GRADUATE STUDENTS' PERCEPTIONS AND RESPONSES TO BULLYING FROM ACADEMIC ADVISORS

by

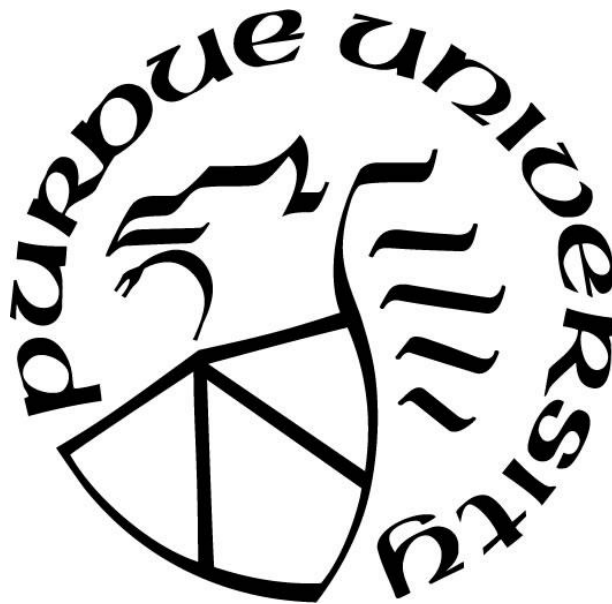**Theodora L.A Amuah**

A Thesis

Submitted to the Faculty of Purdue University
In Partial Fulfillment of the Requirements for the degree of

Master of Arts

Brian Lamb School of Communication

West Lafayette, Indiana

August 2021

THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL

Dr. William B. Collins, Chair

Brian Lamb School of Communication

Dr. Emily Buehler

Brian Lamb School of Communication

Dr. Hwanseok Song

Brian Lamb School of Communication

Approved by:

Dr. Marifran Mattson

Dedicated to my parents, my brother, and my best friend.

ACKNOWLEDGMENTS

Helen Keller's quote, "Alone we can do so little; together we can do so much," were words better understood by me during and after my journey as a master's student. Without the help and support of the individuals who made it possible for a successful completion of my thesis, I would not have been able to write an acknowledgements page to begin with.

I would like to thank God for His mighty Hand that guided me throughout my program. He heard my whispers and my cries and comforted me when I needed Him the most. My sincere appreciation goes to my academic advisor and chair, Dr. William Bart Collins for his tutelage, patience, understanding, flexibility, and encouragement. I would also like to express my gratitude to my committee members, Dr. Emily Buehler, and Dr. Hwanseok Song, for their consistent support throughout this project. I appreciate all professors at the Brian Lamb School of Communication, especially those whose classes I was enrolled and those whose counsels were sought for various graduate school issues I experienced. Without these professors, perhaps, I may not have been introduced to ideas for how to accomplish this project. To all my cohort and classmates, thank you. I was exposed to different perspectives because of you, which contributed to my critical thinking abilities. Brian Lamb School of Communication, through various professional workshops, has contributed to my personal growth as an aspiring researcher, and for that, I am truly grateful.

Without the constant motivation, support, counsel, affirmations, and prayers from my parents and my younger brother, it would have been extremely difficult to get through my master's thesis. I am ever grateful for such a loving family that always has my back. To the rest of my family in Ghana, in Maryland, and in Ohio, thank you for your collective support through phone calls, your advice, your prayers, and especially the comfort foods which saved me weeks of cooking. You all are the best! To the friends who hang out with me so that I could destress and work at having a good work-life balance, thank you! I would also like to express my heartfelt gratitude to Dr. Labi for his support and guidance on how to navigate graduate school. Lastly, to my good friend, Ronald, who also supported me through it all, especially when I was ill a few times, I am ever grateful to you. Indeed, alone I could have only done so little, but together, we all did it, and we did so much more!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Workplace bullying is a major global issue which has received a lot of recognition because of its negative effects on victims' health and work productivity. There have been many attempts to mitigate the effects of workplace bullying, leading researchers to extensively study the phenomenon in various contexts and relationships. Information on workplace bullying in the academic context, precisely relationships between academic advisors and graduate student advisees, is however, lacking. This study aimed at filling in the gap by seeking information about communicative behaviors from advisors that graduate advisees characterized as bullying, and common responses graduate advisees resorted to in the face of adversity. We also sought to understand why advisees may have responded to maltreatment in specific ways. We, therefore, proposed a working model which hypothesized a relationship between advisor negative acts, commitment levels of advisees, and advisee responses. Using Amazon's Mechanical (MTurk) to recruit our sample, participants filled out a survey which included a few demographic questions, the revised version of the Negative Acts Questionnaire (NAQ-R) to measure advisor negative acts, the Exit-Voice-Loyalty-Neglect (EVLN) typology to measure advisee responses, and the Investment Model Scale (IMS) to measure advisee commitment levels to the work relationship with advisors. We verified the reliability and validity of the scales adopted for this study and ran some correlation and mediation analyses to answer our research questions and test our hypotheses. From our findings, we learned that most advisees reported personal insults occurring more frequently in their work relationships with advisors. Advisees also reported a high commitment to the work relationships with their advisors, despite maltreatment, and often responded by adopting the voice or neglect strategy. Findings from this exploratory study imply there is more information to be sought on workplace bullying between advisees and advisors in academic contexts.

CHAPTER 1: INTRODUCTION

Bullying is a topic that has gained global attention because of its prevalence in many contexts such as at homes, schools, prisons, workplaces, on online platforms, and in face-to-face interactions (Goldsmid, 2013; Schäfer et al., 2005). Within these contexts, bullying occurs in various forms and in a variety of relationships (Dalton, 2016; Monks et al., 2011). Dalton (2016) categorizes bullying occurring between peers as a horizontal form, and bullying occurring between supervisors and subordinates as a vertical form. The two main forms of bullying can be seen in various relationships within the different contexts for which bullying occurs. For example, at home, horizontal bullying can be seen among siblings, parents, or romantic partners, whereas vertical bullying can be observed in relationships between parents and their kids. At schools, we also see horizontal bullying occurring among students, instructors, and staff, and vertical bullying occurring between instructors and their students, and/or administration and staff. In prisons, horizontal bullying could exist among inmates, among prison officers, and/or between prison officers and inmates. At workplaces, horizontal bullying could occur among supervisors and among subordinates, and vertical bullying could occur between supervisors and their subordinates.

Despite the various contexts, forms, or relationships for which bullying occurs, the effects bullying has on its victims, perpetrators, and bystanders are usually grave. Victims of bullying often have poor physical health, develop poor self -esteem, engage in substance abuse, experience depression, loneliness, or in extreme cases, end up committing suicide (Vanderbilt & Augustyn, 2010). Perpetrators of bullying may abuse drugs, carry weapons, or experience depression and psychological distress (Vanderbilt & Augustyn, 2010). For bystanders, observing targets of bullying get maltreated produces a high likelihood of developing anxiety or fear and using aggression in the future (Entenman et al.,2005).

The negative effects bullying has on victims, perpetrators, and bystanders often affect organizations as well. Organizational costs for health plans and worker compensation increase as targets of bullying experience an increase in health-related issues, and organizational costs for advertising, rehiring, interviewing, and training are incurred when employee turnover is high (Bartlett & Bartlett, 2011). Organizational culture may become toxic, organizational reputation may be tainted, and organizational productivity may poorly impacted due to low performance and increased absenteeism of targets of bully (Bartlett & Bartlett, 2011).

Looking at the gravity of the effects of bullying, information on the phenomenon in different contexts, forms, and relationships is useful in developing communication strategies for reducing bullying and mitigating its negative effects. So far, literature is generally rife with information on vertical and horizontal bullying in home, school, and work contexts, and in romantic, peer, and supervisor-subordinate relationships. However, information is lacking on vertical and horizontal bullying in academic contexts. The few studies on vertical bullying in academic work environments are mostly centered on relationships between tenured and non-tenured faculty, and relationships between faculty and their undergraduate or graduate students. In relationships between faculty and students, most research has been conducted on undergraduate students in nursing programs. Only few studies like that of Martin et al. (2015) shed light on the nature of bullying in relationships between faculty and graduate students. This study's aim was to bridge that gap by finding more information about bullying in a faculty- graduate student relationship. Specifically, we sought to understand, to a certain extent, the nature of bullying between academic advisors and their graduate student advisees.

The reason the study of this unique relationship is of importance is because of the negative effects this relationship could have on both parties, especially graduate student advisees, if not well managed. Unlike a regular faculty-student relationship, academic advisors may be expected to not only teach, but encourage, counsel, seek funding support for their advisees, and act as good role models graduate student advisees could emulate (Bloom et al.,2007). Graduate students who are mentored by academic advisors, on the other hand, are mostly expected to assist their advisors with research duties, teaching undergraduate and graduate students, grading assignments, and managing the classroom. The responsibilities of the two parties fosters frequent interactions, and these frequent interactions lead to the formation of a work relationship over time. In a relationship between academic advisors and advisees, there is obviously a high-power imbalance between academic advisors and graduate student advisees, mostly because advisees tend to take instructions from advisors often. A relationship fraught with imbalance often has bullying present (Volk et al., 2014). A study of the bullying phenomenon in such a power-imbalanced relationship will provide useful information on effective communicative practices which could be used in preventing or reducing the occurrence of bullying, leading to a well-managed and healthy work relationship.

In the sections that follow, an overview of the workplace bullying literature is provided, the research questions and hypotheses for this study are presented, the theoretical framework

proposed to study the workplace bullying phenomenon between academic advisors and graduate students is examined, our methodology and findings are presented and discussed, and limitations of this study and ideas for future research are provided.

CHAPTER 2: LITERATURE REVIEW

2.1 Workplace Bullying

Empirical research on workplace bullying began in the late 1970s (Monks et al., 2011), and a definition for the phenomenon has since been explored extensively. Einarsen & Raknes (1997), one of the early researchers of workplace bullying, defined the phenomenon as all those repeated actions and practices that are directed to one or more workers, which are unwanted by the victim, which may be done deliberately or unconsciously, but clearly cause humiliation, offense, and distress, and that may interfere with job performance and/or cause an unpleasant work environment. Kelly (2004) defined workplace bullying as persistent, offensive, abusive, intimidating, malicious, or insulting behavior; abuse of power; or unfair penal sanctions which may cause the recipient to feel upset, threatened, humiliated, vulnerable, and less confident. Zapf et al. (2011), defined workplace bullying as harassing, offending, and socially excluding someone or negatively criticizing someone's work tasks. The definition of workplace by Zapf at al. (2011) is similar to that of Farmer (2011), who defined workplace bullying as manifesting itself through verbal or physical attacks, social isolation and exclusion in the workplace, ridicule, and humiliation in front of work colleagues, assignment of demeaning work tasks, staring dirty looks, and or other forms of negative contacts, to mention but a few. The above, and many more definitions of workplace bullying, make it difficult to settle on one common definition. Despite the difficulty in developing a concise but comprehensive definition for workplace bullying (Saunders et al., 2007), common features have been found to exist in all definitions of workplace bullying: frequency, persistency, hostility, and power imbalance (Monks et al.,2009). Frequency refers to the number of times per week the bullying behavior is exhibited, persistency is the duration of time for which bullying is experienced, hostility refers to the underlying negativity of the bullying behaviors, and power imbalance refers to the disparity in perceived power between the perpetrator and the target of bully (Samnani & Singh, 2012). Irrespective of the definition assigned to bullying, if one of these common features are present, the definition of bullying has often been accepted.

Researchers, since the 1970s, not only sought to establish criteria for defining workplace bullying, but also sought to determine the causes and effects of workplace bullying. While some researchers believed that causes of workplace bullying were associated with individual-based

reasons (Seigne et al., 2007), other researchers (Leymann,1996) believed that causes of bullying at the workplace were strongly linked to organizational antecedents, where individual characteristics did not play any role in the occurrences of workplace bullying. For scholars who believed individual traits were the causes of bullying, information found suggested perpetrators of bully were usually aggressive, hostile, extraverted, egocentric, selfish, assertive, competitive, and power-driven (Seigne et al.,2007), and victims of bullying were often less extroverted, less agreeable, less conscientious, less open to experiences, and emotionally unstable (Glaso et al.,2007). For scholars like Salin & Hoel (2011), who believed that causes of bullying at the workplace were strongly linked to organizational antecedents, noisy and stressful work environments, role conflicts and ambiguity, and authoritarian leadership styles were listed as some organizational factors that contributed to bullying occurrences.

While there have been research endeavors aimed at establishing a common definition for workplace bullying, and identifying workplace bullying causes, other studies have shed light on the consequences of bullying to perpetrators, victims, and organizations. Victims of workplace bullying have often reported negative changes in their psychological well-being such as difficulty in sleeping, feelings of helplessness and loneliness, loss of self-confidence, anxiety, and depression (Vartia,2001). Perpetrators of bullying, on the other hand, have often reported experiencing depression or heavy involvement in the use of illegal drugs (Vanderbilt & Augustyn, 2010). At the organizational level, victims who are bullied have often reported reduced productivity in their work which usually leads to low performance levels of the organization (Richardson et al.,2016). Also, organizations have often reported high costs in training new employees when targets of bullying exit (Bartlett & Bartlett, 2011).

Many researchers have found that targets of bullying adopt many coping mechanisms to manage their bullying experiences. For instance, Rayner (1997) found that targets of bullying coped by confronting the perpetrator, doing nothing about bullying behavior, consulting with human resources or colleagues, or resigning from their jobs. Hogh & Dofradottir (2001) found that victims of bullying used humor as a strategy if bullying was considered minor and sought social support if bullying was considered serious. Although most targets of bullying adopt similar coping mechanisms, researchers have found that these coping mechanisms targets of bullying adopt at the workplace are not always static: they may change over time (Zapf & Gross, 2001). As bullying escalates, targets may change from using constructive coping strategies such as not getting

involved in the bully's game to destructive coping strategies such as becoming increasingly isolated (Zapf & Gross, 2001). In extreme cases, where targets of bullying are not able to cope effectively, suicidal thoughts are entertained, suicidal attempts are made, and deaths from suicide occur (Nielsen et al., 2015).

2.2 Workplace Bullying in Academia

In academia, the manifestation of bullying within various professional relationships is likely similar to how bullying manifests itself in the other workplace contexts. Belittling, public humiliation, accusations of lack of effort, name-calling, insults, intimidation, preventing access to opportunities, impossible deadlines and unnecessary disruptions, failure to give credit when due, assigning meaningless tasks, are all common ways in which bullying manifests itself in academia (Rayner & Hoel, 1997). Like victims of bullying in other workplaces, targets of bullying in academia encounter similar consequences such as developing anxiety, becoming isolated, an attack to self-esteem, insomnia, depression, loneliness and having suicidal thoughts. In extreme cases where targets of bully in academia exit, academic institutions incur training costs as well. Coping mechanisms of targets in academia are also like those in other workplace contexts: self-isolation, support seeking from friends, coworkers, and professionals, channeling of energy to other activities, staying calm, avoiding the bully, and ignoring bullying behavior (Keashly & Neuman, 2013).

In academic contexts, vertical bullying is also the most common form that occurs (Dalton, 2016). The main difference between bullying in regular workplace contexts and bullying in academic workplace contexts is the relationships in which bullying occurs. Bullying in academia, as mentioned earlier, has been studied more between tenured and non-tenured faculty, and generally between faculty and students. Because there is currently scant information about bullying in faculty-student relationships, one aim of this study was to understand graduate advisees' perceptions of advisor actions that constituted bullying. Thus, our first research question was:

RQ1: What types of potentially bullying behaviors by advisors are reported by advisees?

An understanding of advisee perceptions of actions that constitute bullying is a step closer to addressing the bullying issue in advisor-advisee relationships because chances of developing healthy work relationships void of maltreatment are increased, and effective advising or mentoring would enable graduate students to successfully achieve their academic and career goals (Lechuga, 2011).

In this study, the revised version of the Negative Acts Questionnaire (NAQ-R) by Einarsen & Hoel (2001) was adopted, as this scale has often been used in the workplace bullying literature to analyze perceptions of bullying behaviors at the workplace. The NAQ-R scale has usually been treated as one dimensional. Some researchers, however, have examined the dimensionality of the NAQ-R scale, and have reported different factor structures (Martin et al., 2015). The four-factor solution (belittlement, punishment, managerial misconduct, and exclusion) developed by Simon et al. (2011) was adopted to answer the first research question posed.

Once an understanding of what advisors' actions are perceived by advisees as bullying was gained, the next goal was to discover common coping strategies advisees adopted when they experienced being treated unfairly. By knowing response strategies of advisees when mistreated, insights into strategies that should be maintained and/or eliminated in the event bullying occurred in work relationships with advisors would be revealed. Thus, the second research question guiding this study was:

RQ2: What responses to possible advisor bullying behaviors do advisees report exhibiting?

2.3 The Exit-Voice-Loyalty-Neglect (EVLN) Model

To analyze advisee responses, the Exit-Voice-Loyalty-Neglect (EVLN) model was adopted. The EVLN model developed by Rusbult & Zembrodt (1983) was designed to analyze individuals' response behaviors to dissatisfaction in relationships. According to Rusbult & Zembrodt (1983), individuals will potentially react to dissatisfaction in relationships by being passive or active, and by being constructive or destructive. The "exit" reaction, considered as active and destructive, includes behaviors that are actively destructive to the future of the relationship (Rusbult et al.,1991, p.54). Examples of such behaviors in romantic relationships include moving out of a joint residence, getting a divorce, threatening to leave, or screaming at one's partner (Rusbult et al.,

1991, p.54). Neglect behaviors, considered passive and destructive, passively allow conditions in a relationship to deteriorate through avoidance reactions such a s ignoring the partner, avoiding discussing problems, criticizing the partner for things unrelated to the real problem, or letting things just fall apart (Rusbult et al., 1991, p.54). Voice responses, considered active and constructive, are attempts to improve conditions in a relationship, and include behaviors such as discussing problems, seeking help from a friend or therapist, changing oneself, or suggesting solutions (Rusbult et al., 1991, p.54). Lastly, loyalty reactions, considered passive and constructive, have to do with optimistically waiting for positive change and include behaviors such as waiting, hoping, and praying that things will improve (Rusbult et al., 1991, p.54).

Based on the definitions of the passive and active, and the constructive and destructive responses, examples of behaviors that fall under the exit category in an advisor-advisee relationship would be advisees committing suicide, leaving the current work relationship to find other advisors to work with, and leaving the academic institution where bullying is experienced. Examples of neglect behaviors would include advisees ignoring their advisors or letting things slide. The examples of voice and loyalty behaviors listed earlier hold true for advisor-advisee relationships as well.

In this study, aside from seeking answers to questions related to advisee perceptions of advisor actions that constitute bullying and advisee responses to bullying from advisors, hypotheses about the quality of works relationships between advisors and advisees influencing advisee responses to bullying behaviors from advisors were explored. The investment model of commitment processes, expanded in the next section, was the model adopted as a potential theoretical framework for explaining the relationships between potential bullying and coping strategies.

2.4 The Investment Model of Commitment Processes

The concept of relational maintenance has been a topic of strong interest in the interpersonal communication field since the 1980s (Duck, 1988). Since the genesis of the research tradition, many definitions have been used to describe relational maintenance. One of the simplest definitions of relational maintenance was proposed by Duck (1988) as the actions of parties in a relationship that preserve its existence. Although there have been many perspectives provided to understanding the concept, researchers have focused most of their attention to identifying which communication behaviors are used most successfully to maintain different types of relationships,

especially romantic ones (Tong & Walter, 2011). One of the common relational maintenance theories that explain communication processes used to maintain relationships is the investment model derived from Kelley and Thibaut's (1978) interdependence theory.

The interdependence theory is a theory that explains how partners in a relationship depend on each other for their needs, where dependence is defined as the extent to which an individual needs a relationship and relies primarily on a given partner and relationship for the fulfillment of important needs (Kelley & Thibaut, 1978). According to Kelley & Thibaut (1978), when individuals believe they are obtaining the best possible deal, however poor the relationship may be in an absolute sense, they are more dependent on the relationship and are likely to remain together. In other words, individuals are likely to still maintain relationships that are unhealthy if they tend to have a high dependence on a relationship for their needs.

The investment model (IM) is an extension of the interdependence theory, where dependence is subjectively expressed as a sense of commitment to a relationship, and commitment is enhanced when individuals feel satisfied, when they perceive alternatives to the relationship to be poor, and when they have invested important resources in the relationship (Rusbult et al., 1994). Johnson (1982) defines commitment as long-term orientation toward a relationship and includes intentions to remain in the relationship as well as feelings of attachment. The investment model proposes that feelings of commitment are influenced by satisfaction, quality of alternatives, and investment size (Rusbult et al., 1994). Satisfaction refers to "the level of positive or negative affect associated with a relationship (Rusbult et al.,1998). Quality of alternatives refers to "perceived desirability of the best available alternative to a relationship" (Rusbult et al.,1998). Lastly, investment size refers to "the magnitude and importance of resources that are attached to the relationship – resources that would decline in value or be lost if the relationship were to end" (Rusbult et al.,1998). According to Buckho et al.'s (2017) findings on the investment model, not one of the three factors is enough to predict levels of commitment to any relationship. However, investment size is the factor that highly predicts commitment levels in relationships (Rusbult et al., 1998).

The investment model, since it was developed, has mostly been applied to abusive romantic relationships (Rhatigan & Axsom, 2006) and a variety of contexts such as socially marginalized relationships (Lehmiller & Agnew, 2007), friendships (Aizawa, 2003), organizational contexts (Bolkan & Goodboy, 2015), and supervisory relationships (Peleg-Oren et al., 2007). In this study, the investment model was applied to analyze advisee commitment to work relationships with

advisors and the influence of commitment on advisee responses to maltreatment from advisors. A working model (seen in figure 1) was created to include the four-factor solution of the NAQ-R scale, the IM scale, and the EVLN model. Based on this new working model, the following hypotheses were proposed:

H1: Perceived advisor bullying behaviors will be associated with relational commitment associated outcomes.

> **H1a: Perceived advisor bullying behaviors will be negatively associated with positive indicators of commitment (satisfaction and investment size).**

> **H1b: Perceived advisor bullying behaviors will be positively associated with negative indicators of commitment (quality of alternatives).**

H2: Advisee perceptions of bullying behaviors will be associated with advisee response strategies.

> **H2a: Advisee perceptions of bullying behaviors from advisors will be positively associated with destructive (neglect and exit) advisee response strategies.**

> **H2b: Advisee perceptions of bullying behaviors from advisors will be negatively related with constructive (voice and loyalty) advisee response strategies.**

H3: Commitment model constructs will mediate the relationship between advisee perceptions of bullying behaviors and advisee responses.

Findings of previous workplace bullying studies suggest that the social categories a person belongs to (race, gender, ethnicity, class, age, religion, disability, etc.) may affect their risk of being subject to workplace bullying and harassment, their sense-making of it and their responses to it (Salin, 2021). Based on such studies, it was speculated that social categories like race, gender, ethnicity, class, and age may have influenced potentially bullying behaviors advisors exhibited and graduate advisee responses. In this study, the relationships between one of these social categories (gender), potential bullying behaviors, and advisee response strategies, were explored. Thus, our third, fourth, fifth, and sixth research questions were:

> **RQ3: Is gender of advisee related to potentially bullying behaviors reported?**

> **RQ4: Is gender of advisor related to potentially bullying behaviors reported?**

RQ5: Is gender of advisee related to advisee response strategies?

RQ6: Is gender of advisor related to advisee response strategies?
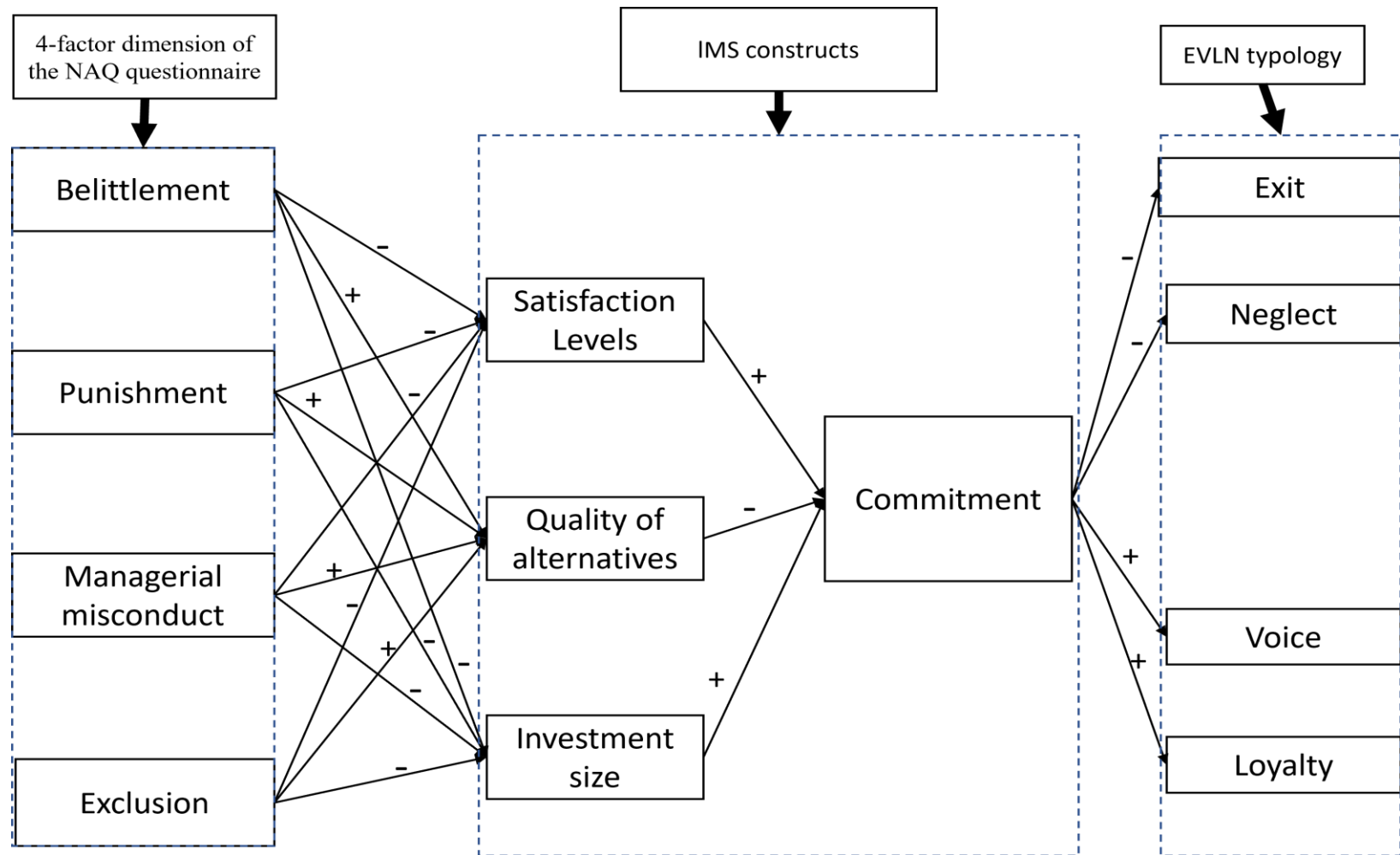
Figure 1: A working model of advisor-advisee bullying.

CHAPTER 3: METHODS

3.1 Participants

The criteria used in allowing for participation in this study included an indication of informed consent to willingly participate, an agreement to the terms of confidentiality and anonymity, a confirmation of being 18 years or older, and an indication of being a current or former graduate student who had at least a year's relationship with one academic advisor during their graduate program.

Of the 309 participants who met the criteria for partaking in this study, 95 responses were removed based on the following criteria set for including data for analyses: 96% and above progress completion rate, 85 seconds and above time duration in completing the study, and IP addresses which appeared only once (and even if appeared more than once, should display different participant majors).

The final sample utilized for data analysis comprised of 214 participants, 110 of which were men, 101 of which were women, and 3 of which indicated being of the third gender. Participant age ranged from 23 to 81 years (M = 43.989, SD = 13.35), with 176 masters students, 34 doctoral students, and 4 individuals who did not declare the highest level of graduate school education attained. Other demographic information such as the gender of advisors can be found in table 1.

3.2 Procedures

A survey was created on Qualtrics, a web-based survey tool for conducting research. Once IRB approval was obtained from the Human Research Committee, participants were recruited through Amazon Mechanical Turk (MTurk), an online crowdsourcing platform where workers are compensated for tasks completed. MTurk workers are people who have accounts with MTurk for the sole purpose of taking surveys. MTurkers also do other huma intelligence tasks (HITs) such as sorting images into categories and so on. Participants (the MTurk workers) who agreed to partake in this study had access to the Qualtrics survey link which contained open and close-ended questions about participants 'demographics and their experiences with their academic advisors.

All participants who successfully completed the survey were compensated with an amount of $1.25.

3.3 Measures

Bullying behavior from academic advisors was measured using the Negative Acts Questionnaire –Revised (NAQ-R) by Einarsen et al. (2009), a 22-item self-report instrument that measures an individual's perception that they have been the target of bullying within the last six months. Although researchers still debate on whether to attribute two, three, four, or five dimensions to the NAQ –R self-report instrument (Einarsen & Raknes, 1997), the four-factor dimension (belittlement, punishment, managerial misconduct, and exclusion) determined by Simons et al. (2011) was adopted for this study. On the four-factor scale, except for exclusion which comprised of four items, all other sub-factors comprised of six items (Martin et al., 2015). Einarsen et al. (2009) attested to the NAQ-R scale's reliability (= 0.90), and Simons et al. (2011) discovered that all four sub-factors, belittlement (a= .74), punishment (a=.82), managerial misconduct (a= .77), and exclusion (a=.75) were also reliable. Based on the reliability of the NAQ-R and its usefulness in the study by Martin et al. (2015), the four sub-factor NAQ-R scale was adopted in this study as measurement of the negative acts advisees experienced from academic advisors.

The Investment Model Scale (IMS) by Rusbult et al. (1998) was originally created to measure the commitment level of individuals to romantic relationships The scale comprises of four constructs: satisfaction level, investment size, quality of alternatives, and commitment level (Rodrigues & Lopes, 2012), all of which collectively assess commitment to the relationship. The 37-item IMS scale consists of 15 facet items and 22 global items (Rusbult et al., 1998). In this study, all four constructs were measured using the 22 global items of the scale. The global items, with reliability values $\alpha = .94$ for satisfaction levels, $\alpha = .75$ for quality of alternatives, $\alpha = .90$ for investment size, and $\alpha = .91$ for commitment level, were adapted to fit the academic advisor-graduate student advisee relationship context. For instance, items related to elements of intimacy and sex on the satisfaction level sub-scale were eliminated, but elements of companionship and security were maintained. In total, the commitment level construct was measured by seven global items and the three remaining subscales were measured by five global items each, as seen in appendix A.

The Exit-Voice-Loyalty-Neglect (EVLN) measurement scale, originally developed to measure responses to dissatisfactory behavior in romantic relationships, proposes that individual's responses to dissatisfactory behaviors in relationships will either be constructive or destructive, and active or passive (Rusbult, 1982). Adaptations of the scale have been developed to measure responses to dissatisfactory behavior in work relationships as well. In such professional relationships, the Exit category includes job movement both within and across organizational boundaries, as well as a variety of activities that precede leaving (Hirschman, 1970). The Voice category includes informal methods of interest articulation and formal mechanisms for attempting to bring about positive change (Hirschman, 1970). Loyalty is defined as a constructive, yet passive reaction wherein employees stand by the organization, waiting for conditions to improve (Hirschman, 1970). Lastly, the Neglect category includes reactions wherein the employee passively allows conditions to worsen (Farrell & Rusbult, 1992). Voice and Loyalty fall under the constructive category, whereas Exit and Neglect fall under the destructive category (Farrell & Rusbult, 1992). Exit and Voice are active strategies in dealing with unsatisfactory relationships, whereas Loyalty and Neglect are passive strategies in dealing with unsatisfactory relationships (Farrell & Rusbult, 1992).

In a study by Rai & Agarwal (2019), the 17-item EVLN measurement scale created by Rusbult et al. (1988) was adopted, and each item on the scale anchored on a five-point scale ranging from 1(strongly agree) to 5 (strongly disagree). The reliability values for the subscales in Rai &Agarwal's (2018) study were as follows: exit = 0.85, voice=0.81, loyalty =0.71, and neglect = 0.85. In this study, all items of the 17-item EVLN scale used in Rai & Agarwal's (2019) study were adapted to identify which of the four responses to hurtful behavior graduate students leaned more towards, after which responses were categorized as either constructive or destructive. Like the study conducted by Rai & Agarwal (2019), exit, voice, and loyalty were measured by 4 items each, and neglect was measured by 5 items.

Table 1: Descriptive statistics for demographics

Demographics	N	Percent (%)
Participant (advisee) Gender		
Male	110	51.4
Female	101	47.2
Nonbinary	2	.9
Agender, present male	1	.5
Advisor Gender		
Male	124	57.9
Female	88	41.1
Nonbinary	1	.5
Participant Age		
Reported	212	99.1
Not reported	2	.9
Highest Level of Education		
Masters	176	82.6
Doctorate	34	15.9
Other	3	1.4
Not reported	1	.5
Ethnicity		
Asian	23	10.7
American Indian/Alaskan Native	1	.5
Black/African American	9	4.2
Latino/Hispanic	16	7.5
Native Hawaiian/Other Pacific Highlander	2	.9
White/Caucasian	174	81.3
Other	1	.5
Prefer not to say	2	.9
Student Immigration Status		
Domestic	208	97.2
International	6	2.8
Advisor Immigration Status		
Domestic	200	93.5
International	14	6.5
Meeting frequency		
Daily	13	6.1
Weekly	86	40.2
Biweekly	34	15.9
Monthly	49	22.9
Never	4	1.9
Other	28	13.1

CHAPTER 4: RESULTS

Prior to conducting analyses to answer the study's proposed research questions and hypotheses, confirmatory factor analyses (CFA) were conducted on all study variables to validate their factor structure. Analyses were conducted with the R package Lavaan through Jamovi for each set of variables (NAQ, IMS, and EVLN) and their associated subscales. The following indices were used to evaluate the adequacy of the variables tested: the ratio χ^2 statistical test/degrees of freedom (χ^2/df), root mean square error of approximation (RMSEA), square root mean residual (SRMR), and the comparative fit index (CFI).

For the NAQ, the four subscales were included in a CFA analysis, where each of the specific items loaded on their respective latent variables, and the latent variables were allowed to be correlated. Based on a χ^2 statistical test/degrees of freedom (χ^2/df) < 5.0 suggested by March & Hocevar (1985), root mean square error of approximation (RMSEA) < .08 suggested by Browne & Cudeck (1992), square root mean residual (SRMR) ≤ .08, and the comparative fit index (CFI) ≥ .90, both suggested by Hu & Bentler (1999), the overall factor structure evidenced poor model fit (see Table 2). Investigations of the coefficients indicated significant cross loading items. Given the poor model fit, an EFA was conducted using principal axis extraction with direct oblimin rotation. Parallel analysis indicated a three-factor solution (overt criticism, personal insults, and exclusion) was appropriate after removing items with loading sizes 0.5 above the primary loading with at least a two- point distance between the primary and the secondary loadings (see appendix B). We called this new three-factor scale NAQ-N.

The four subscales of the IMS were included in a CFA as well. Each of the specific items loaded on their respective latent variables allowed to be correlated too. One item was reverse coded before the CFA analysis was ran. Again, based on the indices' suggestions described above, the overall factor structure evidenced good model fit (see Table 2)**.** Investigations of the coefficients indicated significant cross loading items. Although the model indicated good fit, an EFA was conducted using principal axis extraction with direct oblimin rotation to produce a model with better fit. As displayed in appendix C, parallel analysis indicated the three-factor solution (investment, satisfaction, and quality of alternatives) was appropriate after removing items with loading sizes 0.5 above the primary loading with at least a two- point distance between the primary

and the secondary loadings. The new three-factor scale was accorded the same name as the old one (IMS), as only one item from the old scale was removed.

Four subscales of the EVLN scale were included in a CFA analysis, each of the items loaded on their respective latent variables. Like the NAQ, the overall factor structure evidenced a poor model fit (see Table 2). Coefficients indicated significant cross loading items. An EFA was conducted using principal axis extraction with direct oblimin rotation. Parallel analysis indicated a two-factor solution (Voice and Neglect) was appropriate after removing all items with loading sizes 0.5 above the primary loading with at least a two- point distance between the primary and the secondary loadings (see appendix D). The new two-factor scale was named the Voice-Neglect (VN) scale.

Table 2: Summary of Fit Indices of the NAQ, IMS, and EVLN Models

Model	χ^2	df	p	χ^2/df	RMSEA	SRMR	CFI	TLI
Model 1- NAQ (four factor)								
	677.52	146	<0.001	4.64	0.13	0.05	0.87	0.85
Model 2- IMS (four factor)								
	537.68	183	<0.001	2.94	0.10	0.13	0.90	0.89
Model 3- EVLN (four factor)								
	363.36	146	<0.001	2.49	0.08	0.08	0.88	0.86

Note: RMSEA = root mean square error of approximation, SRMR = square root mean residual, CFI = comparative fit index.

After the new scales were developed, based on the results of the EFA, the following were the reliability scores for the NAQ-R scale: overt criticism $\alpha = 0.954$, personal insults $\alpha = 0.879$, exclusion $\alpha = 0.874$. For the new VN scale, the reliability scores were as follows: voice $\alpha = 0.853$, neglect $\alpha = 0.888$. Lastly, the reliability scores for the new IMS scales were as follows: investment $\alpha = 0.921$, satisfaction $\alpha = 0.940$, quality of alternatives $\alpha = 0.741$. Correlations of all retained study variables can be seen in Table 3.

Table 3: Correlation Matrix for Advisor Gender, Advisee Gender, IMS, NAQ, and EVLN Variables

Study Variables	1	2	3	4	5	6	7	8	9	10
1.Advisor Gender	—									
2. Advisee Gender	0.31 ***	—								
3. Overt Criticism	-0.12	-0.10	—							
4.Personal Insults	-0.12	-0.04	0.75 ***	—						
5. Exclusion	-0.07	-0.02	0.71 ***	0.68 ***	—					
6. Investment	-0.19 **	-0.15 *	0.19 **	0.25 ***	-0.03	—				
7. Satisfaction	-0.09	-0.12	0.04	-0.03	-0.31 ***	0.70 ***	—			
8. Alternatives	-0.17 *	-0.08	0.25 ***	0.30 ***	0.33 ***	0.15 *	-0.03	—		
9. Voice	-0.04	-0.15 *	-0.07	-0.01	-0.17 *	0.24 ***	0.35 ***	-0.01	—	
10. Neglect	-0.09	-0.11	0.64 ***	0.56 ***	0.53 ***	0.14 *	-0.08	0.31 ***	-0.08	—
Mean	1.42	1.48	1.33	1.55	1.50	5.17	6.04	4.84	4.8	2.2
SD	0.49	0.50	0.81	0.86	0.85	2.14	2.20	1.92	1.24	1.36
α			0.95	0.88	0.87	0.92	0.94	0.74	0.85	0.89

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

Research question 1 sought to identify what types of potentially bullying behaviors by advisors were reported by advisees. To answer RQ1, a repeated measure analysis of variance (ANOVA) was conducted. The means of the three - factor NAQ-N scale (overt criticism, personal insults, and exclusion) were compared: overt criticism, M= 1.33, SD = 0.81; personal insults, M= 1.55. SD = 0.86; exclusion, M= 1.50, SD = 0.85. The overall test of within-subject effects was statistically significant (η_p^2= 0.062, F (1,213) = 14.10, p = 0.000001) and evidenced a medium effect size. Post-hoc tests examining the pairwise comparisons, Bonferroni corrected, indicated: advisee perceptions of being overtly criticized were significantly lower than perceptions of being insulted (Δ = 0.221, p<0.05); advisee perceptions of being overtly punished were significantly lower than perceptions of being excluded (Δ=0.166, p<0.05); but perceptions of being personally insulted and being excluded were not significantly different (Δ=0.055, p = 0.71). These results suggested that overall, advisees reported experiencing personal insults more frequently than overt criticism or exclusion. Figure 2 illustrates these findings.
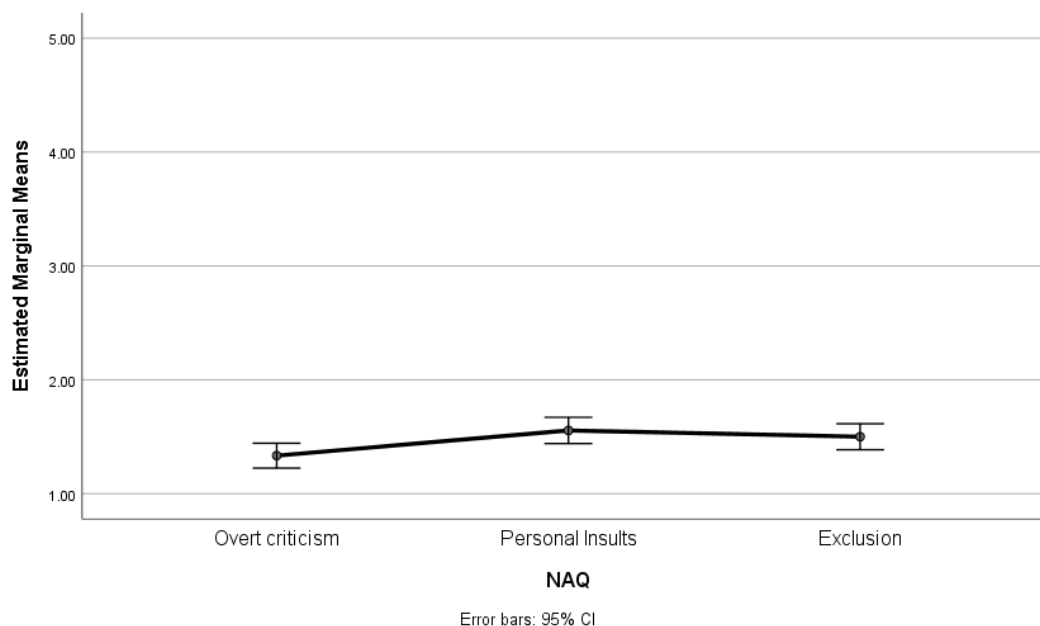
Figure 2: Differences in means of negative acts questionnaire variables with 95% confidence interval

Research question 2 sought to determine which responses to negative acts were commonly reported by graduate advisees. A paired sample t-test was conducted to answer RQ2, where the means of the two - factor EVLN scale (voice and neglect) were compared: voice, M= 4.8, SD = 1.24; neglect, M= 2.2, SD = 1.36. The overall test of within-subject effects was statistically significant; t (213) = 19.94, p

<0.05. Voice as a response strategy was used significantly more than neglect ($\Delta = 2.62$, Cohen's d = 1.36). The results indicate that overall, when advisees experienced negative acts, they were more likely to use voice as a response strategy than neglect. Figure 3 illustrates these results.
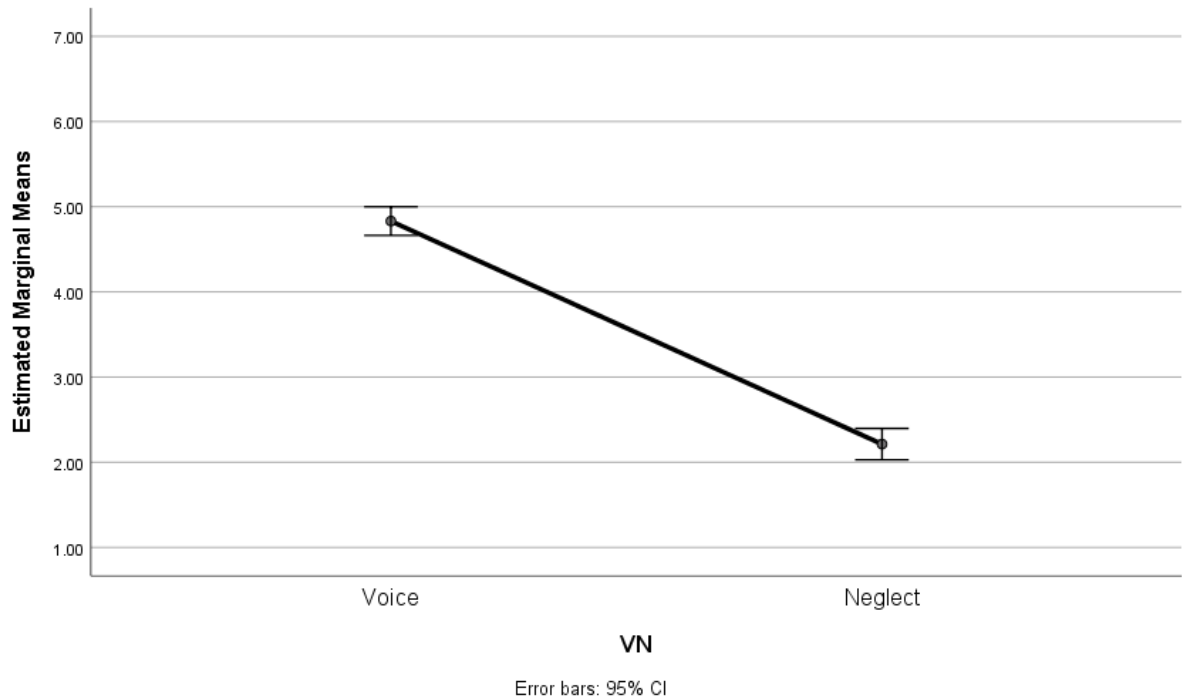
Figure 3: Differences in means of advisee response (VN) variables with 95% confidence interval

Research questions 3 and 4 examined the impact of advisee and advisor gender on negative acts reported. These questions were analyzed concurrently using a multivariate analysis of variance (MANOVA), with advisee and adviser gender as independent variables, and overt criticism, personal insults, and exclusion as the dependent variables. Means of advisee gender to advisor gender for the three factor NAQ scale can be found in table 4.

Table 4: Means of advisee gender to advisor gender for the negative acts reported

	Advisee Gender	Advisor Gender	Mean	Std. Deviation
Overt criticism	Male	Male	1.4734	1.00521
		Female	1.2621	.71734
	Female	Male	1.3302	.86066
		Female	1.1966	.46865
Personal Insults	Male	Male	1.6456	.91778
		Female	1.3966	.54493
	Female	Male	1.6221	.96882
		Female	1.4526	.80494
Exclusion	Male	Male	1.5232	.83791
		Female	1.5057	.95378
	Female	Male	1.6047	1.09171
		Female	1.4023	.60136

Findings revealed that there were no significant interaction effects between gender of advisees and gender of advisors (Pillai's trace = 0.11, F (3,203) = 0.762, p = 0.512), there were no significant differences between the gender of advisee and the negative acts reported (Pillai's trace = 0.11, F (3, 203) = 0.749, p = 0.52), and there were no significant differences between gender of advisor and the negative acts portrayed (Pillai's trace = 0.015, F (3, 203) = 1.02, p = 0.38). The above results suggested that advisor and advisee gender was unrelated to the level of negative acts reported.

Research questions 5 and 6 examined the impact of advisee and advisor gender on response strategies reported. These questions were also analyzed concurrently using MANOVA, with advisee and adviser gender as independent variables, and voice and neglect as the dependent variables. Means of advisee gender to advisor gender for the two factor VN scale can be seen in table 5.

Table 5: Means of advisee gender to advisor gender for response strategies reported

	Advisee Gender	Advisor Gender	Mean	Std. Deviation
Voice	Male	Male	4.9489	1.18639
		Female	5.1782	1.17255
	Female	Male	4.7403	1.29623
		Female	4.5575	1.31884
Neglect	Male	Male	2.4209	1.40136
		Female	2.1379	1.22253
	Female	Male	2.1349	1.55516
		Female	2.0172	1.22103

Findings revealed that there was no significant interaction effect between advisor and advisee gender on voice and neglect (Pillai's trace = 0.07; $F (2, 204) = 0.671$; $p = 0.512$). There was also no significant main effect of advisor gender on the response strategy used by advisees (Pillai's trace = 0.05; $F (2, 204) = 0.490$; $p = 0.6130$. However, there was a significant effect of advisee gender on the response strategy used (Pillai's trace = 0.031; $F (2, 204) = 3.237$; $p<0.05=0.041$). Univariate testing found the effect to be significant between advisee gender and the voice strategy ($F (1,205) = 5.06$, $p<0.05$). Results indicated that advisee gender had an impact on voice but not neglect. Specifically, if an advisor was female, it was highly likely that the gender of advisees who responded to negative acts using the voice strategy was male. Figure 4 below illustrates these results.
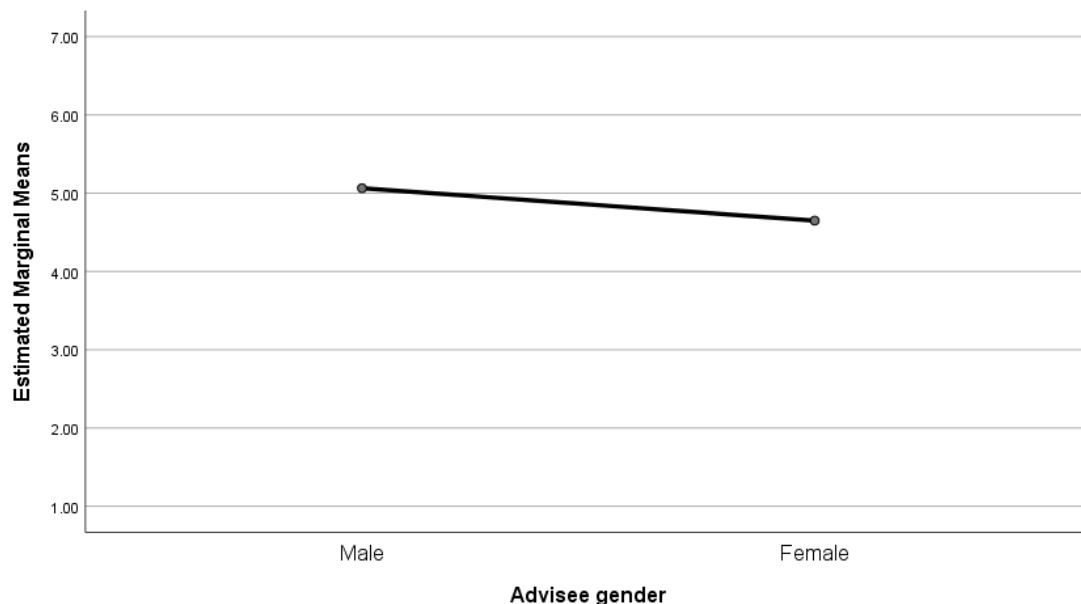
Figure 4: Main effect of advisee gender on the voice strategy

In this study, it was hypothesized that perceived advisor bullying behaviors will be negatively associated with satisfaction and investment size (H1a), and perceived advisor bullying behaviors will be positively associated with quality of alternatives (H1b). To test H1, simple correlations were conducted. As seen in Table 3, H1b was supported, as advisor negative acts (overt criticism, personal insults, and exclusion) and quality of alternatives were positively correlated: H1a, however, was not supported (see Table 3), as advisor negative acts were positively correlated with satisfaction and investment.

The sub hypothesis for our second hypothesis were that advisee perceptions of bullying behaviors from advisors will be positively associated with destructive (neglect and exit) advisee response strategies (H2a), and advisee perceptions of bullying behaviors from advisors will be negatively related with constructive (voice and loyalty) advisee response strategies (H2b). As stated earlier, exit and loyalty constructs were removed because of the cross-loading results observed from the EFA analyses conducted. Standard multiple regression analyses were performed separately, where negative acts (overt criticism, personal insults, and exclusion) were the independent variables, and response strategies (voice and neglect) were the dependent variables. Results from the regression analyses indicated that there was a significant regression equation for voice: $F (3, 210) = 3.457$, $p < 0.05$, with an R^2 of .047. Exclusion from advisors was a significant predictor of the voice strategy, as seen in table 4. Results from the regression analysis also indicate a significant regression equation for neglect: $F (3, 210) = 51.721$, $p < 0.05$, with a R^2 of .425. As seen in table 6, overt criticism was a significant predictor of neglect. These analyses suggested that H2a was supported and H2b was partially supported: except for overt criticism and personal insults, advisee perceptions of being excluded by their advisors was most strongly associated with the use of voice as a strategy. In contrast, advisee perceptions of being overtly criticized by their advisors was most strongly associated with the use of neglect as a response strategy.

Table 6: Regression analysis summary: Voice predicted by overt criticism, personal insults, and exclusion

Negative Acts	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.057	.185		27.346	.000
Overt Criticism	.019	.172	.012	.109	.913
Personal Insults	.266	.156	.182	1.700	.091
Exclusion	-.113	.149	-.301	-2.969	.003

$R^2 = .043$, $F (3, 210) = 3.457$, $p = <0.05$

Table 7: Regression analysis summary: Neglect predicted by overt criticism, personal insults, and exclusion

Negative Acts	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.575	.157		3.658	.000
Overt Criticism	.751	.146	.446	5.144	.000
Personal Insults	.239	.133	.150	1.795	.074
Exclusion	.176	.127	.109	1.387	.167

$R^2 = .047$, $F(3, 210) = 51.721$, $p < 0.05$

The third hypothesis (H3) for this study was that IMS variables will mediate the relationship between negative acts and advisee responses. To test H3, parallel mediation analyses were conducted using PROCESS (Hayes, 2013), model 4. Six parallel mediation models were conducted, with each model set up to have one of the NAQ-N variables as independent, three of the IMS variables as mediators, and one of the EVLN variables as dependent. All mediation analyses were conducted using 5000 bootstrapped samples.

Results of the first parallel mediation analysis revealed that the total effect of overt criticism on neglect was large and statistically significant (c= 0.64, p<0.001). Overall, there was an indirect effect of overt criticism on neglect through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 = 0.06$, 95% CI = 0.01 to 0.10). Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 = 0.03$, 95% CI = 0.0003 to 0.0651), satisfaction ($a_2b_2 = -0.01$, 95% CI = -0.03 to 0.01), and quality of alternatives ($a_3b_3 = 0.03$, 95% CI = 0.01 to 0.07). Confidence intervals did not include zero for investment and quality of alternatives, suggesting parallel mediation from the two relationship quality traits. Confidence intervals for satisfaction included zero, suggesting that satisfaction did not mediate negative acts and neglect. Model 1, displayed in figure 5, illustrates these findings.

Figure 5: A parallel mediation model: IMS variables mediating overt criticism and neglect.

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
*p < .05, **p < .01, ***p < .001, all two-tailed.

Results of the second parallel mediation analysis revealed that the total effect of overt criticism on voice was small and not statistically significant (c= -0.07, p = 0.343). Overall, there was no indirect effect of overt criticism on voice through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 = 0.02$, 95% CI = -0.03 to 0.08). Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 = 0.003$, 95% CI = -0.033 to 0.040), satisfaction ($a_2b_2 = 0.02$, 95% CI = -0.02 to 0.05), and quality of alternatives ($a_3b_3 = 0.01$, 95% CI = -0.04 to 0.05). Confidence intervals included zero for investment, satisfaction, and quality of alternatives, suggesting no parallel mediation. The above results suggested that the commitment level between advisors and advisees does not indirectly affect the voice strategy used by advisees when overtly criticized by advisors. Model 2, displayed in figure 6, illustrates these findings.

$a_1b_1 = 0.005$

$a_2b_2 = -0.023$

$a_3b_3 = 0.008$

$a_1b_1 + a_2b_2 + a_3b_3 = 0.036 \; [-0.049, 0.123]$

Investment

$a_1 = 0.501^*$

$b_1 = 0.001$

Satisfaction

$a_2 = 0.120$

$b_2 = 0.192^{***}$

Overt Criticism

$c' = -0.137$

$c = -0.100$

Voice

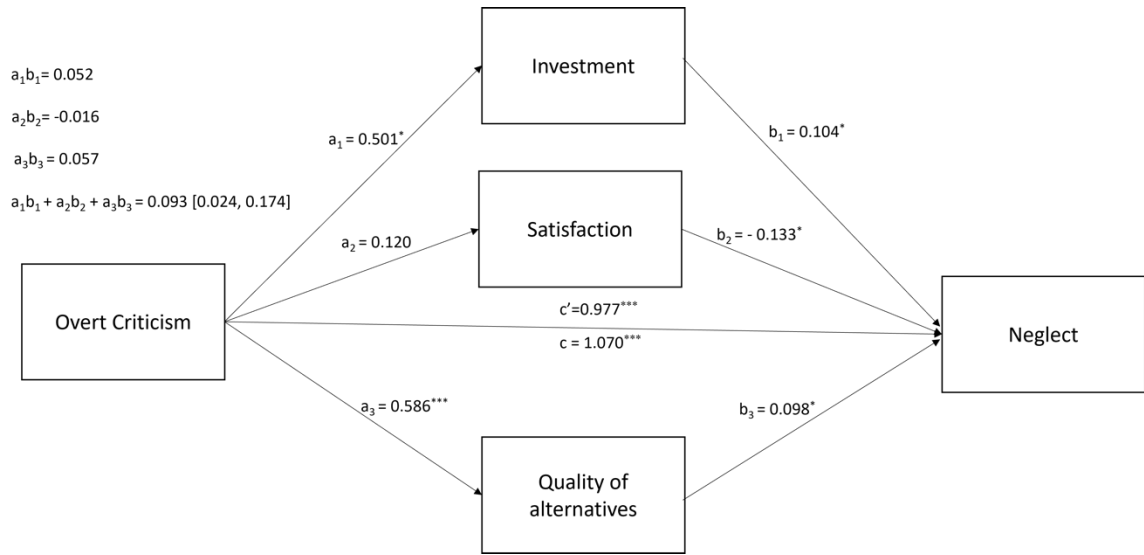$a_3 = 0.586^{***}$

$b_3 = 0.014$

Quality of alternatives

Figure 6: A parallel mediation model: IMS variables mediating overt criticism and voice.

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
$^*p < .05$, $^{**}p < .01$, $^{***}p < .001$, all two-tailed.

Results of the third parallel mediation analysis revealed a large and statistically significant total effect of personal insults on neglect (c= 0.558, p<0.001). Overall, there was a significant indirect effect of personal insults on neglect through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 = 0.07$, 95% CI = 0.01 to 0.13. Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 = 0.02$, 95% CI = -0.02 to 0.06), satisfaction ($a_2b_2 = 0.0039$, 95% CI = -0.01 to 0.03), and quality of alternatives ($a_3b_3 = 0.05$, 95% CI = 0.007 to 0.09). Confidence intervals did not include zero for quality of alternatives but included zero for investment and satisfaction. The results suggested no parallel mediation between personal insults and neglect. This means that advisees who reported experiencing personal insults were more likely to neglect their duties, and the relationship between personal insults from advisors and neglect was indirectly influenced by quality of alternatives. Model 3, displayed in figure 7, illustrates these findings.

$a_1b_1 = 0.031$

$a_2b_2 = 0.006$

$a_3b_3 = 0.071$

$a_1b_1 + a_2b_2 + a_3b_3 = 0.109\ [0.016, 0.208]$

$a_1 = 0.614^{***}$

$a_2 = -0.089$

$a_3 = 0.679^{***}$

$b_1 = 0.051$

$b_2 = -0.070$

$b_3 = 0.106^{*}$

$c' = 0.781^{***}$

$c = 0.891^{***}$

Investment

Satisfaction

Quality of alternatives
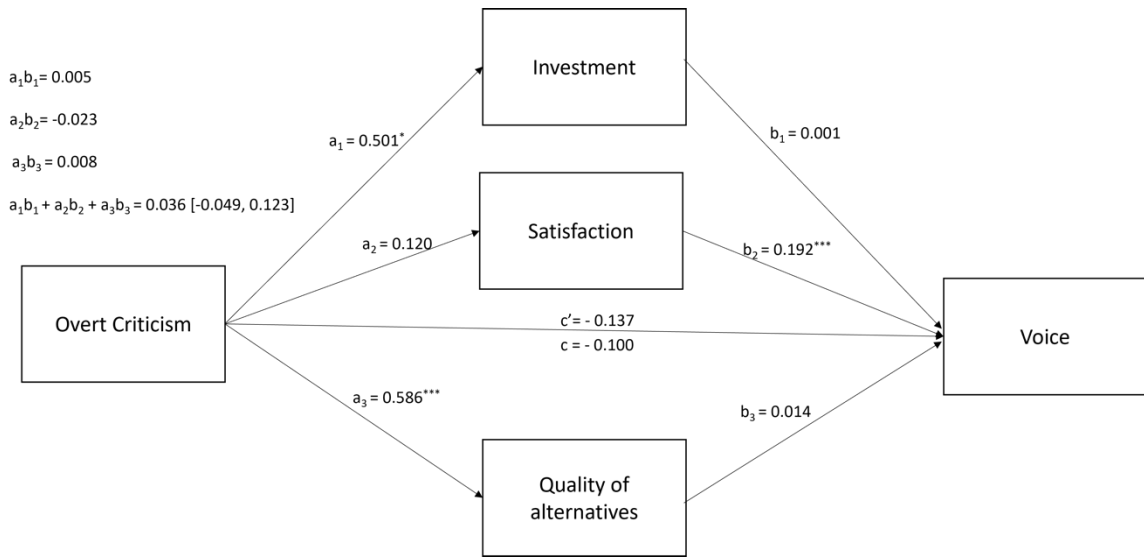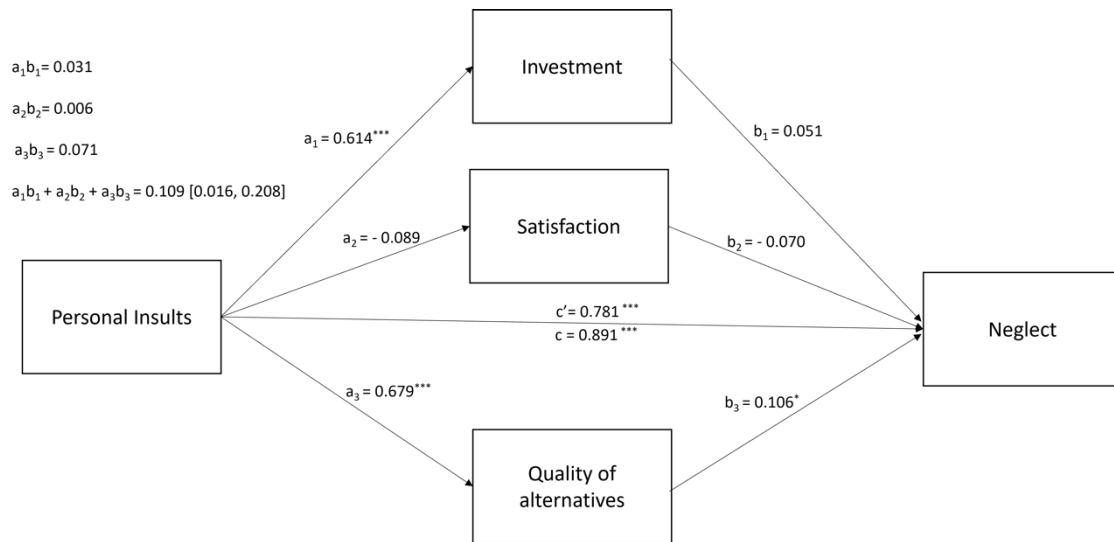
Personal Insults

Neglect

Figure 7: A parallel mediation model: IMS variables mediating personal insults and neglect

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
*p < .05, **p < .01, ***p < .001, all two-tailed.

Results of the fourth parallel mediation analysis revealed that the total effect of personal insults on voice was small and not statistically significant (c= -0.014, p = 0.843). Overall, there was no significant indirect effect of personal insults on voice through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 =$ -0.01, 95% CI = -0.09 to 0.07). Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 =$ -0.0010, 95% CI = -0.05 to 0.05), satisfaction ($a_2b_2 =$ -0.01, 95% CI = -0.06 to 0.03), and quality of alternatives ($a_3b_3 =$ 0.0010, 95% CI = -0.05 to 0.05). Confidence intervals were not above zero for quality of alternatives, investment, and satisfaction. The results suggested no parallel mediation between personal insults and voice. This means that advisees who reported experiencing personal insults were not indirectly influenced by the quality of relationship with their advisors to use voice as a strategy. Model 4, displayed in figure 8, illustrates these findings.

$a_1b_1 = -0.001$

$a_2b_2 = -0.017$

$a_3b_3 = 0.001$

$a_1b_1 + a_2b_2 + a_3b_3 = -0.017\ [-0.127, 0.091]$

$a_1 = 0.614^{***}$

$a_2 = -0.089$

$a_3 = 0.679^{***}$

$b_1 = -0.002$

$b_2 = 0.198^{***}$

$b_3 = 0.002$

$c' = -0.002$

$c = -0.019$

Investment

Satisfaction

Quality of alternatives
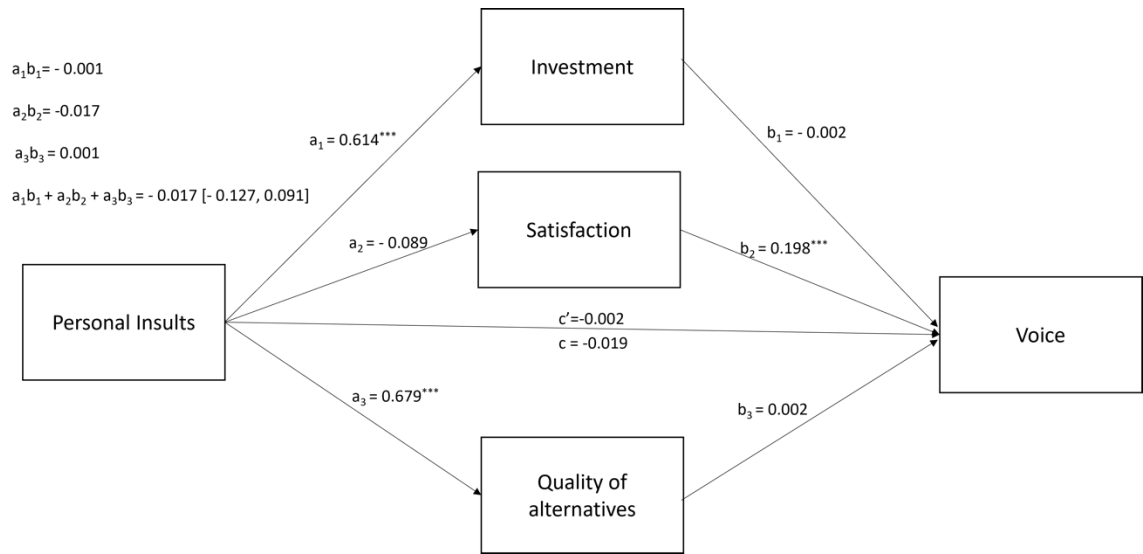
Personal Insults

Voice

Figure 8: A parallel mediation model: IMS variables mediating personal insults and voice.

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
$*p < .05, **p < .01, ***p < .001$, all two-tailed.

Results of the fifth parallel mediation analysis revealed that the total effect of exclusion on neglect was large and statistically significant ($c = 0.528$, $p<0.001$). Overall, there was no significant indirect effect of exclusion on neglect through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 = 0.05$, 95% CI = -0.02 to 0.12). Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 = -0.0052$, 95% CI = -0.04 to 0.02), satisfaction ($a_2b_2 = 0.01$, 95% CI = -0.05 to 0.09), and quality of alternatives ($a_3b_3 = 0.04$, 95% CI = 0.0007 to 0.09). Confidence intervals included zero for quality of alternatives and investment, suggesting no parallel mediation for these two variables. Confidence intervals, however, did not include zero for satisfaction. The results suggested that advisees who reported being excluded were not indirectly influenced by quality of alternatives and investment but were indirectly influenced by satisfaction to use neglect as a response strategy. Model 5, displayed in figure 9, illustrates these findings.

$a_1b_1 = -0.008$

$a_2b_2 = 0.022$

$a_3b_3 = 0.067$

$a_1b_1 + a_2b_2 + a_3b_3 = 0.082$ [- 0.038, 0.207]

$a_1 = -0.077$

$a_2 = -0.811^{***}$

$b_1 = 0.109^*$

$b_2 = -0.028$

$c' = 0.771^{***}$

$c = 0.853^{***}$

$a_3 = 0.754^{***}$

$b_3 = 0.090^*$

Investment

Satisfaction

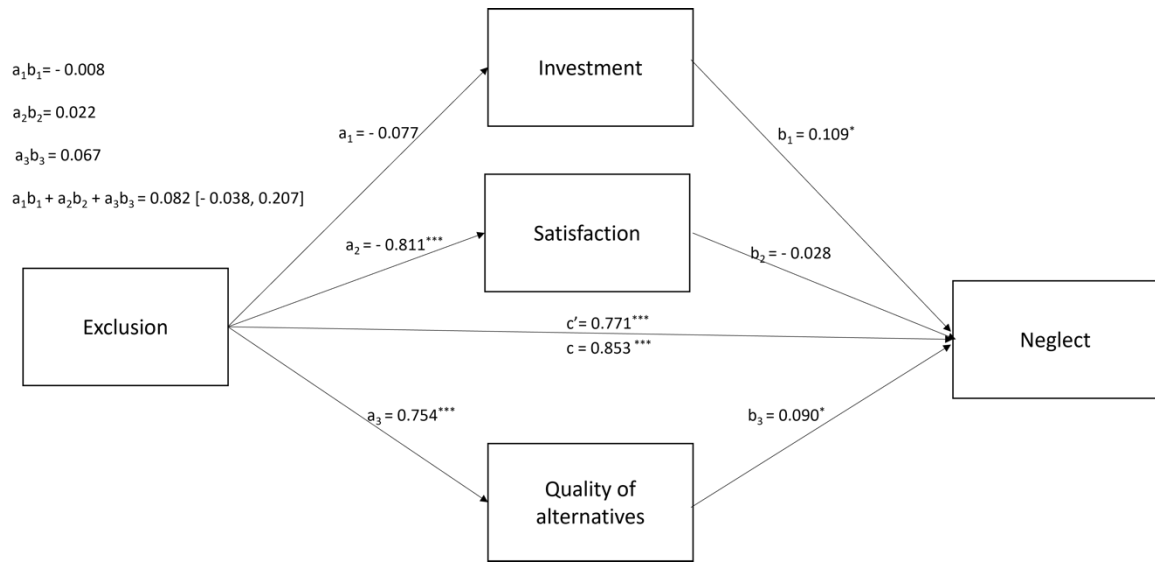Quality of alternatives

Exclusion

Neglect

Figure 9: A parallel mediation model: IMS variables mediating exclusion and neglect

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
$*p < .05$, $**p < .01$, $***p < .001$, all two-tailed.

Results of the sixth parallel mediation analysis revealed that there was a small, statistically significant, standardized total effect of exclusion on voice (c=- 0.167, p<0.05). Overall, there was no significant indirect effect of voice on exclusion through investment, satisfaction, and quality of alternatives ($a_1b_1 + a_2b_2 + a_3b_3 = -0.09$, 95% CI = -0.17 to -0.01). Standardized indirect effects and confidence intervals for specific IMS variables were as follows: investment ($a_1b_1 = -0.0005$, 95% CI = -0.02 to 0.01), satisfaction ($a_2b_2 = -0.10$, 95% CI = -0.17 to -0.03), and quality of alternatives ($a_3b_3 = 0.0082$, 95% CI = -0.05 to 0.06). Confidence intervals included zero for quality of alternatives, investment, and satisfaction, suggesting no parallel mediation between exclusion and voice. These results suggested that advisees who reported being excluded were not at all indirectly influenced by quality of alternatives, investment, and satisfaction to use voice as a response strategy. Model 6, displayed in figure 10, illustrates these findings.

$a_1b_1 = -0.000$

$a_2b_2 = -0.142$

$a_3b_3 = 0.012$

$a_1b_1 + a_2b_2 + a_3b_3 = -0.131 [-0.257, -0.008]$

Investment

$a_1 = -0.077$ $b_1 = 0.010$

Satisfaction

$a_2 = -0.811^{***}$ $b_2 = -0.176^{**}$

Exclusion

$c' = -0.115$
$c = -0.247^*$

Voice

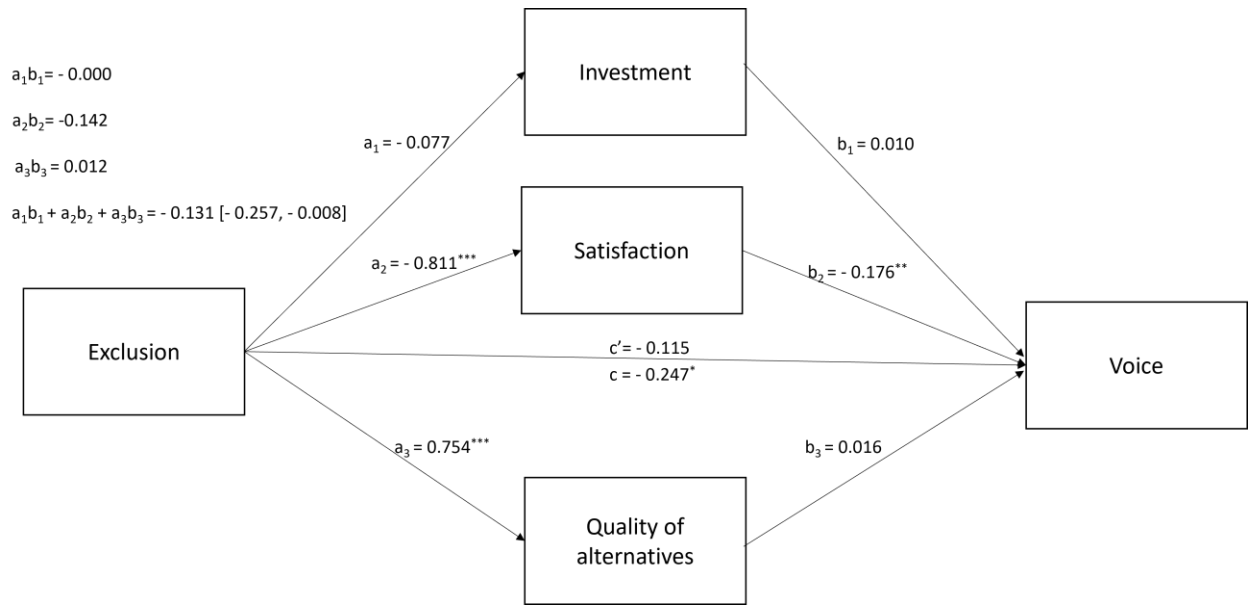$a_3 = 0.754^{***}$ $b_3 = 0.016$

Quality of alternatives

Figure 10: A parallel mediation model: IMS variables mediating exclusion and voice

Note: All paths are unstandardized. C denotes total effect, and c' represents direct effect.
$*p < .05, **p < .01, ***p < .001$, all two-tailed.

Due to the unexpected results related to the positive relationships between satisfaction, investment size, and negative acts, it was speculated that some confounding variables may have influenced the observations made about the working model. One possible confound is the presence of positive acts. Because only negative acts were measured, it is possible that increased levels of reported negative acts experienced by advisees was simply a function of how often they interacted with their advisors. Based on this reasoning, I would expect individuals who interacted more frequently to vary in the types of interactions with advisors, both positive and negative. Therefore, an increase in negative experiences may also indicate the presence of increased positive experiences. If this speculation is true, a positive correlation between frequency of interaction and negative acts reported, a positive correlation between frequency of interaction and increases in IMS-related variables, and possibly, a positive correlation between frequency of interactions and advisee responses to those experiences should be expected.

In a study by Spaniol et al. (2008), the researchers found that older adults had superior memory for positive information (positivity bias), compared to younger adults who remembered negative information better (negativity bias). Based on the researchers' findings on positivity bias and the mean age of 48 in this study, it was reasoned that since participants, most of which were older adults, were

reflecting on past relationships which existed many years ago, reflections on past relationships may have been perceived as more positive over time. To analyze our speculation, a correlation between all study variables, the frequency of meetings between advisors and advisees, and the number of years ago it had been since advisees worked with their advisors was ran. The correlation table, as seen in table 8, shows the relationship between all study variables and the two-time variables.

Table 8: Correlation Table for All Study Variables & The Two Time Variables

	Years Since Worked with Advisor	Frequency of Meetings with Advisor
Investment	.082	.503**
Satisfaction	.025	.317**
Alternatives	-.004	.101
Overt Criticism	-.189**	.209**
Personal Insults	-.128	.309**
Exclusion	-.139*	.115
Voice	.024	.179**
Neglect	-.133	.140*

Note: **Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Results of the correlation analysis indicated a positive relationship between all study variables and the frequency of meetings with an academic advisor. Except for exclusion and quality of alternatives, which were not significant, all positive correlations between study variables and meeting frequency were significant. This means that generally, the more frequent interactions advisees had with advisors, the more likely advisees were committed to the work relationship, the more likely advisees were susceptible to being treated negatively, and the more response strategies advisees used.

Aside from alternatives, overt criticism, exclusion, personal insults, and neglect, where negative correlations between study variables and "years since worked with advisor" were observed, all other relationships between study variables and "years since worked with advisor" were positive. Of all study variables, the only ones with significant correlations were overt criticism and exclusion. This means that generally, the less overt criticism and exclusion advisees experienced, the more years it had been since advisees had a work relationship with advisors and vice versa.

40

CHAPTER 5: DISCUSSION

5.1 General Discussion of Study Findings

The current study sought to find out which negative acts from academic advisors were commonly reported by graduate advisees (RQ1). Consistent with Martin et al.'s (2015) study, which establishes the occasional existence of bullying behaviors by professors to graduate students in higher education settings, the reported levels of negative acts experienced by advisees were low overall, and most advisees who reported having experienced maltreatment from academic advisors experienced being insulted and/or excluded often. Such results indicated that graduate advisees, at some point in their academic journey, perceived potential bullying as occurring in the work relationships with their advisors.

Voice and neglect were the two coping strategies reported by advisees who perceived being maltreated by their advisors (RQ2). Compared to the neglect strategy, the voice strategy was reported as being used more often when advisees felt excluded by their advisors. However, when advisees perceived being overtly criticized, they used the neglect strategy more. One possible reason why advisees reported voicing their dissatisfaction when excluded could be because of the uncertainty associated with advisors' motives for excluding advisees. Thus, advisees probably voiced out their interpretations of advisor actions to reduce uncertainty about why advisees were being excluded. For overt criticism, advisees may have neglected their duties or their advisors because they felt demotivated and less capable of accomplishing their assigned tasks. It would be interesting to learn more about why advisees adopted one strategy over the other, depending on the kind of poor treatment experienced.

According to the current study's findings, the gender of advisee or advisor had no impact on the kind of poor treatment experienced by advisees (RQ 3 & 4). However, gender impacted the responses advisees engaged in when mistreated (RQ 5 & 6). Specifically, male advisees often used the voice strategy when they experienced mistreatment from female advisors. A likely reason for such an outcome could be that male advisees felt less intimidated to communicate their dissatisfaction with mistreatment if advisors were female than if advisors were male. Many other reasons could be explored in subsequent literature to help understand why male advisees found it easier to approach or voice concerns to female advisors than male advisors.

Generally, partial support for H3 was found. That is, investment, quality of alternatives, and satisfaction, mediated the relationship between negative acts (personal insults and overt criticism) and

the neglect response strategy. In other words, when advisees experienced maltreatment from their academic advisors, they usually responded by neglecting their duties or voicing out their concerns, regardless of the level of commitment to the work relationships between the two parties. It is possible that other reasons, other than the level of commitment to the work relationship, exist for why advisees reported voice or neglect as their go-to response strategies. Such reasons could be explored to aid in the identification of factors that influence advisee responses to negative acts from advisors.

In this study, a certain pattern of relationship was hypothesized (H1), where it was expected that satisfaction levels and investment size would decrease when negative acts were experienced, and quality of alternatives would increase when negative acts were experienced. It turned out that quality of alternatives operated as expected, but the opposite was observed in investment size and satisfaction. In Advisees reported feeling more satisfied and invested in the relationship with their advisors when they felt excluded, overtly criticized, and insulted.

There are several possible reasons for why such unexpected results were observed. One possible explanation is that the more advisees felt maltreated, the more motivated they may have been to increase the number of positive interactions with advisors to improve the relationship. The speculation that advisees may have had more positive interactions was supported by the results displayed in table 8: frequent meetings between advisors and advisees was positively correlated with investment and satisfaction. It is possible that these frequent meetings gave advisees more opportunities to positively interact, explaining advisees' high commitment level to the malfunctional work relationships.

A second possible reason why advisee commitment levels to their work relationships with advisors were high is that participants may have had increased number of positive interactions with their academic advisors, in addition to the negative acts experienced. In a study by Berscheid et al. (1989), frequency of interactions, diversity, and strength were the three factors that predicted relational closeness. The more frequent interactions between relationship partners, the more opportunities partners had to influence each other's thought and behaviors (Berscheid et al., 1989). In this study, as displayed in Table 8, the more frequently advisees interacted with advisors, the more negative acts experienced, and the more likely advisees got invested and satisfied in the relationship. Based on Berscheid et al.'s (1989) claims about frequency and relational closeness, it is possible that some of these frequent interactions advisees had with advisors were not only negative but positive. The frequency of positive interactions that may have occurred may have influenced relational closeness, leading advisees' feelings of satisfaction and investment in the work relationships with advisors, despite maltreatment from advisors. Because the

present study did not measure advisee perceptions of positive acts, there is no concrete information on whether participants experienced more positive than negative acts, and if the frequency of positive acts may have contributed to high commitment levels. Further studies could explore the possibility of positive interactions as a confounding variable influencing high commitment levels in relationships where negative acts are present.

Another possible reason why advisees reported high commitment levels to relationships where negative acts were experienced could be in relation to how long ago advisees worked with their advisors. For this sample, the average number of years since advisees worked with their advisors was 11 years ago. Based on Spaniol et al's. (2008) findings on positivity bias, it is possible that the distance in time between then and now may have influenced participants to reflect more on their positive experiences than on their negative experiences with advisors.

In the relationship between advisors and advisees, advisees often need their work relationships more. In other words, the benefits advisees gain from preserving the relationship with advisors most likely outweigh the costs. Because of such knowledge, it is highly likely that advisees perceived having more benefits (recommendation letters for jobs or other academic programs, extensive knowledge on the field of study, advisors as sources of funding, etc.) than costs (negative acts) in maintaining the work relationship, influencing advisees to stay committed to relationships characterized with negative acts.

The probable reasons mentioned above are worth exploring, as exploration would lead to the discovery of more concrete information on why commitment levels increased when advisees were maltreated.

5.2 Theoretical Implications

The IMS was originally created to analyze commitment levels to romantic relationships. In the original four-factor IMS model, quality of alternatives, satisfaction, and investment size were treated as predictive of commitment levels. In this context and sample, however, the overall conceptual four-factor IMS model was not successfully validated. The unsuccessful validation was seemed due to how closely related investment size and commitment were: the items associated with these two constructs loaded in the same factor, and other items of both factors cross loaded. As a result, a three-factor IMS model, which was used in this study, was adopted to analyze commitment. Because investment size and commitment items reflected the same underlying constructs, the three-factor IMS model used in this

study were not treated as predictive of commitment. Rather, because of the uncertainty associated with how the three-factor IMS model would measure the commitment factor, these three constructs were treated as distinct. The inability to validate the factor structure of the original IMS model suggests that the IMS constructs in this study operates differently from the other contexts for which the IMS had been applied to in the past. This means that the IMS model may need more theorizing to consider work relationships in general, and between advisors and advisees in academic contexts.

In this study, the structure of the EVLN model was unable to be validated too. All "exit' and 'loyalty" items cross-loaded, and as a result, the constructs were removed. Although exit and loyalty were removed, voice and neglect were useful constructs which gave insights into what responses advisees engaged in when they were dissatisfied with the relationships they had with their advisors. Most advisees used the voice strategy, which the model describes as constructive. Few advisees used neglect, a response strategy the original EVLN model categorizes as destructive.

One possible explanation for why the factor structure of the EVLN was not validated is also because of the unique characteristics of the academic environment. Although the EVLN typology was originally created to analyze responses to dissatisfaction in romantic relationships, Mellahi et al. (2010) adapted the EVLN model to a work relationship, providing support for the EVLN model applicable to a work relationship context. For this study, the EVLN was applied to a work relationship too. However, it is possible that the nature of the academic environment and the nature of the advisor-advisee relationship could have influenced the responses to the items on the EVLN model. For instance, in a regular work environment, employees could easily exit and quit their jobs to find other jobs elsewhere with no serious repercussions. However, in an academic environment, it does not come easy to end the relationship with an advisor, an institution, or a department due to the long processes involved. Moving from one advisor to another, one department or institution to another, involves considering factors such as restarting one's thesis, looking for other funding opportunities, reapplying to other programs, etc. Such factors could have influenced advisee choices of how they responded to dissatisfactory behavior from advisors, exit not being an option. Further exploration would be useful in explaining why the EVLN did not work in an academic advisor-advisee context. Maybe additional theorizing and better developed measurement tools may be needed to analyze responses to dissatisfactory behavior in work relationships to include academic environments.

5.3 Practical Implications

Based on the findings from this study, the following suggestions could be useful for higher education institutions, academic advisors, and advisees in preventing maltreatment in academic settings and promoting more positive advisor-advisee experiences and relationships:

5.3.1 Suggestions for Higher Education Institutions

1. Although advisees reported using the neglect strategy less, the mere presence of neglect as a coping mechanism suggests that departments need to provide training and mentorship to advisors, especially new faculty, on how to identify negative behaviors from advisees. Being able to identify certain patterns would help advisors, through communication, to effectively work with advisees to preserve positive relationships.

2. Given that the neglect strategy was a response some advisees resorted to, departments need to also provide training to advisees to better use positive strategies for coping with negative behaviors from advisors. Advisee training from departments would also help advisees select their advisors carefully, such that they can have more opportunities to use constructive ways of coping or responding to negative acts from advisors if they occur.

5.3.2 Suggestions for Advisors

3. Given that higher levels of personal insults and exclusion were reported by advisees, advisors need to be aware of actions advisees may interpret as bullying in order not to engage in such activities. This may facilitate the improvement of better relationships and more productive collaborations with their students.

4. Considering voice and neglect were the responses advisees resorted to, advisors also need to be sensitive to behavioral responses of students so that they can correctly attribute advisee actions to their correct causes.

5. Knowing that male advisees find it easier to use voice when their advisors are females, advisors need to be more cognizant of the social categories that play a role in how their actions

are perceived so that advisees do not wrongly interpret advisor actions, and advisees feel more comfortable to use constructive strategies as coping mechanisms even if their advisors were male.

5.3.3 Suggestions for Advisees

6. With the knowledge of what the consensus is for what actions advisees perceive bullying, advisees can now easily recognize when they are the targets of bullying and take proactive steps to deal with issues before they get out of hand.

7. Again, knowing about actions that are generally perceived by advisees as bullying, advisees can avoid misinterpreting negative actions from advisors that may not be categorized as bullying or maltreatment.

<div align="center">

5.4 Limitations & Future Directions

</div>

One of the main limitations of this study is centered around the demographics of the final sample: number of participants, graduate school classification, academic disciplines, ethnicity of the sample, and sample source. The present study sought information about negative experiences of advisees and their responses to bullying from academic advisors. The sample for this study was underpowered. Perhaps, results of this study may have been different if there were more participants took the survey.

The final sample comprised mainly of master's students, limiting generalizability to the experiences of all graduate students. For instance, in this study most participants reported voice as the strategy adopted when negative acts were experienced. Most participants of this study were masters students, and it is possible that the differences in study duration influenced study findings. Compared to doctoral students who usually spend about four or more years in graduate school, masters' students usually have a shorter duration for completion of their studies. It is possible that advisees reported voice as the often-used response strategies used when maltreatment was experienced because of the knowledge of the short time they would spend with advisors. If less time is spent with advisors, advisees may not find the need to preserve a work relationship, and as a result feel more confident in risking voice as a strategy to preserve work relationships with advisors. Even if using voice does not go that well, master's students would not have much time to deal with the negative consequences associated with voice as a

response strategy. The assumption, however, is that doctoral students would have invested more time, energy, effort during their longer duration with advisors, and may have a lot more at stake if using negatively influences the work relationship with academic advisors. Future research could seek information on how advisees use voice as a coping strategy and the possible reasons for why advisees use voice, compared to neglect. Such findings would throw more light on whether all graduate students gravitate more towards voice as a strategy or whether that strategy is restricted to master's students.

For this study, the academic disciplines reported varied greatly. It is possible that there may be certain nuances based on the various academic disciplines advisees belong to, and those nuances could have influenced the results of this study. For instance, in departments where funding is required from advisors, the dynamics in the work relationship advisees have with their advisors may be different from the dynamics seen in work relationships with advisors who do not provide funding to their advisees.

Most participants of this study were domestic Caucasian students. The sample does not reflect the experiences of non-Caucasian and international students. It is possible that non-Caucasian and/or international students may have had different experiences and reactions to mistreatment. The last limitation related to demographics is the recruitment of participants on Amazon MTurk. Aguinis et al. (2020) found that most MTurk workers complete tasks at a rapid speed for monetary rewards, leading to insufficient or careless responses. The researchers also found that MTurk workers, compared to student samples, were more likely to misrepresent self-reported demographics and other study characteristics to meet a study's eligibility criteria. The replication of this study, but with a different sample source, may produce different results, and the endeavor is worth exploring to test for the internal validity of this current study.

A second limitation of this study relates to the study design. Most participants reported having graduated at least a year ago, posing the problem of an oversight or possible memory bias of how exactly events occurred. Researchers could explore a longitudinal study approach, where participant accounts are collected during their graduate school experience.

A third limitation relates to social desirability. Participants could have filled out the survey provided to meet desired expectations rather than report what their actual experiences were. Thus, the likelihood that advisees responded based on an ideal of what actions are viewed as potential bullying and how to respond to negative situations described in the survey is high, leading to possible flaws in the results of this study.

Based on prior literature, advisee responses in this study were categorized as either destructive or constructive. In this study, the interpretation of a constructive response is that such a response preserves the work relationship with advisors, and the interpretation of a destructive response is that such a response does not preserve the relationship with advisors. The presumptions about constructive and destructive responses are not necessarily always true, as destructive responses from advisees may sometimes preserve the work relationship, and constructive responses may destroy the work relationship. Further studies could explore the response dynamics in advisor-advisee relationships to identify instances where destructive responses could be beneficial to the supervisory relationship, and constructive responses could be detrimental to the supervisory relationships.

Lastly, because this study was solely dependent on responses from advisees, there was no information from advisors. Basing our analyses on self-reports of advisees alone could possibly paint a half picture, rather than a full picture of what the bullying situation is between academic advisors and their advisees. Future studies could explore the experiences of academic advisors and their views on what bullying looks like from and towards them.

5.5 Conclusion

Overall, findings from this study indicated that advisees perceived bullying from advisors as personal insults, followed by exclusion, then being overtly criticized. The common strategy used by advisees when negative acts were experienced was voice, especially when advisees perceived being excluded. It did not matter the gender of the advisor or advisee for what negative acts were meted out or experienced, and the choice of responses to negative acts from advisees. However, female advisees, when they perceived being bullied, felt more excluded by their male advisors than they were excluded by their female advisors. Results from this study suggest that the commitment level to the work relationship between advisees and their advisors does not influence the kinds of responses advisees engage in when bullying was experienced. This study provides an initial investigation of bullying in academia between advisors and advisees. With more work to be done in this area, solutions to the bullying problem and its negative effects on advisees and advisors can be fully explored, eventually creating an environment for better advisor-advisee relationships that produces a happy graduate school experience for both parties.

REFERENCES

Aguinis, H., Villamor, I., & Ramani, R. S. (2020). MTurk Research: Review and Recommendations.

Aizawa, H. (2003). Closeness and interpersonal outcomes in same-sex friendships: An improvement of the investment model and explanation of closeness. THE JAPANESE JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY, 42(2), 131-145.

Bartlett, J. E. & Bartlett, M. E. (2011). Workplace Bullying: An Integrative Literature Review. *Advances in Developing Human Resources, 13*(1), 69-84.

Berscheid, E., Snyder, M., & Omoto, A. M. (1989). The Relationship Closeness Inventory: Assessing the closeness of interpersonal relationships. *Journal of personality and Social Psychology*, *57*(5), 792.

Bloom, J. L, Props C., Amanda E., Hall, James Warren, & Evans, Christopher V. (2007). Graduate Students' Perceptions of Outstanding Graduate Advisor Characteristics. *NACADA Journal, 27*(2), 28-35.

Bolkan, S., & Goodboy, A. K. (2015). Personal, Cognitive, and Emotive Antecedents of Consumers' Choices Regarding Complaint Messages. *Western Journal of Communication*, *79*(4), 413-434.

Browne, Michael W, & Cudeck, Robert. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research, 21*(2), 230-258.

Buchko, A. A., Buscher, C., & Buchko, K. J. (2017). Why do good employees stay in bad organizations? *Business Horizons*, *60*(5), 729-739.

Chan, Z. C. (2016). A qualitative study of freshmen's and academic advisors' perspectives on academic advising in nursing. *Nurse education in practice*, *18*, 23-29.

Dalton,D.L. 2016. Bullying in the healthcare Industry: A review of the research & policy recommendations. Journal of Emergency Medical Services. [Online [. Available: http://www.jem.com/ems-insider/articles/2016/08/bullying-in-the-healthcare-industry.html [Accessed 12 May 2018].

Einarsen, S., & Raknes, B. I. (1997). Harassment in the workplace and the victimization of men. *Violence and victims*, *12*(3), 247-263.

Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & stress*, *23*(1), 24-44.

Entenman, J., Murnen, T. J., & Hendricks, C. (2005). Victims, bullies, and bystanders in K-3 literature. *The Reading Teacher, 59*(4), 352–364.

Farmer, D. (2011). Workplace bullying: An increasing epidemic creating traumatic experiences for targets of workplace bullying. *International Journal of Humanities and Social Science*, *1*(7), 196-203.

Farrell, D., & Rusbult, C. E. (1992). Exploring the exit, voice, loyalty, and neglect typology: The influence of job satisfaction, quality of alternatives, and investment size. *Employee Responsibilities and Rights Journal*, *5*(3), 201-218.

Glasø, L., Matthiesen, S. B., Nielsen, M. B., & Einarsen, S. (2007). Do targets of workplace bullying portray a general victim personality profile? *Scandinavian journal of psychology*, *48*(4), 313-319.

Goldsmid, Susan, & Howie, Pauline. (2013). Bullying by definition: An examination of definitional components of bullying. *Emotional and Behavioural Difficulties, 19*(2), 210-225.

Hagedoorn M, VanYperen NW, Van de Vliert E, and Buunk BP (1999) Employees' reactions to problematic events: A circumflex structure of five categories of responses, and the role of job satisfaction. Journal of Organizational Behavior 20: 309–21.

Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states* (Vol. 25). Harvard university press.

Hogh, A., & Dofradottir, A. (2001). Coping with bullying in the workplace. *European journal of work and organizational psychology*, *10*(4), 485-495.

Hu, Li-tze, & Bentler, Peter M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.

Janis Entenman, Timothy J. Murnen, & Cindy Hendricks. (2005). Victims, Bullies, and Bystanders in K-3 Literature. *The Reading Teacher, 59*(4), 352-364.

Keashly, L., & Neuman, J. H. (2010). Faculty experiences with bullying in higher education: Causes, consequences, and management. *Administrative Theory & Praxis*, *32*(1), 48-70.

Keashly, L., & Neuman, J. H. (2013). Bullying in higher education. *Workplace bullying in higher education*, 1-22.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. John Wiley & Sons.

Kelly, S. (2004). Workplace bullying: The silent epidemic. *New Zealand Medical Journal, 117*(1204), U1125.

Lechuga, V. M. (2011). Faculty-graduate student mentoring relationships: Mentors' perceived roles and responsibilities. *Higher education*, *62*(6), 757-771.

Lehmiller, J. J., & Agnew, C. R. (2007). Perceived marginalization and the prediction of romantic relationship stability. *Journal of Marriage and Family*, *69*(4), 1036-1049.

Leymann, H. (1996). The content and development of mobbing. European Journal of Work and Organizational Psychology, 5, 165–184.

Martin, M. M., Goodboy, A. K., & Johnson, Z. D. (2015). When professors bully graduate students: Effects on student interest, instructional dissent, and intentions to leave graduate education. *Communication Education*, *64*(4), 438-454.

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological bulletin*, *97*(3), 562.

Mellahi, K., Budhwar, P. S., & Li, B. (2010). A study of the relationship between exit, voice, loyalty and neglect and commitment in India. *Human Relations*, *63*(3), 349-369.

Monks, Claire P, & Coyne, Iain. (2011). A history of research into bullying. In *Bullying in Different Contexts* (pp. 1-11). Cambridge University Press.

Monks, Claire P, Smith, Peter K, Naylor, Paul, Barter, Christine, Ireland, Jane L, & Coyne, Iain. (2009). Bullying in different contexts: Commonalities, differences and the role of theory. *Aggression and Violent Behavior, 14*(2), 146-156.

Nielsen, M. B., Nielsen, G. H., Notelaers, G., & Einarsen, S. (2015). Workplace bullying and suicidal ideation: A 3-wave longitudinal Norwegian study. *American Journal of Public Health*, *105*(11), e23-e28.

Peleg-Oren, N., Macgowan, M. J., & Even-Zahav, R. (2007). Field instructors' commitment to student supervision: Testing the investment model. *Social Work Education*, *26*(7), 684-696.

Rai, A., & Agarwal, U. A. (2019). Linking workplace bullying and EVLN outcomes. *International Journal of Manpower*.

Rayner, C. (1997). The incidence of workplace bullying. Journal of Community and Applied Social Psychology, 7, 199–208

Rayner, C., & Hoel, H. (1997). A summary review of literature relating to workplace bullying. *Journal of community & applied social psychology*, *7*(3), 181-191.

Rhatigan, D. L., & Axsom, D. K. (2006). Using the investment model to understand battered women's commitment to abusive relationships. *Journal of Family Violence*, *21*(2), 153-162.

Richardson, R. E., Hall, R., & Joiner, S. (2016). Workplace bullying in the United States: An analysis of state court cases. *Cogent Business & Management*, *3*(1), 1256594.

Rodrigues, D., & Lopes, D. (2013). The Investment Model Scale (IMS): Further studies on construct validation and development of a shorter version (IMS-S). *The Journal of general psychology*, *140*(1), 16-28.

Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of experimental social psychology*, *16*(2), 172-186.

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal relationships*, *5*(4), 357-387.

Rusbult, C. E., Zembrodt, I. M., & Gunn, L. K. (1982). Exit, voice, loyalty, and neglect: Responses to dissatisfaction in romantic involvements. *Journal of personality and social psychology*, *43*(6), 1230.

Salin, D., & Hoel, H. (2011). Organizational causes of workplace bullying. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, *2*, 227-243.

Salin, D. (2021). Workplace bullying and gender: an overview of empirical findings. *Dignity and inclusion at work*, 331-361.

Samnani, A. K., & Singh, P. (2012). 20 years of workplace bullying research: a review of the antecedents and consequences of bullying in the workplace. *Aggression and Violent Behavior*, *17*(6), 581-589.

Saunders, Paula, Huynh, Amy, & Goodman-Delahunty, Jane. (2007). Defining workplace bullying behaviour professional lay definitions of workplace bullying. *International Journal of Law and Psychiatry, 30*(4), 340-354.

Schäfer, Mechthild, Korn, Stefan, Brodbeck, Felix, Wolke, Dieter, & Schulz, Henrike. (2005). Bullying roles in changing contexts: The stability of victim and bully roles from primary to secondary school. *International Journal of Behavioral Development, 29*(4), 323-335.

Seigne, E., Coyne, I., Randall, P., & Parker, J. (2007). Personality traits of bullies as a contributory factor in workplace bullying: An exploratory study. *International Journal of Organization Theory and Behavior*, *10*(1), 118.

Simons, S. R., Stark, R. B., & DeMarco, R. F. (2011). A new, four-item instrument to measure workplace bullying. *Research in nursing & health*, *34*(2), 132-140.

Spaniol, J., Voss, A., & Grady, C. L. (2008). Aging and emotional memory: cognitive mechanisms underlying the positivity effect. *Psychology and aging*, *23*(4), 859.

Van Lange, P. A., & Rusbult, C. E. (2011). Interdependence theory. *Handbook of theories of social psychology*, *2*, 251-272.

Vanderbilt, D., & Augustyn, M. (2010). The effects of bullying. *Paediatrics and child health*, *20*(7), 315-320.

Vartia, M. A. (2001). Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. *Scandinavian journal of work, environment & health*, 63-69.

Volk, Anthony A, Dane, Andrew V, & Marini, Zopito A. (2014). What is bullying? A theoretical redefinition. *Developmental Review, 34*(4), 327-343.

Zapf, D., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European journal of work and organizational psychology*, *10*(4), 497-522.

Zapf, Dieter, Einarsen, Stale, Cooper, Cary, & Hoel, Helge. (2010). *Bullying and harassment in the workplace: developments in theory, research, and practice*. CRC Press.

APPENDIX A – SURVEY QUESTIONS

The following survey is on individual perceptions of graduate students and the relationship with their academic advisors. The survey is completely voluntary and anonymous. You may skip any question that makes you feel uncomfortable. The survey will take approximately 10-15 minutes to complete. Upon completion of the survey, you will see a code number to paste into Amazon's MTurk system as proof of your participation. You will receive compensation within 2 days of completion of the study.

If you have any questions about this protocol, please contact:

Theodora Amuah

Brian Lamb School of Communication

Email: tamuah@purdue.edu

Qualification

1. Have you earned a graduate degree from any higher education institution in the United States?

2. Did you have a faculty academic advisor during your time as a graduate student?

Graduate Educational Experiences

Think about the **FIRST** graduate degree for which you had a faculty academic advisor and answer the following questions.

3. Was your first academic advisor your advisor throughout that degree program?

4. What type of degree program was this?

   - Masters
   - Doctoral
   - Other

5. What area of study did you pursue for this graduate degree?

6. Did you do a thesis or dissertation for this graduate degree?

   - Yes

   - No

This survey will be about the academic advisor you described above. Think about this advisor and their interaction with you throughout your time in the graduate program.

Investment Model Scale
7. Think about the nature of the work relationship with the academic advisor you identified above. **Think about your perceptions of that relationship AT THE TIME YOU WERE IN THE PROGRAM.** Indicate the degree (ranging from 0-8, where 0= do not agree at all, 4=agree somewhat, and 8= agree completely) to which you agree with each of the following statements.

Satisfaction Level Items
   a. I felt satisfied with the relationship I had with my advisor.
   b. My relationship with my advisor was much better than that of other graduate students' relationships with advisors.
   c. My relationship with my advisor was close to ideal.
   d. The relationship with my advisor made me very happy.
   e. The relationship with my advisor fulfilled my needs for academic guidance, professional development, etc.

Quality of alternatives Items
   f. The academic advisors, other than my academic advisor, with whom I could have been involved with were very appealing.
   g. My alternatives to the relationship with my academic advisor were close to ideal.
   h. If I did not have a relationship with my academic advisor, I would be fine-I would have found another advisor just as appealing.
   i. Advisors other than my academic advisor were more appealing to work with.

j. My needs for academic guidance, professional development, etc., could have easily been fulfilled in an alternative advisor.

Investment Size Items

k. I put a great deal into our relationship that I would have lost if the relationship with my current advisor were to end.

l. Many aspects of my life were linked to my advisor (research activities, teaching activities, etc.), and I would have lost all of this if the work relationship were to end.

m. I felt very involved in the relationship with my advisor - I put a great deal of work into our relationship.

n. My relationships with faculty and colleagues would have been complicated if my advisor and I were to end our partnership.

o. Compared to other people I know, I invested a great deal in my relationship with my advisor.

Commitment Level Items

p. I wanted the relationship with my advisor to last for a very long time.

q. I was committed to maintaining the relationship with my advisor.

r. I would not have felt upset if the relationship with my academic advisor were to end.

s. I felt extremely attached to our relationship-very strongly linked to my advisor.

t. I wanted the relationship with my advisor to last throughout my whole academic program.

u. I was oriented toward the long-term future of my relationship with my advisor.

Negative Acts Questionnaire

8. Think about your relationship with this same advisor. Please indicate from the available responses (Never/Now and then/ Monthly/Weekly/Daily) the level of frequency of the occurrence of these actions that are/were exhibited by your academic advisor during your time working with your advisor during the program.

a. My academic advisor withholding information which affected my performance. - **exclusion 1**

b. Being humiliated or ridiculed in connection with my work. - **punishment 1**

c. Being ordered to do work below my level of competence. - **managerial misconduct 1**

d. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks. - **managerial misconduct 2**

e. Spreading gossip or rumors about me. - **belittlement 1**

f. Being ignored or excluded. - **exclusion 2**

g. Having experienced insulting or offensive remarks made about my person, attitude, or private life. - **belittlement 2**

h. Being shouted at or being the target of spontaneous anger. - **belittlement 3**

i. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way. - **belittlement 4**

j. Hints or signals from others that I should quit my appointment. - **punishment 2**

k. Repeated reminders of my errors or mistakes. - **punishment 3**

l. Being ignored or facing hostile reaction when I approached. - **exclusion 3**

m. Persistent criticisms of my errors/mistakes. - **punishment 4**

n. Having my opinions ignored. - **exclusion 4**

o. Practical jokes carried out by people I don't get along with. - **punishment 5**

p. Being given tasks with unreasonable deadlines. - **managerial misconduct 3**

q. Having allegations made against me. - **punishment 6**

r. Excessive monitoring of my work. - **managerial misconduct 4**

s. Pressure not to claim something to which by right I am entitled (sick leave, holiday entitlement, travel expenses, etc.) - **managerial misconduct 5**

Exit, Voice, Loyalty, Neglect

9. Reflecting on negative situations you experienced with your advisor, describe how true (Very Untrue of Me, Untrue of Me, Somewhat Untrue of Me, Neutral, Somewhat True of Me, True of Me, Very True of Me) each of these statements were for you in terms of how you typically responded to these situations.

Exit
a. Considered possibilities to change advisors within the department.
b. Actively looked for an advisor within the same department.

c. Intended to change my field of study/department.

d. Actively looked for other programs in another university.

Voice

e. Tried to come to an understanding with my advisor.

f. In collaboration with my advisor, tried to find a solution that was satisfactory to both of you.

g. Talked with my advisor about the problem until we reached total agreement.

h. Suggested solutions to my advisor.

i. Immediately tried to find a solution.

j. Tried to think of different solutions to the problem.

Loyalty

k. Trusted the advisor to solve the problem without my help.

l. Had faith that something like this (negative behaviors) would be taken care of by the advisor without me contributing to the problem-solving process.

m. Assumed that in the end everything was going to work out.

n. Optimistically waited for better times.

Neglect

o. Reported sick because I did not feel like working.

p. Came in late because I did not feel like working.

q. Put less effort into my work than was expected of me.

r. Now and then, did not put enough effort into my work.

s. Missed meetings because I did not feel like attending them.

Open ended survey questions

10. Think about a specific time where this advisor treated you in a way that you felt was unfair or negative? Describe in as much detail as possible what the advisor did that caused you concern.

11. Think about how you responded to the situation you described above. Give a detailed description as possible of what your response was to your advisor's behavior.

12. Why did you respond to the specific instance you described the way you did?

13. What happened as a result of your strategy for responding to the advisor's negative behavior?

Demographics

14. What was your student status at the time you were working with your academic advisor?

    - Domestic student
    - International student

15. What was the status of your academic advisor at the time you worked with them?

    - Domestic
    - International

16. How frequent were your meetings with your academic advisor?

    - Daily
    - Weekly
    - Biweekly
    - Monthly
    - Never
    - Other

17. How many years ago has it been since you worked this advisor during your graduate program?

18. What is your gender?

    - Man
    - Woman
    - Nonbinary/third gender
    - Prefer not to say
    - Other (please specify)

19. What is the gender of your academic advisor?

    - Man
    - Woman
    - Nonbinary/third gender
    - Prefer not to say

- Other (please specify)

20. In what year were you born?

21. What the highest level of education you have received?
- Master's degree
- Doctoral degree
- Other

22. Which of the following best describes your ethnic background (check all that apply)?
- Asian
- American Indian/Alaskan native
- Black/African American
- Latino/Hispanic
- Native Hawaiian/ Other pacific highlander
- White/Caucasian
- Other race/ethnicity. Please specify
- Prefer not to say

23. How did you finance your graduate studies?
- Assistantships (teaching/research)
- Scholarships/Fellowships
- Personal loan
- Self-financed (salary/other)
- Government sponsored/free tuition
- Parents/relatives
- Other, please specify

Conclusion

Thanks for completing this survey. Below, you will find a code number that you should copy and paste into MTurk as evidence of your completion of this study so you can receive your compensation.

APPENDIX B – EFA FACTOR LOADINGS FOR NAQ-N

Factor Loadings

	NAQ-N			
	Overt criticism	**Personal Insults**	**Exclusion**	**Uniqueness**
Practical jokes carried out by people I do not get along with.	0.94			0.14
Having allegations made against me.	0.92			0.19
Spreading gossip or rumors about me.	0.91			0.16
Being shouted at or being the target of spontaneous anger.	0.77			0.26
Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way.	0.70			0.25
Excessive monitoring of my work.		0.94		0.21
Persistent criticisms of my errors/mistakes.		0.65		0.25
Repeated reminders of my errors or mistakes.		0.59		0.45
Being given tasks with unreasonable deadlines.		0.57		0.45
Being ignored or excluded.			0.93	0.22
My academic advisor withholding information which affected my performance.			0.64	0.33
Being ignored or facing hostile reaction when I approached.	0.35		0.58	0.26

Note. 'Principal axis factoring' extraction method was used in combination with an 'oblimin' rotation

APPENDIX C – EFA FACTOR LOADINGS FOR THE IMS

Factor Loadings

	IMS			Uniqueness
	Investment	Satisfaction	Alternatives	
Many aspects of my life were linked to my advisor (research activities, teaching activities, etc.), and I would have lost all of this if the work relationship were to end.	0.87			0.36
I put a great deal into our relationship that I would have lost if the relationship with my current advisor were to end.	0.86			0.21
My relationships with faculty and colleagues would have been complicated if my advisor and I were to end our partnership.	0.75			0.51
I felt very involved in the relationship with my advisor - I put a great deal of work into our relationship.	0.74			0.21
Compared to other people I know, I invested a great deal in my relationship with my advisor.	0.73			0.30
I was committed to maintaining my relationship with my advisor.	0.72			0.25
I felt satisfied with the relationship I had with my advisor		0.91		0.17
My relationship with my advisor was close to ideal.		0.86		0.15
The relationship with my advisor fulfilled my needs for academic guidance, professional development, etc.		0.80		0.27
The relationship with my advisor made me very happy.		0.74		0.19
The academic advisors, other than my academic advisor, with whom I could have been involved with were very appealing.			0.78	0.39
Advisors other than my academic advisor were more appealing to work with.		-0.33	0.72	0.34
My alternatives to the relationship with my academic advisor were close to ideal.		0.36	0.66	0.54

Note. 'Principal axis factoring' extraction method was used in combination with an 'oblimin' rotation

APPENDIX D – EFA FACTOR LOADINGS FOR THE VN SCALE

	VN		
	Neglect	**Voice**	**Uniqueness**
Put less effort into my work than was expected of me.	0.84		0.30
Came in late because I did not feel like working.	0.84		0.30
Reported sick because I did not feel like working.	0.83		0.31
Missed meetings because I did not feel like attending them	0.79		0.38
Now and then, did not put enough effort into my work.	0.66		0.56
Considered possibilities to change advisors within the department.	0.54		0.68
Suggested solutions to my advisor.		0.73	0.45
In collaboration with my advisor, tried to find a solution that was satisfactory to both of us.		0.72	0.47
Talked with my advisor about the problem until we reached total agreement.		0.71	0.49
Tried to come to an understanding with my advisor.		0.71	0.48
Immediately tried to find a solution		0.68	0.53
Tried to think of different solutions to the problem.		0.63	0.60

Note. 'Principal axis factoring' extraction method was used in combination with an 'oblimin' rotation