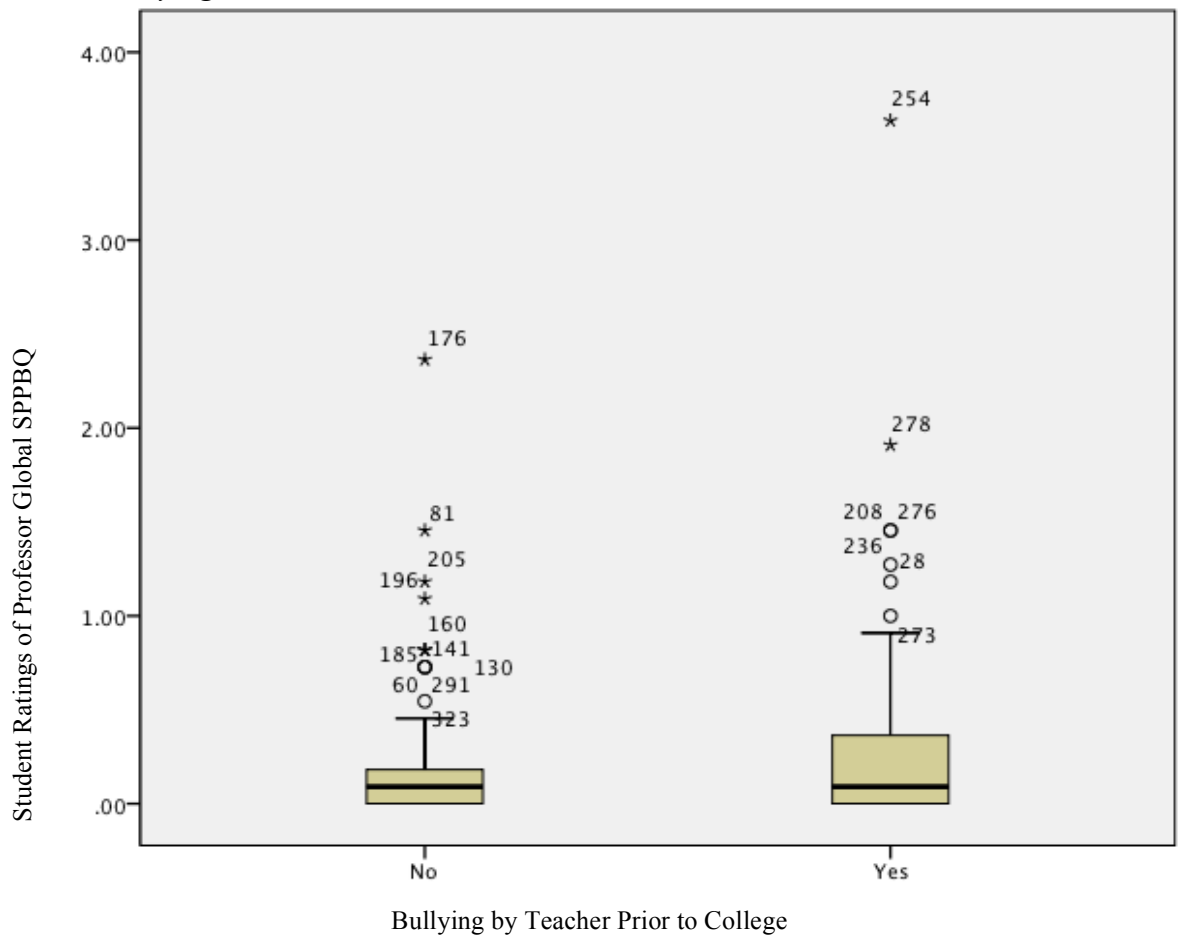
Results, shown in Table 22 and Figure 5, demonstrated a statistically significant difference between students who endorsed being bullied by teachers at least once in school prior to college and students who did not endorse being bullied by teachers prior to college and their ratings on the global professor bullying scale on the SPPBQ. Specifically, students who endorsed being bullied prior to college by a teacher demonstrated significantly increased ratings on the global bullying scale of the SPPBQ with a small effect size [$F(1, 306) = 6.504, p < .05, \eta^2 = 0.016, d = 0.292, 95\% \text{ CI } (0.221, 0.336)$]. Note that effect size estimates are based on Cohen's recommendations of small ($d = 0.20$), medium ($d = 0.50$), and large ($d = 0.80$) (Cohen, 1992).

Table 22. *Teacher Bullying & Professor/Instructor Bullying ANOVA*

Source	Sum of Squares	df	Mean Square	F	p	η^2	d	95% Confidence Interval	
								Lower	Upper
Bullying by Teacher	0.831	1	0.831	6.504	0.011*	.016	0.292	0.221	0.336
Error	39.111	306	0.128						
Total	52.496	308							
Welch Test		230.30		6.009	0.015*				

*p < 0.05

Figure 5. *Box Plot of Teacher Bullying Status Prior to College X Global Professor Bullying*



Sex, Disability Status & Bullying

The hypothesis that a) students who report having a current disability were more likely to report having been bullied by teachers prior to college and to report being bullied by professors/instructors in college and b) students that are male were more likely to report having been bullied by teachers prior to college and to report being bullied by professors/instructors in college, was tested with a 2x2 (disability status; sex) between subjects factorial MANOVA. Two dichotomous independent variables (disability status and sex) were included with two continuous dependent variables of self-perceived bullying by teachers prior to college and self-perceived professor/instructor bullying in college as measured by the global bullying scores from the SPPBQ.

Assumptions of between subjects MANOVAs are similar to those of ANOVAs and therefore the violations in this analysis are similar to those presented in the previous section. The assumption of independence was not met due to the nature of the independent variables – sex and disability status, which cannot be randomly assigned. An additional problem within this analysis involved unequal groups, especially for comparisons between students with and without disability status. Myers and colleagues (2010) suggest an ANOVA for unequal group sizes in the case of one-factor between-subjects designs.

Means and standard deviations of overall global professor and teacher ratings of the SPPBQ, which include the global score on students' perceptions of being bullied by teachers prior to college and professors/instructors in college, are shown by sex and disability status prior in Table 23. The table demonstrates that the data within

the present study also breaks the violation of normality due to leptokurtic variation, but no transformations were made because of the low potential impact on Type I error rate and importance of maintaining the integrity of the relationships between the independent and dependent variables. Finally, homogeneity of variance was assessed via Levene's test, which was not significant for perception of teacher bullying prior to college [$F(1, 282) = 0.819, p = 0.484$], but was significant for perception of professor bullying in college at the .05 level [$F(1, 282) = 6.032, p = 0.001$] indicating this violation was broken for professor bullying only. Therefore, Welch's F tests were run in addition to the standard F test to account for this violation.

Table 23. Means & Standard Deviations of Global Scores on Teacher & Professor/Instructor Bullying

	Dependent Variable	N	Mean	SD	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
Disability Status								
Yes	Teacher Bullying	15	0.366	0.358	1.22	0.50	1.18	1.12
No		271	0.258	0.452	2.67	0.148	7.53	0.295
Yes	Professor Bullying	15	0.315	0.232	0.30	.580	-0.99	1.12
No		271	0.172	0.278	2.99	0.148	11.14	0.295
Sex								
Female	Teacher Bullying	234	0.263	0.428	2.67	0.159	8.15	0.317
Male		52	0.268	0.534	2.45	0.330	5.28	0.650
Female	Professor Bullying	234	0.171	0.245	3.06	0.159	14.35	0.317
Male		52	0.218	0.393	2.10	0.330	3.49	0.650

As can be seen in Tables 24-26, there were no significant differences for the main effects between participant sex or disability status and the global bullying scores on the SPPBQ or the high school measure of bullying within the MANOVA or the ANOVAs accounting for disparate sample sizes. Similarly, there were no significant interactions between sex and disability status. There was, however, a significant interaction between sex and disability status and perception of professor/instructor bullying [$F(1,282) = 4.083, p = 0.044, \eta^2 = 0.01$]. Therefore, a simple effects test was

conducted to further explore the relationship between these two variables within perception of professor/instructor bullying; no significant results were revealed. Statistical power for these analyses were computed post hoc; power was low for the ANOVAs involving both disability status ($1 - \beta = 0.24$) and sex ($1 - \beta = 0.35$).

Table 24. *Disability Status & Sex X Teacher Bullying & Professor/Instructor Bullying MANOVA*

<i>Source</i>	<i>Dependent Variable</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>	η^2
Disability Status	Teacher Bullying	0.004	1	0.004	0.018	0.893	<0.001
	Professor Bullying	0.001	1	0.001	0.013	0.909	<0.001
Sex	Teacher Bullying	0.068	1	0.068	0.335	0.563	<0.001
	Professor Bullying	0.147	1	0.147	1.950	0.164	0.005
Sex * Disability Status	Teacher Bullying	0.090	1	0.090	0.445	0.505	0.001
	Professor Bullying	0.308	1	0.308	4.083	0.044*	0.010
Error	Teacher Bullying	56.915	282	0.202			
	Professor Bullying	21.237	282	0.075			
	Teacher Bullying	77.179	286				
Total	Professor Bullying	31.256	286				

* $p < 0.05$

Table 25. *Disability Status X Professor/Instructor Bullying ANOVA*

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>	η^2
Disability Status	0.197	1	0.197	1.513	0.220	.005
Error	39.774	306	0.130			
Total	39.970	307				

<i>Source</i>	<i>df1</i>	<i>df2</i>	<i>F</i>	<i>p</i>
Welch Test	1	22.689	3.379	0.079

Table 26. *Sex X Professor/Instructor Bullying ANOVA*

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>	η^2
Sex	0.333	1	0.333	2.569	0.110	.008
Error	39.624	306	0.129			
Total	39.956	307				

<i>Source</i>	<i>df1</i>	<i>df2</i>	<i>F</i>	<i>p</i>
Welch Test	1	69.630	3.379	0.280

Post Hoc Analysis – Sex as a Moderator

Post hoc analyses were conducted to further explore sex as a potential moderator on the relationship between teacher bullying in high school and professor bullying in college. Moderators are variables that impact the strength and/or direction

of the relationship of an independent and dependent variable (Baron & Kenny, 1986). Sex was chosen as a moderator for two reasons. First, Table 27 demonstrates that even though the relationship between teacher bullying and professor/instructor bullying was significant and 66% of the students who reported being bullied by a professor in college also reported being bullied by a teacher prior to college, the low percent of students (28%) who endorsed being bullied by teachers prior to college who also endorsed being bullied in college merited further exploration. Second, given the contradictory finding that male student reports of being bullied as a single item question were lower than female student reports in college and male perceptions of being bullied by professors as assessed by the SPPBQ were higher than females in college, a deeper understanding of sex in relation to bullying is important (See Table 19).

Table 27. *Professor/Instructor & Teacher Bullying Endorsements*

	Bullied by Professor	Not Bullied by Professor	Total
Bullied by Teacher	40	103	143
Not Bullied by Teacher	20	160	180
Total	60	163	323

Therefore, the hypothesis that the relationship between student report of being bullied by teachers prior to college and student perceptions of being bullied by professors/instructors in college was moderated by sex was tested via was tested with a 2x2 (teacher bullying status; sex) between subjects factorial ANOVA. Two dichotomous independent variables (teacher bullying status and sex) were included with one continuous dependent variable of self-perceived bullying by

professors/instructors in college as measured by the global bullying scores from the SPPBQ.

Assumptions of between subjects ANOVA, and the violations of these assumptions, are similar to those mentioned previously. These assumptions include the assumption of independence, the issue of unequal groups, normality, and homogeneity of variance. Means and standard deviations are shown in Table 28. The homogeneity of variance was assessed via Levene's test, which was significant at the .05 level [$F(3, 303) = 13.93, p < 0.001$] indicating this violation was broken; however, given the relation of interest is the interaction, no modifications were made.

Table 28. Means & Standard Deviations of Global SPPBQ for Teacher Bullying & Sex

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>		<i>Kurtosis</i>	
				<i>Statistic</i>	<i>Std. Error</i>	<i>Statistic</i>	<i>Std. Error</i>
Teacher Bullying							
At least once	138	0.260	0.429	4.571	0.206	29.513	0.410
Never	169	0.154	0.288	4.133	0.187	23.639	0.371
Sex							
Female	244	0.185	0.280	3.834	0.156	21.956	0.310
Male	63	0.266	0.577	3.835	0.302	18.709	0.595

As can be seen in Table 29, significant differences were revealed for the two main effects: the relationship for perceptions of being bullied by professors/instructors in college was significant for teacher bullying status prior to college with a small effect size [$F(1, 303) = 15.00, p < 0.000, \eta^2 = .036, d = 0.292, 95\% \text{ CI } (.221, .356)$] and for sex with a small effect size [$F(1, 303) = 6.36, p = 0.012, \eta^2 = .015, d = 0.226, 95\% \text{ CI } (0.039, 0.261)$]. There was also a significant interaction, shown in Figure 6, between teacher bullying status and sex with a small effect size [$F(1, 303) = 7.37, p = 0.007, \eta^2 = .018,$]. Therefore, a simple effects test, shown in

Table 30, was conducted to further explore the relationship between these two variables within perception of professor/instructor bullying. Although there were no significant results for female students, a significant effect was demonstrated for male students with a moderate effect size [$F(1, 303) = 1.667, p < 0.001, d = 0.612, 95\% \text{ CI } (.262, .711)$]. Therefore, for male students, endorsement of being bullied by teachers prior to college led to higher ratings of perceptions of professor/instructor bullying in college; however, for female students, teacher bullying status prior to college demonstrated no effect.

Table 29. *Teacher Bullying & Sex X Professor/Instructor Bullying ANOVA*

Source	Sum of Squares	df	Mean Square	F	p	η^2	d	95% Confidence Interval	
								Lower	Upper
Bullying by Teacher	1.867	1	1.867	15.002	<0.001*	0.036	0.292	0.221	0.356
Sex	0.792	1	0.792	6.364	0.012*	0.015	0.226	0.039	0.261
Bullying by Teacher x	0.917	1	0.917	7.366	0.007*	.018			
Error	37.703	303	0.124						
Total	52.364	307							

* $p < 0.05$

Figure 6. *Teacher Bullying Interaction with Sex & Professor/Instructor Bullying*

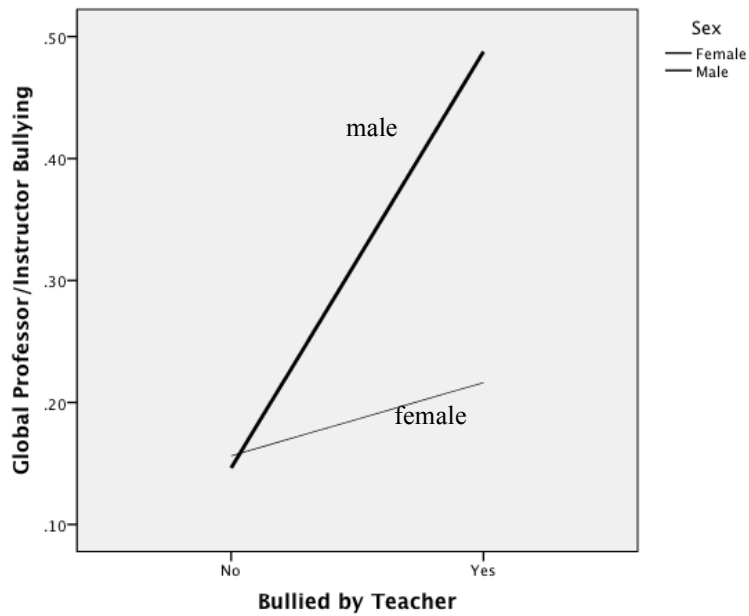


Table 30. *Teacher Bullying & Sex X Professor/Instructor Bullying Simple Effects*

Sex	(I) Bullying by Teacher	(J) Bullying by Teacher	Mean Difference (I-J)	Std. Error	p
Female	No	Yes	-.060	.045	.185
	Yes	No	.060	.045	.185
Male	No	Yes	-.341*	.093	.000*
	Yes	No	.341*	.093	.000*

Sex		Sum of Squares	df	Mean Square	F	p	d	95% Confidence Interval	
								Lower	Upper
Female	Contrast	.219	1	.219	1.764	0.185	0.215	0.165	0.264
	Error	37.703	303	.124					
Male	Contrast	1.667	1	1.667	13.400	<.0001*	0.612	0.262	0.711
	Error	37.703	303	.124					

*p < 0.05

Chapter IV: Discussion

Historically, bullying research has focused on student to student bullying and only recently have studies begun to explore teacher bullying of students. Preliminary findings suggest that teacher bullying and the maltreatment of students may result in loss of trust, feelings of hopelessness and depression, oppositional behavior and increased fighting amongst peers (Pottinger & Stair, 2009). Although much less is known about professor/instructor bullying of college students, research addressing the relationship of professors and students has demonstrated that college students' perception of their rapport with professors may predict motivation, perceptions of learning, and perceived grade (Wilson et al., 2010). After examining the psychometric properties of a questionnaire designed to assess college students' perspectives of professor/instructor bullying and teacher bullying, the present study identified the self-reported prevalence of professor and instructor bullying among college students and college students' perspective of being bullied by teachers in elementary, middle, and high school. Additionally, the present study explored whether specific characteristics were associated with professor bullying – including history of being bullied by teachers, sex and disability status.

Psychometric Findings of SPPBQ

To date, no research has examined the types of professor/instructor and teacher bullying that may exist. A large body of research, however, suggests that peer bullying may be subdivided into direct/overt bullying, involving in-person physical or verbal confrontations, and indirect/covert bullying, including rumor spreading and indirect name-calling (Espelage & Swearer, 2003; Olweus, 1993). Bullying has also

been categorized as either verbal, physical, relational or cyber. Furthermore, no measures assessing college students' perceptions of professor/instructor bullying exist and studies addressing teacher bullying of students have either relied on measures involving similar constructs or have not made their questionnaires available. In addition to examining the psychometric properties of a newly formed questionnaire assessing professor/instructor bullying and retrospective teacher bullying, the present study examined the types of bullying professors/instructors and teachers may use.

The results from the psychometric analyses revealed that both sections of the questionnaire demonstrated satisfactory Cronbach's alpha ratings (greater than .70 as suggested by Nunnally, 1978) and revealed adequate loadings and inter-item correlations for each component. Additionally, the findings provided support for good criterion validation for overall teacher and professor/instructor bullying and its two subcomponents – Academic Bullying and Physical Bullying. Results from the CFA offered evidence for cross-validation of the components within the SPPBQ. Overall, the analyses offer a strong psychometric foundation for the SPPBQ. Additional research should explore the SPPBQ's test-retest reliability, as well as its reliability across different samples. Furthermore, the convergent and divergent validity of the SPPBQ should also be explored.

Because the questionnaires were developed from an existing workplace questionnaire (NAQ-R; Einarsen et al., 2009) that encompassed three underlying components of bullying – personal, work-related, and physically intimidating forms of bullying – it was hypothesized that similar components would be revealed for the professor/instructor bullying and retrospective teacher bullying questionnaire within

the SPPBQ. Additional items were added, however, to address other aspects of bullying that might not exist within the workplace (e.g. acts of violence and being excluded). Interestingly, only two components were revealed for these new measures: Academic Bullying and Physical Bullying. Academic Bullying encompassed academic forms of bullying that occur within the classroom and are related to course performance or participation. The second component, labeled, Physical Bullying encompassed physical and sexual bullying only. Examples of items that loaded on the Academic Bullying component included, “A professor/instructor/teacher withholding information that affects your performance,” “Being humiliated or ridiculed by a professor/instructor in connection with your course,” and “Repeated reminders of your mistakes by a professor/instructor/teacher.” Academic Bullying included items specific to professors/instructors and teachers that were congruent to verbal and relational bullying as described in the peer bullying literature. The items, however, related specifically to verbal bullying within the classroom setting or relational bullying that would impact a student’s academics. Although previous research has addressed bullying as it relates to personal and work characteristics (e.g., Einarsen et al., 2009) and a large number of studies have explored the academic outcomes of victims of bullying (e.g., Holt, Finkelhor, & Kantor, 2007; Swearer, Espelage, Vaillancourt, & Hymel, 2010), no studies to date have explored bullying behaviors involving academics specifically.

Physical Bullying included items with more severe consequences that included both physical bullying and sexual bullying. Items loading on the Physical Bullying component included, “Threats of violence or physical abuse by a

professor/instructor/teacher,” “Acts of violent or physical abuse by a professor/instructor/teacher,” and “having a professor/instructor/teacher gossip about your sex life or spread rumors about your sexual activities.” The Physical Bullying component included items resembling physical bullying in the peer bullying literature, but also included sexual harassment. In the professor/instructor section of the SPPBQ only, the Physical Bullying component also includes making false allegations. Although these items are not consistent with specific types of peer bullying or workplace bullying, they appear to represent bullying in the college context that is more severe and does not necessarily occur in the classroom setting. Future research should explore the generalizability of Academic and Physical Bullying in other college and primary and secondary school settings. Additionally, research should explore the criterion validity of each component separately by including additional questions related to the frequency of academically related bullying as well as the frequency of bullying that is physical or involves more serious threats.

Although item loadings for the SPPBQ did not remain consistent to the categories developed by Einarsen and colleagues (2009) within workplace bullying, this is not especially concerning because of the differences implicit within workplace and academic settings. Generalizing research from non-academic settings to college contexts has proved to be problematic in other areas as well. For example, Myers, Edwards, Wahl and Martin (2007) reported that attributes related to argumentative individuals in contexts relating to superior and subordinate relationships may not translate to the college context. In the present study, items that loaded on Academic Bullying on the SPPBQ included items from the NAQ-R in all three categories.

However, most of the items that fell into the Academic Bullying component on the SPPBQ came specifically from the work-related (academic-related) and person-related categories represented in the NAQ-R. The discrepancy between the two questionnaires may relate to the difference in relationships between supervisors and supervisees and professors and students. Specifically, professors have a substantially shorter length of time to get to know their students (e.g., classes do not meet every day and only last for one semester) and as a result may know less about their students personally. Therefore, on the SPPBQ items that previously related to personal bullying within workplace bullying may fit better within academic forms of bullying.

Although the Academic and Physical Bullying components appear to be unique to professor/instructor and teacher bullying, they were relatively consistent between the professor/instructor bullying section and retrospective teacher bullying section. Items that differed within the questionnaires may reflect the differences between the college setting and the primary and secondary school settings. It is possible that the nature of the relationship between teachers and students in primary and secondary school and those of professors/instructors and college students vary in duration. Future research should explore the differences between professor/instructor bullying in college and teacher bullying in high school.

Prevalence Rates of Bullying in College

The review of the literature explored previously suggested a dearth of research in the area of professor/instructor bullying of college students. It is interesting to note that the only study to date that has addressed professor/instructor bullying of college students (Chapell et al., 2004) did so based on preliminary interviews with students

who told stories of teacher bullying and the original intent of the study was actually to assess peer bullying. Therefore the results of the present study, only the second to address this issue, add substantially to the literature.

Previous prevalence rates reported by the only study addressing professor/instructor bullying reported that 44% of college students endorsed witnessing a teacher (professor/instructor) bully other students at least once and 19% of college students endorsed being bullied by a professor/instructor themselves at least once (Chapell et al., 2004). The present study's findings are remarkably consistent with the rates reported by Chapell and colleagues in 2004. Specifically, 51% of the participants endorsed witnessing a professor/instructor bully other students at least once and 18% of the participants endorsed being bullied by a professor/instructor themselves at least once.

The estimates of peer bullying within college students are also similar to Chapell et al.'s findings. Chapell et al. (2004) reported that 60% of college students reported seeing peer bullying at least once and in the present study, 64% of the participants endorsed seeing a student be bullied in college at least once. Furthermore, the previous study reported that 18% of students admitted to bullying another college student and the present study reported that 15% admitted to doing so. The findings from the present study, however, demonstrate a much larger percentage of students endorsing being bullied themselves by another college student compared to Chapell et al.'s (2004) findings (33% compared to 15%), which may be due to differences in campuses or the timing of the questionnaires. It is important to note, however, that the

demographics, including year in college, sex, age, and ethnicity did not appear highly different in each study.

The prevalence rates relating to students stopping or attempting to stop professor/bullying from occurring are unique to the present study; however, previous research has made estimates of middle school students attempting to stop peer bullying. Whitney and Smith (1993) reported that approximately one-third of high school students reported trying to help a student being bullied and 20% of all students reported doing nothing. Although the rates reported in the present study are even lower – only 7% endorsed having another student intervene in professor/instructor bullying and only 14% endorsed intervening in professor/instructor bullying themselves – these rates do suggest that some students may perceive themselves and others as student allies. Student allies may be crucial in the implementation of support groups and/or clubs to encourage anti-bullying climates on college campuses, especially considering that when bystanders do nothing in response to bullying a message of acceptance may be conveyed (Espelage & Swearer, 2003; Salmivalli et al, 1996). Future research needs to assess effective interventions and prevention programs that support student allies and help reduce professor/instructor and teacher bullying.

The prevalence rates associated with experiences of teacher bullying prior to college were alarmingly high. Forty-four percent of the college students sampled endorsed being bullied at some point by a teacher prior to college, but only 12% endorsed this to have occurred more than once or twice. Previous prevalence rates throughout primary and secondary school of teacher bullying and emotional

maltreatment were much lower, ranging from 1.7% (Olweus, 1996 as cited in Brendgen et al., 2006) to 33% (Benbenishty et al., 2002; Khoury-Kassabri, 2009). It is probable that the discrepancy in the present study's finding compared to other findings relates to this study's retrospective and inclusive nature. Previous studies have assessed prevalence rates of teacher bullying while children are still in elementary, middle and high school and have utilized measures assessing bullying within specific time periods. The present study, however, asked college students about their teacher bullying experiences at anytime in elementary, middle and high school retrospectively and was therefore more likely to demonstrate higher frequencies of teacher bullying.

One other important item to note about students' perspective of bullying prior to college is that the median grade students endorsed being bullied by teachers was 8th grade and the most commonly reported grade students reported teacher bullying was 10th grade. Future studies exploring teacher bullying might focus their efforts on middle school and early high school given students endorsed this year as a time of being bullied by teachers at high rates.

Characteristics of Victims of Teacher & Professor/Instructor Bullying

To explore whether there are specific characteristics within victims of teacher and professor/instructor bullying, group analyses were conducted based on college students' teacher bullying status before college, sex, and disability status. The present study found support for the first hypothesis, that students with a history of being bullied by teachers were more likely to report being bullied by professors/instructors in college; however, there was no evidence to support the remaining two hypotheses,

that students with disabilities and students who are male were more likely to report being bullied by teachers prior to college and professors/instructors in college. The present study did, however, find support for an additional hypothesis, that the relationship between student report of being bullied by teachers prior to college and student perceptions of being bullied by professors/instructors in college was moderated by sex, which was added based on the preliminary findings of this study.

Students in the present study who reported being bullied by teachers before college endorsed significantly higher ratings on the professor SPBBQ suggesting that there was a relationship between teacher bullying status before college and perceptions of professor bullying in college. This finding is consistent with previous research, which reported that forty-percent of victims of bullying in college were also victims in primary and secondary school (Chapell et al., 2004). Within the present study, 66% of those students reporting being bullied by a professor/instructor in college at least once, also reported being bullied by a teacher prior to college. However, only 28% of those students who reported being bullied by a teacher prior to college at least once, also reported being bullied by a professor/instructor in college – demonstrating the substantial decrease in rates of professor/instructor bullying compared to teacher bullying and the possibility of specific moderators on this relationship. It is plausible that students who reported teacher bullying may have reported less professor/instructor bullying upon entering college due to the size of university classes. University classes, especially those that meet general education requirements and are taken the first few years of college, are often larger than primary and secondary school classes. University courses may therefore offer more anonymity to

students and fewer opportunities for professor bullying of students to occur. Although victims of teacher bullying may remain relatively stable throughout their pre-college education and college experience, future research should explore the different characteristics associated with students who endorse teacher bullying and professor/instructor bullying compared to those students who report being bullied only in high school or only in college. Findings from studies exploring these differences may help identify students most at risk for professor/instructor bullying. Additionally, uncovering factors associated with students who appear to overcome teacher bullying may help inform the development of interventions for students who may remain prone to bullying from adolescence into early adulthood.

Although previous research suggests male students may be more likely than female students to perceive themselves as victims of teacher maltreatment (Benbenishty et al., 2002; Casarjian, 2000; Khoury-Kassabri, 2009; Khoury-Kassabri et al., 2008) and may be more susceptible to teacher bullying (Pottinger & Stair, 2009), the present study did not find a relationship between sex and perception of bullying in school or college as a main effect. This finding was somewhat surprising for the results involving students' perceptions of teacher bullying before college based on the research previously mentioned; however, a recent review of peer bullying suggested sex within the roles of bullies and victims are complex (Carrera, DePalma & Lameiras, 2011). Specifically, boys and girls may be more likely to fall into different categories based on type of bullying (e.g. physical or relational; Carrera et al., 2011). In the present study, the prevalence rates reported by males of teacher and professor/instructor bullying were actually lower than those reported by females (34%

of males compared to 47% females for teacher bullying prior to college) as assessed by a question asking how frequently the participant had been bullied. Males, however, reported approximately the same level of bullying experiences as females on the overall ratings of teacher bullying prior to college within the SPPBQ, which includes the average of all items related to Academic and Physical Bullying. It is possible that the differences in question construction led to varying results. For example, Stockdale and colleague (2002) reported that students may be more inclined to endorse specific components of bullying compared to endorsing being bullied in general. The retrospective nature of the questionnaire may have also led to different results than previous research, which asked students questions within a specified time period.

The present study's findings that there were no differences between male and female students' perceptions of professor/instructor bullying in college are less surprising. The only study exploring sex differences in teacher (professor/instructor) bullying within college did report that males engaged in bullying behaviors significantly more than female college students; however, the study did not find a significant relationship between sex and other bullying variables and ultimately called for more research in the area (Chapell et al., 2004). In the present study, males actually reported higher means (although not significantly higher) than females did on the SPPBQ for professor bullying, but endorsed a much lower frequency of being bullied by professors/instructors when asked how often they experienced professor/instructor bullying (9% of males compared to 21% females for professor/instructor bullying in college). Even though the SPPBQ included a definition of bullying in an attempt to establish a consistent understanding of bullying,

these conflicting ratings might reflect a difference in perceptions in the definition of bullying and reflect an issue with the construct validity of using a one item question to assess prevalence. Preconceived notions of bullying may have influenced participant responses to the single question asking how frequently they were bullied, but may have been less influential on the global bullying score, which was comprised of multiple questions addressing independent experiences. As mentioned previously, students may be more hesitant to report being bullied in general compared to endorsing specific components of bullying (Stockdale et al., 2002). The types of students that succeed in high school and enter college may also relate to why males and females did not differ significantly in their ratings of professor/instructor bullying. It is possible that a higher rate of male students, who may be more prone to being bullied by teachers prior to college (Pottinger & Stair, 2009), are not completing high school or entering college.

Based on the inconsistent findings related to sex and bullying over time, post hoc analyses were conducted to explore whether sex acted as a moderator to the relationship between endorsement of being bullied by teachers prior to college and perceptions of being bullied by professors in college. The present study did find support for this hypothesis. Specifically, for male students, endorsement of being bullied by teachers prior to college led to higher ratings of perceptions of professor/instructor bullying in college; however, for female students teacher bullying status prior to college demonstrated no effect. Therefore, sex may moderate the relationship between teacher bullying status prior to college and perceptions of professor/instructor bullying in college.

Although evidence did not support the final hypothesis that students who report having a disability were more likely to experience teacher and professor/instructor bullying, limited statistical power precludes any accurate conclusions. Specifically, the sample of students reporting disabilities was very small – only 15 students reported having a disability and completed both sections of the questionnaires completely. The high prevalence rate of students with disabilities who reported being bullied by teachers and professors/instructors suggests there may be differences between students with disabilities and students without disabilities in their reporting of teacher and professor/instructor bullying. In the present study, 75% of the students who reported having a documented disability, compared to 42% of students without a disability, reported being bullied by a teacher prior to college and fifty percent of students with disabilities, compared to 16% of students without disabilities, reported being bullied by a college professor/instructor in college. The differences between students with and without disabilities in their report of being bullied by teachers and professors also generated large and consistent effect sizes. Based on the present study's descriptive findings, as well as previous studies' findings indicating students with certain disabilities may be more at risk to teacher verbal abuse than students without disabilities (Brendgen et al., 2006; Brendgen et al., 2007), further research focusing on students with and without disabilities is merited.

Implications

Unfortunately, bullying within school systems is a common problem in the USA (Espelage & Swearer, 2003) and in other countries (e.g., Olweus, 1993) leading to a burgeoning area of research over the past two decades. Comparatively, very little

attention has been drawn to the issue of teacher bullying, which may have severe consequences for student victims. Professor/instructor bullying in particular has been largely overlooked and before the present study, only one study had addressed the issue (e.g., Chapell et al., 2004). Therefore current findings offer important insight and implications for college campuses, as well as professors/instructors and students.

The present study offers a new measure, the SPPBQ, to assess professor/instructor bullying as perceived by college students. The SPPBQ could be used in a variety of ways. First, it could be used as part of an overall campus climate survey, helping college administrators, faculty and staff understand students' perceptions of professor/instructor bullying. Second, it might also be used as a screening tool for university early alert systems and assistance with retention, helping to identify college students who feel they are being bullied by professors/instructors or who may be at risk to being bullied by professors/instructors based on their experiences before college. The finding that students who report being bullied by teachers prior to college were more likely to report professor/instructor bullying in college may also indicate a need to screen for victims of teacher bullying within incoming first year students. Identifying the students most at-risk to professor/instructor bullying and arming them with resources and tools to prevent future bullying – for example a student support group to stop professor/instructor bullying – might aid in the prevention of professor/instructor bullying.

The prevalence rates reported in the present study about professor/instructor bullying also speak to the need to reduce professor/instructor and teacher bullying. Students clearly perceive this phenomenon to be occurring yet little attention has been

given to this subject. Support systems designed to help students report professor/instructor bullying and mitigate the consequences of professor/instructor bullying should be explored. Additional interventions should target professors and instructors, ideally to prevent bullying from occurring. Furthermore, the low percentage of college students reporting that others or they themselves have attempted to stop professors/instructors from bullying students may indicate a need to encourage students to support one another. An acceptance of bullying may be conveyed when bystanders do nothing to stop an incident of bullying (Espelage & Swearer, 2003; Salmivalli et al, 1996), therefore encouraging students to speak out during incidents of bullying – peer and instructor – might help reduce the prevalence rates of bullying.

Finally, it is clear that future research is warranted in the area of teacher and professor/instructor bullying of students with disabilities. The present study's small representation of students with disabilities precludes any conclusions about the likelihood of increased bullying within this population; however, the high frequency at which the students with disabilities reported being bullied by teachers and professors/instructors and the resulting large and consistent effect sizes may serve as a pilot study supporting the need for further exploration.

Limitations

Although the present study attempted to explore the role teachers may play in bullying, one limitation is that the findings may be perceived as a persecution or condemnation of teachers and professors. Nonetheless, it is important to address whether students perceive if they are being bullied by teachers and uncover what they perceive to be teacher bullying. The present study was limited in a number of other

ways as well – including a limited sample, a weak study design and the violation of multiple statistical assumptions.

Although the present study attempted to include college students representative of the university at large, the final sample was not a perfect match to the student demographics at the university. The final sample comprised more students with majors in the College of Arts and Sciences than any other college and included more females than males. Male and female participants may have been unevenly represented because there were more female students (60%) than male students (40%) in the College of Arts and Sciences in 2012. Furthermore, the most common major of the participants in the present study was Psychology, which also included more females (56%) than males (44%). Although students of color and students with disabilities were close to the university wide demographics, the findings reflect a sample that is predominantly white/Caucasian and able-bodied, limiting the generalizability of the findings. In particular, teacher and professor/instructor bullying of college students representative of multiple ethnicities, socioeconomic statuses, and sexual orientations are critical areas for future research. The present study was conducted at only one university in the northeast region of the United States and does not represent universities across the country.

The cross-sectional nature of the present study prevents conclusions about change over time and stability of the findings. In addition, the retrospective questions related to teacher bullying are limited by students' memory and self-report biases. As mentioned previously, one limitation related to self-report measures is the over and/or under representation of participant endorsements. Specifically, the present study was

not able to objectively assess if professor/instructor bullying was occurring, but instead relied on student report of their perceptions of professor/instructor bullying. Prevalence rates, therefore, reflect student perception of professor/instructor bullying, which may differ from actual incidents of professor/instructor bullying. These issues influence the construct validity of a measure – with self-report measures it may be difficult to be sure the measure is measuring the construct it is intended to measure (Ellsworth & Gonzalez, 2007). An additional limitation involves the reactivity and social desirability of participant responses, which suggests participant responses may be influenced by how the participant would like or feels like they should be conveyed (Anastasi & Urbina, 1997; Ellsworth & Gonzalez, 2007).

Finally, there was limited statistical power for most of the analyses conducted in the present study. Specifically, much of this data was nonnormal (the predominant issue being that it was leptokurtotik), which may have led to a loss of power in the group analyses. This issue relates to the item distributions within the teacher and professor sections of the SPPBQ. There was a low frequency of endorsement for all items on the SPPBQ, which resulted kurtotik data. To accurately represent the low frequency of bullying experiences within the college student population, the decision was made to maintain raw data and perform analyses without transformations to meet basic statistical assumptions. Although a limitation, maintaining the data in its true form may generate more practical results than results generated from a transformed dataset.

Another limitation that resulted in loss of statistical power in the group analyses involved the small and discrepant sample sizes. Participants were more

represented by female students ($n = 272$) than male students ($n = 65$), and only 20 students reporting having a disability participated. The discrepancy in these samples limited the power of the analyses in comparing males to females and students with disabilities to students without disabilities; however, effect sizes for both sex and disability status were consistent. Furthermore, the violation of the assumption of independence, for all three independent variables in the present study, limits the interpretations of the findings. Ellsworth and Gonzalez (2007) explain that variables that cannot be manipulated (e.g., sex and disability status) are defined as ‘found’ variables. To account for ‘found’ variables, and self-report problems, Ellsworth and Gonzalez recommend ruling out similar constructs that are correlated with the construct of interest. Although including similar variables would have strengthened the findings, it was beyond the scope of the present study.

Future Directions

The present study adds to the dearth of literature concerning professor/instructor bullying and teacher bullying of students in several ways. Firstly, the establishment of the psychometrics properties of the newly formed questionnaire that explores college students’ perceptions of professor/instructor and teacher bullying will help aid future studies and screenings related to bullying within college campuses. The prevalence rate estimates of professor/instructor bullying of college students reported in the present study are consistent with the previously reported rates by Chapell et al. (2004) and draw attention to college students’ perceived existence professor/instructor bullying. Because 14% of college students reported stopping or attempting to stop professors/instructors from bullying other college students, future

research should explore the characteristics associated with these student advocates and uncover the ways in which students are already working to stop professor/instructor bullying. The alarmingly high estimates of prevalence rates related to teacher bullying in primary and secondary school reported retrospectively by college students highlight the need to intervene in teacher bullying early, ideally in elementary school.

Furthermore, the finding that students reported higher incidences of teacher bullying between middle and high school helps guide the timing for future interventions and research when examining students' perceptions of teacher bullying. Exploratory analyses of the continuity of students as victims of teacher bullying before college and professor/instructor bullying in college suggests students with a history of being bullied by teachers are indeed more likely to perceive they are being bullied by professors/instructors in college. Bullying prevention efforts, therefore, should also be implemented in adult settings, such as the workplace and academia, outside of elementary, middle, and high school.

The findings from the current study indicate a need for additional research addressing teacher and professor/bullying. Furthermore, given the divergence in the bullying literature, methodological issues need to be resolved and an operational definition of bullying needs to be established (Espelage & Swearer, 2003). The present study included a definition of teacher and professor/instructor bullying that was based on previous definitions in the literature (Twemlow et al., 2006; Olweus, 1996 as cited in Brendgen et al., 2006); however, the definition did not explicitly state that teacher and professor/instructor bullying must occur repeatedly over time. Although omitting a time reference was consistent to previous definitions of teacher

bullying, it was not consistent to more general definitions of bullying between peers. Future research should explore the differences between definitions of peer bullying and teacher and professor/instructor bullying. In addition to more research exploring the psychometrics of the SPPBQ, a warranted area of research would explore a similar questionnaire designed to assess primary and secondary students' perspectives of teacher bullying. The SPPBQ was designed to assess college students' perspectives in college and prior to college retrospectively, and there is a need to assess students' perspectives of teacher during elementary, middle and high school. Although there is a substantial body of research relating to physical and verbal maltreatment of students by school staff in Israel (Benbenishty et al., 2002; Khoury-Kassabri, 2006; Khoury-Kassabri, 2009; Khoury-Kassabri, 2011; Khoury-Kassabri et al., 2008), to date, very few studies have investigated teacher bullying of students specifically. Studies that have explored teacher bullying have either relied on measures assessing similar constructs (Pottinger & Stair, 2009; Whitted & Dupper, 2008) or on dichotomous yes/no questions (Chapell et al., 2004). Researchers have clearly demonstrated an interest in exploring teacher bullying indicating the need for a valid measure to assess student perception of teacher bullying.

Furthermore, an important area that was not addressed in the present study includes the consequences related to professor/instructor bullying. Although research involving teacher bullying has shown that student victims of teacher bullying may be at greater risk for negative peer social preference, delinquent behavior, poor academics, lower rates of high school graduation rates, increased behavior problems in early adulthood (Brendgen et al., 2006; Brendgen et al., 2007), oppositional behavior,

increased fighting, loss of trust, feelings of hopelessness and suicidality, PTSD and depression (Pottinger & Stair, 2009), presently there is a lack of research examining the consequences of professor/instructor bullying. The assessment of consequences of professor/instructor bullying is a valuable avenue for research given the importance of professor and student relations in college students' academic success (Wilson et al., 2010).

Finally, although significant differences within disability status and teacher and professor/instructor bullying were not found in the present study, given the compromised statistical power of the design, further research in this area is needed. The high prevalence rates reported by the small number of students with disabilities compared to students without disabilities and their large effect sizes for both teacher and professor/instructor bullying in the present study suggest it is possible that a representative sample of students with disabilities may report higher rates of teacher and professor bullying than students without disabilities. One reason teacher and professor/instructor bullying may be especially important to consider amongst students with disabilities pertains to the power differential that is implicit to the teacher-student relationship. A power differential is considered to be a necessary component in the definition of bullying and it might include size, style of dress, money, appearance, ethnicity or any other valued social quality (Twemlow & Sacco, 2008). Few populations have struggled with power in ways that persons with disabilities have. Critical disability theory argues that political issues around disabilities first and foremost involve who is valued and who is marginalized in a society, which leads to a group with power and a group that is powerless (Devlin & Pothier, 2006). Therefore,

students with disabilities may be particularly vulnerable to teacher and professor/instructor bullying.

Summary & Conclusions

The present study offers a new tool, the SPPBQ, for the assessment of professor/instructor bullying of college students and teacher bullying of primary and secondary education students. The SPPBQ is comprised of two underlying components of bullying – Academic Bullying and Physical Bullying – as well as a global component encompassing all of the items. Overall, the questionnaire demonstrated strong criterion validity and internal consistency. The SPPBQ may be used concurrently, to assess college students' perceptions of professor/instructor bullying, and retrospectively, to assess college students' perspectives on teacher bullying.

Prevalence rates reported in the present study suggest bullying of college students by professors/instructors is indeed a problem. The rates were consistent to previous research (Chapell et al., 2004) and revealed that half of college students endorsed witnessing a professor/instructor bully another student at least once and one-fifth endorsed being bullied by a professor/instructor at least once. Prevalence rates associated with teacher bullying prior to college demonstrate that teacher bullying of students may be a common problem and needs to be addressed. Nearly half of the participants endorsed being bullied at some point by a teacher prior to college, and 12% endorsed being bullied by a teacher prior to college more than once or twice. Additionally, nearly 10% of students endorsed having a peer stop or attempt to stop a professor/instructor from bullying them, and 13% endorsed stopping or attempting to

stop a professor/instructor from bullying a peer. These rates suggest that not only are students endorsing being bullied by their teachers and professors, but some students are also trying to intervene in order to stop the bullying from occurring.

A characteristic of victims of professor/instructor bullying included a history of being bullied by teachers in the past, which may be true for male students, but not necessarily for female students. Sex may therefore act as a moderator variable for the relationship between teacher bullying prior to college and professor/instructor bullying in college. Additionally, students with disabilities endorsed high prevalence rates of being bullied by both teachers and professors, indicating one characteristic that may be associated with victims of professor/instructor and teacher bullying is disability status.

The present study supports that college students clearly perceive teacher and professor/instructor bullying as occurring but may not know how to properly address this problem when it occurs. Findings revealed that college students endorsed alarmingly high rates of being bullied by professors in college and by teachers prior to college. The SPPBQ was developed to aid universities and researchers in the identification of students being bullied by their teachers and professors. The SPPBQ may also be used in future studies to address additional characteristics of victims of teacher and professor/instructor bullying or as a screening measure to assist in the understanding, prevention and intervention of professor/instructor bullying. In conclusion, the present study supports that professor/instructor bullying of students is an issue of critical importance. University administrators, faculty and staff should be made aware of professor/instructor bullying and future research should identify effective methods to address this problem and preventing it from occurring.

Appendices

Appendix A: Interview Script

We are going to be asking you to review and answer some questions about professor/instructor bullying. This is for a research study that looks at college students' report of professor/instructor bullying in college and teacher bullying in high school. We are interested in your feedback on whether the survey we plan to use for this study makes sense to people like you. You will be asked to complete sections of the survey and then tell us what you think of them. There are no right or wrong answers. Please answer all items in a section, but mark items that you need to read twice or find difficult to answer/understand. We will go over those items individually. Do you have any questions?

Ok, let's begin working on the survey.

Section A. and Section D. Professor/Instructor, Teacher & Peer Bullying Prevalence

Ask respondents to read directions and complete Section A.

1. Can you tell me in your own words what the instructions are asking you to do?
2. Do you think the answer choices are clear?
3. Were there any questions that didn't apply to you? Please indicate the number of the question.
4. Were there any questions that seemed confusing because you did not understand what was being asked? Please indicate the number of the question.
5. Were there any questions that were emotionally difficult to answer? Please indicate the number of the question.
6. Did any other questions stand out to you for any other reason? Please indicate the number of the question and the reason for which it stood out.
7. Did question X [*insert question for which previous participants raised concern*] stand out to you as X [*insert reason for which previous participants raised concern*]?
8. What suggestions do you have for improving any of the questions?

Section B. Professor/Instructor Bullying Components

Ask respondents to read directions and complete Section B.

9. Can you tell me in your own words what the instructions are asking you to do?
10. Do you think the answer choices are clear?
11. Were there any questions that didn't apply to you? Please indicate the number of the question.

12. Were there any questions that seemed confusing because you did not understand what was being asked? Please indicate the number of the question.
13. Were there any questions that were emotionally difficult to answer? Please indicate the number of the question.
14. Did any other questions stand out to you for any other reason? Please indicate the number of the question and the reason for which it stood out.
15. Did question X [*insert question for which previous participants raised concern*] stand out to you as X [*insert reason for which previous participants raised concern*]?
16. What suggestions do you have for improving any of the questions?

Section C. Teacher Bullying Components

Ask respondents to read directions and complete Section C.

17. Can you tell me in your own words what the instructions are asking you to do?
18. Do you think the answer choices are clear?
19. Were there any questions that didn't apply to you? Please indicate the number of the question.
20. Were there any questions that seemed confusing because you did not understand what was being asked? Please indicate the number of the question.
21. Were there any questions that were emotionally difficult to answer? Please indicate the number of the question.
22. Did any other questions stand out to you for any other reason? Please indicate the number of the question and the reason for which it stood out.
23. Did question X [*insert question for which previous participants raised concern*] stand out to you as X [*insert reason for which previous participants raised concern*]?
24. What suggestions do you have for improving any of the questions?

General

1. Do you think that students you know will be able to answer these questions? Would they mind doing it?
2. What is your overall impression of the survey?

Appendix B: Pilot Informed Consent

INFORMED CONSENT FORM

Title of Research Protocol: College Students' Perception of Professor Bullying
Student Investigator: Marisa E. Marraccini

CONSENT FORM FOR RESEARCH

You have been asked to take part in a research study described below. The person who gave you this form will explain the project to you in detail. You should feel free to ask questions. If you have more questions later, you may discuss them with the student investigator Marisa Marraccini who can be reached at (434) 409-0689 or her supervisor, Lisa Weyandt, Ph.D. at (401) 874-2087.

Description of the Project: The purpose of this research is to develop a survey about perception of professor/instructor bullying among college students.

What will be Done: You will be asked to complete a survey and answer questions about what you understand the questions to mean. We will also ask you questions about your general reactions to the survey. To participate, you must be able to read and speak English, and you must be at least 18 years of age. The interview should last about 1½ hours.

Risks or Discomforts: You might experience some discomfort responding to questions about your experience and views of professor/instructor bullying. There are no known risks associated with participating in this study.

Expected Benefits of the Study: You may not receive any direct benefit from taking part in this study. Some people, however, may find participation in this research informative and personally beneficial.

Confidentiality: Participation in this project is completely confidential. Your information will not be shared with anyone except faculty overseeing this project. Written notes taken during the interview will contain a participant number. All notes will be destroyed within one year.

Decision to Quit at Any Time: Taking part in this study is entirely voluntary. If you wish, you may leave the interview at any time. You need not give any reasons for leaving. Your decision about whether or not to leave will in no way affect your relationship with the personnel associated with this study or employees of University of Rhode Island.

Rights and Complaints: If you are not satisfied with the way this study is performed, or if you have questions about your rights as a research subject, you

may discuss your concerns with Marisa Marraccini at (434) 409-0698 or her major professor, Lisa Weyandt, Ph.D. at (401) 874-2087. In addition, you may contact the office of the Vice President of Research, 70 Lower College Road, Suite 2, University of Rhode Island, Kingston, RI 02882 (401-874-4328).

You have read this Consent Form and currently have no further questions concerning your participation in this project. You understand that you may ask any additional questions at any time and that your participation in this project is voluntary. By participating in the project, you agree that your answers can be used without your signed consent.

Participant Signature _____

Date _____

Marisa E. Marraccini
Student Investigator

Appendix C: Power Analysis

Sample Size – Internal Consistency

Sample size for the internal consistency assessment was determined using the equation $n = \{8k/(k - 1)\} \{Z_{\alpha/2}/\ln(\epsilon_1)\}^2 + 2$, where the estimated confidence interval with an expected Cronbach's alpha coefficient of 0.70 was [0.65, 0.75] and the relative precision was $\epsilon_1 = (1-LL)/(1-UL)$ as described by Bonett (2002). With a two-tailed $\alpha = .05$ and $k = 17$ we find that $n = \{(8*17)/(17-1)\} \{(1.96)/\ln(1.4)\}^2 + 2$ that yields a minimum sample size of $n = 290$.

Sample Size – Group Comparison

Sample size for the group comparison analyses were determined by using the formula $n = 2[(Z_{\alpha} + Z_{1-\beta})/d]^2$ and estimating a small to medium effect size of Cohen's d ($d = 0.30$; Cohen, 1988). Setting $\alpha = .05$, $\beta = .80$, and $d = .30$, we find that $n = 175$ per group.

Appendix D: Informed Consent Form

INFORMED CONSENT FORM
College Students' Perceptions of Professor Bullying

Marisa E. Marraccini, Student Investigator
University of Rhode Island
Psychology Department
10 Chafee Road
Kingston, RI 02881
434-409-0689

DESCRIPTION OF THE RESEARCH AND THE RIGHTS OF PARTICIPANTS

We are inviting 300 University of Rhode Island students ages 18 and older to participate in a study to investigate college student views of professor/instructor bullying. You have been asked to take part in a research study described below. If you have any questions or concern, you may contact the student investigator, Marisa Marraccini, who can be reached at (434) 409-0689 or her major professor, Lisa Weyandt, Ph.D., at (401) 874-2087.

Description of the project: This research study involves responding to a series of questions about your experience and view of bullying. The purpose is to assess the frequency of professor/instructor bullying and the different types of professor/instructor bullying in a college setting.

What will be done: To participate, you must be able to read English, and you must be at least 18 years of age. The entire survey will take approximately 20-25 minutes to complete. You will be asked to complete a questionnaire on the computer about your experiences with bullying from peers and bullying from instructors and professors. Your participation is very important to this study seeking to better understand attitudes of college students toward professor/instructor bullying. Your participation is voluntary and you may quit at any time.

Risks or Discomforts: You might experience some discomfort responding to questions about your experience and views of professor/instructor bullying. There are no known risks associated with participating in this study.

Benefits of this study: You may not receive any direct benefit from taking part in this study. You may receive extra credit in your class for participation. Individual professors provide the extra credit for their classes.

Confidentiality: Your answers are anonymous and will only be seen by Marisa Marraccini, her major professor and possibly research assistants at University of Rhode Island. Participation in this project is completely confidential. Your

information will not be shared with any organization. To ensure the confidentiality of participant data entered via the Internet, the data will be saved with unique non-identifying user ID and passwords. Data collected online do not contain identifying information.

Decision to quit at any time: You may choose not to participate at any time and your decision will in no way affect your status with the University of Rhode Island.

Rights and Complaints: If you have any questions or concerns about this study, please contact Marisa E. Marraccini, (434) 409-0689 or her major professor, Lisa Weyandt, Ph.D, (401) 874-2087. If you have questions about your rights as a research subject, you may contact the Vice President for Research, 70 Lower College Road, University of Rhode Island, Kingston, RI at 401.874.4328, Marisa E. Marraccini at (434) 409-0689, or Lisa Weyandt, Ph.D. at (401) 874-2087 and they will discuss them with you.

I have read the consent form and have no further questions about my participation in this project at this time. I understand that I may ask any additional questions at any time, that my participation in this project is voluntary, and that I may withdraw from this project at any time.

- I am at least 18 years old and I have read the consent form and agree to participate
- I choose not to participate or I am not at least 18 years old

Appendix E: Demographic Questionnaire

2. Today's Date:	3. Year of Birth:
4. Major:	5. Cumulative GPA:

6. Sex:

- A. Female
- B. Male
- C. Other: _____

7. Ethnicity:

- White/European American Pacific Island
- Latino/Hispanic American Asian/Asian American
- Black/African American Multiethnic
- American Indian or Alaska Native
- Other

8. Year in University:

- Freshman
- Sophomore
- Junior
- Senior

9. Do you have a documented disability?

- Yes
- No

10. (Asked only if participant answers "Yes" to previous question): If so, what type of disability do you have?

- Physical Disability
- Learning Disability
- ADD/ADHD
- Asperger Syndrome
- Autism
- Down syndrome
- Dyslexia
- Mental Disability
- Other: _____

11. *Asked only if participant answers "Mental Disability" to previous question*):Type of Mental Disability:_____

12. What type of school(s) did you go to for elementary school?

Public

Private

Home

Other:_____

13. *Asked only if participant answers "Private School" to previous question*):

Type of Private School:

Religious

Unaffiliated

14. What type of school(s) did you go to for high school?

Public

Private

Home

Other:_____

15. *Asked only if participant answers "Private School" to previous question*):Type of Private School:

Religious

Unaffiliated

Appendix F: SPPBQ

Student Perception of Professor/Instructor Bullying Questionnaire (SPPBQ)

The purpose of this confidential questionnaire is to obtain information on student perception of professor/instructor bullying.

Section A.

After reading the definition below, please answer the following questions about your experiences with bullying. For each question choose an answer as it relates to the frequency on a scale from 0 (Never) to 3 (Very frequently).

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student's character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student's mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

16. Have you ever seen a student being bullied in college by a professor/instructor?

- 0 Never
- 1 Only once or twice since I've been in college
- 2 Occasionally
- 3 Very frequently

17. Have you ever been bullied in college by a professor/instructor?

- 0 Never
- 1 Only once or twice since I've been in college
- 2 Occasionally
- 3 Very frequently

18. (Asked only if participant does not answer "Never" to question 2) How many professors/instructors have bullied you in college?

Number of professors who bullied you: _____

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student's character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student's mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

19. Were you ever bullied in elementary, middle or high school by a teacher?

0 Never

1 Only once or twice

2 Occasionally

3 Very frequently

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student's character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student's mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

20. (Asked only if participant does not answer "Never" to question 3) How many teachers have bullied you in elementary, middle and high school?

Number of teachers who bullied you: _____

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student's character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student's mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

21. If you have been bullied by a teacher/professor/instructor, in what grades did the bullying occur? *(Please select all that apply)*

Grade
K
1
2
3
4
5
6
7
8
9
10
11
12
1st year of college
2nd year of college
3rd year of college
4th year or later in college
I have never been bullied by a teacher/professor/instructor

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student’s character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student’s mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

22. Has another student stopped or attempted to stop a professor/instructor from bullying you?
- 0 Never
 - 1 Only once or twice since I've been in college
 - 2 Occasionally
 - 3 Very frequently
23. Have you stopped or attempted to stop a professor/instructor from bullying other students in college?
- 0 Never
 - 1 Only once or twice since I've been in college
 - 2 Occasionally
 - 3 Very frequently

Teacher & Professor/Instructor Bullying Definition:

A student is being bullied by a teacher or professor/instructor when he or she uses her/his power to punish, manipulate or belittle the student beyond what would be a reasonable disciplinary procedure by:

- (1) saying hurtful things to the student (e.g. unfriendly teasing, using a sarcastic or haughty manner, using harmful words or names);
- (2) saying hurtful things about the student's character or ability (e.g., name calling, yelling, or public ridicule);
- (3) making obscene gestures to a student;
- (4) ignoring or neglecting the student;
- (5) physical actions or attacks that may involve hurting or pushing a student around (e.g. putting tape on a student's mouth);
- or (6) spreading of gossip or rumors that make other students, teachers or faculty dislike the student or that get the student into trouble.

Section B.

The following questions address different components of professor/instructor bullying as it relates to your experience during the past six months. Please answer each question as it relates to your experience during your time in college.

24. During your time in college have you experienced the following?

	<i>Never</i>	<i>Now and Then</i>	<i>Monthly</i>	<i>Weekly</i>	<i>Daily</i>
1. A professor/instructor withholding information that affects your performance.	0	1	2	3	4
2. Being humiliated or ridiculed by a professor/instructor in connection with your course.	0	1	2	3	4
3. Spreading of gossip and rumors about you by a professor/instructor.	0	1	2	3	4
4. Being ignored by a professor/instructor.	0	1	2	3	4
5. Being excluded by a professor/instructor.	0	1	2	3	4
6. Having insulting or offensive remarks made about you by a professor/instructor.	0	1	2	3	4
7. Having insulting or offensive remarks made about your attitudes by a professor/instructor.	0	1	2	3	4
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a professor/instructor.	0	1	2	3	4
9. Being shouted at or being the target of spontaneous anger by a professor/instructor.	0	1	2	3	4
10. Having a professor/instructor gossip about your sex life or spread rumors about your sexual activities.	0	1	2	3	4
11. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way by a professor/instructor.	0	1	2	3	4
12. Being told or hinted by a professor/instructor that you are incompetent.	0	1	2	3	4
13. Repeated reminders of your mistakes by a professor/instructor.	0	1	2	3	4
14. Being ignored or facing a hostile reaction when you approach a professor/instructor.	0	1	2	3	4
15. Persistent criticism of your mistakes by a professor/instructor.	0	1	2	3	4
16. Having your comments ignored by a professor/instructor.	0	1	2	3	4
17. Having false allegations made against you by a professor/instructor.	0	1	2	3	4

18. Being the subject of excessive teasing or sarcasm by a professor/instructor.	0	1	2	3	4
19. Threats of violence or physical abuse by a professor/instructor.	0	1	2	3	4
20. Acts of violent or physical abuse by a professor/instructor.	0	1	2	3	4
21. Having insulting or offensive remarks made about your private life by a professor/instructor.	0	1	2	3	4

Section C.

If you have experienced teacher bullying at earlier times in your life, the next set of questions prompts you to provide a specified year and answer the questions according to a time period of at least a couple of months in which you believe you were bullied by a teacher. For each grade you endorsed being bullied by a teacher, please answer all of the questions.

25. Select the year in elementary, middle or high school that you were MOST RECENTLY bullied by a teacher?

- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

I was never bullied by a teacher in elementary, middle or high school.

26. During this time, over a period of a least a couple of months, did you experience the following? (If you endorsed never being bullied, please answer each question generally)

	<i>Never</i>	<i>Now and Then</i>	<i>Monthly</i>	<i>Weekly</i>	<i>Daily</i>
1. A teacher withholding information that affects your performance.	0	1	2	3	4
2. Being humiliated or ridiculed by a teacher in connection with your course.	0	1	2	3	4
3. Spreading of gossip and rumors about you by a teacher.	0	1	2	3	4
4. Being ignored by a teacher.	0	1	2	3	4
5. Being excluded by a teacher.	0	1	2	3	4
6. Having insulting or offensive remarks made about you by a teacher.	0	1	2	3	4
7. Having insulting or offensive remarks made about your attitudes by a teacher.	0	1	2	3	4
8. Crude and offensive sexual remarks directed at you, either publicly or privately, by a teacher.	0	1	2	3	4
9. Being shouted at or being the target of spontaneous anger by a teacher.	0	1	2	3	4
10. Having a teacher gossip about your sex life or spread rumors about your sexual activities.	0	1	2	3	4
11. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way by a teacher.	0	1	2	3	4
12. Being told or hinted by a teacher that you are incompetent.	0	1	2	3	4
13. Repeated reminders of your mistakes by a teacher.	0	1	2	3	4
14. Being ignored or facing a hostile reaction when you approach a teacher.	0	1	2	3	4
15. Persistent criticism of your mistakes by a teacher.	0	1	2	3	4
16. Having your comments ignored by a teacher.	0	1	2	3	4
17. Having false allegations made against you by a teacher.	0	1	2	3	4
18. Being the subject of excessive teasing or sarcasm by a teacher.	0	1	2	3	4

19. Threats of violence or physical abuse or actual abuse by a teacher.	0	1	2	3	4
20. Acts of violent or physical abuse by a teacher.	0	1	2	3	4

Section D.

After reading the definition below, please answer the following questions about your experiences with bullying. For each question choose an answer as it relates to the frequency on a scale from 0 (Never) to 3 (Very frequently).

Peer Bullying Definition:

Students in college are being bullied when a peer or several peers who are more powerful than them deliberately and repeatedly try to hurt them by:

- (1) Attacking them verbally, using harmful words or names;
- (2) Attacking them physically;
- (3) Making obscene gestures towards them;
- or (4) Intentionally isolating them or excluding them from a social group.

27. Have you ever seen a student being bullied in college by another student?

- 0 Never
- 1 Only once or twice since I've been in college
- 2 Occasionally
- 3 Very frequently

28. Have you ever been bullied in college by another student?

- 0 Never
- 1 Only once or twice since I've been in college
- 2 Occasionally
- 3 Very frequently

29. Have you ever bullied another student in college?

- 0 Never
- 1 Only once or twice since I've been in college
- 2 Occasionally
- 3 Very frequently

Appendix G: Participant Debriefing

Thank you for participating in this study. This study was anonymous, which means there is no record of any identifying information. If you have experienced bullying or would like to discuss any of the experiences you reported during this study, please contact any of these resources:

- **Biased Response Team**

www.uri.edu/student_life/brt

brt@etal.uri.edu

- **Student Life**

www.uri.edu/student_life/

401-874-2101

- **Counseling Center**

www.uri.edu/counseling

401-874-2288

217 Roosevelt Hall

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