CHARACTERISTICS OF THE BYSTANDER IN LGBTQ BULLYING AT A
PENNSYLVANIA STATE UNIVERSITY

by

WILLIAM J. KOEHLER

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy

Jack, Joseph, and Morton Mandel School of Applied Social Sciences

CASE WESTERN RESERVE UNIVERSITY

August, 2016
CASE WESTERN RESERVE UNIVERSITY
SCHOOL OF GRADUATE STUDIES

We hereby approve the dissertation of

William J. Koehler

Candidate for the degree of Doctorate of Philosophy*.

Committee Chair

Dr. Mark Singer

Committee Member

Dr. David Hussey

Committee Member

Dr. Daniel Flannery

Committee Member

Dr. Lynn Singer

Date of Defense

April 19, 2016

*We also certify that written approval has been obtained for any proprietary material contained therein
Table of Contents

List of Tables .................................................................................................................. 7

List of Figures .................................................................................................................. 8

Abstract ........................................................................................................................... 9

Chapter 1: Introduction and Purpose .............................................................................. 11

Measuring Bullying ........................................................................................................ 12

Legislation and Policy Addressing Bullying ................................................................. 14

Increased Bullying of LGBT Students ........................................................................ 16

The Consequences of Bullying and Victimization ....................................................... 18

Intent of Research Regarding Anti-LGBTQ Bullying .................................................... 19

Chapter 2: Literature Review and Theory ..................................................................... 21

Understanding Bullying as a Phenomenon .................................................................. 22

Bullying across the lifespan ......................................................................................... 25

Bullying directed toward LGBT individuals .................................................................. 26

Current Literature on Effectiveness of Bullying Interventions .................................... 28

Effectiveness of LGBTQ specific bullying interventions ........................................... 31

Understanding Bystander Intervention ........................................................................ 32

Reasons for unresponsiveness ..................................................................................... 35

Indicators for bystander intervention. Conversely, research also reveals some common factors among bystanders who do intervene: .................................................... 38
Increasing Bystander Intervention .................................................................................. 40

Theoretical framework for increasing bystander intervention among adults. 41

Applying this theoretical framework to LGBT bullying. ................................. 44

Campus climate and bystander responsiveness. .............................................. 45

Summary .................................................................................................................. 47

Chapter 3: Proposal and Methods ........................................................................ 49

Sample ................................................................................................................ 49

Data Collection ...................................................................................................... 51

Instrumentation ..................................................................................................... 53

Attitudes toward LGBT people questionnaire (LGBT Attitudes). ............... 53

LGBT Peer Experiences Questionnaire (LGBT-PEQ). ................................. 54

LGBT changing-attitudes survey (LGBT changing attitudes). ...................... 56

Proposal ................................................................................................................ 57

Research Questions ............................................................................................... 57

Generation of variables ......................................................................................... 61

Plan for data analysis ............................................................................................. 62

Chapter 4: Results .................................................................................................. 66

Sample ................................................................................................................ 66

LGBT Attitudes Scale .......................................................................................... 70

LGBT Peer Experiences Questionnaire Scale .................................................... 72
List of Tables

Table 1: Classes Surveyed............................................................... 50
Table 2: Demographic Characteristics of Participants (N=417).............. 69
Table 3: Factor loading principal axis factoring 13-item LGBT Attitudes
  Scale and eigenvalues.............................................................. 71
Table 4: Factor loadings principal axis factoring 16-item LGBT-PEQ
  Scale and eigenvalues.............................................................. 75
Table 5: Differences in LGBT-PEQ scores between dichotomous
  predictor variables.............................................................. 79
Table 6: Correlations between LGBT-PEQ scores and continuous
  predictor variables.............................................................. 80
Table 7: Regression analysis summary for LGBT Attitudes predicting
  observances of behaviors towards LGBT people.......................... 82
Table 8: Hierarchical regression analysis summary for predicting
  observances of behaviors towards LGBT people from LGBT
  Attitudes scores while controlling for age................................. 83
Table 9: Hierarchical regression analysis summary for predicting
  observances of behaviors towards LGBT people from LGBT
  Attitudes scores while controlling for gender............................ 84
Table 10: Hierarchical regression analysis summary for predicting
  Observances of behaviors towards LGBT people from LGBT
  Attitudes scores while controlling for age and gender.................. 88
List of Figures

Appendix A: Causal Model................................................................. 110

Appendix B: LGBT Campus Climate Questionnaire ......................... 111
Characteristics of the Bystander in LGBTQ Bullying at a Pennsylvania State University

Abstract

by

WILLIAM J. KOEHLER

This study conducts a secondary data analysis of a data set collected from an LGBT Campus Climate Survey distributed on the campus of Edinboro University of Pennsylvania during the fall semester of 2012. The study was developed to advance the understanding of the role of a bystander in LGBT-specific bullying. While the majority of bullying events have at least one bystander, most bystanders do not intervene. However, when bystanders are motivated to intervene, research suggests that the bullying is likely to stop. Darley and Latane (1968) developed a model for explaining a 5-step process a bystander to an emergency situation goes through before intervening. This model has been successfully applied in development of interventions with sexual violence programs on college campuses. Using a 16-item LGBT Peer Experiences Questionnaire (LGBT-PEQ), the study assesses the relationship of bystander demographic characteristics of age, gender, LGBT status, and ethnic identity and respondents attitudes (as measured by an 11-item LGBT Attitudes Scale) with their observances of behaviors directed toward LGBT people (N=417). Results indicate a statistically significant but small practical portion of variance in LGBT-PEQ scores are accounted for by bystander LGBT Attitudes
scores while controlling for age or gender, but not for age and gender combined.
Discussion is offered regarding need for further research about the relationship between
LGBT Attitudes, age, and gender as well as implications for developing interventions for
facilitating bystander intervention in anti-LGBT bullying events in specific “unsafe”
zones on university campuses.
Chapter 1: Introduction and Purpose

What follows is a proposal to utilize data collected from an LGBT Campus Climate Survey distributed on the campus of Edinboro University of Pennsylvania during the fall semester of 2012 to advance the understanding of the role of a bystander in LGBT-specific bullying. The literature reviewed herein indicates that although the majority of bullying events have at least one bystander, most bystanders do not intervene. However, when bystanders are motivated to intervene, research suggests that the bullying is likely to stop. Darley and Latane (1968) developed a model for explaining the process a bystander to an emergency situation goes through before intervening. This model has been successfully applied in development of interventions with sexual violence programs. This researcher uses Darley and Latane’s (1968) model within a systems theory perspective to develop research questions that investigate step one of Darley and Latane’s (1968) model, “noticing the behavior along a continuum as indicating an emergency.” Each of the proposed research questions focus on key characteristics of bystanders that have been identified in the literature as possible predictors of observances of positive and negative behaviors toward LGBT students within a particular university campus community. This proposed analysis will potentially help with developing interventions for facilitating bystander intervention in anti-LGBT bullying events.

Social science researchers generally acknowledge that the “school bully” is an age-old phenomenon; however, it is a social problem that has not been systematically studied until as recently as the 1970s in Scandinavia. Furthermore, it was not until the late 1980s and early 1990s that the issue drew public and research attention in other countries such as Japan, England, Canada and the United States (Olweus, 1993). Most
current literature on bullying still refers to the work of Daniel Olweus when defining this phenomenon. Olweus (1993) defines bullying as being exposed “repeatedly and over time, to negative actions on the part of one or more other students” (p. 9). Bullying can be direct or indirect, verbal or behavioral, and can be done in person or on-line (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014). Additionally, bullying involves a power differential between the victim and the perpetrator of the bullying. The modern technological advances of e-mail, texting and social media have infinitely expanded the access bullies have to their victims. As such, current research concerning the social problem of bullying must include the phenomenon of “Cyberbullying” defined as being exposed to negative actions, repeatedly and over time, which take place through e-mail, video, text, social media or other on-line means (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014).

**Measuring Bullying**

At this point, it should be clarified that there is a difference between the phenomenon of bullying and another commonly discussed behavioral problem, victimization. Victimization involves aggression and violence, can be a one-time occurrence, and need not include a power differential. The two can be closely related, but not all bullying involves aggression and violence and not all aggression and violence by peers involves bullying behavior (Ttofi & Farrington, 2011). At times it may be difficult to determine if statistics presented are, in fact, accurately differentiating between the two. This distinction will be more fully addressed later in this paper. From this point forward, however, the focus will be on understanding bullying behavior as opposed to victimization.
Even if a distinction is made between bullying and victimization, it is still difficult to understand the phenomenon of bullying for a number of reasons. One reason is that there are many behaviors that can be considered to be bullying. For example, out of the 33% of teens that reported being bullied in Hinduja and Patchin’s (2005) study; 41% reported they were “disrespected”, 12% reported they were physically threatened, and 5% reported being scared for their safety.

Another reason is the sheer amount of information available regarding bullying. Statistics about bullying in school are published by numerous organizations, research centers, and universities, each one having a different set of criteria, and perhaps, motivations for reporting. The result is a broad range of the frequency, intensity and prevalence of a variety of behaviors all described as “bullying”. As examples: Stopbullying.gov (n.d.) reports that 28% of students in grades 6-12 and 20% of students grades 9-12 have been bullied in school this year while the National Crime Prevention Council reports that 49% of students in grades 4-12 have experienced bullying within the past month (NCPC, n.d.). Chapell, Hasselman, Kitchin, Lomon, Maclver, and Sarullo (2006) reported that about 19% of the 1,025 undergraduates they surveyed had been victimized at least once by other students, while Bauman and Newman (2013) report that about 3.7% of a sample of 709 university students indicated that they had been bullied, at least occasionally. Some reports attempt to focus on cyberbullying as a way to narrow the vast range of behaviors included in bullying. The I-Safe Foundation reports that about 10%-20% of teens are regularly cyberbullied with about 90% of 4th-8th graders stating they have been cyberbullied at least once (I-Safe Inc., n.d.) while the National Crime
Prevention Council (NCPC, 2014) reports that cyberbullying affects 49%, or almost half of American teens.

Another complication in accurately understanding the frequency, intensity, and prevalence of bullying is under-reporting. Statistics reported by Stopbullying.gov indicate that only 20-30% of bullying is reported (stopbullying.gov, 2014). Underreporting could have a number of reasons. First, one might consider the sheer volume of communication both in person and electronic interaction that must be recalled when people are asked to recall incidents of bullying. Another reason for underreporting may be fear of retaliation or a feeling that reporting is pointless because “nothing will be done about it anyway.”

These are a few of the factors complicating our understanding of the frequency, intensity, and prevalence of bullying, In 2014, the Center for Disease Control (CDC) published a document as an attempt to make bullying terminology more uniform and standardize measurement of the construct of bullying (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014). While current researchers and interventionists are still aligning themselves to these new guidelines, the overarching message seems evident; bullying occurs frequently, with significant percentages of the student population experiencing a range of intensity from students feeling “disrespected” to feeling “afraid for their safety” from as early as Kindergarten through out the college years. And, as will be discussed later, while bullying may look different after graduation, it certainly doesn’t stop there.

**Legislation and Policy Addressing Bullying**
In January of 2001, President George W. Bush signed Public Law 107-110, or the No Child Left Behind Act of 2001 (NCLB). The Safe and Drug Free Schools and Communities Act is part of NCLB, which supports state and local educational systems’ efforts to provide a safe learning environment, particularly for those who have been victims of violent crimes on school grounds (U.S. Department of Education, 2001). However, this Act does not directly address victimization in schools and, to date, there are no federal laws specifically addressing this issue. Issues of bullying therefore are left to the interpretation of individual state laws. As of 2014, all 50 States have some form of bullying and harassment law (some only through the criminal code that applies to juveniles). This, however, can contribute to the difficulty in addressing this social problem in a number of ways.

While passing anti-bullying legislation may be needed, there is some controversy about the effectiveness of unfunded mandates such as NCLB’s Safe and Drug Free Schools and Communities Act and state-specific bullying laws in addressing the issue. For example, schools that are now mandated to create policy, implement procedure, and report findings to the school district and their State’s Department of Education may not be given the funding necessary to train their staff to write or implement these policies and procedures.

Another complication, as discussed above, is that uniform definitions of bullying and standardized methods for measuring bullying behavior are relatively new (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014). In Tennessee, for example, 27% of the bullying cases reported during the 2012-2013 academic year did not meet the state’s
definition of bullying (stopbullying.gov, n.d.). This variance can lead to further stretching limited resources to investigate every claim brought to a school’s attention.

A third criticism about anti-bullying legislation is that policies that do not tailor consequences to specific forms of bullying may do more harm than good. “Zero tolerance” policies, for example, often administer the same consequences regardless of the type of behavior or the motivation behind it. There are arguments that support anti-bullying legislation coming in-line with other harassment and violence prevention laws such as Hate Crime legislation and Title IX of the Educational Amendments of 1972 regarding sex discrimination in education.

**Increased Bullying of LGBT Students**

Many studies of lesbian, gay, bisexual, and transgender (LGBT) students, as well as those who are questioning their sexual or gender identity (Q) indicate that these youth are bullied and harassed at higher rates than heteronormative students (Hoff and Mitchell, 2009; Wensley and Campbell, 2012; Kosciw, Greytak, Palmer, Boensen, 2014). In a 2013 on-line survey of 7,898 students age 13-21, 74.1% of LGBT youth reported verbal harassment because of their sexual orientation (55.2% because of their gender expression) and 36.2% reported being physically harassed because of their sexual orientation (22.7% because of their gender expression) during the past year, and over half reported not feeling safe at school due to sexual orientation (55.5%) or gender expression (37.8%) (Kosciw, Greytak, Palmer, & Boensen, 2014). Wensley and Campbell (2012) found that non-heterosexual first-year university students reported higher levels of victimization compared to heterosexual students and Hoff and Mitchell (2009) found that sexual orientation is one of the reasons undergraduates recall for being victimized online.
While research indicates that LGBT adolescents frequently experience bullying at higher rates than their heteronormative peers, it is difficult to know how many students are LGBT. Using data from Wave III of the National Longitudinal Study of Adolescent Health, Bocheneck and Brown (2001) reported that 5-6% (approximately 2.5 million) of American students self-identify as LGBT. This figure does not include an estimate of the students who may be questioning their sexual orientation or gender identity (Q), who may identify as LGBT at a later point in life, or who may be targeted due to peer’s perception of their sexual orientation or gender identity. It is therefore difficult to estimate how many American students are at increased risk for victimization due to their identified or perceived gender or sexual orientation variance. While this information is taken from a 15-year-old data set, the National Longitudinal Study of Adolescent Health represents one of the only and certainly the largest data set of its kind, and Wave IV data (collected in 2008) is using a population sample that has aged out of the range of interest for the current study. A more recent poll of 1,000 American adults (Moore, 2015) indicates that 64% of 18-29 year olds identify as completely heterosexual, 2% as completely homosexual, and 29% as between 1 and 6 on the Kinsey Scale (with 4% “unsure”). Another source, the Youth Suicide Prevention Program states “Statistics from multiple studies show that 4.5% of youth identify as LGBT in high school while an additional 4.5% identify as Questioning.” (ACT for Youth, n.d.). It is likely that the discrepancy between the 2015 and 2001 data is in part due to increased societal acceptance regarding non-binary gender identity and sexual attraction, behavior, and orientation have allowed individuals to be more open about their gender identity and sexual orientation.
At this point, it is worth briefly discussing the fact that other minority populations are being bullied at higher rates than their majority counterparts. While this will be discussed in greater detail later in the paper, it should be noted that a main reason this paper focuses on LGBTQ-specific bullying is that other vulnerable populations have, for the most part, received full protection under the law whereas LGBTQ protections are still being debated on several levels throughout the country.

**The Consequences of Bullying and Victimization**

Bullying of adolescents is costly, not only to the victim and the bully, but to the others involved as bystanders (including family and friends who may not even know the bullying is occurring), the school or community where bullying occurs, and to society as a whole. Hinduja and Patchin (2007) found that cyberbullied youth experience higher rates of truancy and drop-out, substance abuse, and running away from home when compared to students who did not report on-line bullying. Schenk and Fremouw (2012) reported higher scores on measures of depression, anxiety, phobic anxiety and paranoia in cyberbullied college students when compared to matched controls. They also reported that cyberbullied college students have higher incidents of suicidal thoughts, attempts and completion than their non-bullied peers (Schenk and Fremouw, 2012).

It is well documented that the results of higher incidents of bullying are strongly correlated with LGBTQ adolescents experiencing; higher rates of dropping out of school, increased risk of drug and alcohol abuse, higher rates of depression and other mental health diagnoses and higher incidents of suicide attempts and completion than their heteronormative peers (Bontempo, D’Augelli, 2002; Meyer, 2003; Ellis, High, 2004;
The costs of bullying to the individual extend beyond their time in school. While research indicates that bullying continues in the workplace, social circles, and even into nursing homes and retirement communities, the long term effects of bullying in these environments have only recently been studied. One can project that increased rates of truancy and drop-out, mental illness, suicidality and substance use due to bullying in school will translate into a decrease in an individual’s earning potential, increase their absence from or ability to work, decrease the quality of their relationships, and impact their overall ability to contribute positively to society.

**Intent of Research Regarding Anti-LGBTQ Bullying**

The information that has been presented here indicates bullying is a complex social problem with consequences that impact significant percentages of the population from childhood through adulthood. This information also establishes evidence that LGBTQ adolescents are at increased risk of bullying and victimization throughout their educational experience and, as a result, are reaping the consequences at higher rates than their heteronormative peers.

Throughout the remainder of this paper, several goals related to the social problem of bullying and victimization of LGBTQ adolescents will be addressed. In chapter 2, the theoretical background and a synthesis of the relevant body of research will be presented in order to allow the reader to understand the construct of bullying and the role of the bystander as well as to provide a justification for focusing on the bystander during anti-LGBTQ bullying interventions. Chapter 3 consists of a proposal for a
secondary analysis of a data set that includes a 17 item measure of bystander observances of student’s anti-LGBTQ behavior at a Pennsylvania State University.

“The study of bullying among university students, therefore, has the potential to illuminate understanding of social relationships during the transition from adolescence to adulthood and from higher education to the workplace, so providing insight into the continuity of the phenomenon of bullying across the lifespan and within different contexts.” (Myers & Cowie, 2014 p??).
Chapter 2: Literature Review and Theory

As mentioned previously, most current research regarding bullying refers to the early work of Scandinavian researcher, Daniel Olweus. In fact, the Olweus Bullying Prevention Program is still considered the gold standard of bullying interventions among educators and school administrators today. In the United States, the social problems of bullying and cyber-bullying are recognized, discussed, studied, have media campaigns, policies, and interventions established to address the victims and decrease this negative behavior. A problem with our reactions; however, is that we may be pouring resources into curtailing this behavior without understanding or establishing consensus regarding what the behavior looks like in our school setting (as opposed to Scandinavian schools) or what the desired outcomes of our efforts are to be (Hawley & Williford, 2015). In fact, the CDC’s 2014 release of Bullying Surveillance among Youth version 1.0 (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014), was meant to establish uniform definitions and standardized measures of the bullying phenomenon.

In this chapter, an understanding of the phenomenon of bullying, including the nuance of cyberbullying, will be developed and the variance of bullying across the life-span will be explored. The paper will then analyze the dynamics of bully, victim, and bystander within different environments, and focus on the additional dimensions of LGBTQ specific bullying. The current research that has assessed the effectiveness of interventions aimed at reducing bullying and LGBT specific bullying within the educational environment will be reviewed in order to glean an understanding of risk and protective factors related to bullying. Next, the paper will focus on the role of the bystander, highlighting reasons for the phenomenon of bystander unresponsiveness, and
examine characteristics of bystanders who do intervene. Finally, using systems theory, person-in-environment perspective, and a five-step model of bystander action proposed by Latane and Darley in 1968, a rationale will be presented for focusing on understanding the characteristics of heterosexual peers when conducting LGBT campus climate assessments.

**Understanding Bullying as a Phenomenon**

Olweus (1993) defines bullying as being “exposed, repeatedly and over time, to negative actions on the part of one or more other students” (p. 9). Olweus further defines “negative action” as either words or behavior that is intentionally inflicted upon another in order to cause, or attempt to cause injury or discomfort. He states that a single instance of more serious harassment can be regarded as bullying, but that the intent of including “repeatedly and over-time” is to exclude actions that are non-serious and are occurring regardless of individual target characteristics. Olweus (1993) also stresses an important differential characteristic of bullying is the presence of an imbalance of power between the perpetrator and the victim. “Olweus (1993), Roberts (2006), Lines (2008), and Rigby (2008) all emphasize bullying behaviors as “intentional, threatening, repeated episodes that target someone weaker to make them feel uncomfortable, humiliated, and to make the perpetrator feel satisfied, powerful, dominant, and in control” (Dogruer & Yaratan, 2014). It can be direct or indirect, physical, verbal, relational (social exclusion, attacking one’s reputation), or sexual, and can be in person or by use of technologies (such as online through email, social media, etc. or by phone such as through text messaging).

As previously stated, the CDC has recently published a document as an attempt to make bullying terminology more uniform and standardize measurement of the construct
of bullying for children under the age of 18 (Gladden, Vivolo-Kantor, Hamburger, Lumpkin, 2014). The CDC’s definitions are largely in agreement with these aforementioned elements. Clearly researchers and interventionist to date may not have utilized these newly publicized standards, and those that aim to understand bullying in adult populations would not necessarily hold to them either. Therefore the literature reviewed in this paper will need to take this into consideration; however, Olweus’ definitions provide a generally agreed upon starting point for the majority of the current literature. For example, when students are asked to complete the Revised Olweus Bullying Questionnaire (ROBQ) (Olweus, 1996), they are provided with a clearer definition of behaviors that do and do not constitute bullying. This definition is:

“We say a student is being bullied when another student, or several other students:

- Say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names
- Completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- Hit, kick, push, shove around, or lock him or her inside a room
- Tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her”

“…these things may happen repeatedly, and it is difficult for the student being bullied to defend themselves. But we don’t call it bullying when the teasing is done in a friendly and playful way, or when two students of about the same strength or power argue or fight.” (Olweus, 1996).
It is important to note that this definition does not offer any suggestions to the students regarding the characteristic of the victim of bullying, or offer a definition of “power” or “strength”. This is important, as will be discussed later, because, unless prompted, students may not recognize certain types of behaviors and or language as teasing or bullying, or perhaps recognize what we would define as “social power”. For example, a student who is questioning their sexual orientation or gender identity who repeatedly hears “that’s so gay”, “no homo”, or “you act like a girl” may perceive this as bullying. They may feel powerless to stop the behavior or that the “straight” or cisgender peers using these terms have more social strength than they do. A student who is not questioning their sexual orientation or gender identity may not recognize this language as bullying, and therefore not record it as such.

Because cyberbullying is a relatively new nuance to traditional bullying, there is much debate about the prevalence, impact, and differentiation in victims and perpetrators of this type of bullying (Olweus, 2012). Since 2005, students taking the ROBQ have responded to an additional question (with two sub-questions) related to cyber- or electronic bullying. Respondents are provided with this definition: “when we say bullied electronically, we mean bullying performed via electronic means such as e-mail, instant messaging, in a chat room, on a website (including social media), or text messages sent to a cell phones (Solberg & Olweus, 2003).

Students have an opportunity to respond to each of the 40 key questions (some with additional sub-questions) of the ROBQ with five frequency response alternatives ranging from “I haven’t been bullied at school in the past couple of months” to “[I’ve experienced this] several times a week [in the past couple of months.]” In general,
students are considered to be bullied or to have bullied in that particular manner if they respond to the question “2 or 3 times a month” or more (Solberg & Olweus, 2003). It should be noted that there is no bystander or witness measure in this frequently used instrument, only a reporting of first-hand experience.

As was previously mentioned, it should be further noted that bullying and peer victimization are not necessarily the same thing. Bullying is a type of aggressive behavior (Andershed, Kerr, & Stattin, 2001, Salmivalli & Nieminen, 2002), but not all bullying involves aggression and violence and not all aggression and violence by peers involves bullying behavior (Ttofi & Farrington, 2010). For example, having rumors repeatedly spread about you by peers who hold some type of power over you may constitute bullying, but not aggression and violence (aka peer victimization). In the same way, it isn’t necessarily considered bullying when a student assaults another student of equal power and status with a weapon.

**Bullying across the lifespan.** Researchers tend to agree that bullying occurs across the life span, with its peak between elementary and middle-school years (Hazler, 1996; Rios-Ellis, Bellamy, & Shoji, 2000, Nansel et al., 2001). This is not to say that bullying becomes insignificant or rare in college. As previously stated, a few studies have been conducted regarding bullying on the college campus (Chapell, et al., 2006, Finn, 2004, Walker, Sockman, & Koehn, 2011, Bauman & Newman, 2013; Myers & Cowie, 2014) and report rates of traditional bullying and cyberbullying between 1.1% being bullied “very frequently” to 54% knowing someone who had been cyberbullied during their undergrad experience. Other studies indicate bullying occurs at the faculty level as

Additionally, there is a growing body of literature regarding bullying in the workplace (Cooper, Einarsen, Hoel, & Zapf, 2003, Glendenning, 2001, Vega & Comer, 2005). And, even further along the life span, there is research on bullying that occurs in retirement homes and long term care facilities for the elderly (Michele & Maryse, 2013, Bonifas & Hector, 2013, Komietowicz, 2003).

The fact that bullying occurs across the lifespan supports the idea that understanding this set of behaviors within a social context is important to reducing its frequency, intensity and prevalence. As Meyers and Cowie (2014) stated, focusing in on bullying among university students allows us to understand how this phenomenon mutates as it progresses from the learning environment where it begins into the work environment where it persists.

**Bullying directed toward LGBT individuals.** While it is clear that bullying is a phenomenon occurring at all developmental stages across the life span and in different environments, certain populations are at an increased risk for bullying. This is not a new development, and while it is widely known that bullies choose their victims because they stand out for some unique characteristic (race, religion, ethnicity, weight, appearance, disability, SES, etc.), there are several reasons to focus on anti-LGBT bullying. Many studies of lesbian, gay, bisexual, and transgender (LGBT) students, as well as those who are questioning their sexual or gender identity (Q) indicate that this population experiences frequent bullying for their sexual orientation, gender identity, gender expression, or simply gender non-conformity (Kosciw, Greytak, Palmer, & Boensen,
This may be true for a number of different reasons. For instance, LGBTQ students are a minority population that frequently has less social power than their heteronormative peers in that they are generally isolated from one another and likely come from families that are heterosexual and cisgender. This often leaves them with few, if any, allies, positive LGBTQ role models, or relationships with other LGBTQ individuals. Another reason may be that school policy and practices, in many cases, openly discriminate against LGBTQ students. For example, in GLSEN’s biannual study (Kosciw, Greytak, Palmer, & Boensen, 2014), 55.5% of the LGBT students surveyed reported personally experiencing LGBT-related discriminatory policies or practices at school, and 65.2% said other students had experienced these LGBT-related discriminatory policies or practices (examples: being disciplined for same-sex public displays of affection that were not disciplined for heterosexual displays; restriction from forming or promoting a GSA; being prevented from using their preferred name (for trans students); and being prohibited from wearing clothes or using restrooms considered inappropriate for their legal sex (for trans students)). These experiences of anti-LGBT discrimination in school mirror experiences in the community and workplace as well.

Where discrimination against people based on gender, race, ethnicity, religion, age, or disability still occurs and is a serious social problem worthy of addressing, these are classes of individuals that have full protection under the federal law. On the contrary, discrimination against LGBTQ individuals in employment, housing, and use of public space, or access to businesses, is still legal in parts of the United States. Whether LGBT individuals are part of a protected class is still a national debate, and, in some cases, there is active legislation that permits businesses to discriminate against LGBT individuals (ex:
Indiana State Religious Freedom Restoration Act). While it is true that LGBT rights are gaining ground (for example the June 26, 2015 decision by the Supreme Court of the United States that recognized same-sex marriage) there are still many legal rights denied citizens because of their sexual orientation or gender identity.

For these reasons, it is perhaps easy to see why bullying and other forms of discriminatory and even aggressive behavior towards LGBTQ individuals may appear to be sanctioned by schools, employers, government and even society as a whole. These sanctions, whether overt or suggested, send a mixed message to students about the acceptability of bullying and may even produce an environment that fails to recognize certain behavior or language as bullying.

In summary, we have looked at an expanded definition of bullying behavior as it evolves over the lifespan. We then focused on anti-LGBT bullying as it seems to parallel a current struggle in the United States regarding Civil Rights for this population. Now the effectiveness of current bullying interventions aimed at reducing general and anti-LGBT specific bullying behavior will be addressed.

**Current Literature on Effectiveness of Bullying Interventions**

A meta-analysis of the effectiveness of 44 anti-bullying programs was conducted by Ttofi & Farrington (2010). Of the 622 reports found, 89 (describing 53 different programs, 44 of which provided data and permission for review) were included in the analysis. Ttofi & Farrington (2010) found that in general, school-based anti-bullying programs were effective in decreasing bullying by 20-23% and decreasing peer-victimization by 17 – 20%. These researchers included a weighted odds ratio analysis of 20 different key program elements that contributed to a decrease (or increase) in bullying
and/or peer-victimization. Key elements that were associated with a decrease in bullying include: parent training/meetings, improved playground supervision, disciplinary methods, classroom management, teacher training, classroom rules, a whole-school anti-bullying policy, school conferences, information for parents, and cooperative group work. Programs that incorporated more key elements (11 or more), had a more intense and longer duration (20 hours or more for children and 10 hours or more for teachers), were inspired by Olweus’ work, and worked with older children (11 or older) were most successful in reducing bullying. It is worth noting the results for effectiveness in reducing victimization as well. Key elements that were associated with a decrease in victimization: disciplinary methods, parent training/meetings, videos, and cooperative group work. Programs that had a higher duration and intensity of program delivery, worked with older children, were more established, and where outcome measure of victimization was 2x month or more worked better. In both cases (bullying and peer-victimization), one key-element of “work with peers” was shown to increase bullying (not statistically significant) and peer-victimization (OR = 1.39 for no work with peers; OR = 1.13 for work with peers). Another key-element that indicated a drop in effectiveness was whether a program was implemented in Norway or not.

Another meta-analysis of school bullying intervention programs was published 2 years prior to Ttofi & Farrington (2010) (Merrell, Gueldner, Ross, & Isava (2008). This was a smaller analysis, using 16 studies of 40 found that met their inclusion criteria. Merrell, Gueldner, Ross, & Isava (2008) also found, somewhat tentatively, that there is some evidence supporting the effectiveness of school bullying interventions. That is to say, meaningful positive average effects were found for 36% (10 out of 28) of the
outcome classification variables. More specifically; student self-reports of being bullied, witnessing bullying, and global self-esteem; teacher self-reports of knowledge of bullying prevention, appropriate staff responses to bullying, and efficacy of intervention skills; teacher reports of student’s social competence; peer reports of participation in bullying roles and peer acceptance; and school records of teacher discipline referrals each showed significant positive changes in effects. Additionally, it should be noted that one of the 28 average effect sizes was associated with negative meaningful change (teacher report of student behavioral and emotional problems).

It is important to note out of the 44 reports utilized in the Ttofi & Farrington (2010) meta-analysis, 15 of them were conducted within the United States and/or Canada and 7 were implemented in Norway. Whether the program utilized Olweus’ work and whether the program was implemented in Norway impacting the program’s ability to reduce bullying is significant. US schools are very different from schools of the other countries where programs were considered (mostly European). Additionally, In Merrell, Gueldner, Ross, & Isava (2008) meta-analysis, 6 of the 16 studies utilized were from programs implemented within the United States, 2 from Canada and the remaining 8 were implemented in western European countries.

There is, therefore, some support that the interventions that are currently being used to reduce bullying behavior, are, in-fact, “working”. What one must consider then is the characteristics that are common to those that are successful, and understand why they are contributing to the reduction of bullying behavior. The majority of the 20 factors that indicated a decrease in bullying behaviors in the Ttofi & Farrington (2010) meta-analysis include working with adults (parents and teachers) and/or presenting consistent school-
wide policies that are understood by the adults responsible for enforcing them (teachers). The presence of these factors, and the mere fact that there is an increased positive effect when there are more factors present, seem to suggest that the environment and those responsible for setting the tone of the environment are essential to reducing bullying behavior. What is also telling is the idea that programs that were based on Olweus’ work and were implemented in Norway or a western European country were also successful, indicating that a bullying prevention program may need to be tailored to the unique environment where it is implemented. This might lend some credence to conducting a climate survey or some assessment of the environment before implementing an intervention plan.

**Effectiveness of LGBTQ specific bullying interventions.** While no meta-analysis of effectiveness of LGBTQ specific bullying interventions was found, several studies indicate positive outcomes for certain LGBTQ specific interventions. For example, several studies indicate that positive relationships with peers (regardless of the peer’s sexual or gender orientation) is a primary protective factor for LGBTQ adolescent’s safety and well-being (Horn, Szalacha, & Drill, 2008, Ueno, Gayman, Wright, & Quantz, 2009). Other studies supported the hypotheses that the very presence of a Gay-Straight Alliance (GSA) increased feelings of school belonging and/or school connectedness, decreased perceptions of non-discrimination, and increased LGBTQ student’s ability to identify a safe adult within the school (Heck, Flentje, & Cochran, 2011, Goodenow, Szalacha, & Westheimer, 2006). Furthermore, Walls, Kane, and Wisneski (2010) indicated that participation in a GSA is shown to decrease at-school victimization, decrease truancy and dropout, improve student Grade Point Average
(GPA) and decrease the number of suicide attempts. Finally, studies that looked at LGBTQ specific macro-level interventions indicate some benefits to passing/enforcing anti-bullying policies (with LGBTQ specific language included), including positive LGBT references in curricula and providing sensitivity training to faculty & staff (Hatzenbuehler & Keyes, 2013, Horowitz & Itzkowitz, 2011, McGuire, Anderson, Toomey, & Russell, 2010, Espelage, Aragon, & Birkett, 2008, Murdock & Bolch, 2005). While these studies do not address reducing incidents of bullying behavior directly, they do tie-in directly with increasing a sense of safety and belonging, and the LGBTQ student’s GPA, and decreasing their incidents of truancy, at-school victimization, dropout, and suicide attempts. Addressing these disparities between LGBT students and their heterosexual/cisgender counterparts is, in many ways, more important than reducing incidents of bullying themselves.

It is also interesting to note most factors providing benefit to LGBTQ students (positive relationships with peers, presence of a GSA, LGBTQ language included in clear bullying policies, positive LGBTQ examples in curricula, etc.) are the same ones improving the overall environment or equipping those responsible for creating the environment (like providing sensitivity training to faculty members). These same factors supported a reduction in bullying behavior in the meta-analyses. One difference between the findings of LGBTQ specific interventions and those of the general bullying interventions is the greater emphasis on the peer relationships and/or peer allies (as in the case of the GSAs) in the LGBTQ specific findings.

**Understanding Bystander Intervention**
In addition to assessing the environment and equipping those who are responsible for establishing such an environment at a meso-level (such as school campus), one might also consider the “environment” at a micro-level (such as during a bullying event). It is interesting to note that according to Ahmed (2008), Atlas and Pepler (1998), and O’Connell, Pepler, and Craig (1999), 85% of bullying incidents include at least one bystander, but most bullying intervention programs do not attempt to address the bystander’s behavior or acknowledge their ability to modify the micro-level environment they are part of during a bullying event. For example, the ROBQ directly measures bullying from the victim and bully perspective, but doesn’t measure bystander observations. Yet, other roles in the study of bullying were introduced as early as the mid-1990s. Myers and Cowie (2014) suggest that it was Salmivalli, Lagerspetz, Bjorkqvist, Osterman, and Kaukiainen (1996) who first proposed including roles in the study of bullying other than the traditional bully and victim roles. Such roles included: assistants, reinforcers, outsiders, and defenders.

Researchers agree that bystanders hold the ability to change the bullying event. O’Connell, Pepler and Craig (1999) found bullies stopped aggressing approximately 50% of the time when a bystander actively expressed disapproval. Aboud and Joong, (2008) also indicate the positive role that assertive peer bystanders can play in bullying. Educational psychologist Hutchinson (2012, p. 437) advocates for helping young bystanders to see their reinforcement of bullying (either inadvertent or conscious) as being socially unacceptable.

It is important to note that while most bullies will stop their behavior when a bystander expresses disapproval, most bystanders to school bullying (adults and students
alike) do not intervene when witnessing bullying or violence (Wilson-Simmons, Dash, Tehranifa, O’Donnell & Stueve, 2006, and Cameron, 2014). Whitney and Smith (1993) indicate that about half of 8-11 year old students reported that they would try to help a victim of bullying. The actual observance of intervention done by O’Connell, Pepler and Craig (1999), however, is a much lower 25% of first through sixth grade students with 50% ignoring and 25% actually joining in the bullying behavior. Barhight, Hubbard, and Hyde (2013) also observed that 5th and 6th grade peers reported that only 25% of their peers would intervene in a bullying situation at least 50% of the time. Even more discouraging is Salmivalli, Lagerspetz, Bjorkqvist, Osterman, and Kaukiainen’s (1996) research that indicates only 17% of a sample of sixth graders were observed by their peers to intervene in a bullying situation.

While it is difficult to generalize the actions of children to older age groups, a study by Darley and Latane (1968) on general adult bystander inaction in emergency situations supports the idea that adult bystanders are also typically non-responsive. A seminal example of this non-responsiveness is the brutal stabbing of 28 year old Kitty Genovese in March, 1964. Kitty was attacked outside of her apartment building in Queens, New York and, although there were about a dozen witnesses to this violent attack that occurred in two incidents over about 30 minutes time, there was no action taken by any witness until after Kitty had been stabbed repeatedly and raped.

Given the higher incidents of LGBTQ adolescent victimization when compared to heteronormative youth, focusing on empowering the heterosexual peer to intervene instead of the LGBTQ adolescent offers several benefits. For example, when considering the protective factor of positive peer relationships for LGBTQ adolescents, few studies
have examined victimization from the bystander’s perspective but, according to Ahmed (2008), Pepler and Craig (1995), Atlas and Pepler (1998), 85% of bullying incidents include at least one bystander. Lodge & Frydenberg (ND) validate the important role of peer bystanders in their study supporting the idea put forth that a positive relationship with a peer lends to the feeling of well-being and safety for LGBTQ adolescents. By empowering bystanders, LGBTQ adolescents are afforded an opportunity to avoid bullying and violence before it happens as opposed to becoming victims in need of interventions to mitigate damage (Tabachnick, 2008). Banyard, Plante and Moynihan (2004) and Aboud and Joong (2008) support the idea that an increase in bystander intervention can change social norms in an area like a college campus.

**Reasons for unresponsiveness.** It is a common belief that bystander unresponsiveness is due to pathology, apathy, anomie, or insensitivity of the bystander. Most researchers, on the other hand, present different reasons for bystander unresponsiveness. Darley and Latane (1968), for example, purposed that it isn’t apathy that creates unresponsive bystanders, even in extreme cases like the brutal stabbing of Kitty Genovese witnessed by a dozen unresponsive individuals. Rather, they observed that participants (N= 72) in their study who chose not to report an emergency they witnessed (a phone-interviewee having a seizure) seemed to be more distressed than those who did report the emergency. Barhight, Hubbard, and Hyde’s (2013) study with fourth and fifth graders (N=79) also seems to support the idea that children who were less likely to intervene in a bystander situation are not unresponsive due to pathology, callousness, or insensitivity, but rather a sense of anxiety and unresolved conflict. Jennifer and Cowie (2012) also indicate that 10-11 year old children attributed worry and
shame to the bystander character in their study rather than indifference or malice. Some of the more commonly accepted reasons for bystander unresponsiveness are discussed below:

**State of indecision/social dilemma.** Darley & Latane (1968) indicate that unresponsive bystanders are left in a state of unresolved conflict about what to do. They observed that those who didn’t intervene were more emotionally aroused when they finally saw the interviewer than those who did report the emergency. Salmivalli (2010) and Myers and Cowie (2014) support this idea, stating that observers often feel trapped between knowing that the bullying is wrong, wanting to respond but also being “acutely aware” of their own unsecure position in their peer group. Barhight, Hubbard, and Hyde (2013) indicate that among 79 fourth and fifth graders, those who had a physiological response (heart rate) and a negative emotional response to watching a video of peers being bullied were more likely to intervene in a bullying incident according to their peers than those who had no increase in heart rate or an emotional response. This is particularly relevant when considering our previous discussion regarding anti-LGBT bullying and the mixed message students receive regarding the rights of LGBT individuals. It is also interesting to note that, while not widely publicized or discussed in the research regarding bystander effect, it was probably known by Kitty’s neighbors/bystanders that Kitty was in a lesbian relationship at the time of her stabbing and rape. In 1964, LGBT rights were not conceptualized, but in-fact, homosexuals and transsexual individuals were still pathologized. One could hypothesize then, that bystanders to LGBT specific bullying may experience additional angst about their role as witnesses due to the mixed message they may be receiving regarding LGBT individuals from their environment(s).
Diffusion of responsibility/bystander effect. Another reason for bystander unresponsiveness is as the number of known bystanders increases, the responsibility felt by a particular bystander decreases. Darley & Latane (1968) report the number of bystanders, particularly when the participant couldn’t observe other bystander’s reactions, had a significant impact on reporting speed. Specifically, if the participant knew that there were other bystanders but the participant could not observe how the other bystanders were reacting, the participant responded more slowly as the number of other bystanders increased. This circumstance is parallel in many ways to an on-line bullying situation, graffiti, or perhaps where a teacher is also a bystander along with peers, where people can observe the interaction or message but they are unaware as to the response of anyone else seeing the behavior.

Denying harm: A third reason for bystander unresponsiveness cited by researchers is the failure to recognize behavior as bullying. Myers and Cowie (2014) noted that participants (all university students over the age of 21) in the role of “bystander” in a role-play scenario failed to identify the scenario as bullying where those in the “victim” role clearly did. This component was speculated as a contributing factor to the events that led to the “bully-cide” of Rutgers University freshman Tyler Clementi in 2010. In his 2013 article, Byers observed, during interviews with Tyler’s roommate and friends of the roommate, who recorded and broadcast online Tyler’s sexual interactions with another male in his dorm room, a lack of acknowledgement that their behavior was considered inappropriate or bullying. This factor highlights the importance of defining the components of bullying prior to their being measured. As previously noted, while the ROBQ asks students to report incidents where they were the victim or
perpetrator of bullying, and defines bullying as occurring repeatedly between students of unequal power, they do not include (nor could they explicitly ask) each behavior that would indicate bullying, nor do they define what “unequal power” is. It is therefore important, when conducting an assessment of bullying behavior or environment that one carefully define the behaviors to measure.

There are other reasons researchers have identified for bystander unresponsiveness in addition to those mentioned above. Scapegoating the perpetrator and blaming the victim are among these ideas, and are often supported as reasons in other areas of violence and victimization such as sexual assault (Myers & Cowie, 2014, Byers, 2013, Darley & Latane, 1968).

**Indicators for bystander intervention.** Conversely, research also reveals some common factors among bystanders who do intervene:

*Age.* Barhight, Hubbard, and Hyde’s 2013 study with 79 children (M = 10.80 years) indicates that age is a positive predictor of bystander intervention, contrary to Rigby & Johnson (2006) that younger children are more likely to intervene. Trach, Hymel, Waterhouse & Neale (2010, p. 126-127) observed that secondary school girls intervened less as grade level increased. Gini, Pozzoli, & Borghi (2008) suggest that the attitudes about motivation and intervention change as children move into adolescence. While upperclassmen may differ in characteristics from underclassmen other than age, Brown & Gortmaker (2009) discovered that upper classmen were more likely to report more (anti-LGBT) attacks than underclassmen. There is a lack of research regarding age of bystander after adulthood is reached. Considering that the university is where the majority of students are transitioning from the adolescent to the adult years, one may
hypothesize that age may be a factor influencing bystander intervention within this environment.

**Gender.** Trach, Hymel, Waterhouse, and Neale (2010) found that secondary school boys were less likely to respond as a bystander than their female classmates. When considering university level students, Brown & Gortmaker (2009) report that females report more (anti-LGBT) graffiti, and attacks than male students. When considering adults, Darley and Latane (1968) observed that reporting an emergency was not dependent upon the gender of the bystander in adults. Just as in the consideration of age, it seems that gender may cease to be a factor in likelihood of bystander intervention beyond the university years.

**Intergroup contact.** A third reason for bystander intervention was reported by Dovidio et al. (1991) as their observances of those with more positive associations with the minority group represented by the victim, the more likely they would be to intervene. Abbott and Cameron’s 2014 study with 855 secondary students (11-13 year olds) supports this idea. They report that an increase in contact with a minority group (immigrants) has an indirect effect on assertive bystander intentions via empathy, cultural openness and decreasing in-group bias. Baston, Ahmad, Lishner, and Tsang (2002) support the idea that participation in empathy-building and perspective-taking exercises can increase tolerance toward stigmatized outsider groups. Finally, Bowen and Bourgois (2001) report that one’s comfort level increases with the more LGB people you know. One may hypothesize then, that reports of more positive attitudes towards a minority group (the LGBTQ population for example) may correlate with an increase in the likelihood of noticing behavior that that group defines as bullying, and their intervening.
**Prosocial Skill.** Some research indicates that bystanders that intervene exhibit higher levels of self-efficacy, problem-solving coping strategies, and feelings of personal responsibility than those who are passive during bullying events (Poyhonen & Salmivalli, 2008, Pozzoli & Gini, 2010).

Finally, Poteat and Vecho (2015) report that in a sample of 722 high school students, females, students who exhibited leadership, courage, altruism, and justice sensitivity, and students with more LGBT friends were more likely to intervene when observing homophobic behavior than males, those without those characteristics, and students with less LGBT friends. In summary, individual characteristics that influence bystander intervention consist of two categories: immutable characteristics such as age and gender, and mutable characteristics such as inter-group interaction, attitudes, and prosocial skills.

**Increasing Bystander Intervention**

By considering these reasons for bystander unresponsiveness and some of the characteristics of bystanders who are more likely to intervene, one may wonder if interventions aimed at increasing bystander action have been successful. For an intervention to be successful at increasing bystander responsiveness, it must address the barriers the bystanders face, and empower those bystanders with the characteristics shown to be more likely to intervene. It must also offer a range of intervention opportunities rather than seeing bystander intervention as a monolithic construct.

While research supports bystander intervention as effective in decreasing bullying behavior, increasing bystander intervention through anti-bullying programming has proven to be difficult. A meta-analysis of 11 bullying prevention programs (12 Effect
Sizes) with bystander intervention components was conducted in 2012 (Polanin, Espelage, Pigott, 2012). The results indicate a small but significant increase in bystander intervention ($g = 0.20, p < .001$) with high school students responding more favorably than K-8 students (ES = 0.43, CI = .33 to .52 vs. ES = 0.14, CI = .11 to .18 respectively). This study demonstrates promising evidence in increasing bystander responsiveness in bullying events among middle and high school students. Research has also shown successful bystander intervention strategies for adults in other type of emergencies such as sexual assault, domestic violence, and computer mediated communication (Nickerson, Aloe, Livingston, & Feeley, 2014, Banyard, 2011, McMahon et al., 2014). Therefore applying the principles observed in these intervention models to increasing bystander responsiveness in bullying among young college age adults may be helpful.

**Theoretical framework for increasing bystander intervention among adults.**

Darley and Latane (1968) used their early research among adults regarding bystander intervention in emergencies to develop a model for increasing bystander intervention. This model consists of 5 steps a bystander must move through in order to intervene. These five steps a bystander must move through prior to taking action are:

1. Notice the event along a continuum of actions
2. Consider whether the situation demands your action
3. Decide if you have a responsibility to act
4. Choose what form of assistance to use
5. Understand how to implement the choice safely (Darley and Latane, 1968)

Since the development of this model for understanding bystander intervention in emergencies, this classic model of bystander intervention has been utilized successfully
in developing programs for increasing bystander intervention in sexual assault, intimate partner violence, and other social problems.

*Increasing bystander intervention in sexual assault prevention.* Victoria Banyard (2008) has used this model to develop measures and correlations of prosocial bystander behavior in sexual violence and interpersonal violence in communities. Her research with 389 undergraduate students indicated statistically significant correlations between willingness to engage in bystander behaviors (attitudes) and respondent’s gender, knowledge (about sexual violence), and other individual characteristics (sense of community, extroversion, efficacy, etc.). Significant correlations existed between actual bystander behavior (pretest) and respondent’s gender, knowledge, and attitudes. In a 2 month post-test, only respondent’s attitudes were correlated significantly with actual bystander intervention behavior. In an initial meta-analysis of bystander education training for campus sexual assault prevention, Katz and Moore (2013) have demonstrated some preliminary support for focusing on bystander intervention when addressing the problem of sexual assault on college campuses. Building on a meta-analysis of general sexual assault education programs (Anderson and Whiston, 2005), Katz and Moore (2013) focus on outcomes of bystander efficacy, rape-supportive attitudes, intent to help (as a bystander), rape proclivity, bystander helping behaviors, and perpetration behaviors. Overall, results of an 11-study meta-analysis support current bystander education programs have moderate effect (ES>.50) on bystander-related attitudes and behavioral intentions (efficacy and intent to help) and small effect (.20<ES <.50) on rape-related attitudes and behavioral intentions(rape-supportive attitudes, rape proclivity). This meta-
analysis also demonstrated that bystander programs had stronger effects on two moderator variables (younger participants and male participants).

**Increasing bystander intervention in bullying.** Because an understanding of the process a bystander moves through has been leveraged in increasing bystander intervention in sexual assault on college campuses, perhaps it can serve as a theoretical framework for understanding and increasing the bystander response to bullying and specifically to Anti-LGBT bullying. Pazzoli and Gini (2012) applied the three central steps (steps 2-4) of Darley and Latane’s (1968) 5-step model to measure the bystander behavior of 1,754 children (primary school) and adolescents (middle school). The structural equation modeling (SEM) confirmed the process of intervention behaviors as the hypothesized three-step model with both age groups, indicating some support for Darley and Latane’s model of bystander intervention applying to bullying. Nickerson, Aloe, Livingston, and Feeley (2014) developed an assessment measure for this 5-step process of bystander intervention in bullying events. A Confirmatory Factor Analysis of their measure with secondary school students (N = 562) supports this as a five-factor measure, in alignment with Darley and Latane’s 5-step process when assessing for bystander intervention in both bullying and sexual harassment. Dillan and Bushman (2015) have also applied Darley and Latane’s (1968) five-step bystander intervention model to “cyberbystanders” or those who witness bullying online. Their study looked at the first step, noticing the cyberbullying behavior. From their analysis of data collected from 221 adolescent “cyberbystanders”, they report that noticing the cyberbullying significantly predicts intervention (either direct or indirect reporting). Given these examples of preliminary research supporting this classic 5-step model of bystander
intervention applying to the social problem of general bullying among children and adolescents, it seems logical to assess the helpfulness of this same model in understanding and increasing bystander intervention in LGBT-specific bullying.

**Applying this theoretical framework to LGBT bullying.** If Darley and Latane’s (1968) bystander intervention model is to be useful for increasing bystander responsiveness in anti-LGBT bullying events, it will be helpful to begin with understanding the bystander’s attitudes about LGBT individuals and LGBT-specific bullying events within the context of their particular community. It will also be helpful to understand the individual characteristics of the bystanders that influence their attitudes about LGBT individuals and LGBT-specific bullying events within their community.

Secondly, it will be helpful to understand what affect bystander’s attitudes about LGBT individuals and what affect individual characteristics have on a potential bystander’s ability to notice a particular behavior as a potentially LGBT-specific bullying event. As an example, when an individual overhears someone say “You’re so gay!” do they identify that phrase as harmful? Why or why not? What individual characteristics or attitudes about LGBT-individuals and LGBT-specific bullying in their community help the bystander to “notice the behavior along a continuum of actions” and deem it bullying?

It is also important to consider environmental factors influencing this bystander intervention model. Sarah McMahon (2015) articulated the importance of placing bystander intervention research in a community context in her recent “Call for Research…” empirical review. In this research agenda, McMahon (2015) identifies 5 macro-level factors that influence bystander behavior including; social norms, sense of community, pro-social modeling, policies and accountability cues, and physical
environment. Looking at only the first macro-level factor, Aboud and Joong (2008) state that not only does intergroup name-calling cause public humiliation to the victim, but it also reinforces social norms supporting stereotypes and prejudice. For example, if a bystander notices a behavior as a potentially LGBT-specific bullying event (step 1), but does not consider the situation to demand action on their part (step 2), they may reinforce the “blindness” of those bystanders who already failed to notice the behavior as bullying in the first place. This, therefore, reinforces a social-norm that this behavior is acceptable. This may be particularly reinforced when considering a society that sends mixed messages regarding a particular population such as is the case for LGBT individuals.

Social norms, along with the other four macro-level factors identified in McMahon’s (2015) research agenda, are discussed within the framework of sexual violence prevention in a college campus environment. There are equally compelling reasons to consider the application of the bystander intervention process in LGBT-specific bullying within the campus community as well.

**Campus climate and bystander responsiveness.** Earlier in this paper the benefits of utilizing a university campus to conduct research to understand bullying and bystander interventions were discussed. The typical university student is at a developmental stage that transitions between the child/adolescent stages and the adult stages. In a similar way, the university campus provides an environment that “bridges the gap” between the school domain and the work domain, both areas where bullying occurs, albeit in different forms with different consequences. It is this transitory environment and individual student profile that may make the university an appropriate place to learn
principles about increasing bystander responsiveness that could generalize to both the school and the work environments.

The campus climate survey is a tool that has often been used to assess how students, faculty, and staff feel about various populations on their campus. The findings have then been used to develop interventions. As examples, consider the current campus climate survey regarding sexual misconduct being conducted on 28 college campuses at the initiative of the Association of American Universities (AAU) (anonymous, 2015); Hurtado, Alvarado and Guillermo-Wann’s (2015) recent survey regarding racial salience in precollege and first year college student’s perceptions of campus climate; Johnston and Yeung’s (2014) use of campus climate survey to measure malleability of student attitudes regarding Asian American students after a racially biased incident; Baker, Kerrie’s (2012) campus climate survey regarding perceptions of faculty and students towards students with disabilities and Miller and Berkeley’s (2010) campus climate survey used to assess attitudes and behaviors based on intersections of race and gender. A final example is Yost and Gilmore’s (2011) LGBT campus climate survey at Dickinson College that was used to make policy level changes aimed at creating a less “chilly” climate such as introducing inclusive language into existing policies, including LGBT issues and concerns in curricula development and co-curricula programming, and developing appropriate protocol for response to anti-LGBT discrimination and harassment.

It stands to reason then when considering how to increase bystander responsiveness during anti-LGBT bullying events that a campus climate survey might be useful to understand the LGBT-specific social norms, attitudes, and behaviors on campus
that contribute to potential bystander observations. As previously discussed, research indicates some individual characteristics of bystanders that may be correlated with overcoming the barriers to bystander unresponsiveness (state of indecision/moral dilemma, diffusion of responsibility/bystander effect, denial of harm, etc.) and facilitating their movement through Darley and Latane’s (1968) 5-step process (ex: age, gender, in-group contact, attitudes, etc.). What will also be useful is considering a relationship between these predictive characteristics of the bystander with the behaviors they notice along a continuum as potentially LBBT-specific bullying events.

**Summary**

This chapter first offered a more robust definition of the phenomenon of bullying, including the nuance of cyberbullying, and explored the variance of bullying behaviors across the life-span. An analysis of the dynamics of bully, victim, and bystander at different developmental stages, was then presented, including the additional unique dimension of LGBT-specific bullying. The current research assessing the effectiveness of interventions to reduce bullying was reviewed, offering an understanding of risk and protective factors related to LGBT bullying. It should be noted that the majority of existing literature regarding the construct of bullying, LGBT specific bullying, and bullying interventions is addressing the middle to high school age group. Applying these constructs to a university population may present some barriers due to the difference in development between the populations. There are a few studies presented in this review that are addressing the university age group from a bullying perspective, but this is an area where more research is needed. Next, there was a focus on the role of the bystander, highlighting reasons for bystander inaction, looking at characteristics of bystanders who
do intervene. The body of literature reviewed by this paper regarding bystander inaction and responsiveness offers insight from both bullying in elementary through high school populations, sexual assault intervention in university populations, and emergency responses in adult populations. Using systems theory, person-in-environment perspective, and a five-step model of increasing bystander responsiveness in adults, a rationale was presented for focusing on understanding the effect of campus climate, and individual bystander characteristics (such as age, gender, attitudes towards LGBT individuals, etc) on a bystander noticing a behavior along a continuum as a potential LGBT-specific bullying event. In an attempt to address the gaps in the literature, this paper reviewed literature that drew from populations spanning the developmental stages while recognizing the barriers presented as a call for further research. Because the university campus is a place where many transition from adolescence to adulthood and their education to the workforce, the next chapter presents a proposal for a study assessing the attitudes and other individual characteristics of potential bystanders as they relate to their observances of potential LGBT-specific bullying behaviors on a Pennsylvania State University campus as a step toward addressing the barriers presented by the gaps in the literature.
Chapter 3: Proposal and Methods

Drawing on the previously reviewed research regarding facilitation of bystander responsiveness in LGBT bullying events, this chapter outlines a proposal to utilize previously collected data from a 54-item LGBT Campus Climate Survey administered to undergraduate students at Edinboro University of Pennsylvania in the fall semester of 2012.

Sample

The data for the original study were drawn from LGBTQ campus climate paper surveys administered by Associate Professor of Social Work and Primary Investigator (PI), Hilary Copp, PhD, LSW; Adjunct Instructor of Social Work, Will Koehler, LCSW; and Tina Loomis, MSW student and graduate assistant in the 2012 fall semester of Edinboro University of Pennsylvania. Prior to any data collection, this research received approval from Edinboro University’s Institutional Review Board.

Edinboro maintains an enrollment of approximately 8,700 students; 6,700 undergraduates and 2,000 graduate students. The university employs 404 full and part-time faculty members with an 18:1 student to faculty ratio. It supports over 100 majors and awards 6 different graduate degrees ranging from MA to MSW. Edinboro University also prides itself as maintaining one of the largest communities of resident students with severe disabilities in the country. Because of this commitment to providing quality higher education to all individuals regardless of ability, Edinboro faculty go to great lengths to provide inclusive education tailored to all learning differences (Edinboro University, n.d.).
Within the first four weeks of the fall 2012 academic semester, the LGBTQ campus-climate survey was distributed during 12 class sessions (540 total seat count) on the Edinboro University of Pennsylvania’s main campus. The three researchers gained permission from 8 faculty members to utilize 15-20 minutes of their class time and distribute the survey to students to complete. Participating faculty were recruited by PI through personal and professional acquaintance from a breadth of teaching departments. The 8 faculty members that permitted the researchers to distribute the LGBTQ Campus Climate Survey gave access to a total of 12 class sessions. Table 1 provides further information regarding the 12 class sessions that were surveyed and reflects that the sessions spanned a wide range of both subject matter as well as course level.

<table>
<thead>
<tr>
<th>Course</th>
<th>Enroll</th>
<th>Time</th>
<th>Location</th>
<th>Date</th>
<th>Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 350</td>
<td>38</td>
<td>TR 12:30-1:45</td>
<td>Hendricks</td>
<td>9/13/12</td>
<td>TL/HC</td>
</tr>
<tr>
<td>SOC 100</td>
<td>57</td>
<td>TR 3:30-4:45</td>
<td>Cooper</td>
<td>9/18/12</td>
<td>HC</td>
</tr>
<tr>
<td>MUSC 103</td>
<td>41</td>
<td>MWF 9:00-9:50</td>
<td>Hendricks</td>
<td>9/19/12</td>
<td>HC</td>
</tr>
<tr>
<td>MUSC 103</td>
<td>88</td>
<td>MWF 11:00-11:50</td>
<td>Wiley</td>
<td>9/19/12</td>
<td>HC</td>
</tr>
<tr>
<td>THEA 202</td>
<td>55</td>
<td>TR 9:30-10:45</td>
<td>Diebold</td>
<td>9/20/12</td>
<td>TL</td>
</tr>
<tr>
<td>MUSC 103</td>
<td>86</td>
<td>TR 11:00-12:15</td>
<td>Wiley</td>
<td>9/20/12</td>
<td>TL</td>
</tr>
<tr>
<td>ARHI 558</td>
<td>24</td>
<td>MWF 10:00-10:50</td>
<td>Doucet</td>
<td>9/21/12</td>
<td>WK</td>
</tr>
<tr>
<td>ARHI 558</td>
<td>41</td>
<td>MWF 11:00-11:50</td>
<td>Doucet</td>
<td>9/21/12</td>
<td>WK</td>
</tr>
<tr>
<td>THEA 318</td>
<td>30</td>
<td>MWF 1:00-1:50</td>
<td>Diebold</td>
<td>9/21/12</td>
<td>WK</td>
</tr>
<tr>
<td>MATH 107</td>
<td>28</td>
<td>MW 6:00-7:40</td>
<td>Doucette</td>
<td>9/24/12</td>
<td>TL</td>
</tr>
<tr>
<td>PSYC 225</td>
<td>42</td>
<td>MWF 10:00-10:50</td>
<td>Compton</td>
<td>9/26/12</td>
<td>HC</td>
</tr>
<tr>
<td>SOWK 115</td>
<td>52</td>
<td>TR 9:30-10:45</td>
<td>Wiley</td>
<td>9/27/12</td>
<td>TL</td>
</tr>
</tbody>
</table>
It should be noted that although there were 540 students enrolled across the 12 class sessions, a precise response rate cannot be calculated. It is not known how many students were present and eligible to take the survey for several different reasons. First, attendance was not taken at each class session by any of the researchers. Second, the researchers asked students not to take the survey more than once. It is not known if students were present in more than one class session where surveys were distributed. Third, the researchers did not count the number of incomplete surveys that were returned. Finally, only students who were age 18 and older were eligible to take the survey, and the researchers did not take a count of students who were under the age of 18. Of the 540 potential students surveyed, there were 419 surveys completed and collected across the 12 class sessions. If all 540 students were present on the day the survey was distributed, age 18 or older, and had not completed the survey during a different class, this would reflect a 78% response rate. In all likelihood, the response rate was higher; however, as stated above, the precise response rate cannot be calculated.

Data Collection

The 8 faculty members who agreed to have their classes surveyed provided the PI with a schedule of class meeting days and times as well as how many students were enrolled in each class. The PI coordinated coverage of each classroom with the availability of the researchers. PI provided training to the two other researchers regarding how surveys were to be administered to students. Upon receiving agreement for a researcher to distribute surveys during a particular class session, the researcher would arrive at the scheduled room with consent forms, blank surveys, and pens, enough for each enrolled student. The researcher would read the statement developed by the PI
regarding the purpose of the survey and then distribute a consent form, and survey to each student.

Potentially, 540 students from 12 class sessions received a survey, and an informed consent. Participants were given as much time as needed to complete the measure. As students completed the survey, they turned it in at the front of the classroom. When everyone was finished, the researcher collected the pile of returned surveys, and thanked the students and the professor for their time. The researchers collected 419 completed surveys. After all surveys were collected, the graduate assistant researcher entered the data into a Microsoft Excel spreadsheet.

A different graduate assistant then reviewed a randomly-sampled 10% of the surveys for input errors. If a data entry error was discovered, the entire survey was reviewed and corrected. Furthermore, the survey number immediately preceding and following the survey that contained the error was reviewed and corrected if necessary. This process would continue until two correctly entered surveys were found both preceding and following an incorrectly entered survey. The graduate assistant that reviewed 10% of the surveys for accuracy reported finding two “sets” of incorrectly entered surveys. In each case, a section of about twelve questions had been incorrectly entered for about three to seven surveys in the set. After the first 10% were reviewed for accuracy and corrected, the graduate assistant again reviewed a randomly-sampled 10% of the surveys. No data entry errors were found during this second search. Data were then exported to SPSS, version 17 for analysis. Both the Excel Spreadsheet and the SPSS files are stored on the PI’s computer which is a password protected system owned by the
Edinboro University Department of Social Work, while paper surveys were kept in a locked file drawer in researcher Will Koehler’s office in the Department of Social Work.

**Instrumentation**

There were 9 demographic questions, a 13-item instrument measuring respondent’s attitudes about LGBT people, a 15-item LGBT changing-attitudes instrument, and a 17-item LGBT Peer Experiences Questionnaire in the 54-item Campus Climate Survey used in this study. This instrument was modeled after several other university LGBT Campus Climate surveys (Brown and Gortmaker, 2009; Rankin, 2004; Bowen and Bourgeois, 2001; DAugelli and Hershberger, 1995; and Maleny, Williams, and Geller, 1997). This 54-item survey was used to compare respondent’s demographic information and attitudes about LGBT people in general to their observances of LGBT bullying and supportive behaviors and their thoughts about the overall climate for LGBT people on campus by staff, faculty, and other students.

Of the nine demographic questions, this study uses five: age, racial/ethnic identity, birth sex, current gender identity, and current sexual identity. The remaining demographic questions were collected by the PI to be used in her research.

**Attitudes toward LGBT people questionnaire (LGBT Attitudes).** Items 11-23 comprise the 13-item attitudes toward LGBT people questionnaire. The strong language used in items 11-17 (ex: sex between two men is just plain wrong and I think lesbian women are disgusting.) are replications of questions asked and language used by DAugelli and Hershberger’s (1995) longitudinal study regarding AIDSphobia and homophobia among four cohorts of undergraduate students. DAugelli and Hershberger’s (1995) study utilized the Attitudes Towards Lesbians and Gay Men (ATLGM) 20-item
instrument (Herek, 1988). Although the ATLGM instrument does not include questions regarding bisexual or transgender individuals, the PI introduced 3 questions (items 14, 16, and 17) regarding these populations with similar wording.

Items 18-23 are adaptations from a study with 109 college students regarding their comfort level with being around gay, lesbian, and bisexual students (Bowen and Bourgeois, 2001). This study supported a hypothesis that increased exposure to LGB individuals increased feelings of comfort with LGB people in general. While Bowen and Bourgeois (2001) did not include questions about heterosexual student’s consideration of transgender individuals, the PI incorporated two questions (items 22 and 23) regarding the respondent’s comfort level with discovering a friend was transgender.

**LGBT Peer Experiences Questionnaire (LGBT-PEQ).** The LGBT-PEQ was used in this study to measure the observances of Edinboro students regarding behaviors by other students, staff, and faculty members towards LGBTQ students on their campus. This instrument was included as items 24-40 in the survey.

The basis for the 17-item LGBT-PEQ came from the Peer Experiences Questionnaire+9 (PEQ+9) (Wiens & Dempsey, 2009), which was an adaptation from the original PEQ (Vernberg, Jacobs, & Hershberger, 1999). The original PEQ is an 18 item measure of middle-school student’s experiences of being a victim and being a perpetrator of bullying behaviors with 9 items measuring experiences of Victimization of Self (VS) and 9 items measuring experiences of Victimization of Others (VO) (Vernberg, et al., 1999). Vernberg et al. (1999) reported adequate internal consistency for the Victimization of Self (α = .85) and Victimization of Others (α = .78) scales for their study.
Wiens and Dempsey (2009) adapted the PEQ by adding 9 items (PEQ+9) that measured the same 9 experiences as the original PEQ, but from a bystander’s perspective. The PEQ+9 asked questions such as “A student teased another student in a mean way, called him or her bad names, or said rude things to him or her.” Wiens & Dempsey (2009) also reported an adequate internal consistency for each of the three subscales Victimization of Self (α = .82), Victimization of Others (α = .84), and the new subscale, Witnessing Victimization (α = .90).

With permission from the authors of the PEQ+9, the researchers adapted the 9 items from the Witnessing Victimization (WV) subscale to create the LGBT-PEQ. Adaptations included modifying each statement to indicate that the observed behavior happened specifically because the victim was being identified by the perpetrator as LGBTQ (ex: A student called another student a name or made rude comments in person because they thought that student was LGB or T), and “maturing” the language and content of the items to be more appropriate for older adolescents (ex: “A student scared another student into giving up money or other things” was changed to “A student vandalized, damaged, or stole another student’s property because they thought that student was LGB or T”).

Additionally, as the 9 WV items in the PEQ+9 did not have any measure of cyber-bullying, the researchers added language that indicated a desire to measure some behaviors both in-person and online (ex: 24. A student used LGBT-specific language in a negative manner in-person; and 25. A student used LGBT-specific language in a negative manner online.)
In addition to wanting to measure WV by peers (WVP), additional items were added to include observances not only of peers, but of university staff and faculty as well (WVF) (ex: 38. A member of Edinboro faculty or staff used LGBT-specific language in a negative manner). Finally, as in Brown & Gortmaker’s 2009 study that asked about positive behaviors, inquiries about observances of positive behaviors towards LGBTQ students (ex: “A member of Edinboro faculty or staff used LGBT-specific language in a positive manner” and “a student spoke up in person for another student…”) were also included.

As several other studies (Brown & Gortmaker, 2009; Rankin, 2004; Gortmaker & Brown, n.d.; Melaney, Williams, & Geller, 1997) had asked about observances of graffiti on campus, the researchers added an item regarding student observances of anti-LGBT graffiti on campus (item 35).

This modified LGBTQ-PEQ was then included in the 38 item LGBTQ campus-climate survey as questions 24-40 (see attached).

**LGBT changing-attitudes survey (LGBT changing attitudes).** Items 41-55 comprise the 15-item LGBT changing-attitudes survey. With the exception of item 50, these items were not used in this study, but were introduced by the PI as part of the original study. Item 50 (How interested are you in learning more about LGBT people?) was used as a check for social desirability with the LGBT Attitudes Scale.

Many of the questions asked in items 41-55 were adapted from two similar studies (Brown and Gortmaker, 2009; Malaney, Williams, and Geller, 1997). Brown and Gortmaker’s 2009 study was conducted at a large Midwestern state research university (Brown & Gortmaker, 2009) and looked at the variance of interest in learning more about
LGBT issues, general perceptions of campus climate for LGBT students, and change in attitudes towards and climate for LGBT students across gender, class standing, LGBT status and campus “role” (student, RA, faculty, or staff). This study supported the idea that females, third and fourth year students, LGBT students, Resident Assistants, and staff were more likely than males, first and second year students, heterosexual students, and faculty to express positive attitudes about LGBT students (Brown & Gortmaker, 2009). In an earlier study, Malaney, Williams, and Geller (1997) conducted a phone survey of 630 students in two different Northeast universities regarding their perceptions of the campus climate for LGB students, and their interest in and exposure to LGB issues (Malaney, Williams, & Geller, 1997). In this study, students at both universities were asked questions about their exposure to anti-LGB behaviors, how they thought they would respond to these behaviors (intervene directly, report behavior, nothing, etc.), perceptions of climate for LGB students on campus, and their interest in and support of LGB issues and rights. This study measured differences in response rates across these variables based on gender, and class standing.

Proposal

This researcher proposes to conduct exploratory data analysis from the 419 completed surveys in order to compare attitudes of potential bystanders to LGBT bullying events to their observances of current behaviors of faculty, staff, and other students towards LGBT students at Edinboro University.

Research Questions. As previously discussed, in order to create interventions that address barriers bystanders of LGBT-specific bullying face and to facilitate their movement through Darley and Latane’s (1968) five-step process to take action, a multi-
systems understanding of the characteristics of the bystanders within their environment is needed. This researcher poses a series of research questions to direct this study towards this goal.

**Attitudinal factors for reporting behaviors.** Research indicates that an increase in exposure to a minority group may have an indirect effect on bystander responsiveness (Dovidio et al., 1991, Bowen and Bourgois, 2001, Baston, Ahmad, Lishner, and Tsang, 2002, and Abbott and Cameron, 2014). The more positive interactions that occur between an individual and a minority group, the more empathy and positive attitudes that are developed toward that group, and other minority groups in general (Dovidio et al., 1991). Increased empathy and a more positive attitude towards a minority group may increase the likelihood of an individual noticing behavior directed towards that minority group as bullying (step one of Darley and Latane’s (1968) five-step process). Therefore, a primary research question for this study: How much variance in observances of behaviors towards LGBT people can be predicted by observers’ attitudes towards LGBT people?

**Demographic factors influencing attitudes and reporting behaviors.** Given that the research that has been reviewed regarding increasing bystander responsiveness in LGBT-specific bullying spans a considerable breadth of factors, including developmental stages, multiple intersections of diversity (gender, ethnicity, sexual identity, etc.), difficult constructs to measure (sympathy, empathy, positive attitudes, degrees of power, etc.), and consideration of influence by multiple layers of environmental systems, one must consider the interaction of such variables in determining what influences a student to notice a behavior as either positive or negative towards LGBT individuals.
**Age.** Previously discussed literature seems to indicate a relationship between a bystander’s age and their likelihood to intervene during a bullying event. Gini, Pozzoli, and Borghi (2008) suggest that attitudes toward intervening and motivation to intervene changes from childhood to adolescence. Because traditional university students are transitioning from adolescence to adulthood, the age of a particular bystander may be a factor influencing their responsiveness when witnessing an anti-LGBT bullying event. Therefore, a second research question proposed for this study: While accounting for the age of the respondent/observer, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals?

**Gender.** Previously reviewed research may indicate that gender influences bystander responsiveness during a bullying event wherein females may be more likely to respond to bullying than males in secondary school students and university students (Trach, Hymel, Waterhouse and Neale, 2010 and Brown and Gortmaker, 2009). One may hypothesize that one reason female students are more likely to intervene during a bullying event is that females have long been considered a social minority, and therefore may more easily sympathize with the victim, having experienced similar feelings of powerlessness. To that end, a third research question for this study is: How much variance in observances of behaviors towards LGBT individuals can be predicted by observers’ attitudes toward LGBT people when accounting for their gender?

**Sexual orientation and gender identity.** Research does indicate that belonging to a particular minority group heightens one’s sensitivity to behaviors directed towards that minority group. Therefore, a fourth research question is proposed for this study: How much variance in observances of behaviors towards LGBT individuals can be predicted
by their attitudes towards LGBT individuals while accounting for their sexual orientation and gender identity (i.e. self-identifying LGBT minority status vs. self-identifying heteronormative orientation and identity)?

*Other minority status.* Along that line of thinking, one may also posit that bystanders from other minority groups (other than females or LGBT identifying students) may also feel more sympathy towards victims of bullying as they recognize the power differential present during the event. Therefore, this researcher poses a fifth research question for this study: How much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals while accounting for their ethnic identity?

*Demographic and attitudinal factor interactions.* One reason for these considerations is to understand how much of the variance in observation of positive and negative behaviors can be accounted for by mutable characteristics, such as attitudes, while controlling for immutable characteristics, such as demographic characteristics. While demographic characteristics such as gender, age, ethnic identity, etc. may account for a portion of variance in bystander observances, these are obviously not characteristics that can be changed with interventions. Research seems to indicate, however, that attitudes can be changed through various forms of intervention. A key, therefore, in developing interventions that increase bystander responsiveness is in understanding how much variance in bystander observations of behavior as bullying (step one in Darley and Latane’s (1968) five-step process) is accounted for by mutable characteristics such as attitudes towards the victim when controlling for immutable characteristics such as age, gender, sexual orientation and gender identity, and ethnic identity. With that being said,
this researcher poses a final research question to guide this study: How much variance in observations of positive and negative behavior towards LGBT people can be predicted by the observer’s attitude toward LGBT people when accounting for immutable demographic characteristics of age, gender, sexual orientation and gender identity, and ethnic identity?

These research questions are demonstrated in the causal model included below.

**Generation of variables.** The variables of interest for this study include 4 demographic characteristics (age, gender, sexual orientation and gender identity, and ethnic identity), an LGBT attitudes score, and an LGBT-Peer Experiences Questionnaire score.

**Demographic variables.** Each of the 4 demographic variables for this study is taken from questions in the Campus Climate Survey. For the purposes of this study, age will initially be considered as a continuous variable. Gender, sexual orientation and gender identity, and ethnic identity, on the other hand, will all be considered dichotomous categorical variables initially. The reason for transforming the categorical variables of gender, sexual orientation and gender identity, and ethnic identity into dichotomous variables is to determine if the relationship to attitudes and observations of behaviors is influenced by level of privilege/degree of power. Therefore, gender (birth sex) will be transformed into male or female/intersex, current sexual orientation and gender identity will be transformed into heterosexual or non-heterosexual and cisgender or non-cisgender responses respectively. Ethnic identity will be transformed into Caucasian or non-white responses.
**LGBT Attitudes score.** Thirteen items (Questions 11 – 23) will be used to construct an LGBT Attitudes Scale (LGBT Attitudes). All 13 response options were the same (Strongly Agree, Agree, Disagree, Strongly Disagree). The researchers coded each response as follows: Strongly Agree = 1, Agree = 2; Disagree = 3, Strongly Disagree = 4. All 13 responses were then added for a total LGBT Attitudes score. The Chronbach’s alpha for the full sample was .96 (M = 42.86, SD = 9.02, with a range from 13 to 52). Thirteen participants had missing data on this scale.

**LGBT Peer Experiences Questionnaire (LGBT-PEQ) score.** The 17 items comprising LGBT-PEQ scale (Questions 24-40) will be used to create an LGBT-PEQ score. Response options are the same to all 17 items (Never, Once, 2-3 Times, 4-5 Times, More Than 5 Times). The researchers coded all responses for the 17 items (Q24-Q40) the same Never = 0, Once = 1, 2-3 Times = 2, 4-5 Times = 3, More Than 5 Times = 4. The responses for these 17 items were then added together to create a LGBT-PEQ. The Cronbach’s alpha for the full sample was .79 (M = 5.24, SD = 5.93, with a range from 0 to 41). Five participants had missing data on this scale.

**Plan for data analysis.** The data for this study will be analyzed in three phases: descriptively by univariate analysis, bivariate analysis for primary identification of strength and direction of prescriptive variables and outcome variables, and multivariate analysis of prescriptive and outcome variables to address research questions. Only cases with no missing data in the variables of interest will be used in creation of variables and data analysis.

**Univariate analysis.** After each variable is generated, mean values, range of observed values, standard deviations and frequency tables will be generated for all
variables of interest. Variables will be inspected for normality of distribution and adjustments made when necessary.

**Bivariate analysis.** Correlation tables will be generated and inspected for consideration of strength and direction of relationship. Crosstabs for each outcome variable and predictor variable will be inspected in order to assess for sparseness and risk of complete separation. Only variables that exhibit statistically significant relationships during bivariate analysis will be used during the analysis addressing the posed research questions.

**Addressing research questions.** Once the screening of the data is complete, variables and outcome-predictor relationships are established as sufficient for analysis, each research question will be addressed as described below.

*RQ1:* How much variance in observances of behaviors towards LGBT people can be predicted by observers’ attitudes towards LGBT people? This research question will be answered through a simple linear regression of LGBT attitudes scores across LGBT-PEQ scores. This researcher hypothesizes that a statistically significant and positive correlation exists between observers’ attitudes towards LGBT people and their observances of behaviors towards LGBT people. This researcher also hypothesizes that a significant percentage of LGBT-PEQ scores can be predicted by LGBT attitudes scores.

*RQ2:* While accounting for the age of the respondent/observer, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals?

This research question will be answered through a multiple linear regression analysis of age and LGBT attitudes scores across LGBT-PEQ scores. This researcher
hypothesizes that as respondent’s age increases; there will be an increase in observances of behaviors towards LGBT individuals.

*RQ3-5:* The next three research questions detail the relationship that three dichotomous variables (gender, LGBT status, ethnic identity) have with observances of behaviors towards LGBT individuals and their impact on the relationship between attitudes towards LGBT people and observances. These research questions will be answered through a series of multiple linear regression analysis of an independent variable across LGBT-PEQ scores. This researcher hypothesizes that females will record more observances than males, LGBT identifying respondents will record more observances than heteronormative identifying respondents, and non-white respondents will record more observances than white respondents.

*RQ6:* How much variance in observations of behavior towards LGBT people can be accounted for by the observer’s attitudes toward LGBT people when controlling for immutable demographic characteristics of age, gender, LGBT status, and ethnic identity? This research question will be answered through a hierarchical regression analysis of the independent variables across LGBT-PEQ scores. Prior to adding the demographic variables that were shown to be significant individually, they will be screened for any possible interaction effect. This researcher hypothesizes that a statistically significant amount of variance in LGBT-PEQ score can be accounted for by LGBT-attitude score after controlling for age, gender, LGBT status, and ethnic identity.

In summary, this researcher has developed a proposal to utilize data collected from an LGBT Campus Climate Survey distributed on the campus of Edinboro University of Pennsylvania during the fall semester of 2012 in order to advance the
understanding of the role of a bystander in LGBT-specific bullying. The literature that has been reviewed herein indicates that although the majority of bullying events have at least one bystander, most bystanders do not intervene. However, when bystanders are motivated to intervene, research suggests that the bullying is likely to stop. Darley and Latane (1968) have developed a model for explaining the process a bystander to an emergency situation goes through before intervening. This model has been successfully applied in development of interventions with sexual violence programs. This researcher uses Darley and Latane’s (1968) model within a systems theory perspective to develop research questions that investigate step one of Darley and Latane’s (1968) model, “noticing the behavior along a continuum as indicating an emergency.” Each of the proposed research questions focuses on key characteristics of bystanders that have been identified in the literature as possible predictors of observances of positive and negative behaviors toward LGBT students within a particular university campus community. This proposed analysis will potentially help with developing interventions for facilitating bystander intervention in anti-LGBT bullying events.
Chapter 4: Results

Sample

As previously noted, 419 surveys were returned for analysis. Seventeen cases had at least one missing entry on either the LGBT Attitudes scale \((n = 12)\), the LGBT-PEQ scale \((n = 4)\), or both \((n = 1)\) and were considered for deletion. Ultimately, two cases were deleted from the analysis. One survey had 17 of 17 items missing on the attitudes scale, and was a 19 year old, white, heterosexual, cisgender, male, a demographic that was overrepresented in the study. A second survey had 2 of 17 items missing on the attitudes scale, and was a 19 year old, white, heterosexual, cisgender, female, a demographic that also was overrepresented in the study. All other cases with missing data on either the LGBT Attitudes scale or the LGBT-PEQ scale were retained for analysis either due to their indication that they were in an underrepresented demographic category (ex: age > 25 or nonwhite) \((n = 4)\), or they had only one missing item on one of the two scales \((n = 11)\). Additionally, 2 cases did not indicate their age, and 7 cases did not indicate their race. These cases were also retained and included in analysis where appropriate. The process left a total number of 417 cases to be analyzed for this study.

The mean age for respondents was 21.3 years \((SD = 5.28)\); with a range of 18 to 65 years old. Using Curran et al.’s (1996) criteria of skewness < 2 and kurtosis < 7, frequency distribution within this range has a high negative skew (skewness = 3.82) and is leptokurtic (kurtosis = 19.2) with 88.2% \((n = 366)\) indicating they were of traditional college age (18 to 24) and 11.8% indicating they were on nontraditional age \((n = 51)\) with 2 cases omitting their age. This negative skew and leptokurtic distribution was
anticipated due to the fact that the sample was taken from a university setting where the majority of respondents are expected to be of traditional college age.

Because racial/ethnic identity responses were written in by the respondent, responses varied considerably. The majority of respondents (n = 363, 87.1%) indicated they were “white”, “Caucasian”, or some similar indication, while 47 students (11.3%) gave a non-white description. Seven students did not indicate their racial/ethnic identity. The 2012-2013 common data set for Edinboro University (Edinboro University, 2013) indicates that about 14% of students enrolled in October of 2012 were nonwhite.

All 417 respondents indicated their current gender identity, with 240 (57.6%) of respondents indicating their current gender identity as female, 174 (41.7%) indicating male, and 3 (.7%) indicating they were transgender/other. The 2012-2013 common data set for Edinboro University (Edinboro University, 2013) indicates that about 62% of students enrolled in October of 2012 were female. For purposes of this analysis, the 3 students indicating that they were transgender/other, were recoded into a “non-male” category along with those indicating they were female in a dichotomous gender variable.

All 417 respondents also indicated their sexual orientation, with 91.1% (n = 380) indicating a heterosexual orientation. Of the 37 respondents indicating their sexual orientation was not heterosexual, 2.9% (n = 12) indicated they were bisexual, 2.2% (n = 9) gay, 1.4% (n = 6) questioning, .7% (n = 3) lesbian, .7% (n = 3) asexual, and 1.0% (n = 4) other. For purposes of this analysis, those indicating they were not heterosexual in orientation (n = 37 and one student who indicated they were heterosexual but “gender fluid”) were recoded into a “non-heterosexual or non-cisgender” category in a
dichotomous LGBT status variable \((n = 38, 9.1\%)\). Table 2 displays the demographic characteristics of the sample used in this data analysis.
### Table 2. Demographic Characteristics of Participants (N=417)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at time of survey (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>93</td>
<td>22.4%</td>
</tr>
<tr>
<td>19</td>
<td>97</td>
<td>22.6%</td>
</tr>
<tr>
<td>20</td>
<td>68</td>
<td>16.4%</td>
</tr>
<tr>
<td>21</td>
<td>52</td>
<td>12.5%</td>
</tr>
<tr>
<td>22</td>
<td>31</td>
<td>7.5%</td>
</tr>
<tr>
<td>23</td>
<td>14</td>
<td>3.5%</td>
</tr>
<tr>
<td>24</td>
<td>11</td>
<td>2.7%</td>
</tr>
<tr>
<td>25-65</td>
<td>49</td>
<td>11.9%</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>363</td>
<td>87.0%</td>
</tr>
<tr>
<td>Non-White</td>
<td>47</td>
<td>11.3%</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>1.7%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>174</td>
<td>41.7%</td>
</tr>
<tr>
<td>Non-male</td>
<td>243</td>
<td>58.3%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>LGBT Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual &amp; cisgender</td>
<td>379</td>
<td>90.9%</td>
</tr>
<tr>
<td>Non-heterosexual or non-cisgender</td>
<td>38</td>
<td>9.1%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Notes: Age $M = 21.3$, $SD = 5.28$
LGBT Attitudes Scale

Because the LGBT Attitudes is a new scale, constructed of questions from previous studies, a confirmatory factor analysis (CFA) was conducted on the 11 items of the intended LGBT Attitudes scale with this sample using principal axis factoring with orthogonal (varimax) rotation with Eigen values held to 1. Factorability was assessed by comparing the calculated Kaiser-Meyer-Olkin value (KMO = .89) to Pett et al.’s (2003) recommendations (p. 78) that a KMO value below 0.60 is “unacceptable.” The factor loadings in the rotated factor matrix (orthogonal) were then inspected using Pett et al’s (2003) cutoff of 0.40 (p. 168) for assessing the factor loadings of each item. Costello & Osborne’s (2005) guidelines that an item is considered to “cross-load” if magnitudes are greater than 0.30 on more than one factor, and that factors with less than three items loading on it will be considered a weak factor (pp. 4-5) were also used in considering the quality of each extracted factor.

Table 3 displays the results of principal axis factoring with oblimin rotation for the LGBT Attitudes scale. Two factors emerged from the CFA with heavy cross-loading on both factors. The results of the CFA along with a calculated Cronbach’s Alpha of .96 indicated a highly reliable, 1 to 2 factor scale consisting of all thirteen intended items for this scale. Because the Cronbach’s Alpha measure of reliability would be reduced if any single item was removed from this scale and because each item was cross-loaded on both factors; this researcher maintained the LGBT attitudes scale as one measure consisting of 13 items. The resulting LGBT attitudes scale ($M = 42.9, SD = 9.02$) was normally distributed using Curran et al.’s (1996) criteria of skewness < 2 and kurtosis < 7.
### Table 3. Factor loading principal axis factoring 13-item LGBT Attitudes Scale and eigenvalues

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11. Sex between two men is just plain wrong.</td>
<td>.865</td>
</tr>
<tr>
<td>12. Sex between two women is just plain wrong.</td>
<td>.815</td>
</tr>
<tr>
<td>13. I think male homosexuals are disgusting.</td>
<td>.881</td>
</tr>
<tr>
<td>14. I think bisexual men are disgusting.</td>
<td>.907</td>
</tr>
<tr>
<td>15. I think lesbian women are disgusting.</td>
<td>.885</td>
</tr>
<tr>
<td>16. I think bisexual women are disgusting.</td>
<td>.875</td>
</tr>
<tr>
<td>17. I think transgender people are disgusting</td>
<td>.834</td>
</tr>
<tr>
<td>18. If I discovered that a male friend was gay or bisexual, that would make me uncomfortable with that person.</td>
<td>.689</td>
</tr>
<tr>
<td>19. If I discovered that a male friend was gay or bisexual, that would be a reason for me to end the friendship.</td>
<td>.664</td>
</tr>
<tr>
<td>20. If I discovered that a female friend was gay or bisexual, that would make me uncomfortable with that person.</td>
<td>.624</td>
</tr>
<tr>
<td>21. If I discovered that a female friend was gay or bisexual, that would be a reason for me to end the friendship.</td>
<td>.639</td>
</tr>
<tr>
<td>22. If I discovered that a friend was transgender, that would make me uncomfortable with that person.</td>
<td>.639</td>
</tr>
<tr>
<td>23. If I discovered that a friend was transgender, that would be a reason for me to end the friendship.</td>
<td>.706</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>8.98</td>
</tr>
</tbody>
</table>

**Factor Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>---</td>
<td>.796</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.796</td>
<td>---</td>
</tr>
</tbody>
</table>

N=417

Notes: Bold values represent the highest loading, shaded values represent cross-loadings
LGBT Peer Experiences Questionnaire Scale

Similar to the LGBT Attitudes Scale, the LGBT Peer Experiences Questionnaire (LGBT-PEQ) Scale is a new measure, constructed from a similar subscale for use with a middle school population (Wiens & Dempsey, 2009). Although a .79 Cronbach’s Alpha was calculated using all 419 surveys, an inspection of the output indicates that if item 39 (A member of Edinboro faculty or staff used LGBT-specific language in a positive manner) was deleted, the Cronbach’s Alpha value increased to .81. A confirmatory factor analysis was conducted on the 17 items of the intended LGBT-PEQ scale. This CFA indicated that item 39 did not load on any of the 5 potential factors identified using Pett et al.’s (2003) cutoff of 0.40 (p. 168) for assessing the factor loadings of each item. It was therefore determined that item 39 would be dropped from the LGBT-PEQ scale for this analysis and that the remaining 16 items would comprise the LGBT-PEQ scale.

A confirmatory factor analysis (CFA) was conducted on the 16 items of the intended LGBT-PEQ scale with this sample using principal axis factoring with orthogonal (varimax) rotation with Eigen values held to 1. Factorability was assessed by comparing the calculated Kaiser-Meyer-Olkin value (KMO = .76) to Pett et al.’s (2003) recommendations (p. 78) that a KMO value below 0.60 is “unacceptable.” The factor loadings in the rotated factor matrix (orthogonal) were then inspected using Pett et al’s (2003) cutoff of 0.40 (p. 168) for assessing the factor loadings of each item. Costello & Osborne’s (2005) guidelines that an item is considered to “cross-load” if magnitudes are greater than 0.30 on more than one factor, and that factors with less than three items loading on it will be considered a weak factor (pp. 4-5) were also used in considering the quality of each extracted factor.
Table 4 displays the results of principal axis factoring with Oblimin rotation for the LGBT Attitudes scale. Five factors emerged from the CFA with factors 4 and 5 being considered weak. The results of the CFA along with a calculated Cronbach’s Alpha of .81 indicated a highly reliable, 3 to 5 factor scale consisting of 16 of the intended items for this scale.

There are several reasons supporting the decision to maintain the LGBT-PEQ as a single measure consisting of 16 items. The primary reason is that the research regarding bystander involvement in bullying of LGBT people indicates that there are a range of behaviors that should be considered. The literature regarding increasing bystander intervention in campus sexual assault supports this as well. For example, if bystanders are noticing microaggressions towards a female at a party, they are more likely to intervene before the behavior escalates along the continuum towards sexual assault. To apply this theory to behaviors directed at LGBT individuals, the questions in the LGBT-PEQ measure inquired about a range of behaviors observed from positive behaviors, such as observing a student standing up for another student who was thought to be LGBT, to observing a student being assaulted because they were perceived to be LGBT.

Another reason for maintaining this as a single measure is the high reliability of the scale. Removing any item (with the exception of item #39) from the scale would decrease the Chronbach’s Alpha to under .80.

A third reason the LGBT-PEQ was utilized as a single-factor scale had to do with the factor loadings. An analysis of the factor loadings in table 4 shows that each factor does not align with what we know about behavior towards LGBT individuals. For example, factor 1 consists of 5 items and 4 additional items with cross-loadings. These 9
items are inquiring about behaviors that range from exclusion to assault as opposed to one type of behavior, such as microaggressions.
<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. A student used LGBT-specific language in a negative manner in person.</td>
<td>.266</td>
<td>.646</td>
<td>.164</td>
<td>.070</td>
<td>.158</td>
</tr>
<tr>
<td>25. A student used LGBT-specific language in a negative manner online</td>
<td>.296</td>
<td>.820</td>
<td>.317</td>
<td>.101</td>
<td>.009</td>
</tr>
<tr>
<td>26. A student excluded another student from an activity or conversation in person because they thought that student was LGB or T.</td>
<td>.714</td>
<td>.338</td>
<td>.226</td>
<td>.306</td>
<td>.153</td>
</tr>
<tr>
<td>27. A student excluded another student from an activity or conversation online because they thought that student was LGB or T.</td>
<td>.709</td>
<td>.236</td>
<td>.275</td>
<td>.340</td>
<td>.075</td>
</tr>
<tr>
<td>28. A student called another student a name or made rude comments in person because they thought that student was LGB or T.</td>
<td>.586</td>
<td>.561</td>
<td>.327</td>
<td>.191</td>
<td>.039</td>
</tr>
<tr>
<td>29. A student called another student a name or made rude comments online because they thought that student was LGB or T.</td>
<td>.559</td>
<td>.633</td>
<td>.391</td>
<td>.273</td>
<td>-.223</td>
</tr>
<tr>
<td>30. A student inappropriately grabbed or touched another student because they thought that student was LGB or T.</td>
<td>.481</td>
<td>.112</td>
<td>.181</td>
<td>.499</td>
<td>.379</td>
</tr>
<tr>
<td>31. A student vandalized, damaged, or stole another student’s property because they thought that student was LGB or T.</td>
<td>.464</td>
<td>.102</td>
<td>.314</td>
<td>.472</td>
<td>.485</td>
</tr>
<tr>
<td>32. A student exposed (“outed”) or revealed personal information about another student because they thought that student was LGB or T.</td>
<td>.622</td>
<td>.297</td>
<td>.334</td>
<td>.321</td>
<td>.364</td>
</tr>
<tr>
<td>33. A student threatened to physically harm another student because they thought that student was LGB or T.</td>
<td>.729</td>
<td>.162</td>
<td>.322</td>
<td>.491</td>
<td>.370</td>
</tr>
</tbody>
</table>
34. A student actually physically harmed another student because they thought that student was LGB or T.

<table>
<thead>
<tr>
<th></th>
<th>.591</th>
<th>.049</th>
<th>.240</th>
<th>.812</th>
<th>.320</th>
</tr>
</thead>
</table>

35. I saw anti-LGBT graffiti on campus.

<table>
<thead>
<tr>
<th></th>
<th>.320</th>
<th>.112</th>
<th>.142</th>
<th>.845</th>
<th>.090</th>
</tr>
</thead>
</table>

36. A student spoke up in person for another student who was being excluded, ridiculed, bullied, or harmed because that student was thought to be LGB or T.

<table>
<thead>
<tr>
<th></th>
<th>.304</th>
<th>.164</th>
<th>.545</th>
<th>.118</th>
<th>.319</th>
</tr>
</thead>
</table>

37. A student spoke up online for another student who was being excluded, ridiculed, bullied, or harmed because that student was thought to be LGB or T.

<table>
<thead>
<tr>
<th></th>
<th>.221</th>
<th>.256</th>
<th>.888</th>
<th>.165</th>
<th>.002</th>
</tr>
</thead>
</table>

38. A member of Edinboro faculty or staff used LGBT-specific language in a negative manner.

<table>
<thead>
<tr>
<th></th>
<th>.231</th>
<th>.204</th>
<th>.195</th>
<th>.214</th>
<th>.456</th>
</tr>
</thead>
</table>

39. A member of Edinboro faculty or staff treated a student in a negative or unfair manner because they thought that student was LGB or T.

<table>
<thead>
<tr>
<th></th>
<th>.390</th>
<th>.076</th>
<th>.264</th>
<th>.673</th>
<th>.497</th>
</tr>
</thead>
</table>

Eigenvalues

<table>
<thead>
<tr>
<th></th>
<th>5.34</th>
<th>2.07</th>
<th>1.25</th>
<th>1.10</th>
<th>1.03</th>
</tr>
</thead>
</table>

**Factor Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>---</td>
<td>.360</td>
<td>.361</td>
<td>.457</td>
<td>.250</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.360</td>
<td>---</td>
<td>.289</td>
<td>.082</td>
<td>.016</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.361</td>
<td>.289</td>
<td>---</td>
<td>.208</td>
<td>.175</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.457</td>
<td>.082</td>
<td>.208</td>
<td>---</td>
<td>.264</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.250</td>
<td>.016</td>
<td>.175</td>
<td>.264</td>
<td>---</td>
</tr>
</tbody>
</table>

N=417

Notes. Rotation converged in 8 iterations. Bold values represent the highest loading, shaded values represent cross-loadings.
Assumptions for multiple regression analysis. The LGBT-PEQ variable was then calculated as described in the Methods section and analyzed to determine if it met the assumptions for multiple regression analysis. The frequency distribution of the resulting 16-item LGBT-PEQ ($M = 5.24$, $SD = 5.94$) shows a slightly negatively skewed (skewness = 2.14) and slightly leptokurtic (kurtosis = 6.68) distribution when using Curran et al.’s (1996) criteria of skewness < 2 and kurtosis < 7. The first consideration for addressing the skewness > 2 was the impact of outlier scores. Five cases were identified as outliers on the LGBT-PEQ variable using an inspection of a boxplot and a raw score of LGBT-PEQ greater than two units of standard deviation from the mean score. The frequency distribution of the LGBT-PEQ with outliers excluded did not bring the skewness value to less than 2 and therefore it was determined to continue to include these outlier scores in the data analysis.

At this point, consideration was given to transformation of the LGBT-PEQ variable to bring the skewness within Curran et al.’s criteria. This researcher determined that what might be gained through transforming the variable into a more normally distributed frequency did not outweigh what would be lost in interpretability of a variable such as “square root of LGBT-PEQ” or “Log10 of LGBT-PEQ” when compared to that of the LGBT-PEQ.

Bivariate Analysis

In order to prepare for multiple regression analysis, an exploration of the significance, directionality, and magnitude of the relationship between demographic characteristics (age, ethnic/racial identity, gender, and LGBT status), LGBT attitudes scores, and LGBT-PEQ scores on a bivariate level was made through a series of
independent samples $t$ tests and Pearson correlations. During this analysis, a Bonferroni correction was not used to mitigate a Type 2 error. Type 1 errors, if made, would be mitigated through the findings rendered by multiple regression analysis.

**Ethnic/Racial Identity, Gender, and LGBT Status.** A two-tailed $t$ test was performed to determine if white respondents have a significantly different mean LGBT-PEQ score than non-white respondents. The mean LGBT-PEQ score was not significantly higher for non-white respondents ($M = 5.36, SD = 6.65$) than white respondents ($M = 5.29, SD = 5.89$). Similarly, a two-tailed $t$ test was performed to determine if male respondents have a significantly different mean LGBT-PEQ score than non-male respondents. The mean LGBT-PEQ score was significantly higher in male respondents ($M = 6.08, SD = 7.29$) than in non-male respondents ($M = 4.63, SD = 4.68$), $t(415) = 2.47 p < .05$. Finally, a third two-tailed $t$ test was performed to determine if respondents who identified as heterosexual and cisgender had significantly different mean LGBT-PEQ scores than respondents who self-identify as LGBT. The mean LGBT-PEQ score was not significantly higher for self-identified LGBT respondents ($M = 5.26, SD = 5.36$) than heterosexual and cisgender respondents ($M = 5.23, SD = 6.01$). Table 5 displays a summary of the differences in LGBT-PEQ scores between dichotomous predictor variables.
Table 5. Differences in LGBT-PEQ scores between dichotomous predictor variables

<table>
<thead>
<tr>
<th>Ethnic/Racial Identity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td></td>
<td>Non-White</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGBT-PEQ</td>
<td>5.29</td>
<td>5.89</td>
<td>5.36</td>
<td>6.65</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Gender                 |        |        |        |        |        |        |        |
|                        | Male   |        | Non-male |        |        |        |        |
|                        | M      | SD     | M      | SD     |        |        |        |
| LGBT-PEQ               | 6.08   | 7.29   | 4.63   | 4.68   | .30*   |        |        |

| LGBT Status            |        |        |        |        |        |        |        |
|                        | Hetero/Cis |        | LGBorT |        |        |        |        |
|                        | M      | SD     | M      | SD     |        |        |        |
| LGBT-PEQ               | 5.23   | 6.01   | 5.26   | 5.36   | .03    |        |        |

N = 417

Notes. *p < .05, two tailed.

Age and LGBT Attitudes. A Pearson correlation matrix was generated to determine the significance, directionality, and magnitude of the relationship between the two continuous predictor variables (age, LGBT Attitudes) with the LGBT-PEQ scores. As Table 6 displays, a respondent’s age has a statistically significant (p < .001), negative, and small effect size ($r^2 = .03$) with LGBT-PEQ score. Table 6 also shows a statistically significant (p < .05), negative, and small effect size ($r^2 = .01$) between LGBT Attitudes score and LGBT-PEQ score.
Table 6. Correlations between LGBT-PEQ scores and continuous predictor variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>LGBT-PEQ(r)</th>
<th>Age</th>
<th>LGBT Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBT-PEQ (r)</td>
<td>5.24</td>
<td>5.94</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>21.29</td>
<td>5.26</td>
<td>-.18**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>LGBT Attitudes</td>
<td>42.88</td>
<td>9.02</td>
<td>-.11*</td>
<td>.03</td>
<td>--</td>
</tr>
</tbody>
</table>

N = 417
Notes: * p < .05 (2-tailed). ** p < .01 (2-tailed).

Multiple Regression

A series of multiple regression analyses were conducted to test each of the 6 hypotheses related to the 6 research questions previously described in the methods section. Tabachnick and Fidell (1989) and Allison (1999) present suggested ratio and 4 other assumptions for regression analysis; normality of distribution, no risk of multicollinearity of independent variables, homoscedasticity of residuals, and linearity of relationship. Tabachnick and Fidell (1989) suggest a 20:1 ratio between cases and independent variables.

The ratio of cases to independent variables for this study is 83:1 which greatly exceeds this suggestion. The assumption of normal distribution was previously discussed in this section. A correlations matrix was generated of all independent variables to assess for risk of multicollinearity. No bivariate correlations exceeded standards to cause concern for multicollinearity according to Allison’s (1999, p. 64) standards for Pearson’s correlation (r < 0.8). Scatterplots of regression standardized residual by regression standardized predicted values were generated and examined on each predictor variable.
scores to assess for homoscedasticity of variance and linearity of relationship. All plots met the assumptions of homoscedasticity and linearity.

Other assumptions for multiple regression analysis were addressed by dichotomizing predictor variables (as in the case of ethnic/racial identity, gender, and LGBT status) and assessing for outliers based on Cook’s distance being greater than one. A determination was made that assumptions were adequately met for multiple regression analysis of LGBT-PEQ on predictor variables.

**LGBT Attitudes and observances of behavior.** The first research question; how much variance in observances of behaviors towards LGBT people can be predicted by observers’ attitudes towards LGBT people, was answered through a simple linear regression of LGBT-PEQ on LGBT Attitudes. Based on studies presented in the literature review it was hypothesized that a statistically significant and positive correlation would exist between observers’ attitudes towards LGBT people and their observances of behaviors towards LGBT people. It should be noted, however, that a bivariate analysis of LGBT-PEQ and LGBT Attitudes showed a statistically significant but small and negative effect size (\( r = -.11, p < .05 \)).

Table 7 displays the results of the linear regression model that examines this first research question; specifically, LGBT-PEQ regressed on LGBT Attitudes. The equation which demonstrates the predicted LGBT-PEQ based on respondents’ LGBT Attitudes is:

\[
\text{LGBT-PEQ} = 8.23 - .07(\text{LGBT Attitudes}) + e.
\]

While the model was statistically significant, as hypothesized, \( F(1, 415) = 4.71, p < .05 \), there is a negative relationship between LGBT-PEQ and LGBT Attitudes, with a small amount of explained variance (0.9%), \( R^2 = .01 \) and adjusted \( R^2 = .09 \).
Table 7. Regression analysis summary for LGBT Attitudes predicting observances of behaviors towards LGBT people.

<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>R² Change</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.011*</td>
<td>--</td>
<td>8.231***</td>
<td>1.410</td>
<td>-</td>
</tr>
<tr>
<td>LGBT Attitudes</td>
<td>-.070*</td>
<td>.032</td>
<td>-.106*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 417
Notes. * p < .05 (2-tailed). ** p < .01 (2-tailed). *** p < .001.

Age, LGBT Attitudes, and observances of behavior. A hierarchical regression of LGBT-PEQ on Age and LGBT Attitudes was conducted to address the second research question: While accounting for the age of the respondent, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals? Based on studies presented in the literature review it was hypothesized that the observances of behaviors towards LGBT individuals would increase as the age of the respondent increases. It should be noted, however, that a bivariate analysis of Age and LGBT-PEQ showed a statistically significant but small and negative effect size (r = -.18, p < .01).

Table 8 displays the hierarchical regression model addressing this second research question. The equation which demonstrates the predicted LGBT-PEQ based on LGBT Attitudes while controlling for respondent’s age is: LGBT-PEQ = 12.19 - .19(Age) - .07(LGBT Attitudes) + e. While the model was statistically significant, as hypothesized, $F(2, 414) = 8.66, p < .01$, there is a negative relationship between LGBT-PEQ and Age, and LGBT-PEQ and LGBT Attitudes, with a small amount of total explained variance.
(3.6%), \( R^2 = .04 \) and adjusted \( R^2 = .036 \) and a small amount of variance explained (1.0%) by LGBT Attitude while controlling for age, \( \text{R}^2 \text{ Change} = .01 \).

**Table 8.** Hierarchical regression analysis summary for predicting observances of behaviors towards LGBT people from LGBT Attitudes scores while controlling for age.

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>( \text{R}^2 )</th>
<th>( \text{R}^2 \text{ Change} )</th>
<th>B</th>
<th>SE</th>
<th>( \text{Beta} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.031***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>-1.97***</td>
<td>.055</td>
<td>-.175***</td>
</tr>
<tr>
<td>Block 2</td>
<td>.040*</td>
<td>.010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td>12.189***</td>
<td>1.790</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>-1.94***</td>
<td>.054</td>
<td>.172***</td>
</tr>
<tr>
<td>LGBT Attitudes</td>
<td></td>
<td></td>
<td>-.065*</td>
<td>.032</td>
<td>-.099*</td>
</tr>
</tbody>
</table>

\( N = 417 \)

Notes. * \( p < .05 \) (2-tailed). ** \( p < .01 \) (2-tailed). *** \( p < .001 \).

**Gender, LGBT Attitudes, and observances of behavior.** A hierarchical regression analysis was conducted to address the third research question: While accounting for the gender of the respondent, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals? Based on studies presented in the literature review it was hypothesized that the observances of behaviors towards LGBT individuals would be higher in non-male than in male respondents. It should be noted, however, that a bivariate analysis (independent samples \( t \)-test) of Gender and LGBT-PEQ showed that male respondents had a statistically significant and higher mean LGBT-PEQ score (\( M = 6.08, SD = 7.29 \))
than non-male respondents ($M = 4.63, SD = 4.68$) with a small effect size ($d = -0.23, p < .01$).

Table 9 displays the hierarchical regression model addressing this third research question. The equation which demonstrates the predicted LGBT-PEQ based on LGBT Attitudes while controlling for respondent’s gender is: $\text{LGBT-PEQ} = 8.33 - 1.23(\text{Gender}) - 0.06(\text{LGBT Attitudes}) + \epsilon$. While the model was statistically significant, as hypothesized, $F(1, 414) = 4.48, p < .05$, there is a negative relationship between LGBT-PEQ and Gender, and LGBT-PEQ and LGBT Attitudes, with a small amount of total explained variance (1.6%) explained, $R^2 = .02$ and adjusted $R^2 = .016$ and a small amount of variance explained (.7%) by LGBT Attitude while controlling for gender, $R^2$ Change = .007.

**Table 9.** Hierarchical regression analysis predicting observances of behaviors towards LGBT people from LGBT Attitudes scores while controlling for gender.

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.014*</td>
<td></td>
<td>6.080***</td>
<td>.448</td>
<td>-</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>-1.447*</td>
<td>.587</td>
<td>-.120*</td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td>.007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.021*</td>
<td>.007</td>
<td>8.332***</td>
<td>1.405</td>
<td>-</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>-1.231*</td>
<td>.599</td>
<td>-.102*</td>
</tr>
<tr>
<td>LGBT Attitudes</td>
<td></td>
<td></td>
<td>-.055</td>
<td>.033</td>
<td>-1.689</td>
</tr>
</tbody>
</table>

N = 417

Notes. * $p < .05$ (2-tailed). ** $p < .01$ (2-tailed). *** $p < .001$. 
LGBT Status, LGBT Attitudes, and observances of behavior. A hierarchical regression of LGBT-PEQ on LGBT Status and LGBT Attitudes was intended to address the fourth research question: While accounting for the LGBT Status of the respondent, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals? Based on studies presented in the literature review it was hypothesized that the observances of behaviors towards LGBT individuals would be higher in self-identified LGBT respondents than in heterosexual and cisgender respondents. A bivariate analysis (independent samples t-test) of LGBT Status and LGBT-PEQ showed that there was not a statistically significant difference in mean LGBT-PEQ scores between self-identified LGBT respondents \((M = 5.26, SD = 5.36)\) and heterosexual and cisgender respondents \((M = 5.23, SD = 6.01)\) respondents. Because bivariate analysis did not indicate a statistically significant difference in means between white and non-white respondents, a hierarchical regression analysis was not needed for this research question.

Ethnic/Racial Identity, LGBT Attitudes, and observances of behavior. A hierarchical regression of LGBT-PEQ on Ethnic/Racial Identity and LGBT Attitudes was intended to address the fifth research question: While accounting for the ethnic/racial identity of the respondent, how much variance in observances of behaviors towards LGBT individuals can be predicted by their attitudes towards LGBT individuals? Based on studies presented in the literature review it was hypothesized that the observances of behaviors towards LGBT individuals would be higher in non-white respondents than in white respondents. A bivariate analysis (independent t-test) of Ethnic/Racial Identity and LGBT-PEQ showed that there was not a statistically significant difference in mean
LGBT-PEQ scores between white ($M = 5.29, SD = 5.89$) and non-white ($M = 5.36, SD = 6.65$) respondents. Because bivariate analysis did not indicate a statistically significant difference in means between white and non-white respondents, a hierarchical regression analysis was not needed for this research question.

**Age, Gender, LGBT Attitudes, and observances of behavior.** The final research question for this study was: How much variance in observances of behaviors towards LGBT individuals can be predicted by observer’s attitudes towards LGBT people when controlling for immutable demographic characteristics of age, gender, LGBT status and ethnic identity? Based on studies presented in the literature review it was hypothesized that a statistically significant amount of variance in LGBT-PEQ scores can be accounted for by LGBT Attitudes scores after controlling for age, gender, LGBT status, and ethnic/racial identity. A hierarchical regression analysis was conducted to address this research question, however, because bivariate analyses (independent samples $t$-test) of LGBT Status and Ethnic/Racial Identity did not show statistically significant relationships with LGBT-PEQ scores, these two independent variables were not included in the hierarchical regression model. Because age and gender were found to be statistically significant contributions to variance in LGBT-PEQ scores, an interaction effect variable was included in the initial block of the hierarchical regression model.

Table 10 displays the hierarchical regression model addressing this final research question. Note that the Age*Gender interaction variable is not statistically significant, indicating that there is no interaction effect between these two variables contributing to the variance in LGBT-PEQ scores. While the final model was statistically significant, as hypothesized, $F(1, 411) = 7.17, p < .01$, the unstandardized coefficient for the LGBT
Attitudes score ($B = -.051$) is not statistically significant, nor is the small amount of variance explained (0.6%) by LGBT Attitude while controlling for age and gender, $R^2$ Change = .007, statistically significant.
Table 10. Hierarchical regression analysis predicting observances of behaviors towards LGBT people from LGBT Attitudes scores while controlling for age and gender.

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>R²</th>
<th>R² Change</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td>.044***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td>10.145***</td>
<td>1.227</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.191***</td>
<td>.054</td>
<td>-.169***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-1.400***</td>
<td>.582</td>
<td>-.116***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age(centered)*Gender</td>
<td>-.037</td>
<td>.112</td>
<td>-.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2</td>
<td>.050</td>
<td>.006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td>12.186***</td>
<td>1.783</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.190***</td>
<td>.054</td>
<td>-.168***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-1.197***</td>
<td>.595</td>
<td>-.099***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGBT Attitudes</td>
<td>-.051</td>
<td>.033</td>
<td>-.078</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 417

Notes. * p < .05 (2-tailed). ** p < .01 (2-tailed). *** p < .001.
Chapter 5: Discussion

The primary rationale for this study was to test the relationship between respondents’ rates of observances of behaviors towards LGBT people and their attitudes about LGBT people. Analyzing this relationship furthers the understanding of at least two key areas for research and practice. One is that it assists with the determination of the significance, direction, and magnitude of the relationship between attitudes about LGBT and observances of behaviors towards LGBT people as an entry into Darley and Latane’s 5-step process of bystander intervention in an emergency. The second is to observe the interaction between various demographic characteristics of potential bystanders to LGBT-specific bullying with their attitudes towards LGBT individuals.

As application of Darley and Latane’s 5-step process of bystander intervention in an emergency to LGBT-specific bullying is relatively new, there were very few, if any, existing measures to utilize in this study directly. Consequentially, this study utilized the existing research from adjacent areas of inquiry to create the measures for this exploratory investigation. What follows is a discussion of the findings of this study.

General Findings

The results from this data analysis indicate that a weak yet statistically significant association exists between potential bystanders’ observances of behaviors directed towards LGBT peers and their attitudes about LGBT people in general. This relationship remains statistically significant when accounting for the respondents’ age and gender independently, but not when considered together. Other demographic factors that were considered as having influence on respondents’ observances of behaviors, specifically
ethnic/racial identity and sexual orientation/gender identity did not have significant impact on the respondents’ observances for this particular sample.

**Discussion of research questions and hypothesis testing.** The initial research question guiding this analysis was an inquiry regarding the relationship between respondents’ attitudes about LGBT people and their observances of behaviors directed towards LGBT peers. Based on literature regarding LGBT bullying and other minority bullying, additional research questions were proposed to inquire about the interaction of various demographic variables with attitudes about LGBT people and their impact on their observances of behaviors directed towards LGBT peers. As was detailed in the results chapter, the data analysis indicated mixed responses to each research question.

**Research question 1.** The first hypothesis of this study proposed a statistically significant and positive relationship would exist between observers’ attitudes towards LGBT people and their observances of behaviors towards LGBT people. This hypothesis was supported in the current literature. For example, Abbott and Cameron (2014) report more positive associations with a particular minority group had an indirect effect on bystander intentions, as did Dovidio et al. (1991) and Baston, Ahmad, Lishner, and Tsang (2002).

While results of the linear regression model did not indicate a statistically significant positive relationship as hypothesized, there is a statistically significant and negative relationship between observed behaviors and attitudes among respondents. Only a small amount of variance in observations were explained (approximately 1%) by the respondents’ attitudes.
There may be several possible reasons for this hypothesis not being fully supported by this study. One possibility is respondents who have more positive attitudes regarding LGBT people in general may have significantly different peer groups than those with poorer attitudes. As such, they may encounter fewer blatantly negative behaviors towards LGBT people. Another consideration for this negative relationship between attitudes about LGBT people and observances of behaviors towards LGBT people may be respondents view the campus environment where this study occurred as having a relatively positive to neutral attitudes about LGB and T people in general. 89.7% of respondents rated attitudes on campus about lesbian, gay, or bisexual people as neutral – very positive and 82.8% of respondents rated attitudes on campus about transgender people as neutral – very positive. Because respondents perceive the campus to be a generally neutral to accepting space for LGBT people, this may decrease the actual number of actual behaviors to observe, regardless of the observers’ attitudes.

**Research question 2.** The second hypothesis of this study proposed the observances of behaviors towards LGBT individuals would increase as the age of the respondent increases. That is to say; a statistically significant and positive relationship would exist between observers’ attitudes towards LGBT people and their observances, and older respondents would report observing more behaviors than younger respondents. This hypothesis was seemingly supported through current studies suggesting attitudes toward intervening and motivation to intervene changes during the transitions from childhood, adolescence, and adulthood (Gini, Pozzoli, & Borghi, 2008). Specifically, Brown and Gortmaker (2009) discovered upper classmen were more likely to report more (anti-LGBT) attacks than underclassmen.
The hierarchical regression model did not indicate a statistically significant relationship as hypothesized. The negative relationship between observances of behaviors towards LGBT individuals and respondents’ attitudes towards LGBT people remains statistically significant when accounting for age of the respondent. Furthermore, there exists a statistically significant and negative relationship between respondents’ observances and age, indicating younger respondents are reporting more observances than older respondents. The amount of variance in observances explained by respondents’ age is minor, about 3%, and the amount of variance in observances explained by respondent attitudes remains constant (approximately 1%) while controlling for the age of the respondent.

Again, there may be several reasons why this hypothesis was not supported by this particular study. One reason may be while the current research indicates an increase in reporting of anti-LGBT incidents among upper classmen compared to underclassmen, this may not necessarily indicate that upper classmen observe more anti-LGBT behaviors, rather they are more likely to report them when compared to underclassmen. Furthermore, while age generally is related to class standing, this study regressed observances across age, not class standing.

The suggestion made by this study; younger respondents observe more LGBT-specific behaviors than older respondents may have contributions similar to the negative relationship between LGBT attitudes and observances. That is to say just as respondents who have more positive attitudes may have established social circles that are less tolerant of anti-LGBT behaviors, older respondents may have more control over their social environment than younger respondents. Older respondents may be less likely to live in
dormitories or be in milieus that are less self-selecting, therefore have less exposure to casual interactions with individuals with differing value systems than they have.

**Research question 3.** The third hypothesis of this study proposed the observances of behaviors towards LGBT individuals would be higher in non-male than in male respondents. That is to say a statistically significant and positive relationship would exist between observers’ attitudes towards LGBT people and their observances, and non-male respondents would report higher observances of LGBT-specific behaviors than male respondents. This hypothesis was seemingly supported by current research that indicated gender influences bystander responsiveness during a bullying event wherein females may be more likely to respond to bullying than males in secondary school students and university students (Trach, Hymel, Waterhouse and Neale, 2010 and Brown and Gortmaker, 2009).

The results of the hierarchical regression model did not indicate a statistically significant relationship as hypothesized, however, the negative relationship between observances of behaviors towards LGBT individuals and respondents’ attitudes towards LGBT people remains statistically significant while accounting for the gender of the respondent. Furthermore, there exists a statistically significant and negative relationship between respondents’ observances and the respondents’ gender. Specifically, male respondents report significantly higher observances of behaviors than non-male respondents. The amount of variance of observances explained by respondents’ gender has a small practical significance (about 1.4%) and a smaller amount of variance of observances (< 1%) is explained by respondents’ attitudes towards LGBT people while controlling for gender than not.
There is another interesting result from this particular study regarding differences between male and non-male respondents. There is a statistically significant mean difference between male attitudes towards LGBT people ($M = 40.61$, $SD = 9.55$) and non-male attitudes ($M = 44.51$, $SD = 8.26$), $t(339) = -4.34$, $p < .01$. Furthermore, Cohen’s effect size value ($d = .44$) suggests a moderate practical significance to this relationship. Therefore, this study suggests, in this sample of students, male respondents have poorer attitudes towards LGBT people and observe more LGBT-specific behaviors than the non-male respondents.

A further investigation into this gender difference reveals another interesting perspective. Separating the 13-item LGBT Attitudes Scale into 10 questions about LGB individuals and 3 items about transgender individuals indicates a statistically insignificant difference between male ($M = 3.20$, $SD = .70$) and non-male ($M = 3.46$, $SD = .62$) attitudes toward lesbian, gay, and bisexual individuals ($t(407) = -3.99$, $p = .052$) but statistically significant poorer attitudes in male respondents ($M = 2.98$, $SD = .92$) when compared to non-male attitudes ($M = 3.38$, $SD = .73$) toward transgender individuals ($t(410) = -4.85$, $p = .02$). Cohen’s effect size value ($d = .48$) again demonstrates a moderate practical significance to this relationship, indicating the difference in male attitudes compared to non-male attitudes is related to gender identity variance compared to sexual orientation variance. There may be several implications to be made from these results.

One possibility may be similar to those relating to younger respondents reporting higher observances of LGBT-specific behaviors than older respondents. For instance, while the current literature supports female secondary and university students being more likely to respond to general bullying than male students, it does not necessarily indicate
non-male students observe more behaviors than male respondents. This study measured observances of LGBT-specific behaviors rather than responses to those behaviors, and the results of this study support the opposite, that male students are observing more LGBT-specific behaviors than non-male respondents.

**Research question 4.** The fourth hypothesis of this study proposed the observances of behaviors towards LGBT individuals would be higher in self-identified LGBT respondents than in heterosexual and cisgender respondents. That is to say a statistically significant and positive relationship would exist between observers’ attitudes towards LGBT people and their observances, and LGBT respondents would report higher observances of LGBT-specific behaviors than heterosexual and cisgender respondents. However, results of an independent t-test indicate heterosexual and cisgender respondents had lower observances of LGBT-specific observances than self-identified LGBT individuals, this difference was not statistically significant. Therefore, the hypothesis for this research question was not supported by these study results. There is, however, a statistically significant mean difference between heterosexual/cisgender respondents’ attitudes towards LGBT people ($M = 42.18, SD = 8.93$) and LGBT individuals attitudes ($M = 49.87, SD = 6.72$), $t(51) = -6.50, p < .001$. Furthermore, Cohen’s effect size value ($d = .97$) suggests a high practical significance to this relationship. Therefore, this study suggests, in this sample of students, heterosexual and cisgender respondents have poorer attitudes towards LGBT people but observe about the same LGBT-specific behaviors when compared to self-identified LGBT respondents.

**Research question 5.** The fifth hypothesis of this study proposed the observances of behaviors towards LGBT individuals would be higher in non-white respondents than
That is to say; a statistically significant and positive relationship would exist between observers’ attitudes towards LGBT people and their observances, and non-white respondents would report higher observances of LGBT-specific behaviors than white respondents. However, results of an independent t-test indicate white respondents had lower observances of LGBT-specific observances than non-white individuals, this difference was not statistically significant. Therefore, the hypothesis for this research question was not supported by these study results.

**Research question 6.** The sixth and final hypothesis of this study proposed a statistically significant amount of variance in LGBT-specific observances can be accounted for by respondents’ attitudes towards LGBT individuals after controlling for age, gender, LGBT status, and ethnic/racial identity. Because there was no statistically significant relationship between respondent observances and their ethnic/racial identity or their LGBT status, these two independent variables were not included in the hierarchical regression model. The results of the hierarchical regression model indicates the overall model was not statistically significant as hypothesized. The relationship between respondents’ attitudes towards LGBT people and their observances of LGBT-specific behaviors is small (.6%) and not statistically significant after controlling for respondents’ age and gender. The final model however, supported a statistically significant and small effect size, about 5% of overall variance, in observances of LGBT-specific behaviors being accounted for by respondents’ age, gender, and attitudes towards LGBT people.

**Limitations**

There are several limitations to this study. A primary limitation is this study used a convenience sample of students. While the primary investigator made attempts to
gather a representative sample of the overall university student population, the selection of classrooms was not randomized. Although attempts were made to survey a wide range of classes from introductory to advanced subject matter, that the PI approached faculty that she knew could have influenced the type of respondents selected. As a result, comparing demographic information of the sample with the 2012-2013 common data set for Edinboro University (Edinboro University, 2013) shows the sample had a lower percentage of non-white students, and a lower percentage of non-male students than the total student population enrolled in October, 2012.

Another limitation of this study is this researcher having minimal control over the data collected as this was a secondary data analysis. While this researcher had the uncommon privilege of permission to insert the LGBT-PEQ scale into the Campus Climate Survey, the demographic questions, and the LGBT Attitudes scale were previously established. As a result, some of the variables of interest indicated in the literature review were not able to be measured as effectively as possible.

A third limitation is there are no previous studies using the LGBT Attitudes scale. Although the LGBT-Attitudes scale was constructed by the PI using questions and ideas from previous studies, there were no studies validating the psychometric properties of this particular scale. Furthermore, while it was intentional on the part of the PI to ask questions using strong descriptors such as “just plain wrong”, “disgusting”, and “reason to end the friendship” and the response options were intentionally categorical as well, these methods present some limitations as well as advantages. For instance, the scale only allows for a limited range of responses, i.e. the respondent is given only 4 choices about their agreement with a statement about how disgusting a certain behavior or person is,
rather than soliciting the respondents’ opinion. Furthermore, it should be noted that this strong language was adopted from was from DAugelli and Hershberger’s (1995) study regarding AIDSphobia and homophobia among undergraduate students. While homophobia is an attitude that was being measured in the current study, AIDSphobia was not. Language used to describe attitudes about people or orientations are considerably different in 2016 than they were in 1995. Therefore the use of outdated language such as “disgusting” may have hindered respondents ability to understand what was being asked of them.

A related limitation involves a potential issue with social desirability among respondents. The LGBT Attitudes scale measures attitudes about a limited range of behaviors such as non-heterosexual sex, non-heteronormativity, and discovery of someone being non-heterosexual or transgender. Because there are such strongly worded questions with limited response options a social desirability component should be considered. A later question in the Campus Climate Survey asks respondents about their level of interest in learning more about LGBT people. Preliminary frequency analysis of this question indicates 60% of respondents are somewhat uninterested or not at all interested in learning more about LGBT people. While this is not a direct check of social desirability, compared to the 74% of respondents indicated an average response of disagree to strongly disagree (indicating more positive attitudes) on the LGBT-Attitudes score may indicate a concern. If 74% of respondents have above average attitudes towards LGBT people and yet 60% of respondents are somewhat uninterested to not at all interested in learning more about LGBT people, there may be an incongruence in reporting actual attitudes about LGBT people.
Similarly, another limitation to this study is there are no existing studies measuring observances of LGBT specific behaviors from a bystander perspective on a college campus. Although the LGBT-PEQ scale was constructed from a similar bystander observances measure, this previously existing measure was not developed for college students, nor was it for LGBT-specific behaviors. This limitation relates to a previously identified gap in the literature regarding bullying among populations other than elementary through high school. Because there are only a few studies that investigate general bullying with the university population or the campus climate regarding LGBT students, but none that have developed measures of observed behaviors, it is difficult to know if the LGBT-PEQ that was adapted from a measure for general bullying among middle school populations is appropriate.

A related limitation to this study regarding the LGBT-PEQ scale are the questions comprising the LGBT-PEQ scale covering a range of behaviors that do not necessarily adhere to the pre-established definition of bullying behavior. For example, the first question in the scale asks respondents to report how many times within the past month they have heard a student use LGBT-specific language in a negative manner in person. This behavior more closely meets the definition of microagression as opposed to bullying. At the other end of the continuum, the eleventh question in the scale asks respondents to indicate how often they have observed a student physically harming another student because they thought the student was LGB or T. This behavior more closely meets the definition of victimization, assault, or even a hate-crime rather than bullying. Furthermore, two questions asked about positive LGBT-specific behaviors. While this measure has merit in that it measures a range of behaviors over a continuum
from microagression to assault/hate-crime, perhaps a limitation of this measure is the psychometric properties of the scale are not validated by other existing studies.

A final limitation that should be considered for this study is there is no established comparison of LGBT-specific behaviors within the timeframe of this study. The 2013 Annual Campus Security and Fire Safety Report (Edinboro University, 2013) includes hate-crime reports for 2012. This is one concrete measure of behaviors that correlate with some of the scale items in the LGBT-PEQ, specifically assaults (aggravated and simple), thefts (robbery and burglary), and “other harassments” motivated by the victim’s sexual orientation. The definitions of these crimes in the Annual Report closely parallel the behaviors described in some of the items of the LGBT-PEQ scale. Specifically, item 30 relates to inappropriate grabbing or touching could parallel simple assault, item 31 describes vandalized, damaged, or stolen property is similar burglary, item 33 (threatened to physically harm), and item 34 (actual physical harm) could relate to assaults or “other harassments” in the annual report. The 2013 report does not include any incidents of these hate-crimes in 2012.

As will be discussed in greater detail later in the paper, there is a stark difference between the official Annual Report and the corresponding items in the LGBT-PEQ. It should therefore be considered a limitation to this study that no accurate report exists of actual occurrences of LGBT-specific behaviors to compare to the respondents observances in this study. That is to say, we do not know if the total number of behaviors observed by the respondents in this study is the same as the actual number of those behaviors that actually occurred in the presence of the respondents. Nor do we know the
total number of LGBT-specific behaviors that actually occurred during this one month timeframe across the campus.

**Implications for Theory Development**

As previously stated, the primary rationale for this study was to test the relationship between respondents’ rates of observances of behaviors towards LGBT people and their attitudes about LGBT people. The fundamental theoretical model used to develop this rationale nested Darley and Latane’s (1968) 5-step process of adult bystander intervention in an emergency into the specific environment of a Pennsylvania state university with the specific “emergency” being LGBT-specific bullying events. This study supports the relationship between respondent’s observances of behaviors towards LGBT students and their attitudes about LGBT people in general, but not in the manner hypothesized. Rather, the statistically significant yet small practical relationship between observances and attitudes indicates that those with poorer attitudes are observing more LGBT-specific behaviors than those with more positive attitudes. This relationship is enhanced when including various demographic characteristics of the respondent. Specifically, younger respondents are observing more LGBT-specific behaviors than older respondents, and male respondents are observing more LGBT-specific behaviors than non-male respondents. Additionally, male respondents have significantly poorer attitudes about LGBT people than non-male respondents.

Looking at these findings in the larger campus environment further supports this theoretical framework in interesting ways. Compare the reports of the official safety report (Edinboro University, 2013), which has ‘0’ occurrences over the course of one year for the entire campus for behaviors that had multiple occurrences observed over the
course of one month by a portion of the student body. Specifically, 3 respondents report observances of at least one incident of inappropriate grabbing or touching, 18 report at least one observance of vandalized, damaged, or stolen property, 22 report at least one observance of threatened harm, and 11 report at least one observance of actual physical harm, each because of perceived LGBT status over a one month period. The stark difference between these observed behaviors in a one month period to the official report of “0” observed behaviors over a 12 month period is noteworthy. Also noteworthy is that even though there were these reports of inappropriate grabbing, vandalized or stolen property, threatened and actual harm, the majority of respondents regard Edinboro as a neutral to very positive environment for LGB people (92%) and transgender people (80%).

What these findings seem to indicate when held to the theoretical framework established at the beginning of this study is this: attitudes about LGBT people and specific demographic characteristics of the observer such as age and gender seem to interact with perceptions of the campus environment to influence observances of LGBT-specific behaviors such that it impacts a respondent’s entry into the 5-step process of intervening in a LGBT-specific bullying event. Rather than these factors and interactions influencing a respondent at step one; noticing a behavior along a continuum of actions, as hypothesized, the findings may suggest that attitudes about LGBT people, respondents age and gender, and perceptions of the campus environment regarding LGBT people influence a respondent in step two; considering that the behavior demands action.

Clearly, these findings support some elements of the suggested theoretical framework but not precisely in the manner hypothesized by this researcher. This indicates
that while some tentative clinical recommendations can be made at this point, further inquiry along these lines would prove profitable.

**Recommendations**

The findings from this study suggest both recommendations for social work practice and research as a result of the findings of this study. What follows is a discussion of these two areas.

**Recommendations for practice.** A primary recommendation for social work practice to be drawn from these findings is in designing of interventions for increasing bystander awareness of the impact LGBT-specific behaviors has on campus climate for LGBT students. There seems to be incongruence between the negative LGBT-specific behaviors observed by respondents with their overall attitudes about LGBT people and their impression that the campus climate is generally neutral or supportive of LGBT people. As previously described in greater detail, bullying poses difficulties for the victim that are carried beyond their school experience and studies indicate bullying occurs on the college campuses. Other studies show that LGBT students are bullied at higher rates than heteronormative students. Furthermore, researchers agree that bystanders hold the ability to change a bullying event and support the idea that an increase in bystander intervention can change social norms in an area like a college campus. The findings from this study suggest, however, that the majority of respondents do not identify a problem with the social norms of this campus, or at least that the negative behaviors observed towards LGBT people indicate an unsupportive campus climate. Thus, it seems reasonable that interventions should be developed and implemented that raise the
awareness of the impact that negative LGBT-specific behaviors have on LGBT students, and, quite frankly, on the bystanders, bullies, and entire campus environment.

Another implication for practice that can be drawn from these findings is a need to tailor interventions to increase bystander intervention to specific audiences. There were three factors that influenced observances of LGBT-specific behaviors in this study; LGBT attitudes, age, and gender of the respondent. Of particular interest is the intersection of LGBT attitudes and gender of the respondent. Because gender and age are not mutable characteristics interventions designed to raise awareness of the impact of negative LGBT-specific behaviors or improve attitudes about LGBT people in general should consider these characteristics carefully. For example, interventions conducted with an audience that is primarily male should anticipate that males may observe more negative LGBT-specific behaviors and have poorer attitudes about LGBT people than non-male participants. As another example, interventionists should consider that although younger participants may not have significantly different attitudes about LGBT people, they are likely to observe more LGBT-specific behaviors than older participants.

A final implication for practice from this study would be to develop interventions that are sensitive to the difference in attitudes and behaviors towards LGB people compared to transgender individuals. As stated earlier, 92% of respondents view the Edinboro University campus as a neutral to a very positive environment for lesbian, gay, and bisexual individuals, but this number drops to 80% for transgender individuals. Furthermore, separating the LGBT Attitudes Scale into 3 questions about transgender people and 10 items about LGB people supports a statistically significant more positive mean attitudes scores in LGB Attitudes ($M = 3.35, SD = .67$) when compared to T
Attitudes ($M = 3.22, SD = .84), t(405) = 5.67, p = .000. A Cohen’s $d$ calculation indicates a small effect size for this difference ($d = .17$). Clearly this sample demonstrates more positive attitudes and perceptions of safety for lesbian, gay, and bisexual individuals when compared to attitudes and perceptions of safety for transgender individuals. Based on these results, interventions intended to reduce anti-LGBT behaviors and improve attitudes towards LGBT individuals can assume poorer attitudes towards transgender individuals and therefore would do well to increase education about gender identity.

**Recommendations for future research.** There are several recommendations for future research brought about through this study. Some of the obvious ones would be to improve this study by dealing with the limitations. For example, this same campus climate survey could be distributed to a randomized sample of classrooms, allowing for a more representative sample of the Edinboro University as a whole. Alternatively, this survey could be distributed to groups of people that were underrepresented in this particular sample, such as non-white and LGBT individuals, or use a matched-sample. These alternatives would increase the power of the regression of the LGBT-PEQ on ethnic/racial identity and LGBT status. These recommendations would also allow for the results to be more easily generalizable to other campuses.

Other recommendations for future research regarding limitations of this study would be to make improvements of this campus climate survey based on the findings of this study. One example of this would be to utilize more information regarding the demographic characteristics of the respondents. This study suggests that younger respondents observe more LGBT-specific behaviors when compared to older respondents. One possible reason suggested by this researcher for this finding is that
younger respondents may be in milieus that are more diverse than older respondents for a variety of reasons (e.g., younger students tend to live on campus). A recommendation therefore, would be to test this hypothesis by determining the relationship between observances of LGBT-specific behaviors and the living arrangements of the respondent.

Another important limitation to this study that would direct future research relates to a gap found in the existing body of research presented in the literature review. The construct of bullying has been most studied among elementary through high school students. While there are some studies that present a picture of bullying behaviors among college students, there is a need for a deeper understanding of how bullying evolves in different developmental stages. A recommendation for further research therefore would be to address this gap in the literature through gathering more observations of LGBT-specific bullying among university students through the use of valid and reliable measures.

A related recommendation for future research would be to explore the importance of social networks beyond the physical campus in LGBT-specific behaviors. While this study asked a limited number of questions about observations of LGBT-specific behaviors online, little exploration was done to determine if observations of LGBT-specific differed between online settings and physical campus settings. With the increasing importance of social networks as well as the increase in online interaction in both social and educational settings, this area should be considered more thoroughly.

Another area of recommendations for further inquiry would be to more closely examine the psychometric properties of the two scales utilized in this study; the LGBT Attitudes scale and the LGBT Peer Experiences Questionnaire (LGBT-PEQ). Because
respondents had a seeming incongruence between their LGBT Attitudes score and their desire to learn more about LGBT people, a recommendation for further research would be to explore a more robust understanding of respondent attitudes about LGBT individuals. This may be explored in a number of ways. For example, respondents might be permitted to suggest their own responses to LGBT people (example: I think transgender individuals are _________), or might be asked about a broader range of LGBT characteristics (example: I think LGBT people should be allowed to adopt children). As another suggestion, the language in the LGBT Attitudes scale that was adopted from DAugelli and Hershberger’s (1995) study on AIDSphobia and homophobia could be modernized.

The results of the confirmatory factor analysis of the LGBT-PEQ suggested three to five factors. This researcher suggested that a limitation of this study was that the LGBT-PEQ measured observances of behaviors that existed outside of the previously established definition of LGBT-specific bullying. A suggestion for further exploration would be to examine the factors of the LGBT-PEQ in light of this continuum of behaviors ranging from positive behaviors, microaggressions, bullying, harassment, and assault and hate-crimes.

Yet another recommendation for further research is to understand more about both the location the respondent observed the LGBT-specific behavior and the characteristics of the one acting. For example, this researcher hypothesized that male respondents had more observances of behaviors and poorer attitudes than non-male respondents because they were in all male environments (example: dormitories, locker rooms, fraternities, etc.). It is therefore a recommendation that this hypothesis is tested to
determine if males, who may exhibit poorer attitudes about LGBT people than non-males, are also committing these LGBT-specific behaviors. An additional recommendation would be to investigate the location these behaviors are being committed (example: dormitory, classroom, locker room, student union building, online, etc.). This will be helpful in determining if there are particular areas of the campus or particular social networks that are not as supportive as respondents believe the overall campus to be.

Still another area for further research would be to begin looking at the next steps in the model of bystander intervention in an LGBT-specific bullying event on a college campus. For example, once a student has observed a behavior as LGBT-specific bullying, what motivates them toward the process of intervening? Studies of campus sexual assault programs indicate factors like efficacy, knowledge, and intent to help as factors for increasing bystander intervention (Katz and Moore, 2013 and Banyard, 2008). A recommendation for future research would be to understand if these characteristics contribute to increasing bystander intervention in LGBT-specific bullying as well; specifically if they advance a bystander through steps 2-5 in Darley and Latane’s (1968) five-step process.

Yet another area of recommendation for further research would be to examine further where attitudes regarding LGBT people most clearly influence a bystander to intervene in an LGBT-specific event. Because respondent attitudes towards LGBT people was negatively related to observances of LGBT-specific behaviors, this researcher hypothesized that LGBT attitudes may influence a respondent’s consideration that the
behavior demands action (step 2) instead of a respondent’s noticing the behavior along a continuum of actions as bullying (step 1).

A final area of further research would be to continue to develop an understanding of the differences in attitudes towards lesbian, gay, and bisexual people compared to transgender individuals. In general, literature regarding LGBT-specific bullying is still in early stages of development. Most studies do not separate attitudes or behaviors towards transgender individuals from attitudes or behaviors towards lesbian, gay, and bisexual individuals. In this sense, this study was a seminal example and revealed statistically and practically significant results. Clearly a deeper understanding of individuals attitudes and behaviors towards transgender individuals is needed.

In conclusion, this study was a preliminary attempt to test the relationship between respondent’s rates of observances of behaviors towards LGBT people and their attitudes about LGBT people. It was undertaken with a goal to further the understanding of improving bystander intervention in an LGBT-specific bullying events in efforts to improve the overall campus climate for LGBT individuals. While findings supported a small and negative relationship between respondents attitudes toward LGBT people and observances of LGBT-specific behaviors, further inquiry into the relationship of respondents’ gender and age is warranted.
Appendix A: Causal Model

Attitudes towards LGBT students
(LGBT Attitudes Score)

DV: Bystander observances of behaviors
towards LGBT people
(LGBT-PEQ score)
Appendix B: Questionnaire

Note: If you have already taken this survey in another class, please do NOT take it again.

By beginning the survey, you acknowledge that you have read the informed consent and agree to participate in the survey. You also acknowledge that you are at least 18 years of age and that you understand that you have the right not to answer any or all of the questions in the survey. Finally, you understand that you can quit the survey, without penalty, at any time.

1) I realize that being part of this study is my choice. I am at least 18 years of age. I have read the consent form. I consent to participate in this study.
   a) Yes, I consent to participate.
   b) No, I do not want to participate. (If you do not choose to participate, please return unmarked materials.)

2) What is your age? (You must be at least 18 to participate) __

3) What is your racial/ethnic identity? ______________________

4) What is your academic status?
   a) Undergraduate student
   b) Graduate student
   c) Other: ______________________

5) What is your major? ______________________

6) How many years have you been at Edinboro University?
   a) This is my first year at Edinboro
   b) This is my second year at Edinboro
   c) This is my third year at Edinboro
   d) This is my fourth year at Edinboro
   e) I have been at Edinboro for more than four years

7) Are you currently:
   a) Living on campus
   b) Living off campus in Edinboro in student apartments or with other students
   c) Other

8) What is your birth sex (how you were identified at birth)?
   a) Male
   b) Female
   c) Intersex

9) Which term best describes your current gender identity?
   a) Male
   b) Female
   c) Transgender
   d) Other: ______________________

10) Which term best describes your current sexual identity?
    a) Heterosexual/straight
    b) Lesbian
    c) Gay
    d) Bisexual
    e) Questioning
    f) Asexual
       □ Other: ______________________
Below are statements that may or may not express your own views about LGBT (lesbian, gay, bisexual, transgender) issues. People have differing opinions on these issues. Please indicate the extent to which you agree or disagree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11) Sex between two men is just plain wrong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Sex between two women is just plain wrong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) I think male homosexuals are disgusting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) I think bisexual men are disgusting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) I think lesbian women are disgusting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16) I think bisexual women are disgusting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17) I think transgender people are disgusting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Note: “transgender” means a person whose gender identity does not match their birth sex. For example, someone who feels like a woman trapped in a man’s body or vice versa.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18) If I discovered that a male friend was gay or bisexual, that would make me uncomfortable with that person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19) If I discovered that a male friend was gay or bisexual, that would be a reason for me to end the friendship.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20) If I discovered that a female friend was lesbian or bisexual, that would make me uncomfortable with that person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21) If I discovered that a female friend was lesbian or bisexual, that would be a reason for me to end the friendship.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22) If I discovered that a friend was transgender, that would make me uncomfortable with that person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23) If I discovered that a friend was transgender, that would be a reason for me to end the friendship.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### DURING THE LAST MONTH, how often did you witness the following?

<table>
<thead>
<tr>
<th></th>
<th>永远</th>
<th>一次</th>
<th>2-3次</th>
<th>4-5次</th>
<th>More than 5次</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>A student used LGBT-specific language in a negative manner <strong>in person.</strong></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>25</td>
<td>A student used LGBT-specific language in a negative manner <strong>online.</strong></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>26</td>
<td>A student excluded another student from an activity or conversation <strong>in person</strong> because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>27</td>
<td>A student excluded another student from an activity or conversation <strong>online</strong> because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>28</td>
<td>A student called another student a name or made rude comments <strong>in person</strong> because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>29</td>
<td>A student called another student a name or made rude comments <strong>online</strong> because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>30</td>
<td>A student inappropriately grabbed or touched another student because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>31</td>
<td>A student vandalized, damaged, or stole another student’s property because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>32</td>
<td>A student exposed (“outed”) or revealed personal information about another student because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>33</td>
<td>A student <strong>threatened</strong> to physically harm another student because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>34</td>
<td>A student <strong>actually physically</strong> harmed another student because they thought that student was LGB or T.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>35</td>
<td>I saw anti-LGBT graffiti on campus.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
DURING THE LAST MONTH, how often did you witness the following?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once</th>
<th>2-3 times</th>
<th>4-5 times</th>
<th>More than 5 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>36)</td>
<td>A student spoke up in person for another student who was being excluded, ridiculed, bullied, or harmed because that student was thought to be LGB or T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37)</td>
<td>A student spoke up online for another student who was being excluded, ridiculed, bullied, or harmed because that student was thought to be LGB or T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38)</td>
<td>A member of Edinboro faculty or staff used LGBT-specific language in a negative manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39)</td>
<td>A member of Edinboro faculty or staff used LGBT-specific language in a positive manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40)</td>
<td>A member of Edinboro faculty or staff treated a student in a negative or unfair manner because they thought that student was LGB or T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please respond to the following questions about your own attitudes and experiences.

<table>
<thead>
<tr>
<th></th>
<th>Very positive</th>
<th>Somewhat positive</th>
<th>Neutral/no opinion</th>
<th>Somewhat negative</th>
<th>Very negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>41)</td>
<td>How would you describe your attitude toward LGB (lesbian, gay, bisexual) people before you came to Edinboro?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42)</td>
<td>How would you describe your attitude toward LGB people now?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43)</td>
<td>How would you describe your attitude toward transgender people before you came to Edinboro?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44)</td>
<td>How would you describe your attitude toward transgender people now?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45)</td>
<td>In general, how would you describe attitudes on campus about LGB people?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46)</td>
<td>In general, how would you describe attitudes on campus about transgender people?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
48) If your attitude toward LGBT people has changed since you came to Edinboro, how much of the change is due to your experiences at Edinboro?

☐ The change is mostly due to my experiences at Edinboro
☐ The change is partly due to my experiences at Edinboro
☐ The change is not at all due to my experiences at Edinboro
☐ My attitude has not changed

49) How have the following aspects of life at Edinboro affected your attitude toward LGBT people?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Positively</th>
<th>Negatively</th>
<th>Neutral</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting LGBT people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

50) How interested are you in learning more about LGBT people?

☐ Very interested
☐ Somewhat interested
☐ Somewhat uninterested
☐ Not at all interested

51) In general, how would you describe attitudes on campus about LGBT people?

☐ Very positive/supportive
☐ Somewhat positive/supportive
☐ Neutral
☐ Somewhat negative/unsupportive

52) In general, how would you rate the campus climate in relation to LGBT people and issues this year compared to past years?

☐ This is my first year at Edinboro University.
☐ It is more supportive now than in past years.
☐ It is about the same now as it has been in past years.
☐ It is less supportive now than in past years.

53) In general, how would you describe attitudes on campus about transgender people?

☐ Very positive/supportive
☐ Somewhat positive/supportive
☐ Neutral
☐ Somewhat negative/unsupportive
☐ Very negative/unsupportive

54) In general, how would you rate the campus climate in relation to transgender people and issues this year compared to past years?

☐ This is my first year at Edinboro University.
☐ It is more supportive now than in past years.
☐ It is about the same now as it has been in past years.
☐ It is less supportive now than in past years.

55) If you identify as LGBT, have you ever felt unsafe at Edinboro because of your sexuality or gender expression?

☐ I do not identify as LGBT
☐ I identify as LGBT and I have never felt unsafe at Edinboro
☐ I identify as LGBT and there were one or two times when I felt unsafe at Edinboro
☐ I identify as LGBT and I have often felt unsafe at Edinboro
References


Baker, K. Q. 1., kqbaker@cedarcrest.edu, Boland, K., kpboland@cedarcrest.edu, & Nowik, C. M. 1., christine.nowik@cedarcrest.edu. (2012). A campus survey of faculty and student perceptions of persons with disabilities. *Journal of Postsecondary Education & Disability, 25*(4), 309-329.


Byers, D. S. (2013). "Do they see nothing wrong with this?": Bullying, bystander complicity, and the role of homophobic bias in the tyler clementi case. Families in Society, 94(4), 251-258. doi:10.1606/1044-3894.4325


http://dx.doi.org/10.1016/j.jsp.2015.10.002


