

EXAMINING THE COPING RESOURCES OF POLYVICTIMIZED YOUTH AND YOUNG
ADULTS

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EXAMINING THE COPING RESOURCES OF POLYVICTIMIZED YOUTH AND YOUNG ADULTS

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Bullying represents a significant concern for many youth and young adults in the United States and abroad. However, the growth of technology has allowed for new platforms in which perpetrators can engage in bullying behaviors, such as text and video messaging, social media applications, and online gaming. In addition, research has suggested that the majority of cyberbullied individuals experience co-occurring in-person victimization as well. These trends are concerning, given that findings within both the traditional and cyberbullying literatures place victimized youth at-risk for a host of social and emotional concerns. However, research has yet to fully explore the unique experiences and psychosocial correlates of polyvictimized youth and young adults. Research on traditional and cyberbullying has typically utilized theoretical orientations that consider environmental, relational, and cognitive factors that contribute to the likelihood of involvement in bullying. These same factors should be considered when exploring how youth cope with these experiences. Therefore, the purpose of this dissertation study was to further explore the internalizing symptomology associated with various victimization experiences (e.g., cyberbullying only, traditional bullying only, polyvictimization), as well as the potential buffering impact of participants' perceptions of their coping resources (e.g., coping ability, friend and family support). Results from the current study found that polyvictimized youth and young adults reported experiencing

significantly worse anxiety and depressive symptomology when compared to those who were bullied by only one form or did not report experiencing victimization within the last year. Additionally, the current study found that higher perceptions of resilient coping, friend support, and family support predicted less severe internalizing symptomology regardless of victimization experiences. These results suggest that victims of co-occurring forms of bullying are at-risk for severe internalizing symptomology and highlight the need to measure both forms of bullying in future research. In addition, fostering positive appraisals of one's ability to cope and seek support should be considered important clinical goals, particularly for polyvictims due to their heightened risk of significant anxious and depressive symptoms.

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Chapter 1: Introduction

The way that youth and young adults connect has recently seen drastic changes due to the evolution of technology. The rise in the availability of social media websites, applications, and online video games has allowed humanity to connect like never before. As such, the use of these technology formats has grown at a dizzying rate, particularly among young people. Many youth report daily use of their electronics, as well as engaging on a plethora of social media platforms (Lenhart, 2015). In addition, young people often use these electronic platforms and services to connect and create new friendships (Lenhart, Smith, Anderson, Duggan, & Perrin, 2015). Thus, the age of social media and online gaming has created a digital landscape in which individuals can both reconnect with old friends and create new ones with a click of a mouse. However, the evolution of digital relationships has brought forth several concerns related to the negative aspects of social relationships. Bullying conducted through electronic methods, or cyberbullying (Smith & Slonje, 2010), has emerged as a significant concern across social media and gaming platforms (Whittaker & Kowalski, 2015). Given the co-occurrence of traditional and cyberbullying behaviors (Kessel Schneider et al., 2012; Modecki, Minchin, Harbaugh, Guerra, & Runions 2014; Perren, Dooley, Shaw, & Cross, 2010; Raskauskas & Stoltz, 2007), as well as the numerous psychosocial concerns associated with both forms of victimization (Bonanno & Hymel, 2013; Gámez-Guadix, Gini, & Calvete, 2015; Swearer, Song, Cary, Eagle, & Mickelson, 2001; Wang, Nansel, & Iannotti, 2011), polyvictimization should be considered a peer-relationship problem of great importance to clinicians and researchers alike. However, much is still unknown

regarding the effects of co-occurring victimization, as well as how youth can best cope with multiple victimization experiences.

Traditional bullying represents a unique form of peer aggression that impacts many youth across the world. Bullying behaviors are defined by three criteria: The behavior is aggressive and intentional, is repeated or is likely to be repeated by the perpetrator(s) of the behavior, and includes an imbalance of power between those involved in the behavior (i.e., perpetrator(s) and victim(s); Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014; Olweus, 1997). Bullying often includes several forms of the behavior (Smokowski & Kopasz, 2005), such as physical (e.g., hitting, kicking others), verbal (e.g., name calling, insults), relational bullying (e.g., spreading rumors, excluding others), and cyberbullying (i.e., bullying through cell phones, social media, online gaming; Smith & Slonje, 2010). In addition, research has highlighted the multiple participant roles that individuals can meet within the bullying dynamic (Pouwels, Lansu, & Cillessen, 2016; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). These participant roles include perpetrators (e.g., bullies) and recipients of bullying behaviors (e.g., victims; Salmivalli, 1999), as well as youth who identify in both roles (e.g., bully-victims; Haynie et al., 2001). In addition, many youth report involvement only in observing bullying behaviors in their schools (Salmivalli, 2010). While prevalence estimates often vary, studies often report that 8% to 30% of participants experience bullying victimization (Kessel Schneider et al., 2012; Nansel et al., 2001; Solberg & Olweus, 2003; Wang, Iannotti, & Nansel, 2009).

Involvement in bullying has been associated with numerous academic, social, and emotional concerns. For example, perpetration of bullying behaviors has often been

linked with increased aggression, as well as callous-unemotional traits and conduct problems (Cook, Williams, Guerra, Kim, & Sadek, 2010; Craig, 1998; Viding, Simmonds, Petrides, & Frederickson, 2009). Victims of bullying have also been found to be at-risk for numerous psychosocial concerns, such as social isolation, academic concerns, lower perceptions of support, and significant depressive and anxious symptomology (Demaray & Malecki, 2003; Holt & Espelage, 2007; Kaltiala-Heino, Fröjd, & Marttunen, 2010; Ripski & Gregory, 2009; Spriggs, Iannotti, Nansel, & Haynie, 2007; Swearer et al., 2001; Tatura, Karver, & Gesten, 2014; Wang et al., 2011). Thus, victimization through bullying behaviors should be considered a significant socially-based stressor placing one at-risk for experiencing difficulties in a number of relevant domains.

Cyberbullying

Research into the cyberbullying experiences of youth and young adults has begun to highlight similar trends and long-lasting concerns as those found within the traditional bullying literature base. However, the cyberbullying literature is plagued with many inconsistencies in how these behaviors are defined and measured (Selkie, Fales, & Moreno, 2016). Researchers have often questioned whether the definitional criteria set forth by Olweus (1997) applies within a digital setting. For example, the definitional criterion of repetition may be difficult to assess through technology, given that aggressive behaviors online can easily be shared (e.g., retweeted) or viewed by many on public pages (Slonje, Smith, & Frisé, 2012; Smith, del Barrio, & Tokunaga, 2013). However, studies have suggested the importance of utilizing the same definitional criteria used within the traditional bullying literature to better compare and understand the differing

forms of bullying (Menesini et al., 2012; Nocentini et al., 2010; Thomas, Connor, & Scott, 2015).

As with traditional bullying, cybervictimization has been reported as a significant concern for many individuals, with the majority of prevalence estimates ranging from 10% to 40% (Kowalski & Limber, 2013; Ortega et al., 2012; Slonje et al., 2012; Tokunaga, 2010; Waasdorp & Bradshaw, 2015). However, prevalence rates for cyberbullying victimization vary widely based on the definitions and methods used (Selkie et al., 2016). Studies often suggest that cyberbullying victimization occurs less often when assessed alongside traditional bullying experiences (Kessel Schneider et al., 2012; Kowalski, Morgan, & Limber, 2012; Smith et al., 2008; Waasdorp & Bradshaw, 2015). In addition, cyberbullying often peaks at a later age when compared to traditional bullying, often occurring in late middle and early high school (Tokunaga, 2010). However, individuals outside of this age range have been found to engage in cyberbullying as well (e.g., university students; Kowalski, Morgan, Drake-Lavelle, & Allison, 2016; Varghese & Pistole, 2017).

Youth and young adults involved in cyberbullying behaviors are at-risk for similar psychosocial concerns as those found within the traditional bullying literature. For example, victims of cyberbullying have been found to report numerous social and academic concerns, such as difficulty concentrating at school, feelings of loneliness, and low self-esteem (Beran & Li, 2007; Olenik-Shemesh, Heiman, & Eden, 2012; Patchin & Hinduja, 2010; Şahin, 2012). Victimization through cyberbullying has also been linked to similar internalizing difficulties as those found in traditional bullying research. Cyberbullying victims are often found to exhibit elevated depressive symptomology,

anxiety concerns, and suicidal ideation (Bonanno & Hymel, 2013; Campbell, Spears, Slee, Butler, & Kift, 2012; Juvonen & Gross, 2008; Sampasa-Kanyinga, Roumeliotis, & Xu, 2014; Wang et al., 2011). Taken together, these findings from the traditional and cyberbullying literature bases suggest that both forms of victimization serve as important risk factors for experiencing significant internalizing concerns.

In addition, research has highlighted the likelihood of co-occurring forms of victimization, with many cyberbullied youth reporting coinciding traditional bullying victimization experiences (polyvictimization; Kessel Schneider et al., 2012; Kowalski & Limber, 2013; Myers, Swearer, Martin, Palacios, 2017; Perren, Dooley, Shaw, & Cross, 2010; Waasdorp & Bradshaw, 2015). Unsurprisingly, these polyvictimized youth have been found to be at-risk for experiencing elevated social, emotional, and academic concerns when compared to non-polyvictimized youth (Cross, Lester, & Barnes, 2015; Gradinger et al., 2009; Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015). However, little is known about this group of individuals. Therefore, one of the primary goals of this proposed dissertation project was to further examine the polyvictimization experiences of youth (i.e., ages 13-18) and young adults (i.e., ages 19-25), as well as the associated internalizing concerns for this unique group of individuals when compared to those who are victimized through one form alone.

Theoretical Orientations of Bullying Research

Few studies within the cyberbullying literature have explicitly tested theoretical models of understanding the phenomenon. However, several theories previously utilized within traditional bullying research have been suggested as important for understanding electronic bullying behaviors. One such model that has been used and adapted within the

traditional bullying literature is Bronfenbrenner's (1977) ecology of human development model. In this ecological model, Bronfenbrenner (1977) posited that the study of human development requires an understanding of various related social and environmental systems, in addition to knowledge of individual differences and immediate environmental factors. Thus, this ecological perspective denotes the interdependent relationship among the individual's unique features and each of the nested systems. The microsystem is comprised of the child's direct relationships with various individuals, such as their parents, peers, and school staff. Mesosystems consist of relationships among individuals and environments that directly interact with the child, such as family-school partnerships and conflict between peers and school staff. Broader systems are also considered within the model, such as the exosystem, which is comprised of relationships among individuals who are not directly involved with the child, but continue to influence their development (e.g., parental work stress, neighborhood violence), and the macrosystem, which is comprised of the social or cultural norms involved in the child's development (e.g., laws, school policy, cultural beliefs). This ecological framework necessitates the inclusion of these interdependent systems and their bidirectional influence with the child in order to fully conceptualize the child's development of unique strengths and presenting concerns.

Bronfenbrenner's (1977) model has been adapted and utilized both within the traditional bullying (Swearer & Espelage, 2011; Swearer & Hymel, 2015) and cyberbullying fields (Cross et al., 2015). The social-ecological model of bullying underscores the influence of various individual and environmental factors on the likelihood of youth experiencing bullying behaviors. For example, numerous individual (e.g., callous-unemotional traits, internalizing concerns; Cook et al., 2010; Cappadocia,

Craig, & Pepler, 2013), family (e.g., parental warmth and involvement; Barboza et al., 2009; Georgiou & Fanti, 2010; Karlsson, Stickley, Lindblad, Schwab-Stone, & Ruchkin, 2014), peer (e.g., peer rejection, peer support; Craig, Pepler, & Atlas, 2000; Kochel, Ladd, Bagwell, & Yabko, 2015; Kollerová & Smolík, 2016; O'Connell, Pepler, & Craig, 1999), school (e.g., school climate, teacher support; Barboza et al., 2009; Wang, Berry, & Swearer, 2013), and community or societal factors (e.g., neighborhood safety, school policies; Espelage, Bosworth, & Simon, 2000; Muijs, 2017) have been linked with individuals' role(s) within the bullying dynamic (e.g., victim, perpetrator). In addition, unique electronic factors have been suggested to influence one's likelihood to experience cyberbullying behaviors (Cross et al., 2015), such as frequent use of social media platforms and risky online behaviors (Gámez-Guadix, Borrajo, & Almendros, 2016; Navarro, Serna, Martínez, & Ruiz-Olivia, 2013).

An additional model often examined within the literature relates to the social information-processing skills of youth involved in bullying behaviors. The social information-processing (SIP) model consists of a series of non-linear cognitive and emotional stages designed to properly encode, process, and interpret socially-relevant cues to inform the selection and enactment of appropriate behavioral responses (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). The SIP model underscores the importance of accurate encoding and interpretation of social and emotional cues, as biases or deficits in any stage can result in the selection and enactment of socially-inappropriate or unhelpful behaviors. Unsurprisingly, youth involved in bullying often exhibit social information-processing deficits. For example, victimized youth have been found to exhibit a hostile attribution bias when presented with ambiguous social events, as well as a tendency to

select behavioral responses that will avoid future conflict with the perpetrator (Guy, Lee, & Wolke, 2017; Smalley & Banerjee, 2014; Ziv et al., 2013).

Numerous environmental, relational, and cognitive factors play a significant role in promoting and maintaining one's involvement in bullying as either a victim or perpetrator of the behavior(s). However, these same factors must also be considered when investigating how youth cope with these experiences. Therefore, an additional focus of this dissertation study was to investigate the impact of participants' perceptions of their coping ability, as well as peer and family support, on the relationship between bullying victimization and internalizing symptomology.

The Protective Nature of Coping and Social Support

Given the well-supported relationship between bullying victimization and psychosocial difficulties, researchers and clinicians alike are interested in examining how youth can best cope with these experiences. Coping research both within and outside of the bullying literature has often incorporated Lazarus and Folkman's (1987) transactional model of stress and coping. Lazarus and colleagues posited that the stress response experienced by individuals is not produced solely by an event, but instead from the individual's appraisal of the event, as well as their appraisal of their ability to mitigate any potential threat or harm. As with the social information-processing model, accurate appraisal skills are crucial to one's ability to successfully cope and mitigate stress.

The transactional model of stress and coping consists of two unique appraisal skills important to the selection and enactment of helpful coping resources. Primary appraisals consist of the individual's assessment of the event in regards to any potential threat or harm to their well-being. Individuals who assess an event as involving limited

risk or threat are unlikely to experience significant stress or consequences. However, those events that result in a significant appraisal of threat or harm to the self or important others may experience high-levels of stress if not addressed by one's coping resources. In order to select and enact helpful coping resources, one must first evaluate the strategies and support members available to them. These secondary appraisals consist of one's evaluations of the various coping resources to which they have access, the resources' effectiveness in addressing the problem, and the individual's ability to successfully employ each strategy. The transactional model of stress and coping posits that those who experience both threatening primary appraisals of an event and negative secondary appraisals of their coping resources, or ability to utilize the strategies effectively, are at most risk for experiencing adverse effects (Lazarus, 2000; Lazarus & Folkman, 1987). The individual must then choose an appropriate coping resource based on these primary and secondary appraisals. Lazarus and Folkman (1987) suggested that coping resources typically serve either a problem-focused (e.g., problem-solving) or emotion-focused (e.g., emotion regulation and support) function. In addition, the effectiveness of these resources is often contingent on the type of problem at hand. For example, individuals who deem themselves as having little control over the event may be best served by initially utilizing emotion-focused coping resources, rather than problem-focused solutions (Forsythe & Compas, 1987). Given that victims of bullying, particularly those receiving multiple forms of victimization, may view these experiences as beyond their control, these youth may benefit from emotion-focused strategies, such as emotion regulation skills, cognitive reappraisals, and seeking out emotion-focused social support. However, previous research on the transactional model of stress and coping has suggested that individuals

were more likely to utilize avoidant strategies when appraising the problem as requiring acceptance or threatening their self-esteem (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986).

Coping with Bullying Victimization

Research examining the coping resources employed by victims of traditional bullying or cyberbullying often report similar problem-focused (e.g., notifying an adult, problem-solving, blocking the perpetrator) and emotion-focused strategies (e.g., seeking social support, cognitive coping; Perren et al., 2012; Tenenbaum, Varjas, Meyers, & Parris, 2011). However, the effectiveness of these strategies (e.g., technical solutions for cyberbullying; Parris, Varjas, Meyers, & Cutts, 2012), as well as the likelihood of these strategies being used (e.g., social support seeking; Tenenbaum et al., 2011), have been called into question. For example, youth often report refraining from sharing their cyberbullying experiences with adults given concerns that older individuals may not understand their online experiences, as well as fears that parents will limit their use of technology (Juvonen & Gross, 2008; Mishna, Saini, & Solomon, 2009; Smith et al., 2008). Victimized youth also report often using avoidant (e.g., ignoring the victimization; Hunter & Boyle, 2004; Paul et al., 2012; Whittaker & Kowalski, 2015) and depressive coping strategies (e.g., social withdrawal, negative self-thoughts; Völlink, Bolman, Dehue, & Jacobs, 2013). These findings support previous research within the social information-processing literature that victims are more likely to select and enact avoidant strategies, as well as research within the coping field that events that are appraised as threatening to one's self-esteem are often met with avoidant coping strategies (Folkman et al., 1986; Guy et al., 2017; Smalley & Banerjee, 2014; Ziv et al., 2013). However, the use

of these strategies to cope with traditional and cyberbullying victimization experiences has been associated with elevated stress and internalizing symptoms (Kochenderfer-Ladd & Skinner, 2002; Na, Dancy, & Park, 2015; Newman, Holden, & Delville, 2011).

While these findings suggest that the majority of coping resources designed to address victimization are ineffective or underused, several resources have been found to mitigate the risk associated with bullying. For example, perceptions of available support from peers and adults have been suggested to buffer the impact of both traditional and cyberbullying victimization in the form of reduced risk for psychosocial concerns (e.g., internalizing symptomology, psychological distress; Davidson & Demaray, 2007; Holt & Espelage, 2007; Machmutow et al., 2012; Malecki, Demaray, & Davidson, 2008). Cognitive coping strategies have also been associated with reduced depressive and anxious symptoms (e.g., positive reappraisals; Garnefski & Kraaij, 2014). These findings suggest that victimized youth may benefit most from employing these coping resources, particularly when utilizing emotion-focused properties of these strategies (e.g., emotion-focused social support). Therefore, it is important that research continues to explore the coping strategies often utilized by victimized youth, as well as the impact of one's secondary appraisals of their available coping resources on their well-being.

The Current Study

Research has highlighted the significant impact of both traditional and cyberbullying victimization experiences. In addition, studies now suggest that many youth experience co-occurring forms of bullying behavior and are, therefore, at increased risk for significant social and emotional concerns. However, research has yet to adequately assess the unique impact of polyvictimization experiences on youth and

young adult's well-being when compared to traditional or cyberbullying victimization experiences alone, as well as how the coping and support perceptions of these youth impact the severity of their internalizing symptomology. Therefore, the purpose of this study was to examine the relationship between internalizing symptomology and reported victimization experiences. However, the primary research question for this dissertation study was "Do perceptions of coping ability and support moderate the relationship between victimization experiences (e.g., polyvictimized, traditional or cyberbullying only) and internalizing symptoms (e.g., depressive and anxious symptoms)?" Given the importance assigned to secondary appraisals of one's coping resources, this dissertation study sought to examine the unique impact of perceptions of coping ability, friend support, and family support on this relationship.

Data for this proposed dissertation were collected during a larger, international research investigation with the Born This Way Foundation examining the factors associated with youth engagement and empowerment. Data were collected from a total of 4,224 youth and young adults across 115 countries using an online survey platform (i.e., Qualtrics). The following chapter describes the traditional and cyberbullying literatures, as well as theoretical models often incorporated within both fields. In addition, the chapter will discuss the transactional model of stress and coping and how this model informs common coping resources used by victimized youth. Lastly, the chapter will present the specific research questions and hypotheses that guided this study.

Chapter 2: Literature Review

Traditional Bullying

Research examining traditional bullying (i.e., in-person bullying), has taken place for several decades, with the earliest writings and current definition stemming from the foundational work of Dr. Dan Olweus. This definition developed by Olweus (1997) and now adapted by the Center for Disease Control (CDC; Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014) states that bullying behaviors should meet three distinct criteria. First, bullying behaviors are considered harmful and are intentionally committed by the perpetrator(s) of the behavior. Second, bullying behaviors are perpetrated repeatedly over time by the perpetrator(s), or have the high probability of being repeated. Thus, single isolated events are not considered bullying behaviors due to the complexity of peer conflict. Lastly, the bullying dynamic includes a real or perceived imbalance of power between the perpetrator(s) and victim(s), such as a disparity of physical strength, popularity, or size of one's friendship group (Hunter, Boyle, & Warden, 2007). Including this established definition of bullying in research is imperative, given that recent investigations have suggested that youth who experience bullying behaviors that meet these criteria are more likely to report significant concerns with interpersonal relationships, academic achievement, and internalizing symptoms (Malecki et al., 2015; Ybarra, Espelage, & Mitchell, 2014).

The Bullying Dynamic

While aggressive behaviors must meet these above criteria to be considered bullying, these behaviors can take several forms. Media reports of bullying often highlight the most overt forms of the behavior: physical (e.g., hitting, kicking, or shoving

others) and verbal bullying (e.g., name calling, insults; Smokowski & Kopasz, 2005). However, bullying often also occurs in more covert forms. For example, relational bullying involves behaviors intended to harm social relationships, such as spreading rumors and excluding others from joining groups (Smokowski & Kopasz, 2005). Additionally, as advancements in technology have allowed humans to interact with their peers through a plethora of devices and online spaces, so too has it allowed for individuals to victimize others electronically. Cyberbullying involves bullying behaviors perpetrated through electronic sources (e.g., social media, cell phones, online gaming platforms; Smith & Slonje, 2010). Furthermore, research examining these forms of bullying suggests that youth experience multiple forms of victimization (Bradshaw, Waasdorp, & Johnson, 2015; Kowalski & Limber, 2013; Myers, Swearer, Martin, Palacios, 2017; Waasdorp & Bradshaw, 2015). Thus, victims may experience the repetitive nature of bullying through a variety of bullying forms and locations (e.g., in-person and online).

Adding to the complexity of bullying, research has suggested that individuals can meet criteria for various participant roles within the bullying dynamic (Pouwels, Lansu, & Cillessen, 2016; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). For example, youth can be categorized as bullies, or those who perpetrate the behaviors against others, as well as victims, or those who are targeted by bully perpetrators (Salmivalli, 1999). In addition, youth often report involvement as both victims and perpetrators of the behavior (i.e., bully-victims; Haynie et al., 2001). However, the majority of youth within the bullying continuum report involvement as bystanders, or those who observe bullying behaviors (Salmivalli, 2010). These individuals serve an

important role within the bullying dynamic, given that previous literature has suggested that bystander behaviors can significantly reinforce or reduce bullying within the classroom (Salmivalli, Voeten, & Poskiparta, 2011). It is important to note that these roles do not represent fixed or static bullying statuses for youth. Current research has found that youth often report fluid bullying experiences and identify in various roles across time and setting (Ryoo, Wang, & Swearer, 2015; Williford, Boulton, & Jenson, 2014). Thus, youth may identify in various roles (e.g., bully, victim, bystander) across their home, school, community, and online platforms, as well as across their school years. Therefore, it is important to recognize bullying as a complex continuum of behaviors across time.

Prevalence of Bullying

While bullying is a complex social and psychological behavior, several general themes have emerged within the literature base. Previous research has generally reported prevalence estimates ranging from 8% to 30% of youth identifying as a victim of bullying, while 6.5% to 13% of youth identify as bully perpetrators (Dulmus, Sowers, & Theriot, 2006; Kessel Schneider, O'Donnell, Stueve, & Coulter, 2012; Nansel et al., 2001; Pouwels, Lansu, & Cillessen, 2016; Solberg & Olweus, 2003; Wang, Iannotti, & Nansel, 2009). Recent research has also suggested that bullying behaviors may be declining (Rigby & Smith, 2011). While these findings provide hope and reinforce recent bullying prevention and intervention efforts, it should be noted that these results may not accurately reflect all victimization experiences. For example, recent research suggests that online harassment and victimization may be on the rise (Jones, Mitchell, & Finkelhor, 2013; National Center for Education Statistics Data Point, 2019). Therefore,

while traditional victimization experiences may be declining, it is important to recognize the ever-evolving technological landscape and the potential for increased rates of cyberbullying. In addition, while studies may report that up to two-thirds of youth do not experience bullying victimization at a single time point, a large percentage of youth report experiencing some form of bullying involvement during their school years. For example, Hoover, Oliver, and Hazler (1992) reported that nearly 77% of youth reported experiencing bullying victimization at some point during their schooling. Therefore, while bullying behaviors can be considered a low-prevalence phenomenon from year to year, it is important to recognize that many youth will experience bullying victimization at some point during their formative years.

Demographic Variability in Bullying

Involvement in bullying has also varied by many individual characteristics, such as gender identity, sexual orientation, and age. While all gender identities are involved in bullying perpetration and victimization, gender identity has been associated with differing rates of involvement in specific bullying roles and forms. For example, many have argued that boys are more likely to be involved in bullying (Nansel et al, 2001; Pellegrini & Long, 2002; Pouwels et al., 2016) than girls. In addition, gender identity has been associated with differing forms of bullying others. Previous research has suggested that boys engage in more physical forms of bullying and aggression, while girls participate in less-overt forms of bullying behavior, such as verbal and relational forms (Bradshaw et al., 2015). While gender differences have been a popular avenue for study, authors have typically adopted a cisgender-exclusive approach, thus, limiting their understanding of non-cisgendered (e.g., transgender, pangender) youths' bullying

experiences. However, studies that have included participants who identify as transgender have found significant concerns relating to gender identity-based hostility and victimization (Goldblum et al., 2012; Reisner, Greytak, Parsons, & Ybarra, 2015).

Research within the lesbian, gay, bisexual, queer, and questioning (LGBQQ) community has produced similar results, suggesting that sexual minority youth may be at-risk for increased rates of bullying victimization (Fedewa & Ahn, 2011; Williams, Connolly, Pepler, & Craig, 2005). Sexual minority individuals often report similar victimization experiences as compared to heterosexual youth, such as name calling and rumor spreading (Rivers, 2001), as well as slurs targeting their sexual orientation (Poteat, O'Dwyer, & Mereish, 2012). In addition, youth who report questioning their sexual identity have also reported elevated victimization experiences when compared to both heterosexual and sexual minority youth (Birkett, Espelage, & Koenig, 2009).

While bullying behaviors are reported across age and settings (e.g., school, work), previous research has suggested that bullying behaviors are most common for late elementary and middle school students, with youth reports of victimization, particularly through physical means, declining with age (Hoover et al., 1992; Nansel et al., 2001; Scheithauer, Hayer, Patermann, & Jugert, 2006; Wang et al., 2009). In addition, specific age and grade transitions have been identified as an important focus for intervention. In their longitudinal investigation of youth in primary and secondary schools, Pellegrini and Long (2002) found that reported bullying victimization increased following the transition to sixth grade. These findings suggest that school officials may be best served by including prevention and intervention services early and during transitions to new schools. However, bullying victimization should not be considered an issue exclusive to

elementary and middle school youth. In fact, bullying victimization has been reported well beyond the formative years with research indicating bullying concerns in high school and college (Chen & Huang, 2015), as well as in the workplace (Samnani & Singh, 2012; Van den Brande, Baillien, De Witte, Vander Elst, & Godderis, 2016).

Therefore, while prevention and intervention services should be identified in early school years, it is important to recognize bullying as a problem that impacts individuals throughout the lifespan.

Social and Emotional Concerns

Victims. Given the high likelihood of experiencing bullying victimization, as well as the powerful negative features of the behavior (e.g., repetition, power imbalance), it comes as little surprise that those individuals who are involved in bullying are likely to experience significant social and emotional difficulties. For example, victimization has been linked to a plethora of academic and school-based concerns, such as feeling unsafe in school, lower academic achievement, and less academic engagement (Goldweber, Waasdorp, & Bradshaw, 2013; Ripski & Gregory, 2009; Totura, Karver, & Gesten, 2014). Victims of bullying have also been found to experience greater social concerns, such as social isolation and negative perceptions of peer relationships (Spriggs, Iannotti, Nansel, & Haynie, 2007). Thus, victimized youth may be at-risk for experiencing significant relationship concerns.

Victimization has also been linked to elevated reports of internalizing symptoms, such as anxiety (Swearer, Song, Cary, Eagle, & Mickelson, 2001). Experiencing victimization has been linked to social anxiety concerns and somatic complaints (Boulton, 2013; Craig, 1998; Modin, Låftman, & Östberg, 2015). It has also been

suggested that this relationship may be bidirectional, with victimized youth experiencing a negative cycle of anxious symptoms (e.g., withdrawal, maladaptive cognitions) that likely places these individuals at-risk for further victimization (Calvete, Fernández-González, González-Cabrera, & Gámez-Guadi, 2017). Additional internalizing symptomology has been well documented throughout the bullying literature. For example, bullying victimization has been associated with increased risk for experiencing depressive symptoms (Kaltiala-Heino, Fröjd, & Marttunen, 2010; Wang, Nansel, & Iannotti, 2011). Additional research has highlighted the potential long-term impact of bullying victimization. A recent meta-analysis of the bullying literature found that bullying victimization placed youth at-risk for later depression while controlling for a range of childhood risk factors (Ttofi, Farrington, Lösel, & Loeber, 2011). Thus, experiencing victimization in childhood may not only be a significant risk factor for experiencing immediate psychosocial concerns, but later emotional maladjustment as well. Additionally, victimized youth have reported lower perceptions of peer and parent social support when compared to youth uninvolved in bullying (Demaray & Malecki, 2003; Holt & Espelage, 2007), with chronic victimization associated with significantly low perceptions of support (Smokowski, Evans, & Cotter, 2014). Therefore, youth who experience bullying victimization may not only be at-risk for significant social and emotional concerns, but also perceive less support to address them.

Bully perpetrators. Perpetration of bullying behaviors has also been associated with significant psychosocial maladjustment. For example, perpetrators of bullying have been found to exhibit elevated rates of aggression, callous-unemotional traits and conduct problems (Cook, Williams, Guerra, Kim, & Sadek, 2010; Craig, 1998; Viding,

Simmonds, Petrides, & Frederickson, 2009). However, research has suggested that perpetrators of aggression and bullying may be viewed as popular (Vaillancourt & Hymel 2006; Vaillancourt, Hymel, & McDougall, 2003) and that perpetration of relational-type aggression may result in attaining a high social status (Faris, 2012). Although bully perpetrators may hold a high social status, research has suggested that these youth typically experience similar mental health concerns when compared to victims (e.g., depression; Roland, 2002).

Bully-victims. Given the dual experience of the bully-victim group (i.e., experiencing both perpetration and victimization), it comes as little surprise that these youth are likely to have the significant social and emotional concerns associated with both roles. For example, Menesini, Modena, and Tani (2009) found that bully-victims reported greater externalizing and internalizing concerns when compared to victims and perpetrators, respectively, as well as those uninvolved in bullying. In addition, Menesini and colleagues (2009) found that bully-victims and victims who reported stable victimization experiences reported greater internalizing concerns. Further research has also suggested that bully-victims may be at-risk for experiencing multiple internalizing and externalizing symptoms (Gradinger, Strohmeier, & Spiel, 2009; Kaltiala-Heino, Rimpelä, Pantanen, & Rimpelä, 2000; Kumpulainen et al., 1998; Özdemir & Stattin, 2011; Swearer et al., 2001).

Cyberbullying

While research investigating traditional bullying experiences is well-established, the cyberbullying literature base represents an emerging area of inquiry with little consensus. For example, a multitude of cyberbullying definitions have been used across

studies with little agreement regarding the appropriate definitional criteria. This lack of a clear and consistent definition has plagued the cyberbullying literature base, resulting in wide discrepancies in estimated prevalence levels, as well as difficulty in cross-study comparisons. While it has been suggested that the definitional criteria used within traditional bullying research (e.g., intentionality, repetition, perceived power imbalance; Olweus, 1997) are likely also helpful when identifying cyberbullying behaviors, the complexity and novelty of electronic social interactions have raised doubts by numerous authors as to the applicability of these criteria in the online world. For example, researchers have called into question the meaning of online repetition. Although repetition through traditional bullying methods consists of repeated instances of the behavior(s), a single post could be considered a cyberbullying behavior due to rapid sharing by others (e.g., retweeting) or if viewed by a vast audience of mutual online connections (Slonje, Smith, & Frisé, 2012; Smith, del Barrio, & Tokunaga, 2013). In addition, while traditional bullying researchers have suggested that several potential forms of power imbalance apply in face-to-face bullying scenarios (e.g., physical strength, social power), many have questioned the application of the power imbalance criterion online. Several unique examples of electronic power imbalances have been proposed, such as greater knowledge and capability of using technology resources and remaining anonymous during cyberbullying encounters (Patchin & Hinduja, 2015; Vandebosch & van Cleemput, 2008).

With the definition of cyberbullying behaviors continuing to be debated within the field, research has begun to suggest that the three criteria set forth by Olweus (1997) applies to electronic bullying behaviors (Nocentini et al., 2010; Patchin & Hinduja,

2015). In one study of youth from Italy, Germany, and Spain, Nocentini and colleagues (2010) found that both intentionality and repetition of the behavior(s) serve as important criteria for correctly identifying cyberbullying behaviors for youth. Likewise, Menesini et al. (2012) found that youth from six European countries identified both an imbalance of power and intentionality as important constructs when identifying cyberbullying behaviors. These conflicting results regarding the importance of repetition and an imbalance of power underscore the complexity of applying these criteria in an electronic setting. Thus, while these definitional criteria may apply both to traditional and cyberbullying behaviors, unique aspects of technology use may impact the identification and understanding of electronic bullying behaviors. However, those arguing for the need for consistency in the assessment of the two forms of bullying have suggested the use of the three criteria model for both traditional and cyberbullying research (Thomas, Connor, & Scott, 2015).

Cyberbullying also contains unique characteristics that differentiate these behaviors from traditional bullying. Perpetrators of cyberbullying may utilize anonymity, such as through the use of a different online identity or profile (Vandebosch & van Cleemput, 2008). Youth often report greater concern for cyberbullying encounters in which the perpetrator is anonymous (Sticca & Perren, 2013). In addition, cyberbullying behaviors can be perpetrated both publicly (e.g., public posts on social media, forwarding text messages) or privately (e.g., private messages), with research suggesting that public posts result in greater distress (Sticca & Perren, 2013). These factors also significantly impact how individuals engage online. Labeled the “online disinhibition effect”, this theory posits that unique features of the electronic environment, such as anonymity and

the asynchronicity of electronic interactions (i.e., delayed responses and reactions), may influence individuals to behave online in a manner inconsistent from their in-person behavior (Suler, 2004). While these behaviors may manifest in a positive manner (e.g., acts of kindness, self-disclosure), they may also include hurtful insults, criticism, and threatening behaviors that one would likely not employ on an in-person basis. Thus, cyberbullying behaviors may include more hurtful language and actions when compared to traditional victimization due to this toxic disinhibition online effect. However, while these features may be included in cyberbullying exchanges, authors within the cyberbullying literature have suggested that they may better describe the severity of cyberbullying, rather than definitional criteria (Menesini et al., 2012). Therefore, while cyberbullying may include unique factors that speak to its severity (e.g., electronic sources, anonymity, wide audience), these behaviors should be judged within the criteria established by Olweus (1997) as a unique form of bullying, not a separate construct (Thomas et al., 2015).

Prevalence of Cyberbullying

Given the lack of a uniform definition agreed upon by researchers, prevalence estimates of cyberbullying have varied. A recent systematic review of studies conducted in the United States found that reported cyberbullying perpetration ranged from 1% to 41%, while cyberbullying victimization ranged from 3% to 71% across the 81 reviewed articles (Selkie, Fales, & Moreno, 2016). In addition, Selkie and colleagues (2016) reported a wide range of both time points (e.g., within the last year, within the last month) and terms (e.g., cyberbullying, cyber aggression) used across the literature base. Therefore, cross-study comparisons, as well as generating a global prevalence estimate,

have proven difficult for researchers. However, Selkie and colleagues (2016) noted that prevalence estimates varied less among studies deemed high quality (victimization range: 4% to 56%). Further reviews of the literature have found that 20% to 40% of youth typically report cyberbullying victimization (Tokunaga, 2010). Recent research within the United States (Hinduja & Patchin, 2012; Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015) and abroad (Gómez-Guadix, Gini, & Calvete, 2015; Tsitsika et al., 2015) has reported similar prevalence rates. Others have noted lower prevalence estimates (e.g., 10% to 15%), particularly when using more stringent timing criteria (e.g., two or more times a month; Kowalski & Limber, 2013; Ortega et al., 2012; Slonje et al., 2012). While these findings suggest that the prevalence of cyberbullying behaviors is comparable to the estimates reported within the traditional bullying literature base, victimization through cyberbullying is often reported less frequently when assessed alongside traditional bullying victimization experiences (Kessel Schneider et al., 2012; Kowalski, Morgan, & Limber, 2012; Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014; Smith et al., 2008; Waasdorp & Bradshaw, 2015). However, these reports may not accurately depict the actual online experiences of school-aged youth. For example, studies examining this discrepancy suggest that youth often refrain from reporting their cyberbullying experiences to adults out of fear of losing access to their electronics and social media platforms (Juvonen & Gross, 2008; Mishna, Saini, & Solomon, 2009; Waasdorp & Bradshaw, 2015).

Researchers must account for all forms of bullying in order to provide a more accurate representation of victimization experiences. Studies that have included measures of both traditional and cyberbullying report co-occurring in-person and electronic

victimization experiences, suggesting that targets of bullying often experience victimization through multiple forms of the behavior (i.e., polyvictimization; Cross, Lester, & Barnes, 2015; Kessel Schneider et al., 2012; Kowalski et al., 2013; Modecki et al., 2014; Perren, Dooley, Shaw, & Cross, 2010; Raskauskas & Stoltz, 2007; Smith et al., 2008). Myers and colleagues (2017) found that nearly 80% of individuals who reported cyberbullying victimization reported experiencing traditional bullying as well. Waasdorp and Bradshaw (2015) found similar results, with less than 5% of participants experiencing cybervictimization alone. These findings suggest that youth who are victimized electronically are at-risk for experiencing traditional victimization as well. This research also underscores a further unique concern brought on by the influence of cyberbullying; victimization experiences now pose a constant threat to youth (Mishna et al., 2009). While it was previously feasible that youth could alleviate their bullying experiences simply by returning home from school, they now face the potential for relentless insults, exclusion, and threats by simply logging online.

Demographic Variability in Cyberbullying

Mirroring the development of the traditional bullying literature, early investigations of cyberbullying have sought to identify demographic and developmental trends. However, much of this research suffers from conflicting findings or is too limited to allow for generalizations. For example, differences across gender identities have been suggested, such as girls being more likely to identify as a victim of cyberbullying (Kessel Schneider et al., 2012; Kowalski & Limber 2007), while boys more likely to engage in perpetration of the behavior (Li, 2006). However, these trends have been challenged with mixed findings. For example, in their review of the literature, Tokunaga (2010) reported

that no definitive gender differences existed for experiencing cyberbullying victimization. Others have also reported observing little to no difference in cyberbullying experiences across the genders (Bonanno & Hymel, 2013; Patchin & Hinduja, 2006). However, as with research examining traditional bullying victimization, the cyberbullying literature base has been hampered by the paucity of research including gender identity responses beyond a cisgender approach (i.e., exclusively male or female). Studies that have examined the unique cyberbullying experiences of cisgender and transgender youth report elevated risk for youth who identify as transgender (GLSEN, CiPHR, & CCRC, 2013; Myers et al., 2017; Sterzing, Ratliff, Gartner, McGeough, & Johnson, 2017).

Research examining the cyberbullying experiences of sexual minority youth have found comparable results to those within the traditional bullying literature, suggesting that LGBQQ (i.e., lesbian, gay, bisexual, queer, questioning) youth are more likely to experience electronic victimization than their heterosexual peers (Abreu & Kenny, 2017; Cénat, Blais, Hébert, Lavoie, & Guerrier, 2015; Kessel Schneider et al., 2012; Robinson & Espelage, 2011). Myers and colleagues (2017) found that youth and young adults who identified as bisexual or pansexual reported more frequent cyberbullying victimization when compared to youth who identified as heterosexual, gay or lesbian. These findings underscore the importance of ensuring safety online for sexual minority youth, given that many utilize online resources for support or to gain information relevant to their identity (Varjas, Meyers, Kiperman, & Howard, 2013).

While traditional bullying research has suggested that these behaviors often peak in late elementary and early middle school, cyberbullying behaviors tend to emerge in the late middle and high school years (Tokunaga, 2010). However, cyberbullying has also

been reported by individuals outside of this age range, such as at the university level (Kowalski, Morgan, Drake-Lavelle, & Allison, 2016; Varghese & Pistole, 2017).

Tokunaga (2010) reported in their review and synthesis of cyberbullying studies the likelihood of a curvilinear developmental trend, with cyberbullying victimization increasing and peaking near the end of middle school, followed by a decrease in reported victimization experiences. Barlett and Chamberlin (2017) reported a similar quadratic relationship for age and cyberbullying perpetration, with reported cyberbullying behaviors decreasing as individuals approached adulthood. These findings suggest that cyberbullying represents a significant concern for a wide range of individuals, with the majority of victimization experiences emerging near the transition to high school.

Social and Emotional Concerns

Victims. As with research conducted within the traditional bullying field, cyberbullying victimization has been noted as a significant risk factor for a number of psychosocial concerns. For example, victims of cyberbullying have experienced increased risk for academic concerns, such as poor grades and difficulty concentrating (Beran & Li, 2007). These findings are important, given that school administrators and state legislators have found creating anti-cyberbullying policies difficult due to the perception that these behaviors, as well as their consequences, exist outside of the school campus. Cyberbullying victims have also been found to experience significant social and emotional concerns, such as victimized youth reporting increased feelings of loneliness and decreased self-esteem (Olenik-Shemesh, Heiman, & Eden, 2012; Patchin & Hinduja, 2010; Şahin, 2012).

Cyberbullying victimization has also been associated with the same internalizing difficulties as have been reported in the traditional bullying literature (Tsitsika et al., 2015; Waasdorp & Bradshaw, 2015). Studies have consistently found cyberbullied youth at-risk for significant depressive concerns (Bonanno & Hymel, 2013; Gámez-Guadix et al., 2015; Wang et al., 2011). In their study of youth from Australia and Switzerland, Perren et al. (2010) found that more frequent electronic victimization predicted elevated depressive symptoms even after controlling for traditional victimization experiences. Cyberbullying victimization has also been associated with elevated anxiety concerns (Campbell, Spears, Slee, Butler, & Kift, 2012; Juvonen & Gross, 2008). For example, Dempsey, Sulkowski, Nichols, and Storch (2009) found a modest effect for cybervictimization on social anxiety symptoms. However, it should be noted that Dempsey and colleagues (2009) assessed for general cybervictimization and did not include the more stringent criteria associated with cyberbullying behaviors (i.e., no mention of definitional criteria). Still, these findings highlight the potential for electronic victimization experiences to further impact an individual's well-being and relationships outside of the online environment. Safety concerns have also been reported, with cyberbullied youth experiencing suicidal ideation (Hinduja & Patchin, 2018; Sampasa-Kanyinga, Roumeliotis, & Xu, 2014). Collectively, these findings underscore the detrimental impact of either form of victimization (i.e., in-person, electronic) on an individual's social and emotional well-being.

Bully perpetrators. Although less attention has focused on the perpetrators of cyberbullying behaviors, preliminary findings have suggested that these youth are at risk for many of the same social and emotional concerns found within the traditional bullying

literature. For example, cyberbullying perpetrators also tend to exhibit conduct and peer relationship problems, as well as internalizing concerns, when compared to non-involved youth (Campbell et al., 2013). In their meta-analysis of the literature, Kowalski, Giumetti, Schroeder, and Lattanner (2014) found small to moderate effects for drug and alcohol use, low life satisfaction and self-esteem among perpetrators of cyberbullying. While further research is necessary to fully explore the unique social and emotional correlates of cyberbullying perpetration, these emergent findings underscore the risk for all youth involved in cyberbullying behaviors.

Bully-victims. Youth who experience both bullying perpetration and victimization are at elevated risk due to their potential for experiencing the associated negative outcomes of both bullying roles. While still an emerging area of research, cyberbully-victims appear to exhibit a similar risk to those involved as traditional bully-victims (McLoughlin, Spears, Taddeo, & Hermens, 2019). For example, Gámez-Guadix, Orue, Smith, and Calvete (2013) found that cyberbully-victims scored higher on measures of depression, substance use, and problematic internet use when compared to both victims and non-involved youth. Additionally, Gámez-Guadix and colleagues (2013) reported significant differences for substance use and problematic Internet use among cyberbully-victims when compared to both victims and uninvolved youth six months later. Kowalski and Limber (2013) found additional elevated risk for cyberbully-victims, with males and high school-aged students within this role scoring highest on measures of depression and anxiety. Although further research is necessary, these findings provide support for the dangers associated with dual bullying roles through either traditional or electronic means.

Polyvictimization experiences. One significant area of emerging inquiry surrounds the experiences and outcomes of youth who are victimized through both traditional and electronic means. As previously discussed, a large proportion of cyberbullied youth report coexisting traditional bullying victimization (i.e., polyvictimization; Kessel Schneider et al., 2012; Modecki et al., 2014; Perren et al., 2010; Raskauskas & Stoltz, 2007). However, few studies have explicitly examined the unique psychosocial correlates associated with polyvictimization experiences. Studies that have assessed both traditional and cyberbullying experiences have typically included independent analyses or direct comparisons of the two forms of bullying and have reported similar associated psychosocial concerns for these two roles (Kowalski & Limber, 2013). However, direct comparisons have differed in the strength of these relationships. For example, while victims of both forms of bullying reported perceiving traditional bullying as more impactful than cyberbullying, Campbell et al. (2012) found that victims of cyberbullying scored higher on measures of internalizing symptoms, as well as social concerns, when compared to victims of traditional bullying. Others have found that this relationship may vary by the form of bullying, with findings suggesting that traditional victimization experiences may be linked to depressive symptoms, while cyberbullying experiences are associated with symptoms of anxiety (Sjursø, Fandrem, & Roland, 2016).

Studies that have examined the unique contribution of polyvictimization experiences have generally found that youth who experience co-occurring forms of victimization often report increased school absenteeism, emotional difficulties, somatic complaints, depressive symptoms, and self-harm over those who experience traditional or

cyberbullying alone (Cross et al., 2015; Gradinger et al., 2009; Hinduja & Patchin, 2018; Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015). Research has also suggested an additional risk for experiencing elevated psychosocial concerns among those victimized through cyberbullying while controlling for traditional bullying experiences (Bonanno & Hymel, 2013; Perren et al., 2010). Thus, cyberbullying victimization appears to include additional harm over and above traditional bullying experiences. However, others have challenged these findings by reporting an additive effect for traditional bullying experiences over and above cyberbullying experiences (Hase, Goldberg, Smith, Stuck, & Campain, 2015). While there is a paucity of consistent findings regarding the unique contribution of each specific form of bullying, the emergent empirical evidence suggests that experiencing co-occurring forms of victimization may result in an increased negative effect on one's psychosocial well-being. These findings underscore the importance of assessing participants' traditional and cyberbullying experiences concurrently. However, additional research is needed to fully evaluate the experiences of polyvictimized youth, as well as the relevant contribution of the individual forms of bullying victimization. Therefore, one of the primary purposes of this dissertation study was to examine the internalizing symptomology associated with each form of bullying victimization (e.g., traditional only, cyberbullying only, polyvictimization). This will allow researchers and clinicians to better understand the relative effect of single or combined victimization experiences, expanding our understanding of the psychosocial impact of bullying victimization, as well as standards for measuring the behavior(s).

Theoretical Models of Bullying

Given the discrepancy and debate associated with the field of cyberbullying, it comes as little surprise that no dominant theoretical orientation has been consistently applied in the extant research. However, given the likelihood of co-occurring forms of bullying, several theories associated with traditional bullying have been suggested as helpful in the examination of cyberbullying experiences (Espelage, Rao, & Craven, 2013; Hong et al., 2016). One such theory that has been adapted and utilized in the bullying literature is Bronfenbrenner's ecology of human development model (Bronfenbrenner, 1977). In this seminal work, Bronfenbrenner (1977) argued that studies of human behavior must go beyond simple examinations of influence from single, immediate environmental factors, and should instead consider the multiple systems that directly and indirectly impact the development of the individual.

In his ecological model, Bronfenbrenner (1977) postulated that human behavior and development is impacted by multiple nested systems. In addition, the relationship between these systems and the individual should be considered interdependent, with each system and the developing individual both influencing and receiving influence from each other. The first system described by Bronfenbrenner (1977) is the microsystem. The microsystem consists of the direct relationships between the environment and the individual. When considering child development, numerous settings are relevant for consideration, including the home (e.g., parents, siblings), school (e.g., peers, school staff), and potentially the workplace.

However, Bronfenbrenner (1977) also argued for the inclusion of broader social and cultural relationship systems. The mesosystem includes interactions and relationships between the individuals and environments directly involved with the child. Examples of

mesosystems may include the relations between one's family, school, or peers (e.g., family-school partnerships; student-teacher conflict). Exosystems include relationships among individuals and settings that do not directly involve the individual, but exert indirect influence nevertheless. Examples of exosystems relevant to child development include parental work relationships and stress, governmental agencies, and neighborhood violence. Lastly, the macrosystem encompasses the social or cultural standards of the various systems that influence the developing child (e.g., social norms, laws, school policy).

Bronfenbrenner (1977) argued that developmental researchers must take into account the full spectrum of influence associated with the interdependent relations of the evolving individual and their relevant social systems. Authors within both the traditional (Espelage, 2014; Swearer & Doll, 2001; Swearer & Hymel, 2015) and cyberbullying fields (Cross et al., 2015) have concurred and adapted this theory to create the social-ecological model of bullying.

The social-ecological model of bullying. Researchers within the field of bullying have advocated for the continued use of Bronfenbrenner's (1977) work as a means for understanding the factors contributing to the perpetration of bullying behaviors. Like Bronfenbrenner's ecological system's perspective, the social-ecological model of bullying posits that the likelihood of experiencing bullying perpetration and victimization is greatly influenced by a host of individual and environmental factors (Swearer & Espelage, 2011; Swearer & Hymel, 2015). Any number or combination of these factors may contribute to the tendency to experience bullying perpetration or victimization (i.e., equifinality; Cicchetti & Rogosch, 1996; Swearer & Espelage, 2011). Therefore, bullying

perpetration and victimization should be viewed as behavioral tendencies and not characteristics that reside within the child (Swearer & Doll, 2001). Additionally, the social-ecological model underscores the multidirectionality of these factors, with a number acting as both antecedents and consequences of bullying behaviors that may promote the likelihood of continuing this experience (Swearer & Espelage, 2011).

Individual factors. Numerous individual factors have been associated with increased perpetration and victimization experiences. Reviews and analysis of the social-ecological model of bullying have noted several important individual factors, such as age, gender, and ethnicity (Barboza et al., 2009; Espelage, 2014; Hong & Espelage, 2012). Other factors found within the literature suggest more malleable features and, thus, possible targets for intervention. For example, perpetrators of bullying tend to exhibit elevated callous-unemotional traits, conduct problems, and externalizing behaviors (Cook et al., 2010; Viding et al., 2009), while victims of both traditional and cyberbullying tend to exhibit elevated internalizing symptoms (e.g., depression; Cappadocia, Craig, & Pepler, 2013; Espelage & Holt, 2001). Positive attitudes towards violence and bullying perpetration have also been found to play an important role in contributing to the likelihood of perpetrating traditional and cyberbullying behaviors (Barlett, 2015; Espelage, Hong, Kim, & Nan, 2017; van Goethem, Scholte, & Wiers, 2010).

Family factors. Family factors also play a significant contributing role in bullying victimization experiences. For example, positive features of parent-child relationships, such as higher levels of parental monitoring, warmth, and support, have been associated with a lower risk for involvement in bullying (Barboza et al., 2009; Duncan, 2011; Georgiou & Fanti, 2010; Karlsson, Stickley, Lindblad, Schwab-Stone, & Ruchkin, 2014).

Reviews of the cyberbullying literature have suggested similar protective parenting factors for limiting involvement in cyberbullying victimization and perpetration, such as parental warmth and support (Elsaesser, Russell, Ohannessian, & Patton, 2017).

Peer factors. Research has consistently shown that bullying must be considered within a peer context given that many peers are present during bullying episodes (Atlas & Pepler, 1998; Craig & Pepler, 1997). Additionally, these peers' behaviors play an important role in either reinforcing the bullying or intervening to support the victim (Craig, Pepler, & Atlas, 2000; O'Connell, Pepler, & Craig, 1999; Salmivalli et al., 2011). Children's social groups also contribute to the likelihood of involvement in bullying. For example, perpetrators of bullying are often viewed as popular and tend to affiliate with other aggressive and delinquent youth (Espelage, Holt, & Henkel, 2003; Ferguson, Miguel, & Hartley, 2009; Vaillancourt & Hymel 2006; Vaillancourt et al., 2003). However, victimized youth often endure negative peer experiences, such as peer rejection and few friendships (Kochel, Ladd, Bagwell, & Yabko, 2015; Kollerová & Smolík, 2016). Social support has also been suggested as a significant factor for bullied youth, as victims often report lower perceptions of peer support (Demaray & Malecki, 2003; Holt & Espelage, 2007).

School factors. The impact of various school factors has also been examined. Perceptions of school climate contribute to the occurrence of victimization, with unhealthy climates and attitudes being associated with higher rates of bullying behaviors (Nickerson, Singleton, Schnurr, & Collen, 2014; Richard, Schneider, & Mallet, 2012; Wang, Berry, & Swearer, 2013). Support from teachers and school staff serve an important role, given that youth involved in bullying often report lower perceptions of

staff support (Barboza et al., 2009; Berkowitz & Benbenishty, 2012). Additionally, positive perceptions of staff support have been found to contribute to positive attitudes towards help-seeking behaviors for bullying (Eliot, Cornell, Gregory, & Fan, 2010). School-wide interventions, such as Positive Behavior Interventions and Supports (PBIS), have been suggested as a means for reducing and preventing bullying behaviors (Pugh & Chitiyo, 2012; Ross & Horner, 2009, 2014).

Community, societal, and cultural factors. Community, cultural, and societal factors represent the broadest level of the social-ecological model of bullying and can be conceptualized similar to the exo and macrosystems in Bronfenbrenner's (1977) work. Although there is a paucity of research examining the relative influence of these factors, many hold substantial relevance for conceptualizing bullying involvement. Negative perceptions of neighborhood safety have been associated with elevated risk for bullying perpetration (Espelage, Bosworth, & Simon, 2000; Swearer et al., 2012). Many additional factors should be considered at this level (e.g., cultural differences, laws and policy). For example, school anti-bullying policies may assist in reducing bullying behaviors (Muijs, 2017).

Online factors. Cyber-specific factors have also been proposed as important features for consideration (Cross et al., 2015). For example, more frequent use of social networking sites and online communication have been suggested as risk factors for elevated cyberbullying victimization (Meter & Bauman, 2015; Navarro, Serna, Martínez, & Ruiz-Olivia, 2013). Risky behaviors online (e.g., posting inappropriate content, limited privacy settings) have also been associated with increased involvement in cyberbullying behaviors (Gámez-Guadix, Borrajo, & Almendros, 2016; Peluchette, Karl, Wood, &

Williams, 2015). Unique aspects of the online environment have also been found to influence cyberbullying perpetration. As discussed above, unique features of the online social environment, such as anonymity and the asynchronicity of electronic interactions, may lead to a toxic inhibition in electronic social interactions (Suler, 2004).

Application of the social-ecological model in bullying research. These robust research findings suggest that the use of an ecological perspective for bullying research is not only supported, it is necessary. Research utilizing the social-ecological model of bullying underscores the complexity of the bullying dynamic. A multitude of factors at the individual, family, peer, school, and societal levels interact and can result in significant risk for elevated perpetration and victimization experiences. Therefore, it is important that research continues to consider and assess for various individual and environmental factors that may reinforce bullying behaviors, as well as how youth address these behaviors (e.g., coping).

Social information-processing. Additional theoretical orientations have been explored within the bullying literature. Researchers in both the fields of traditional and cyberbullying have suggested the application of a social information-processing model for understanding both bullying perpetration and victimization. This model posits that children's behavioral responses are the result of a series of non-linear cognitive processes designed for encoding, processing, and interpreting socially-relevant cues (Crick & Dodge, 1994). The first stage of the model consists of the individual attending to and encoding relevant social or internal cues (e.g., facial expressions, situational factors). These cues are then interpreted based on several factors, such as one's assessment of the intent of the individual(s), the cause of the event, and their previous experiences.

Following encoding and interpretation of socially-relevant cues, the individual then selects a relevant goal for the situation. Goals often include an internal (e.g., emotion regulation) or external (e.g., instrumental purpose) function (Lemerise & Arsenio, 2000). These goals and interpreted cues assist the individual in generating a series of potential responses for the situation at hand. Each response is then evaluated on a number of factors, such as the expected outcomes and one's efficacy in enacting the response. Lastly, a response is selected and enacted by the individual. Successful completion of each of these cognitive processes contributes to the enactment of socially appropriate behavior (Dodge & Crick, 1990). However, biases or deficits in any of the social information-processing stages can result in misattributions of intent and socially inappropriate behavior. Additionally, each of the stages is impacted not only by the stimuli of the immediate environment and situation, but also one's knowledge from previous experiences (Crick & Dodge, 1994). Thus, youth who have experienced negative peer or adult relationships may be more likely to interpret socially ambiguous situations in a negative light, leading to a cycle of negative social experiences, misinterpreted social cues, and inappropriate social behaviors.

Adding to the social information-processing model, Lemerise and Arsenio (2000) posited that the individual's emotions play a large role in this process and, thus, must be recognized as a contributing factor in addition to the individual's cognitive processes. Lemerise and Arsenio (2000) suggested that one's emotional processes can be beneficial for processing social information, such as by increased motivation and emotional prioritizing through somatic markers (i.e., narrowing response options in difficult situations through affective experiences). However, the model also recognizes the

potential biasing effect of the individual's emotional processes, such as the effect of temperamental emotionality and emotion regulation skills on problem behaviors (Rydell, Berlin, & Bohlin, 2003). In addition, the authors posited that previous knowledge and memories used within this model contain both cognitive and emotional components (i.e., "affect-event links"). Thus, Lemerise and Arsenio's (2000) integrated model posits that in addition to the cognitive factors identified by Crick and Dodge (e.g., memory of previous experiences, knowledge of social rules, schemas; 1994), one must also recognize the emotional factors (e.g., temperament, emotion regulation skills) that permeate and influence each level of information processing. For example, during the encoding and interpretation stages of the social information-processing model, Lemerise and Arsenio's (2000) posited that the individual must also encode and interpret their own emotional cues, as well as the emotional cues of others within the social environment, in order to accurately process the event. However, affective stimuli can influence this process, as the individual's mood, their regulatory skills, and the emotional cues of others influence the type of social information encoded and its interpretation. For example, youth who appraise others' emotions as angry are more likely to attribute hostile intent to their actions (Lemerise, Gregory, & Fredstrom, 2005).

These emotional processes impact other stages of information processing as well, such as the individual's generated goals and response options (Lemerise & Arsenio, 2000). The authors note that the intensity of the individual's and others' emotions likely impact the formation of goals and response choices, with more intense emotions contributing to more hostile or avoidant goals. Additionally, Lemerise and Arsenio (2000) suggested that the responses generated during the social information-processing

model are likely influenced by the individual's current and previous emotional experiences. For example, if a child has learned that avoiding settings in which they may experience bullying (e.g., school) results in decreased anxiety, then they are likely to utilize these responses during future anxiety-provoking situations. The emotional ties between individuals in social settings have also been found to play a significant role in goal formation. For example, Lemerise, Thron, and Costello (2017) found that youth presented with vignettes involving provocation from friends rated social relational goals most important (e.g., to be liked), while provocation from enemies was associated with more avoidant (e.g., avoid the individual) or instrumental goals (e.g., get my way).

Lastly, encoding and interpretation of socially-relevant cognitive and emotional cues continues to play a role in the success of the individual's enacted response (Lemerise & Arsenio, 2000). This information allows youth to evaluate the success of their chosen response, as well as if any adjustments are required. Taken together, it is clear that multiple cognitive and emotional stimuli and skills are required to be successful in one's processing of social information. Thus, a variety of skill deficits, intense emotional processes, and negative past experiences (e.g., bullying victimization) can significantly bias one's processing of socially-relevant information.

Previous research has found that youth involved in aggressive or bullying behaviors experience a variety of social information-processing deficits (van Reemst, Fischer, & Zwirs, 2016; Ziv, Leibovich, & Shechtman, 2013). Dodge and Coie (1987) found biases for reactively aggressive youth at the interpretation level, with many exhibiting a hostile attribution bias when interpreting socially ambiguous cues. However, proactively aggressive youth are typically biased when evaluating potential behavioral

responses, often rating aggressive responses more favorably than others (Crick & Dodge, 1996). Variations in social information-processing have also been found as a function of bullying involvement. For example, perpetrators of bullying have been found to select aggressive goals and behavioral responses, while victims of bullying tend to display a hostile attributional bias and prefer behavioral responses that would avoid conflict (Guy, Lee, & Wolke, 2017; Smalley & Banerjee, 2014; Ziv et al., 2013). These findings suggest that involvement in bullying may contribute to significant deficits in social information-processing, which may in turn contribute to the continuation of one's involvement in the same bullying role (i.e., continued victimization or perpetration). The social information-processing model is particularly relevant when examining cyberbullying behaviors. As noted by Dodge and Crick (1990), previous experiences and knowledge play a large role in the processing of socially relevant stimuli. However, youth may struggle to adequately process social information and cues online given the novelty and ambiguity associated with electronic social interactions (Runions, Shapka, Dooley, & Modecki, 2013). Therefore, youth engaging in online social interactions may be more likely to experience biases and deficits in their social information processing.

Application of the social information-processing model in bullying research.

Given that bullying represents a significant social concern for many youth, it comes as little surprise that those involved within the bullying dynamic struggle to effectively process socially-relevant cues. These processing deficits may cause continued concern in the form of maladaptive behaviors and emotional concerns. Additionally, victims of bullying often appear to attribute a hostile intent to others when presented with ambiguous stimuli, as well as select behavioral goals and responses that will further avoid

conflict. As noted by Lemerise and Arsenio (2000), these social-information biases may be associated with emotional processes, such as heightened emotionality, emotion regulation deficits, and negative perceptions of their relationship with others within the social event. Thus, victims of bullying may experience unique social information-processing deficits in the form of inadequate encoding and interpretation of socially-relevant cognitive and emotional stimuli, as well as the selection and enactment of behavioral responses that function to decrease the intense emotional responses associated with bullying victimization (e.g., depression, anxiety). Therefore, it is important that research continues to include both cognitive and emotional factors in their understanding of how individuals respond to bullying victimization.

Coping

Given that involvement in any form of bullying has been associated with numerous social and emotional problems, it is important that researchers continue to engage in meaningful work that better informs clinicians, school staff, and parents in how best to help youth mitigate these concerns. However, it is important to note that not all of those involved in bullying experience adverse outcomes. One factor that significantly contributes to the social and emotional well-being of victimized youth is the coping resources used to mitigate stress and peer conflict. Coping has been defined as "...the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them" (Folkman & Lazarus, 1980, p. 223). Thus, effective coping should be a primary variable of interest for bullying researchers. However, just as numerous individual, environmental, and cognitive factors impact the likelihood of experiencing bullying, the effective selection and utilization of helpful coping resources

rely on a multitude of interrelated factors, such as the evaluation of difficult situations and the tools individuals possess to address them.

Transactional model of stress and coping. Lazarus and Folkman (1987) proposed their transactional model of stress and coping to better recognize the importance of cognitions in the coping process. Lazarus and colleagues posited that the process of coping with stressful environments and circumstances is preceded by various appraisals of the event and our own ability to alleviate the issue. Additionally, Lazarus and Folkman (1987) suggested that experienced stress is triggered by the combination of these same appraisal processes. Similar to the social information-processing model, an individual's cognitive ability to accurately appraise various stimuli plays a significant role in well-being.

Primary appraisals. Two appraisal levels are posited to contribute to an individual's coping processes. Primary appraisals describe the assessment of an event's relevance to an individual's well-being (Folkman, 1984). In this level of the appraisal process, individuals must assess what is at stake in the event relating to various individual and environmental factors, such as their goals, the self (e.g., threats to self-esteem), and others (e.g., threats to others' well-being; Folkman et al., 1986; Lazarus & Folkman, 1987). In addition, one's general beliefs, such as beliefs regarding control (e.g., internal locus versus external locus), play an important role in the appraisal of threat or harm (Folkman, 1984). This process may result in three various appraisals of the event: (1) harm/loss (i.e., analysis of previous injury or damage), (2) threat (i.e., analysis of the potential for harm), or (3) challenge (i.e., analysis of the potential for growth; Folkman, 1984; Lazarus & Folkman, 1987). However, situations that do not elicit significant stakes

will likely result in minimal consequences or concerns for the individual. Thus, the potential for a situation to elicit a stress response depends largely on one's cognitive appraisal of the event's personal relevance and threat.

Secondary appraisals. The secondary appraisal process relates to the evaluation of an individual's coping resources available to address the impact of the event (Lazarus & Folkman, 1987). During this process, the individual must assess the potential application of various coping resources and supports from assorted domains including physical (i.e., health, energy), social (i.e., support members), psychological (i.e., positive beliefs and cognitions), and material resources (i.e., money; Folkman, 1984). How individuals choose and enact these coping resources depends largely on their appraisal of the event (e.g., sense of threat, situational control) and their assessment of the most realistic coping option, such as changing the event, accepting the event, seeking additional information regarding the event, and withholding a response that may further cause harm (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Situational appraisals of control also play a significant role during this appraisal stage (Folkman, 1984). This process includes both an estimate of the efficacy of one's coping resources in controlling or mitigating the perceived threat from the event, as well as one's efficacy in utilizing the proposed strategy (Bandura, 1982). It is the combination of these appraisal processes that contribute to the experience of stress and determination of helpful coping resources (Folkman, 1984; Lazarus, 2000; Lazarus & Folkman, 1987). For example, an individual who generates a primary threat appraisal may not experience harm to their well-being, provided that their secondary appraisal acknowledges various coping resources that are available and are deemed helpful in mitigating the event. However, if

one appraises an event as threatening and does not view that he or she has the appropriate resources, or ability to enact them, then the likelihood of experiencing significant stress increases.

Coping resources. Following the appraisal of threat and coping options, the individual must enact various coping resources to mitigate the potential for stress and harm to their well-being. Lazarus and Folkman (1987) posited that two primary coping functions are active in this stage: problem-focused and emotion-focused coping. Problem-focused coping resources include cognitive and behavioral strategies designed to affect or change the problem at hand through direct action (Folkman, 1984; Lazarus, 2000). Problem-focused coping strategies often include planning and problem-solving, as well as confronting the problem (Folkman & Lazarus, 1980; Folkman et al., 1986). Emotion-focused coping includes any number of cognitive or behavioral emotion-regulation strategies, such as cognitive reappraisals and seeking emotional support (Folkman, 1984; Folkman et al., 1986; Lazarus, 2000). Social support may also contribute to problem-focused coping if support members can assist in remedying the problematic situation. Research examining these coping functions has suggested general trends in the application of these resources. For example, situations in which individuals' appraisals suggest the potential to facilitate change often include more problem-focused coping strategies, while situations that require acceptance on the part of the individual often elicit emotion-focused coping strategies. (Folkman & Lazarus, 1980). Research that has examined more specific examples of coping resources has found similar results. Folkman and colleagues (1986) found that appraisals of changeable events elicited coping resources that represented aspects of both problem and emotion-focused

strategies, such as confronting behaviors, problem-solving, and cognitive reappraisal. However, individuals who appraised their situation as requiring acceptance were more likely to engage in more avoidant and distancing strategies (e.g., avoiding others, detaching significance). In addition, Folkman and colleagues (1986) found that appraisals of threat to self-esteem were associated with more confrontive coping, avoidant strategies, and less support seeking behaviors. These particular results are concerning, given that bullying victimization can represent a significant threat to one's self-esteem and well-being. These findings suggest that a sense of control and ability to produce change play a significant role in an individual's appraisal of the applicability of problem-focused strategies. However, it is important to note that potential stress-inducing situations often require individuals to utilize both problem and emotion-focused coping (Folkman & Lazarus, 1980). In addition, Lazarus and Folkman's (1987) transactional model conceptualizes coping resources independent of their impact on an individual's well-being. The model posits that no single coping resource is inherently effective or ineffective. Instead, effective coping is the result of congruence between the function of the strategy and the primary appraisal of the event (Forsythe & Compas, 1987; Lazarus & Folkman, 1987). For example, individuals who appraise the situation as requiring acceptance would likely benefit most from emotion-focused strategies, such as emotion regulation skills and cognitive reappraisals of helplessness (Folkman, 1984). However, utilizing incongruent strategies, such as problem-focused strategies when facing an event out of one's control, could result in increased risk for harm.

Coping and Adolescence

In addition to the transactional model of stress and coping, studies within the coping literature have also utilized the approach-avoidance model of coping (Roth & Cohen, 1986). This model posits that coping resources fall into two categories: approach and avoidant responses. Approach responses consist of cognitive and behavioral strategies that specifically target some aspect of change and confronting the stressor (e.g., problem-solving, emotion regulation strategies, cognitive reappraisal skills; Ebata & Moos, 1991). Avoidant responses, however, consist of cognitive and behavioral strategies that seek to avoid or distance oneself from the stressor and reduce threat (e.g., behavioral avoidance, cognitive distancing or distraction). While approach strategies are often considered the most adaptive approach, both response types include associated benefits and risks. For example, avoidant strategies may benefit individuals through the immediate reduction of stress and threat. In addition, early use of avoidant strategies may help build a sense of hope and facilitate helpful approach strategies (Roth & Cohen, 1986). Consistent with the transactional model of stress and coping, avoidant strategies may also be helpful if controllability of the stressor is low (Folkman, 1984; Folkman & Lazarus, 1980). However, long-term use of avoidant strategies limits one's ability to fully integrate and resolve the original threat. In addition, consistent use of avoidant strategies also limits one's ability to recognize potential changes in the stressful event that may allow for the individual to effectively utilize approach strategies. Approach strategies also include associated benefits and costs. Use of approach strategies can help individuals modify the stressful event, as well as their cognitive and emotional reactions to the stressor (Roth & Cohen, 1986). However, due to the need for the individual to face or acknowledge the threat, approach categories place individual at-risk for experiencing

elevated levels of immediate stress. While these response types may appear to be contrasting in their function, a combination of both approach and avoidant strategies may be the most ideal solution to many stressors.

Research on adolescent coping response styles have generally found support for approach, problem and emotion-focused responses (Compas et al., 2017; Connor-Smith & Compas, 2002; Ebata & Moos, 1991; Hampel & Petermann, 2006; Rodríguez-Naranjo & Caño, 2016; Vannucci, Flannery, & McCauley Ohannessian, 2018), while finding a negative effect for avoidant strategies on well-being (Connor-Smith & Compas, 2002; Rodríguez-Naranjo & Caño, 2016; Seiffge-Krenke & Klessinger, 2000). For example, in their meta-analysis of 212 studies within the adolescent coping literature, Compas and colleagues (2017) found that approach and problem-focused strategies were significantly related to lower internalizing and externalizing symptoms, respectively. Disengagement and avoidant strategies were also found to be positively related to increased internalizing and externalizing symptoms. Research has also suggested that the developmental periods of adolescence and young adulthood involve significant variability in the use of various coping strategies across gender and age. Studies have often found that females are likely to utilize an assortment of adaptive (e.g., support seeking) and maladaptive (e.g., rumination) coping responses (Eschenbeck, Schmid, Schröder, Wasserfall, & Kohlmann, 2018; Hampel & Petermann, 2005, 2006). Previous research has also found that coping resources often vary throughout development, suggesting that these coping processes evolve as youth develop more complex cognitive and behavioral repertoires (Zimmer-Gembeck & Skinner, 2011). However, findings have often differed due to variation in the included participants' ages. For example, Valiente,

Eisenberg, Fabes, Spinrad, and Sulik (2015) found in their longitudinal study that emotion-focused coping and social support seeking decreased, while avoidance and cognitive restructuring increased between late childhood and middle adolescence. However, Vannucci and colleagues (2018) found increases in active coping and planning at age 17, which were associated with fewer depressive symptoms. Eschenbeck and colleagues (2018) also found that older children (i.e., fifth and seventh grade students) had higher rates of problem-solving and lower rates of avoidance when compared to younger students (i.e., third grade students). In their review of the literature, Zimmer-Gembeck and Skinner (2011) helped explain these discrepant results by examining trends in coping across developmental periods. Results from 58 articles suggest that the use of problem-solving skills, distraction, and accommodation (e.g., cognitive restructuring) typically increase across childhood and adolescence, while escape behaviors typically decrease with age. Zimmer-Gembeck and Skinner (2011) also found that these changes were even more pronounced during periods of increased cognitive ability and flexibility (i.e., adolescence), as evidenced by increased use of cognitive distraction, reappraisal skills, and more flexible problem-solving. However, these changes in cognitive skills may also contribute to increased maladaptive coping, such as the greater likelihood of engaging in rumination during adolescence (Hampel & Petermann, 2005; Zimmer-Gembeck & Skinner, 2011). Taken together, these findings suggest that adolescence and young adulthood represent important developmental periods marked with increased cognitive ability, which likely play a significant role not only in how young people choose which coping resources to employ, but also how effective they are at utilizing these skills.

Coping with Traditional Bullying

The application of these models of coping within bullying research may assist stakeholders in better understanding the processes that impact successful coping with victimization experiences. Research that has included a transactional approach to conceptualizing coping has generally identified victims' coping strategies falling within the same problem-focused (e.g., notifying a teacher, confronting the perpetrator, planful problem-solving, self-control) or emotion-focused categories (e.g., seeking social support, emotion regulation skills, cognitive coping; Tenenbaum, Varjas, Meyers, & Parris, 2011). Tenenbaum and colleagues (2011) also found through their qualitative analysis that many of the coping resources served both problem and emotion-focused functions (e.g., social support, distancing, internalizing). However, participants also rated various supports as ineffective, such as the problem-focused functions of social support and confronting the perpetrator. Others have also found deviations in the impact of strategies typically considered as helpful. For example, Kochenderfer-Ladd and Skinner (2002) found that higher tendencies to engage in problem-solving exacerbated the negative relationship between frequent victimization and peer ratings of social preference. Waasdorp and Bradshaw (2011) also found differences in social-emotional functioning across classes of responses, indicating that those youth who endorse a multitude of responses (e.g., aggressive responses, help-seeking, problem-solving) often report experiencing heightened levels of internalizing concerns. Taken together, these studies highlight the complexity of the coping response and suggest that youth who employ commonly-endorsed strategies, as well as a variety of strategies, may not experience the buffering effect they seek. However, studies have often found support for

the buffering effect of problem and emotion-focused resources for victimized youth (Boulton, 2013; Hampel, Manhal, & Hayer, 2009; Hewett, Liefoghe, Visockaite, & Roongrerngsuke, 2018; Yin et al., 2017). For instance, cognitive strategies have been found to play a significant role in the well-being of victimized youth. Victims of bullying have been found more likely to hold maladaptive cognitive patterns, such as rumination, and these negative schemas may place victimized youth at-risk for future bullying (Calvete et al., 2017; Hampel et al., 2009; Maji, Bhattacharya, & Ghosh, 2016). These maladaptive cognitive styles (e.g., rumination, catastrophizing) have been found to increase the risk victimized youth face for heightened internalizing symptomology (Garnefski & Kraaij, 2014). Conversely, authors have found that cognitive styles that promote more helpful thinking styles (e.g., cognitive reappraisal skills, positive refocusing) have been found to buffer or explain the effect of victimization on internalizing symptoms (Boulton, 2013; Garnefski & Kraaij, 2014; Singh & Bussey, 2010). These findings suggest that while youth may benefit from a variety of coping resources, cognitive skills may play a significant role in buffering the effect of victimization on one's well-being.

However, while results have varied in regards to the helpfulness of various problem or emotion-focused coping resources, findings have been consistent in regards to the unhelpfulness of avoidant behaviors. Victims of bullying have often been found to report utilizing avoidant coping strategies (e.g., Hampel et al., 2009; Hunter & Boyle, 2004; Lodge & Feldman, 2007; Newman, Holden, & Delville, 2011). Consistent with studies within the general coping literature, these avoidant strategies have been found to worsen or explain the negative relationship between victimization and internalizing

symptomology (e.g., Hampel et al., 2009; Kochenderfer-Ladd & Skinner, 2002; Lodge & Feldman, 2007; Newman et al., 2011; Visconti & Troop-Gordon, 2010). Considering the consistent findings across literature bases suggesting the limited efficacy of avoidant coping strategies, some may wonder why victimized youth would employ these resources. One factor that may play an important role is the sense of control one experiences. Research within the coping literature has suggested that experiencing a low sense of control may result in engaging in avoidant coping resources (Folkman et al., 1986; Zimmer-Gembeck, Van Petegem, & Skinner, 2016). Victims of bullying have been found to exhibit a low sense of control and low ratings of optimism, with more frequent victimization resulting in lower perceptions of control and an increased likelihood to engage in avoidant coping strategies (Cassidy & Taylor, 2005; Hunter & Boyle, 2002, 2004; Skrzypiec, Slee, Murray-Harvey, & Pereira, 2011). As has been found in the coping literature, victimized youth who report experiencing low perceptions of control to change their bullying experiences report engaging in avoidant coping strategies (Hunter & Boyle, 2004). Taken together, these findings suggest that more frequent or severe bullying experiences may be perceived as less controllable to victimized youth, resulting in the use of strategies that serve to primarily avoid future conflict.

Perceptions of various forms of support (e.g., peers, parents, teacher) have also been found to contribute to victims' well-being in the form of reduced internalizing symptomology, school maladjustment, non-suicidal self-injury, and psychological distress (Bhui, Silva, Harding, & Stansfeld, 2017; Claes, Luyckx, Baetens, Van de Ven, & Witteman, 2015; Davidson & Demaray, 2007; Holt & Espelage, 2007; Malecki, Demaray, & Davidson, 2008). However, research on victimization and social support has

uncovered mixed results given the type of support, as well as the individuals' gender. For example, Holt and Espelage (2007) found that victims and bully-victims experienced reduced anxiety and depression when reporting moderate-levels of perceived peer support. However, maternal support did not interact with the participants' reported bullying role, but did exhibit a negative relationship with anxiety and depression, indicating that perceptions of maternal support benefited all participants regardless of their victimization experience. Visconti and Troop-Gordon (2010) also found that seeking support from peers and parents was associated with increased perceptions of loneliness and anxiety. The protective nature of social support has also varied across the gender of those victimized. For example, Tanigawa, Furlong, Felix, and Sharkey (2011) found a moderating effect for both perceptions of parent and close friend support among victimized males, but only main effects for social support and depressive symptoms among female participants. However, Davidson and Demaray (2007) found that higher perceptions of teacher, classmate, and school social support were associated with lower internalizing symptomology for highly victimized males, while perceptions of parent support buffered the impact of victimization on internalizing symptomology for females. Kochenderfer-Ladd and Skinner (2002) also found differences in gender, suggesting that while support-seeking may buffer the social impact of victimization for girls, boys who sought support experienced lower preferences by peers. These findings underscore the competing theories of social support within the bullying literatures: the stress-buffering model and main effect model (Cohen & Wills, 1985; Demaray & Malecki, 2011). The main effect model of social support posits that all individuals experience benefit from actual or perceived social support regardless of the amount of stress. However, the stress-

buffering model of social support suggests that the benefits of social support are experienced most by individuals encountering increased stress, such as involvement in bullying. Cohen and Wills (1985) noted that perceptions of social support may assist those experiencing stress by means of bolstering secondary appraisals of one's coping resources, and ability to utilize these resources, as well as support members assisting in problem-solving (i.e., instrumental support). Therefore, given the varied findings within the literature, it is crucial that research continues to investigate the relative buffering ability of social support for victimized youth across forms of support and victimization status. In addition, given that polyvictimized youth experience multiple forms of victimization, these youth may benefit most from various social supports. Taken together, these findings suggest that youth victimized by traditional bullying may benefit from positive secondary appraisals involving various problem and emotion-focused coping resources. In addition, while the lack of perceived control experienced by victims of traditional bullying may require emotion-focused coping strategies, Folkman and Lazarus (1980) posited that stressful events may require both forms of coping resources (e.g., problem and emotion-focused strategies). Therefore, victims may be best served by a combination of initial emotion-focused (e.g., cognitive reappraisals, emotion regulation, emotion-focused social support) and subsequent problem-focused strategies (e.g., problem-solving, assertive behaviors). This dissertation study sought to assess participant appraisals of multiple forms of coping resources (e.g., resilient coping ability, friend support, family support), as well as both problem and emotion-focused factors for each coping resource.

Coping with Cyberbullying

Victims of cyberbullying employ similar problem-focused and emotional-focused coping resources as those found within the traditional bullying literature. Perren and colleagues (2012) identified several similar response categories including preventive strategies, strategies designed to combat ongoing cyberbullying (e.g., confronting the perpetrator, ignoring or avoiding strategies, seeking instrumental support), and strategies to address potential maladjustment (e.g., seeking emotional support, helpful and unhelpful emotion coping strategies). Unique to the cyberbullying context are technical solutions, such as blocking perpetrators, deleting messages, and reporting posts to electronic administrators. These technical resources are commonly reported by youth and young adults as their preferred response strategies for cybervictimization (Orel, Campbell, Wozencroft, Leong, & Kimpton, 2017; Smith et al., 2008; Whittaker & Kowalski, 2015). However, youth have also questioned the helpfulness of these approaches given the power imbalance inherent to cyberbullying relationships (e.g., creating fake profiles, anonymity; Parris, Varjas, Meyers, & Cutts, 2012). An additional strategy often endorsed by cybervictimized youth is seeking support from others, such as adults or peers (Frisén, Berne, & Marin, 2014; Paul, Smith, & Blumberg, 2012). This support may serve both a problem-focused (e.g., instrumental support) and emotion-focused function (e.g., emotional support; Perren et al., 2012). However, many of the assessments of coping behaviors within the cyberbullying literature include hypothetical reports of preferred strategies. In reality, many youth refrain from sharing their victimization experiences with others, particularly with adults (Juvonen & Gross, 2008; Smith et al., 2008). Youth often report hesitation regarding seeking support due to concerns that adults will not understand their experiences or may restrict their access to

technology (Juvonen & Gross, 2008; Mishna et al., 2009). In addition, negative cognitive factors, such as rumination, have been found to increase the likelihood that cyberbullied youth seek out help from others, suggesting that victims may wait until their cognitive and behavioral well-being is severely impacted before seeking support (Zsila, Urbán & Demetrovics, 2018). This is concerning, given that low perceptions of social support from peers, family members, and significant others have been linked to increased risk for experiencing cyberbullying victimization (Olenik-Shemesh & Heiman, 2017). However, positive perceptions of support have been found to buffer the effect of cyberbullying victimization on one's well-being. For example, Machmutow and colleagues (2012) found that higher perceptions of support lowered the risk for elevated depressive symptomatology among cyberbullied youth. Studies examining perceptions of specific forms of support have found unique relationships with various psychosocial concerns. For example, studies have emphasized the buffering ability of perceptions of family and peer support in protecting cybervictimised youth from experiencing later substance use and depressive symptoms (Wright, 2016, 2017). Wright (2016) also found a moderating effect for perceptions of peer support in reducing later marijuana use for cyberbullied youth. In addition, higher perceptions of social connectedness have been found to mediate the relationship between cybervictimization and internalizing concerns (McLoughlin et al., 2019). These findings suggest that while youth may experience hesitation in seeking out support from others for their victimization experiences, holding positive appraisals of one's support resources and seeking out help may protect youth from experiencing the negative consequences associated with cyberbullying victimization.

However, cyberbullied youth typically engage in many of the avoidant strategies used by victims of traditional bullying, such as ignoring or doing nothing about their victimization experiences (Paul et al., 2012; Whittaker & Kowalski, 2015). The helpfulness of these strategies has been called into question. For example, in their investigation of cyberbullied college students, Na, Dancy, and Park (2015) found that avoidant coping strategies (e.g., cognitive distancing, externalizing and internalizing behaviors) predicted higher anxiety and depression scores for victimized youth, as well as lower self-esteem. Völlink, Bolman, Eppingbroek, and Dehue (2013) also found that emotion-focused strategies consisting of both avoidant and cognitive reappraisal skills strengthened the relationship between victimization and health complaints. den Hamer and Konijn (2016) also highlighted the importance of cognitive and emotion regulation strategies, finding that unhelpful cognitive skills (e.g., rumination, catastrophizing) strengthened the impact of anger reactions on future cyberbullying perpetration for victims of cyberbullying. Victims of cyberbullying also endorsed more depressive coping strategies, such as social withdrawal, negative self-thoughts, and inactivation (e.g., stay in bed all day; Völlink, Bolman, Dehue, & Jacobs, 2013). The use of avoidant and depressive coping styles to address cybervictimization may reflect the helpless beliefs reported by youth, with many believing that nothing can be done to stop cyberbullying from occurring (Parris et al., 2012). In turn, thoughts and feelings of helplessness regarding electronic victimization have been associated with elevated depressive symptomology for cyberbullied youth (Machmutow et al., 2012). Furthermore, frequency of cyberbullying behaviors has also been found to play a significant role in determining how youth cope with their victimization experiences. For example, Navarro, Larrañaga,

and Yubero (2016) found that youth who experienced more frequent cyberbullying victimization were more likely to engage in aggressive behaviors or keep their feelings to themselves. Frequent cyberbullying victimization has also been linked to lower perceptions of coping self-efficacy, which in turn was related to increased emotion dysregulation and internalizing symptoms (Trompeter, Bussey & Fitzpatrick, 2018). Therefore, as with traditional bullying, victims of cyberbullying may be more likely to engage in avoidant or unhelpful coping strategies, particularly when victimization occurs more frequently. This heightened frequency may result in victimized youth feeling less efficacious and in control to affect change and cope with their victimization experiences. Therefore, it is apparent that individuals' perceptions and appraisals of their coping resources (i.e., secondary appraisals) play a significant role in protecting or exacerbating the social and emotional concerns associated with both traditional and cyberbullying victimization. However, the significance of the secondary appraisals for cyberbullying is unclear. For example, much of the literature has included measures of preferred coping strategies or participants' selected coping strategies given a hypothetical bullying scenario. Given that accurate appraisals of one's available coping resources, as well as one's ability to enact them (i.e., secondary appraisals), are critical in the coping process, it is important that research considers these appraisals and their impact on victimized youth's well-being. Thus, further research is necessary to better understand the various coping appraisals of cyberbullied youth, as well as their impact on related psychosocial concerns (e.g., depression, anxiety).

Additionally, research has yet to consider the unique appraisals and necessary coping resources for polyvictimized youth. As previously discussed, the majority of

cyberbullied youth often report co-occurring traditional victimization (Kessel Schneider et al., 2012; Modecki et al., 2014; Perren et al., 2010; Raskauskas & Stoltz, 2007). These polyvictimization experiences have revealed an amplified effect in the form of more elevated psychosocial concerns (Bonanno & Hymel, 2013; Perren et al., 2010).

Therefore, it is likely that polyvictimized youth may experience greater threat appraisals and lower perceptions of changeability than do victims of only one form of bullying. This cognitive experience may result in lower rates of using problem (e.g., seeking out instrumental support) and emotion-focused strategies (e.g., cognitive reappraisals, emotionally supportive peers and adults). These coping tendencies may lead to further negative appraisals of the impact of one's coping resources and increased feelings of helplessness, resulting in the observed elevated risk for psychosocial concerns among polyvictimized youth. However, research has yet to directly examine this relationship. Therefore, the primary purpose of this dissertation study was to examine how perceptions of one's coping ability and supports impacts the relationship between various forms of victimization and internalizing symptomology.

Summary

All forms of bullying victimization represent a significant risk factor for elevated psychosocial concerns, including social skill deficits, decreased school functioning, and internalizing symptoms (e.g., anxiety and depression). Therefore, it is important that traditional and cyberbullying research continues to examine the factors that may mitigate these stressful events and potentially long-lasting concerns. One factor that is important to examine is the appraisals and perceptions youth hold of their ability to cope with stress. Additionally, there is a paucity of research examining the experiences of

polyvictimized youth, including their associated psychosocial concerns and coping strategies. This dissertation study sought to add to the extant literature by providing an account of these unique features compared to those associated with individual victimization experiences (e.g., traditional only, cyberbullying only). In addition, the current study sought to examine the moderating effect of perceptions of support and coping ability on the relationship between distinct victimization experiences (e.g., cyberbullying only, traditional bullying only, polyvictimization) and internalizing symptomology (e.g., depressive and anxious symptoms).

Research Questions

Based on this review of the extant literature, the social-ecological model of bullying, the social information-processing model, and the transactional model of stress and coping, this dissertation study sought to address the following research questions:

1. How do different victimization experiences (e.g., no victimization, traditional or cyberbullying only, polyvictimization) relate to depressive and anxious symptomology?
 - a. Hypothesis one: Youth and young adults who report no victimization experiences will report lower depressive and anxious symptomology scores when compared to traditional bullying only, cyberbullied only, and polyvictimized participants.
 - b. Hypothesis two: Youth and young adults who experience co-occurring forms of victimization will report higher depressive and anxious symptomology scores when compared to traditional bullying only, cyberbullied only, and uninvolved participants.

2. Do perceptions of coping ability moderate the relationship between victimization experiences and internalizing symptomology?
 - a. Hypothesis three: Polyvictimized individuals will experience a greater buffering effect on internalizing symptomology when holding high perceptions of resilient coping, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).
3. Do perceptions of friend support moderate the relationship between victimization experiences and internalizing symptomology?
 - a. Hypothesis four: Polyvictimized individuals will experience a greater buffering effect on internalizing symptomology when holding high perceptions of friend support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).
4. Do perceptions of family support moderate the relationship between victimization experiences and internalizing symptomology?
 - a. Hypothesis five: Polyvictimized individuals will experience a greater buffering effect on internalizing symptomology when holding high perceptions of family support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).

Chapter 3: Methods

Participants

Data for the proposed study were collected as part of a larger national and international survey examining the factors related to youth empowerment and engagement. Two surveys were administered to youth (i.e., ages 13-18) and young adults (i.e., ages 19-25). Power analyses for an analyses of variance (ANOVA) and multiple regression were conducted using the G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007) by a University of Nebraska's statistical consultant within the Nebraska Evaluation and Research (NEAR) Center to evaluate the necessary sample size for a set of power and effect size criteria. Using the criteria of power at .8, a medium effect size of .25 (Cohen, 1969), and an alpha level .025, an estimated total sample size of 212 participants was given for an ANOVA. This alpha level was used given the need to include separate ANOVAs to provide unique analyses for depressive and anxious symptoms. Additionally, a power analysis was conducted for a multiple regression. Using the criteria of power at .8, an effect size .15, an alpha level .05, and the number of predictors as five, an estimated total sample size of 138 participants was given for a multiple regression. Therefore, the current study was found to have an adequate number of participants for all proposed analyses.

Measures

Constructs assessed included demographic information, involvement in traditional bullying, involvement in cyberbullying, anxiety symptomology, depressive symptomology, coping ability, and perceptions of friend and family support. These measure were chosen due to the importance of these constructs described in the literature.

All measures were provided in the English language. Each of the measures are described in further detail below.

Demographic Information. Participants responded to self-report questions through the Qualtrics survey platform. Self-reported demographic items included questions regarding one's age, grade, country, sexual orientation, gender identity, and race (Appendix A).

Bullying involvement. Traditional bullying involvement was assessed through the *Verbal and Physical Bullying Scale* (VPBS; Werth, Nickerson, Aloe, & Swearer, 2015; Appendix B). As part of the *Bully Survey* (Swearer, 2001), the VPBS includes 13 items assessing the degree to which participants self-report their involvement as a victim or perpetrator of both physical and verbal/relational bullying (Physical subscale $\alpha = .79$, Verbal subscale $\alpha = .85$; Swearer, Turner, Givens, & Pollack, 2008) Participants were provided a definition of bullying and rate responses on a six-point Likert scale ($1 = Strongly disagree$ to $6 = Strongly Agree$). This definition of bullying is modeled after those of Olweus (1997) and the Center for Disease Control (CDC; Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014) to include aspects of intentionality, repetition, and an imbalance of power. The definition provided to participants is as follows:

Bullying happens when someone hurts or scares another person on purpose and the person being bullied has a hard time defending himself or herself. Usually, bullying happens over and over and includes: (1) punching, shoving or other acts that hurt people physically; (2) spreading bad rumors about people; (3) keeping certain people out of a group; (4) teasing people in a mean way; and (5) getting certain people to “gang up” on others.

Following the definition of bullying, participants were prompted to identify whether they have participated in bullying as a victim or perpetrator within the last year, as well as the frequency of their involvement (e.g., “*One or more times a month,*” “*One or more times a week,*” “*One or more times a day*”). Participants for the study were identified as a victim of traditional bullying if they reported experiencing victimization for any amount of time within the past year.

Cyberbullying involvement. Cyberbullying involvement was assessed through a modified version of the Cyberbullying Questionnaire (CQ; Smith, n.d.; Smith, Mahdavi, Carvalho, & Tippett, 2008; Appendix C) with permission from the primary author of the measure (P. K. Smith, personal communication, April 29, 2015; Appendix D). This modified version of the questionnaire includes updated methods and sources of cyberbullying (e.g., online gaming, social media sites and applications) and provides a list of 34 different social media sources for cyberbullying involvement. Parallel to the format of the VPBS, participants were provided a definition of cyberbullying that contains the criteria set forth by Olweus (1997) and suggested as important by authors within the cyberbullying literature (Patchin & Hinduja, 2015; Thomas et al., 2015). Given that authors have debated the exact definition of cyberbullying, the definition from the www.stopbullying.org website, supported by 11 Federal Partners, was provided to promote understanding across participants:

Bullying is unwanted, aggressive, repetitive behavior that involves a real or perceived power imbalance. Cyberbullying is bullying that takes place using electronic technology. Electronic technology includes devices and equipment such as cell phones, computers, and tablets as well as communication tools including social media sites and

applications, text messages, chat, online video games, and websites. Examples of cyberbullying include mean text messages or emails, rumors sent by email or posted on social media sites, and embarrassing pictures, videos, websites, or fake profiles.

Following this definition, participants were prompted to identify whether they have been involved in cyberbullying as a victim or perpetrator over the past year, as well as the frequency of this involvement (e.g., “*One or more times a month,*” “*One or more times a week,*” “*One or more times a day*”). Additional questions included on the CQ assess one’s involvement in various forms of cyberbullying perpetration and victimization (e.g., through social media, mean texts), the specific social media and online gaming platforms associated with cyberbullying (e.g., Facebook, Instagram, Snapchat, Xbox Live), and the participants’ perceptions of the severity of various forms of cyberbullying when compared to traditional bullying. The involvement item (i.e., “Have you been cyberbullied this past year?”) was utilized to determine group status. Participants who reported that they had been victimized within the past year were identified as a cybervictim. In addition, those participants who reported experiencing both traditional and cyberbullying victimization were identified as polyvictims.

To inform content validity, researchers often seek out experts to ensure that the construct is being accurately represented in the measure. Therefore, youth were contacted through two separate means to assess for the accuracy and validity of the sites, applications, and online gaming sources included in the CQ. First, participants were queried during an earlier iteration of the survey how often they used a variety of social media sites and applications. Participants were provided with a list of popular social media sites, as well as a text entry option, and prompted to rate how often they utilized

these services. These social media outlets, along with others included in open-ended responses, were then included in the CQ. In addition, siblings and adolescent friends of those in the primary researcher's doctoral seminar were sent the CQ in order to provide feedback and guidance regarding the language, length, and cyberbullying methods included in the survey.

Internalizing symptomology. Depressive symptomology was assessed for all participants using the Beck Depression Inventory- Second Edition (BDI-2; Beck, Steer, & Brown, 1996). This second edition represents an extensive revision of the original Beck Depression Inventory (Arbisi, 2001; Farmer, 2001), which represents a frequently utilized clinical tool for measuring depressive symptoms (Piotrowski & Keller, 1989). The BDI-2 includes 21 items and utilizes a four-point scale to assess for severity of symptoms in individuals aged 13 and above. This version of the self-report measure asked participants to select statements that best describe their mood within the last two weeks to better reflect current literature and diagnostic criteria for depressive episodes (Arbisi, 2001; Farmer, 2001). Items were summed to create a total depressive score with higher scores reflecting greater symptom severity. The BDI-2 has demonstrated strong psychometric properties, with internal reliability ranging from .89-.94 (Arnau, Meagher, Norris, & Bramson, 2001; Beck et al., 1996; Steer & Clark, 1997) and a test-retest coefficient of .93 (Beck et al., 1996).

Anxiety symptomology was assessed through two different measures based on the age of the participant. Individuals between the ages of 13 and 18 completed the Multidimensional Anxiety Scale for Children (March, Parker, Sullivan, Stallings, & Conners, 1997). The MASC includes 39 items that fall within one of four subscales:

Physical Symptoms, Harm Avoidance, Social Anxiety, and Separation/Panic (March et al., 1997). Participants were instructed to rate how they have felt over the past two weeks, with responses ranging from 0 (“*Never true about me.*”) to 3 (“*Often true about me.*”). The MASC has demonstrated sound psychometric functioning, with both strong internal (.90, March et al., 1997) and intraclass correlation coefficients (.78-.87, March et al., 1997; March, Sullivan, & Parker, 1999).

Individuals between the ages of 19 and 25 received the Beck Anxiety Inventory (BAI; Beck & Steer, 1993). The BAI asks participants to rate the severity of various symptoms of anxiety (e.g., feeling nervous, sweating, fear of losing control) within the past week. The BAI consists of 21 items assessing experienced symptoms within the past week. Participants responded to the severity of symptom on a four-point scale ranging from 0 (“*Not at all*”) to 3 (“*Severely (I could barely stand it)*”). The BAI has demonstrated strong psychometric properties both in clinical and community samples, with internal reliability coefficients ranging from .90 (community undergraduate students; Creamer, Foran, & Bell, 1995) to .92 (clinical sample; Beck, Epstein, Brown & Steer, 1988) and test-retest reliability coefficients of .62 (community undergraduate students; Creamer et al., 1995) to .75 (clinical sample; Beck et al., 1988).

Coping ability. Coping ability was assessed through the Brief Resilient Coping Scale (BRCS; Sinclair & Wallston, 2004). The BRCS includes four items that assesses the individuals’ tendency to cope with stressful events in a positive and active manner. Sinclair and Wallston (2004) suggest that high scores on the BRCS reflect a tendency “...to reframe the potency of stressors by affirming control of positive ways to offset potential losses (p. 100).” The authors go on to suggest that participants with high scores

on the BRCS will tend to mitigate threat appraisals through a positive secondary appraisal of their ability to enact helpful coping resources. Participants evaluated each item on a 1 (“*Does not describe you very well*”) to 5 (“*Does describe you very well*”) scale. Items were summed to create a total resilient coping score. The BRCS has demonstrated moderate psychometric properties, with internal reliability coefficients ranging from .67 to .69, and test-retest reliability ranging from .69 to .71 (Limonero et al., 2014; Sinclair & Wallston, 2004).

Friend and family support. Perceptions of friend and family support were assessed using the friends and family subscales of the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS consists of 12 items assessing perceptions of social support from three distinct sources: friends, family, and significant others. However, only the items assessing friend and family support were used in this study. The friend subscale of the MSPSS consists of four items assessing aspects of perceived friend support (e.g., “I have friends with whom I can share my joys and sorrows.”). The family subscale of the MSPSS consists of four items assessing aspects of perceived family support (e.g., “My family is willing to help me make decisions.”). Participants were prompted to respond to how they feel about each item on a 7-point scale ranging from 1 (“*Very strongly disagree*”) to 7 (“*Very strongly agree*”). Moderate to strong reliability coefficients for both the total MSPSS scale and each subscale has been reported. Internal reliability has been reported as ranging from .84 (adolescent sample; Zimet, Powell, Farley, Werkman, & Berkoff, 1990) to .88 (college sample; Zimet et al., 1988) for the total scale, .81 (adolescent sample; Zimet et al., 1990) to .87 (college sample; Zimet et al., 1988) for the family subscale, and .85 (college

sample; Zimet et al., 1988) to .92 (adolescent sample; Zimet et al., 1990) for the friend subscale, suggesting that the MSPSS displays strong internal reliability with both adolescents and young adults. In addition, test-retest reliability coefficients have been reported as .85 for the total scale, .85 for the family subscale, and .75 for the friend subscale (Zimet et al., 1988).

Procedure

Data were collected as part of a larger study from May 2016 until March 2017. Participants were recruited through multiple methods, including the *Life Is Good*® tour, Born This Way Foundation social media accounts, Lady Gaga's social media accounts, and various other organizational events connected to the Born This Way Foundation (e.g., TextTalkAct, Mattel). All participants accessed the surveys through links provided through the Born This Way Foundation website. These links directed individuals to the Born Brave Experiences Surveys (Qualtrics, 2017). Upon completion of the survey, participants provided their contact information for future research opportunities and incentives, and received a closing statement thanking them for their participation. In addition, this statement directed participants to a web link that provides resources for any mental health concerns related to participation in the survey (Appendix E). Participants received a 20% off coupon to *Life Is Good*® merchandise upon the termination of the survey and were entered for a chance to win Lady Gaga merchandise.

Upon completion of the study, data cleaning tasks were completed by trained graduate students. The first stage of data cleaning involved deletion of participants who declined taking the survey, provided duplicate responses, or who reported ages outside of

the targeted age range (i.e., 13-25). Additional data cleaning tasks included creation of syntax, appropriate value labels, and a final merging of the databases.

Approval for the initial phase of the Born Brave Experiences Study was obtained from the University of Nebraska-Lincoln's Institutional Review Board (UNL IRB # 13052; Appendix F). The third phase of the larger study was obtained through a continuing review from the University of Nebraska-Lincoln's Institutional Review Board (UNL IRB # 13052; Appendix G). Parental or individual consent were required to participate based on the participant's age. Participants aged 13-18 were prompted to have their parents complete a parental consent form (Appendix H). Following completion of this consent form, a youth assent form (Appendix I) was emailed directly to the adolescent participant. Young adults aged 19-25 were prompted to complete an individual consent form (Appendix J) only. All researchers involved in the larger study completed the Collaborative Institutional Training Initiative (CITI) training. All identifying information was deleted from the dataset prior to the analyses for this study.

Analysis Procedures

Preliminary analyses.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 24 software. Victimization experiences were examined across key demographic variables (e.g., gender identity, sexual orientation, age). Cronbach's alphas were calculated for all continuous scale scores including traditional and cyberbullying victimization, anxious and depressive symptoms, resilient coping, and perceptions of peer and family support. Means, standard deviations, and skewness were calculated for the dependent measures of internalizing symptoms.

A series of one-way analyses of variance (ANOVA) were used to assess the first research question, split by age group (i.e., youth 13-18 and young adults 19-25) to account for the unique anxiety measures used for each group. In addition, a multiple regression was used to assess the hypothesized moderating impact of perceptions of coping and support with the Johnson-Neyman technique used to probe the interactions. Several assumptions must be met prior to running a multiple regression. First, a linear relationship must exist between the dependent and independent variables (Tabachnick & Fidell, 2013). In addition, each variable must come from a normally distributed population and the variance of errors across the independent variables must be constant (i.e., homoscedasticity; Pedhazur, 1997). Lastly, the independent variables should not be highly correlated (e.g., .90 and above; multicollinearity) or redundant (i.e., singularity, Tabachnick & Fidell, 2013). In addition, a linear relationship is also assumed for the moderation relationship (Hayes & Montoya, 2017).

Several assumptions must be met prior to running an ANOVA. First, it is assumed that there is an independence of observations (Keppel & Wickens, 2004). Second, it is assumed that the dependent variables are normally distributed. Lastly, homogeneity of variance should be achieved and tested by the Levene's statistic (Keppel & Wickens, 2004).

Data analytic strategy. ANOVAs were used to address the first research question. Separate ANOVAs were run for the two age groups (i.e., youth and young adults) due to the different anxiety measures used for the age groups. In addition, given the added risk for obtaining a Type I error due to utilizing separate analyses for both anxiety and depression symptoms, an alpha of .025 was used for each ANOVA.

Multiple regression analyses using the Johnson-Neyman technique to probe interactions were used to assess the hypothesized moderation relationships. While not used as often as the “pick-a-point” procedure, the Johnson-Neyman technique has a significant strength over this procedure due to not requiring arbitrarily picking points along the moderating variables to assess the interaction effect (Bauer & Curran, 2005; Hayes, 2018; Hayes & Matthes, 2009; Hayes & Montoya, 2017). Thus, instead of categorizing a continuous variable into “low, medium, and high” groupings, the Johnson-Neyman technique allows examination of the interaction along multiple points of a continuous moderating variable. In addition, the Johnson-Neyman technique determines where the moderation effect occurs along the continuous variable (Bauer & Curran, 2005; Hayes, 2018; Hayes & Montoya, 2017; Potthoff, 1964). Victimization experiences were grouped into three categories: no victimization, single form of victimization, and polyvictimization. This was done due to the inability to derive a solution with more than three groups (Hayes & Montoya, 2017). Two SPSS macros were used to generate the omnibus Johnson-Neyman comparison (i.e., OGRS; Hayes & Montoya, 2017; Montoya, 2016) and any necessary pairwise comparisons (i.e., PROCESS; Hayes, 2018).

Research question one. To determine if youth who experience unique forms of victimization (e.g., traditional only, cyberbullying only, polyvictimized youth, no involvement) differ in their depressive and anxious symptomology, a one-way analysis of variance (ANOVA) was used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI). **Hypothesis one** would be supported if non-victimized youth and young adults endorsed lower anxious and depressive

symptomology when compared to traditional-only victims, cyberbullying-only victims, and polyvictimized youth. **Hypothesis two** would be supported if polyvictimized youth endorsed higher anxious and depressive symptomology when compared to traditional-only victims, cyberbullying-only victims, and those uninvolved in bullying.

Research question two. To determine if participants' perceptions of coping ability moderated the relationship between victimization experiences and internalizing symptomology, a multiple regression analysis using the Johnson-Neyman technique to probe interactions was used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI). **Hypothesis three** would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomology when holding high perceptions of resilient coping, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).

Research question three. To determine if participants' perceptions of friend support moderated the relationship between victimization experiences and internalizing symptomology, a multiple regression analysis using the Johnson-Neyman technique to probe interactions was used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI). **Hypothesis four** would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomology when holding high perceptions of friend support, when compared to

uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).

Research question four. To determine if participants' perceptions of family support moderated the relationship between victimization experiences and internalizing symptomology, a multiple regression analysis using the Johnson-Neyman technique to probe interactions was used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI). **Hypothesis five** would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomology when holding high perceptions of family support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only).

Chapter Four: Results

Preliminary Analyses

Participants included 1,062 youth and 3,162 young adults from 115 countries (46.1% from the United States) with a mean age of 20.04 for the combined sample. The grade levels reported by participants included 13 sixth grade students (.5%), 32 seventh grade students (1.4%), 56 eighth grade students (2.4%), 122 ninth grade students (5.2%), 164 tenth grade students (6.9%), 232 eleventh grade students (9.8%), 284 twelfth grade students (12.0%), 1,170 college students (49.5%), and 293 graduate-level students (e.g., graduate, law, medical students; 12.3%), with the majority of participants reporting currently being in school (56%). Participants' reported sexual orientation and gender identities also varied. The sample included 1,157 participants who identified as straight (27.4%), 228 as lesbian (5.4%), 1,309 as gay (31.0%), 808 as bisexual (19.1%), 92 as queer (2.2%), 197 as questioning (4.7%), 260 as pansexual (6.2%), 112 as other (2.7%), and 61 who preferred not to disclose their sexual orientation (1.3%). The sample also included 1,790 participants who identified as male (42.4%), 2,054 as female (48.6%), 110 as transgender (2.6%), 139 as genderqueer (3.3%), 29 as pangender (.7%), 74 as other (1.8%), and 28 who preferred not to disclose their gender identity (.6%). In addition, the majority of participants identified as Caucasian (2,817, 66.7%), while 41 identified as American Indian or Alaska Native (1.0%), 230 as Asian (5.4%), 157 as Black (3.7%), 4 as Native Hawaiian or Pacific Islander (.1%), 567 as multiple races (13.4%), and 408 as other (9.7%).

Descriptive statistics and crosstabs tabulations were produced to generate overall victimization group membership and according to gender identity, sexual orientation, and

age group (i.e., youth and young adult). Results indicated that 52.9% ($n = 1,830$) of participants reported no victimization experiences within the last year, while 25.9% ($n = 895$) reported traditional victimization alone, 5.1% ($n = 175$) reported cyberbullying victimization alone, and 16.1% ($n = 560$) reported a polyvictimization experience (i.e., both traditional and cyberbullying victimization). Table 1 provides group membership across gender identity, sexual orientation, and age. As can be seen in Table 1, several of the cell sizes for the victimization groups across gender identity and sexual orientation were small (i.e., < 10) and indicated a vastly unequal sample size. Therefore, gender identity and sexual orientation were not included in subsequent analyses.

In addition, analyses of internal consistency were conducted for the continuous scaled scores. Results for the Beck Depression Inventory (BDI; $\alpha = .945$), Beck Anxiety Inventory (BAI; $\alpha = .933$), Multidimensional Anxiety Scale for Children (MASC; $\alpha = .911$), Friend Support subscale ($\alpha = .914$), and Family Support subscale ($\alpha = .934$) indicated strong internal reliability. The Brief Resilient Coping Scale ($\alpha = .730$), total Traditional Victimization Score ($\alpha = .844$), and total Cyberbullying Victimization Score ($\alpha = .732$) all fell slightly below the other continuous measures indicating fair internal consistency. Overall, these coefficients are consistent with previous findings and suggest fair to strong internal consistency for the continuous measures.

Research Question One: Victimization and Internalizing Symptomology

The goal of the first research question was to determine how different victimization experiences (e.g., no victimization, traditional or cyberbullying only, polyvictimization) relate to depressive and anxious symptomology. Hypothesis one predicted that youth and young adults who reported no victimization experiences would

report lower depressive and anxious symptomology scores when compared to traditional bullying only, cyberbullied only, and polyvictimized participants. Hypothesis two predicted that youth and young adults who experienced co-occurring forms of victimization would report higher depressive and anxious symptomology scores when compared to traditional bullying only, cyberbullied only, and uninvolved participants. To address these hypotheses, a series of one-way ANOVAs were conducted to compare the identified victimization groups on their depression and anxiety scores. Separate ANOVAs were run for the two age groups (i.e., youth and young adults) due to the different anxiety measures used for the age ranges. In addition, given the added risk for obtaining a Type I error due to utilizing separate analyses for both anxiety and depression symptoms, an alpha of .025 was used for each ANOVA.

Prior to running each ANOVA, tests for assumptions were analyzed to determine the accuracy of input, range of missing data, potential for outliers, and whether the data were normally distributed (Tabachnick & Fidell, 2013). Descriptive statistics on each of the dependent variables with frequency counts, skewness, and histograms were generated separately for the victimization groups. No concerns were noted regarding the accuracy of input or potential outliers. In addition, histograms generated for the BAI and MASC generally indicated normal distributions. Histograms generated for the BDI indicated a moderate positive skew when examined at specific levels of victimization. In addition, values of skewness for the BAI (.649) and BDI (.643) indicated a moderate positive skew for the sample as a whole. Shapiro-Wilk tests of normality and Q-Q plots were used to further examine the assumption of normality. Each of the four victimization groups' scores violated the Shapiro-Wilk test of normality for the young adults' BDI and BAI

scores ($p < .001$). In addition, non-victimized ($p < .001$), traditionally bullied ($p < .001$), and polyvictimized youths' scores ($p = .001$) on the BDI also violated the Shapiro-Wilk test of normality. However, authors have argued that analyses consisting of large sample sizes are likely not greatly impacted by violations of non-normality (Ghasemi & Zahediasl, 2012). In addition, visual inspection of the Q-Q plots reveals little variation. Levene's Test of Equality of Error Variances was used to assess the assumption of homogeneity of variance. Levene's Test of Equality of Error Variances was not significant for the ANOVA examining group differences on the MASC for youth ($p = .373$). However, Levene's Test of Equality of Error Variances was significant for the ANOVA examining group differences on the BAI for young adults ($p < .001$), as well as the ANOVAs examining group differences on the BDI for both youth ($p = .007$) and young adults ($p < .001$), indicating the analyses violated the assumption of homogeneity of variance. Therefore, Welch's *F-test* was used to account for these unequal variance concerns (Keppel & Wickens, 2004).

According to the results of the one-way ANOVA, there was a significant relationship between victimization experiences and scores on the MASC for youth, $F(3,912) = 15.229, p < .001, \omega^2 = .045$. Mean anxiety scores for each of the victimization groups are provided in Table 2. Post hoc analyses using the Tukey HSD post hoc criterion for significance indicated that the average anxiety score for polyvictimized youth was significantly higher than the anxiety scores for traditionally bullied youth ($p = .003, CI [1.13, 10.96]$) and non-victimized youth ($p < .001, CI [6.25, 15.46]$), but was not significantly different from the anxiety scores of cyberbullied youth ($p = .514, CI [-4.61, 13.40]$). In addition, traditionally bullied youth scored significantly higher on the MASC

when compared to non-victimized youth ($p = .006$, CI [.66, 8.96]). No other mean comparisons were significantly different. Given the assumption of homogeneity of variance was not met for the remaining ANOVAs, Welch's adjusted F ratio was used. The analysis including the BAI with young adults was significant, suggesting that there was a significant relationship between victimization experiences and scores on the BAI for young adults, *Welch's* $F(3, 494.93) = 89.70$, $p < .001$, $adj\omega^2 = .095$. Mean anxiety scores for each of the victimization groups are provided in Table 2. Post hoc analyses using the Games-Howell post hoc criterion for unequal variances indicated that the average anxiety score for polyvictimized young adults was significantly higher when compared to traditionally bullied ($p < .001$, CI [2.39, 7.85]), cyberbullied ($p < .001$, CI [5.86, 13.44]), and non-bullied young adults ($p < .001$, CI [9.64, 14.48]). Traditionally bullied young adults also scored significantly higher on the BAI when compared to cyberbullied ($p = .001$, CI [1.10, 7.97]) and non-bullied young adults ($p < .001$, CI [5.14, 8.74]). Cyberbullying victims did not significantly differ from non-victimized young adults on the BAI ($p = .143$, CI [-5.61, .79]). Taken together, both hypotheses one and two were generally supported for youth and young adults' anxiety scores.

Welch's adjusted F ratio was also used for each test of depression. The analysis including the BDI with youth was significant, suggesting that there was a significant relationship between victimization experiences and scores on the BDI for youth, *Welch's* $F(3, 180.67) = 30.29$, $p < .001$, $adj\omega^2 = .088$. Mean depression scores for each of the victimization groups are provided in Table 3. Post hoc analyses using the Games-Howell post hoc criterion for unequal variances indicated that the average depression score for polyvictimized youth was significantly higher when compared to traditionally bullied (p

= .008, CI [.53, 8.40]) and non-bullied youth ($p < .001$, CI [7.46, 14.71]), but did not significantly differ from cyberbullied youth ($p = .609$, CI [-3.76, 9.29]). In addition, non-victimized youth had significantly lower depression scores when compared to both traditionally ($p < .001$, CI [-9.70, -3.54]) and cyberbullied youth ($p = .001$, CI [-14.40, -2.24]). Cyberbullying victims did not significantly differ from traditionally bullied youth on the BDI ($p = .857$, CI [-4.56, 7.95]). A significant relationship between victimization experiences and scores on the BDI for young adults was also observed, *Welch's F* (3, 498.94) = 60.85, $p < .001$, $adj\omega^2 = .066$. Mean depression scores for each of the victimization groups are provided in Table 3. Post hoc analyses using the Games-Howell post hoc criterion for unequal variances indicated that the average depression score for polyvictimized young adults was significantly higher when compared to traditionally bullied ($p = .002$, CI [.74, 6.15]), cyberbullied ($p < .001$, CI [3.52, 11.20]), and non-bullied young adults ($p < .001$, CI [7.27, 12.02]). Traditionally bullied young adults also scored significantly higher on the BDI when compared to cyberbullied ($p = .01$, CI [.36, 7.47]) and non-bullied young adults ($p < .001$, CI [4.33, 8.07]). Cyberbullying victims did not significantly differ from non-victimized young adults on the BDI ($p = .207$, CI [-1.04, 5.60]). Taken together, both hypotheses one and two were generally supported for youth and young adults' depression scores.

Research Question Two: Coping, Victimization, and Internalizing Symptomatology

The goal of the second question was to determine if participants' perceptions of coping ability moderated the relationship between victimization experiences and anxiety or depression symptomatology. Hypothesis three would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomatology when

holding high perceptions of resilient coping, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). To address this hypothesis, a series of multiple regression analyses using the Johnson-Neyman technique to probe interactions were used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI).

Prior to running the regression analyses, tests for assumptions were analyzed to determine the accuracy of input, range of missing data, potential for outliers, whether the data were normally distributed, and to test for multicollinearity (Tabachnick & Fidell, 2013). Descriptive statistics on each of the continuous scaled scores with frequency counts, skewness, and histograms were generated with no concerns noted regarding the accuracy of input. In addition, visual inspection of the generated scatter plots revealed little concern for potential outliers. Histograms for the continuous variables indicated moderate skewness for the scores on the BDI, BAI, coping, and friend support with skewness scores of .643, .649, -.626, and -.824, respectively. Scatter plots of standardized residual and predicted values were generated for each of the regression analyses, which revealed that the data were generally homoscedastic. In addition, a series of Pearson product-moment correlations were run to determine the strength of the relationship between the continuous variables (See Table 4). Examination of the correlation table indicates a significant negative relationship between each of the proposed moderating variables and the dependent measures of anxiety and depression, suggesting the presence of a negative linear relationship. In addition, scatterplots were generated to further examine the linear relationships between variables. Examination of these scatterplots

supported the linear relationships found through the correlation analyses. Multiple regression analyses were run using the three proposed moderating variables as predictors to obtain variance inflation factors (VIF) as an examination for multicollinearity. All obtained VIF scores were below two, suggesting that no multicollinearity is evident.

The first regression analysis including the three victimization groups, perceptions of coping, and scores on the MASC was significant, suggesting that the effect of victimization experience on anxiety symptoms as measured by the MASC depends on resilient perceptions of coping for youth, $\Delta R^2 = .006$, $F(2, 910) = 3.05$, $p = .048$. The addition of the interaction accounts for an additional .6% of the variance in anxiety symptoms. Examination of the Johnson-Neyman table indicates a defining values of 9.58 for the moderating variable, suggesting that differences in anxiety scores for the victimization groups emerge among participants with a resilient coping score of 9.58 or greater. Figure 1 displays the anxiety scores for the three victimization groups across coping scores. Follow-up pairwise comparisons were completed using indicator coding. Pairwise tests comparing the polyvictimization group to both the traditional or cybervictimization only group ($\Delta R^2 < .001$, $F(1,910) = .0339$, $p = .854$) and the non-victimization group ($\Delta R^2 = .004$, $F(1,910) = 3.53$, $p = .061$) were not significant, suggesting that the change in MASC scores across perceptions of coping did not differ for the polyvictimization group when compared to the other two groups. Thus, hypothesis three was not supported. However, the pairwise test comparing the traditional or cybervictimization only group and the non-victimization group was significant, ($\Delta R^2 = .005$, $F(1,910) = 5.16$, $p = .023$). The PROCESS macro identified 12.87 as the perceived coping score where the traditional or cybervictimization only group and the non-

victimization group transitions from non-significant to significant at the .05 level. Inspection of the Johnson-Neyman table reveals that youth in the traditional or cybervictimization only group held significantly higher anxiety scores when compared to the non-victimization group among those who scored 12.87 or higher on perceptions of coping, but did not significantly differ among those with lower coping scores. Therefore, while visual inspection of Figure 1 suggests that each of the three groups reported lower anxiety scores as perceptions of resilient coping increased, this effect was most pronounced for non-victimized youth.

However, no significant interaction effect was found for the regression analysis including the three victimization groups, perceptions of coping, and scores on the BAI for young adults, $\Delta R^2 = .0003$, $F(2, 2538) = .47$, $p = .625$. Thus, Hypothesis 3 was not supported when examining young adults' self-reported anxiety symptoms. Figure 2 displays the anxiety scores for the three victimization groups across coping scores.

Likewise, no significant interaction effects were found for the regression analyses including the three victimization groups, perceptions of coping, and scores on the BDI for both youth, $\Delta R^2 = .0007$, $F(2, 910) = .41$, $p = .666$, and young adults, $\Delta R^2 = .0004$, $F(2, 2538) = .61$, $p = .546$. Thus, Hypothesis 3 was not supported when examining youth and young adults' self-reported depressive symptoms. Figures 3 and 4 display the depression scores for the three victimization groups across coping scores for youth and young adults, respectively.

Research Question Three: Friend Support, Victimization, and Internalizing Symptomatology

The goal of the third research question was to determine if participants' perceptions of their friend support moderated the relationship between victimization experiences and anxiety or depression symptomology. Hypothesis four would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomology when holding high perceptions of friend support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). To address this hypothesis, a series of multiple regression analyses using the Johnson-Neyman technique to probe interactions were used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI).

No significant interaction effects were found for the regression analyses including the three victimization groups, perceptions of friend support, and scores on the MASC for youth $\Delta R^2 = .0045$, $F(2, 910) = 2.26$, $p = .105$, as well as the BAI for young adults, $\Delta R^2 = .0002$, $F(2, 2538) = .32$, $p = .730$. Thus, Hypothesis 4 was not supported when examining youth and young adults' self-reported anxiety symptoms. Figures 5 and 6 display the anxiety scores for the three victimization groups across friend support scores for youth and young adults, respectively.

Likewise, no significant interaction effects were found for the regression analyses including the three victimization groups, perceptions of friend support, and scores on the BDI for both youth, $\Delta R^2 = .0021$, $F(2, 910) = 1.21$, $p = .299$, and young adults, $\Delta R^2 = .0004$, $F(2, 2538) = .68$, $p = .509$. Thus, Hypothesis 4 was not supported when examining youth and young adults' self-reported depressive symptoms. Figures 7 and 8 display the

depression scores for the three victimization groups across friend support scores for youth and young adults, respectively.

Research Question Four: Family Support, Victimization, and Internalizing Symptomatology

The goal of the fourth research question was to determine if participants' perceptions of their family support moderated the relationship between victimization experiences and anxiety or depression symptomatology. Hypothesis five would be supported if polyvictimized individuals experienced a greater buffering effect on internalizing symptomatology when holding high perceptions of family support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). To address this hypothesis, a series of multiple regression analyses using the Johnson-Neyman technique to probe interactions were used. Separate analyses were conducted for youth (i.e., ages 13-18) and young adults (i.e., ages 19-25) to account for the differing anxiety measures included in the two surveys (i.e., MASC, BAI).

No significant interaction effects were found for the regression analyses including the three victimization groups, perceptions of family support, and scores on the MASC for youth, $\Delta R^2 = .0006$, $F(2, 910) = .32$, $p = .729$, as well as the BAI for young adults, $\Delta R^2 = .0011$, $F(2, 2538) = 1.68$, $p = .186$. Thus, Hypothesis 5 was not supported when examining youth and young adults' self-reported anxiety symptoms. Figures 9 and 10 display the anxiety scores for the three victimization groups across family support scores for youth and young adults, respectively.

Likewise, no significant interaction effects were found for the regression analyses including the three victimization groups, perceptions of family support, and scores on the BDI for both youth, $\Delta R^2 = .0009$, $F(2, 910) = .58$, $p = .560$, and young adults, $\Delta R^2 = .0012$, $F(2, 2538) = 1.84$, $p = .158$. Thus, Hypothesis 5 was not supported when examining youth and young adults' self-reported depressive symptoms. Figures 11 and 12 display the depression scores for the three victimization groups across family support scores for youth and young adults, respectively.

Main Effect of Coping and Support

Given the limited support for the hypothesized moderating relationships, Hayes (2018) suggests examining the model without the interaction effect to determine potential individual effects of the independent variables. Therefore, a series of follow-up multiple regression analyses were run including each of the proposed moderating variables and continuous measures of traditional and cyberbullying victimization on depressive and anxious symptoms. Prior to running the regression analyses, tests for assumptions were analyzed to determine the accuracy of input, range of missing data, potential for outliers, whether the data were normally distributed, and to test for multicollinearity (Tabachnick & Fidell, 2013). Descriptive statistics on each of the continuous variables with frequency counts, skewness, scatter plots, and histograms were generated with no concerns noted regarding the accuracy of input or potential outliers. Histograms for the continuous variables indicated moderate skewness for the scores on the BDI, BAI, coping, friend support, and frequency of cyberbullying victimization, with skewness scores of .643, .649, -.626, -.824, and .747, respectively. Scatter plots of standardized residual and predicted values were generated for each of the regression analyses, which revealed that

the data were generally homoscedastic. In addition, a series of Pearson product-moment correlations were run to determine the strength of the relationship between the continuous variables (see Table 4). Examination of the correlation table indicates a significant negative relationship between coping and support variables with the dependent measures of anxiety and depression, suggesting the presence of a negative linear relationship. A positive linear relationship was also found for the victimization variables with the dependent measures of anxiety and depression. Examination of generated scatterplots provided additional support for each of the linear relationships. All obtained VIF scores were below two, suggesting that no multicollinearity is evident.

The multiple regression model including traditional victimization, cybervictimization, coping, friend support, and family support predicting MASC scores for youth was significant, $R^2 = .163$, $R^2_{Adj} = .141$, $F(5, 190) = 7.39$, $p < .001$. Table 5 provides the individual regression weights and standardized coefficients. Both coping and friend support had significant negative regression weights, indicating that youth with higher scores on these scales were expected to have lower anxiety scores as measured by the MASC, after accounting for the other variables in the model. Family support did not significantly contribute to the multiple regression model. Given that the coping scale significantly moderated the relationship between victimization experiences and MASC scores, only friend support will be further discussed here. The significant regression weight for friend support suggests that for every unit increase in perceptions of friend support, anxiety symptoms decrease by .496.

The multiple regression model including traditional victimization, cybervictimization, coping, friend support, and family support predicting BDI scores for

youth was significant, $R^2 = .422$, $R^2_{Adj} = .407$, $F(5, 190) = 27.73$, $p < .001$. Table 6 provides the individual regression weights and standardized coefficients. Coping, friend support, and family support had significant negative regression weights, indicating that youth with higher scores on these scales were expected to have lower depression scores as measured by the BDI, after accounting for the other variables in the model. The significant regression weights suggest that for every unit increase in perceptions of coping, friend support, and family support, depression symptoms decrease by 1.254, .428, and .645, respectively. Examination of Table 6 suggests that family support is a relatively more important predictor when compared to coping and friend support.

The multiple regression model including traditional victimization, cybervictimization, coping, friend support, and family support predicting BAI scores for young adults was significant, $R^2 = .236$, $R^2_{Adj} = .225$, $F(5, 350) = 21.63$, $p < .001$. Table 7 provides the individual regression weights and standardized coefficients. Coping had a significant negative regression weight, indicating that young adults with higher coping scores were expected to have lower anxiety scores as measured by the BAI, after accounting for the other variables in the model. Friend and family support did not significantly contribute to the multiple regression model. The significant regression weight suggests that for every unit increase in perceptions of coping, anxiety symptoms decrease by .736.

The multiple regression model including traditional victimization, cybervictimization, coping, friend support, and family support predicting BDI scores for young adults was significant, $R^2 = .325$, $R^2_{Adj} = .315$, $F(5, 350) = 33.71$, $p < .001$. Table 8 provides the individual regression weights and standardized coefficients. Coping, friend

support, and family support had significant negative regression weights, indicating that young adults with higher scores on these scales were expected to have lower depression scores as measured by the BDI, after accounting for the other variables in the model. The significant regression weights suggest that for every unit increase in perceptions of coping, friend support, and family support, depression symptoms decrease by 1.167, .358, and .395, respectively. Examination of Table 8 suggests that coping is a relatively more important predictor when compared to family or friend support.

Chapter Five: Discussion

This study examined the potential unique buffering effect of coping and support perceptions among those with different victimization histories (i.e., no-victimization, traditional or cybervictimization only, polyvictimization). Previous studies have just now begun to examine the unique psychosocial outcomes associated with being the target of multiple forms of bullying victimization. In addition, studies within the bullying and cyberbullying literature have found discrepant findings regarding the helpfulness of various coping and support resources, as well as the perceptions bullying victims hold. The purpose of this study was to expand the traditional and cyberbullying literatures by examining the potential buffering effect of holding positive perceptions of resilient coping and access to support from friends and family. Quantitative analyses examined the relationship between victimization history and anxiety and depressive symptoms. Moderation analyses were conducted using the Johnson-Neyman technique to examine the potential individual buffering effect of resilient coping, perceptions of friend support, and family support. Follow-up multiple regression analyses were run when no group differences for these buffering effects emerged to examine the individual impact of coping and support perceptions. This chapter will review the results of each analysis in conjunction with previous findings in the literature. In addition, study limitations and implications for both research and clinical practice will be discussed.

Preliminary Analyses

Researchers have argued in support of measuring traditional and cyberbullying behaviors simultaneously, due to the similar definitional criteria and the likelihood of victims experiencing both forms of bullying (Menesini et al., 2012; Nocentini et al.,

2010; Thomas et al., 2015; Waasdorp & Bradshaw, 2015). Providing further support for this view, the current study found that the majority of cyberbullied youth and young adults experienced co-occurring forms of traditional victimization. In the current study, 25.9% ($n = 895$) of youth and young adults reported traditional victimization alone. Comparatively, only 5.1% ($n = 175$) of youth and young adults reported cyberbullying victimization alone. These prevalence rates are consistent with previous studies examining overlapping forms of victimization (Cross et al., 2015; Kessel Schneider et al., 2012; Myers et al., 2017; Waasdorp & Bradshaw, 2015), as well as previous studies that have found that cyberbullying victimization experiences are reported less frequently than traditional bullying victimization (Kessel Schneider et al., 2012; Kowalski, Morgan, & Limber, 2012; Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014; Smith et al., 2008; Waasdorp & Bradshaw, 2015). In addition, 16.1% ($n = 560$) of youth and young adults reported involvement as polyvictims (i.e., both traditional and cyberbullying victimization), suggesting that the majority of individuals who experience cyberbullying victimization experience traditional bullying as well. This finding is consistent with previous examinations of co-occurring forms of victimization (Cross et al., 2015; Gradinger, Strohmeier, & Spiel, 2009; Kessel Schneider et al., 2012; Myers et al., 2017; Waasdorp & Bradshaw, 2015) and underscores the need for researchers to assess both forms of victimization in future research. Recent studies within the cyberbullying literature reflect the current comparative emphasis in the field, with many studies seeking to find similar relationships to those found in the traditional bullying literature, or instead comparing traditional and cyberbullying experiences to examine the individual impact of each form of victimization. Given the continued support for co-occurring victimization

experiences, it may be more prudent for future research to examine both forms of bullying for the potential additive effect of experiencing polyvictimization.

Victimization and Internalizing Symptomology

The goal of the first research question was to determine if youth and young adults with various victimization histories (i.e., no-victimization, traditional bullying only, cyberbullying only, polyvictimization) differ in their anxious and depressive symptomology. It was hypothesized that youth and young adults who reported no-victimization experiences would score significantly lower on measures of anxiety and depression when compared to the single or polyvictimization victimization groups, while the polyvictimization group would score significantly higher on measures of anxiety and depression when compared to both the non-involved and single form victimization groups (i.e., traditional or cybervictimization alone). These hypotheses were generally supported, suggesting that youth and young adults who experience co-occurring forms of traditional and cyberbullying victimization are at-risk for greater impact on their psychosocial functioning and well-being. These findings are consistent with the emerging research examining multiple forms of victimization (Cross et al., 2015; Gradinger et al., 2009; Hinduja & Patchin, 2018; Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015), as well as research examining the impact of experiencing multiple traumatic or stressful events (Finkelhor, Ormrod, & Turner, 2007; Ford, Wasser, & Connor, 2011; Turner, Finkelhor, & Ormrod, 2010). While these findings are not surprising, they do provide further support for the need to consider co-occurring forms of bullying in future research. Failing to do so may result in researchers underestimating the additive impact of experiencing multiple forms of victimization. Additionally, these findings should further

inform school staff and outpatient providers regarding the relative impact of various bullying experiences on one's well-being. For example, polyvictimized young adults' scores on the Beck Anxiety Inventory fell in the "Severe Anxiety" range, while polyvictimized youth and young adults' scores on the Beck Depression Inventory fell towards the high end of the "Moderate Depression" distribution range when compared to reported clinical norms (Beck & Steer, 1993; Beck, Steer, & Brown, 1996). While school support staff and clinicians should be supportive of any bullied youth, additional clinical attention should be made to youth who experience multiple forms of victimization as these individuals may be experiencing significant levels of distress.

Coping, Victimization, and Internalizing Symptomatology

The goal of the second research question was to determine if participants' perceptions of their coping ability moderated the relationship between victimization experiences and internalizing symptomatology. It was hypothesized that polyvictimized individuals would experience a greater buffering effect on internalizing symptomatology when holding high perceptions of resilient coping, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). Contrary to this hypothesis, the majority of the analyses of moderation were not significant, suggesting that the relationship between reported victimization history and anxiety and depressive symptomatology did not vary according to perceptions of resilient coping. However, it was found that coping scores did significantly moderate the relationship between victimization experiences and anxiety scores for youth. Follow-up comparisons revealed that while changes in anxiety scores across levels of coping perceptions did not differ between the polyvictimized group and both the single

victimization group or the non-victimized group, this relationship did differ for the traditional or cybervictimization only group when compared to the non-victimization group. Further analysis of this significant comparison revealed that among those youth with coping scores below 12.87, non-victimized youth did not differ from traditional or cybervictimization youth on their reported anxious symptoms. However, among those with a resilient coping score of 12.87 or higher, youth who experienced traditional or cybervictimization alone reported more severe anxious symptoms than those who reported experiencing no forms of victimization. These results suggest that as perceptions of coping ability approach moderate to high levels, those who reported no victimization history experienced a more pronounced reduction of their anxiety scores when compared to youth who reported experiencing traditional or cyberbullying victimization alone. Therefore, while both youth who reported single forms of victimization and no victimization experienced lower anxiety scores as their perceptions of coping increased, this buffering effect was strongest for those who denied bullying within the last year. This protective effect for victims of bullying and cyberbullying is consistent with previous research, particularly studies that have examined adaptive cognitive coping strategies (e.g., cognitive reappraisal skills, positive refocusing; Boulton, 2013; Garnefski & Kraaij, 2014; Singh & Bussey, 2010), as these cognitive skills appear to connect closely with the items included on the Brief Resilient Coping Scale (e.g., “Regardless of what happens to me, I believe I can control my reaction to it”). In addition, those with high scores on the Brief Resilient Coping Scale reflect a “belief in their ability to address adverse circumstances and usually succeed at their selected challenges” (Sinclair & Wallston, 2004, p. 99), suggesting that youth with higher scores may perceive themselves

as efficacious in their ability to cope and handle difficult stressors. Perceptions of self-efficacy have been found to play an important role in promoting adaptive coping use, as well as impacting internalizing symptoms (Kokkinos, Panagopoulou, Tsolakidou, & Tzeliou, 2015; Trompeter, Bussey, & Fitzpatrick, 2017). Therefore, while a positive belief of one's efficacy to cope and address difficult stressors may play a protective role for all youth, those youth and young adults who do not experience any form of bullying victimization may experience a heightened benefit from these positive perceptions when compared to their victimized peers.

However, given the paucity of significant interactions, follow-up analyses were conducted to examine the individual contribution of coping perceptions. Consistent with previous research, higher perceptions of resilient coping were associated with decreases in anxiety and depressive symptomology for both youth and young adults when holding victimization experiences and support perceptions constant. Higher scores on the Brief Resilient Coping Scale indicate a tendency to engage in approach-style coping responses that include a tendency to utilize problem-solving and reframe threats as opportunities for growth (Sinclair & Wallston, 2014). These strategies have been found to promote well-being in both youth and young adults (Compas et al., 2017; Connor-Smith & Compas, 2002; Ebata & Moos, 1991; Hampel & Petermann, 2006; Rodríguez-Naranjo & Caño, 2016; Vannucci, Flannery, & McCauley Ohannessian, 2018). In addition, these findings are primarily consistent with the main effects model of coping and support, in that resilient coping appeared to benefit all participants, not just those who reported experiencing the most stress (Cohen & Wills, 1985; Demaray & Malecki, 2011; Wilkinson, Walford, & Espnes, 2000). Thus, while resilient coping should be considered

an important construct to be included in future research on traditional and cyberbullying, these initial findings suggest that the protective effect of resilient coping on internalizing symptoms may not significantly differ for those with diverse victimization experiences, but instead should be considered an important clinical target for all.

Friend Support, Victimization, and Internalizing Symptomology

The goal of the third research question was to determine if participants' perceptions of friend support moderated the relationship between victimization experiences and internalizing symptomology. It was hypothesized that polyvictimized individuals would experience a greater buffering effect on internalizing symptomology when holding high perceptions of friend support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). Contrary to this hypothesis, none of the models reached significance. These findings are somewhat surprising, given previous research that has found differences in the protective effect of peer support and connectedness on internalizing symptoms for victims of both traditional and cyberbullying (Davidson & Demaray, 2007; Kochenderfer-Ladd & Skinner, 2002; McLoughlin et al., 2019; Tanigawa, Furlong, Felix, & Sharkey, 2011). However, previous studies within the traditional and cyberbullying literatures have typically examined the effect of peer support across frequencies of single forms of victimization or bullying roles (i.e., bully, victim, bully-victim). Thus, this study is unique in that the hypothesized buffering effect of peer support perceptions was compared across multiple forms of bullying victimization.

However, as was done with the non-significant coping interactions, analyses were run to examine the independent effect of friend support perceptions on anxiety and depressive symptoms. Youth who reported higher perceptions of friend support experienced less severe anxious and depressive symptomology. A similar effect was also found for young adults' depressive scores. These findings are consistent with previous literature examining the stress-buffering and main effect models of social support (Cohen, 2004; Cohen & Wills, 1985; Galand & Hospe, 2013; Lee et al., 2006; Rueger, Malecki, Pyun, Aycocock, & Coyle, 2016). For example, in their meta-analysis of the social support literature, Rueger and colleagues (2016) found a direct effect for general peer group support and a smaller effect for close friend support on decreased depressive symptoms, but found limited evidence for the stress-buffering model of support. Thus, these findings suggest that high perceptions of friend support may be beneficial regardless of one's victimization experiences. Further examination of the items included on the Friend Support Subscale of the Multidimensional Scale of Perceived Social Support suggest that both perceptions of availability (e.g., "I have friends with whom I can share my joys and sorrows") and effectiveness of support (e.g., "I can talk about my problems with my friends") play an important role in protecting youth and young adults from heightened internalizing difficulties. Thus, clinicians may benefit youth not only by helping them identify available and effective support members, but also by challenging negative assumptions or appraisals of one's ability to benefit from receiving helpful support from friends.

Interestingly, the direct effect of friend support perceptions on anxiety was only significant for youth and not for young adults. This finding was surprising, given the

general perception that friendships and peer support play an important and beneficial role in one's development, particularly during adolescence and young adulthood. However, previous literature has suggested that close friendships can also provide unhelpful resources for youth with internalizing symptoms (Dishion & Tipsord, 2011). For example, co-rumination, or the excessive discussion and re-discussion of stressors and negative emotions among friends, has been associated with increased anxious symptoms (Rose, 2002; Rose, Carlson, & Waller, 2007). However, given the social process of co-ruminating with a friend, this interaction style was also associated with higher ratings of closeness with friends. Therefore, while adolescents may perceive their friendships as close and as a reliable resource to discuss their concerns, this co-rumination style may further exacerbate internalizing symptoms. Additionally, friend support has not consistently been found to serve as a strong protective factor for youth. For example, Rueger and colleagues (2016) found a small effect for close friend support even when compared to support from their peers at large. In addition, Holt and Espelage (2007) found that victimized youth with high levels of perceived friend support also reported the highest ratings of internalizing symptoms. These findings suggest that the protective nature of friend support may be more complex than is generally considered, particularly for those transitioning into young adulthood and experiencing symptoms of anxiety. However, helping youth and young adults connect with supportive peers should still be considered an important goal for clinicians and non-clinicians alike.

Family Support, Victimization, and Internalizing Symptomatology

The goal of the final research question was to determine if participants' perceptions of family support moderated the relationship between victimization

experiences and internalizing symptomology. It was hypothesized that polyvictimized individuals would experience a greater buffering effect on internalizing symptomology when holding high perceptions of family support, when compared to uninvolved individuals and those who are bullied by only one form of bullying (i.e., traditional or cyberbullying only). Again, contrary to this hypothesis, none of the models reached significance. However, follow-up analyses suggested that for both youth and young adults, higher perceptions of family support were associated with lower depressive symptomology. Again, items on the Multidimensional Scale of Perceived Social Support reflect the importance of perceiving one has high levels of available (e.g., “My family is willing to help me make decisions”) and effective support (e.g., “I get the emotional help and support I need from my family”) to minimize depressive symptoms. These findings provide further support for the main effects model of social support (Cohen, 2004; Cohen & Wills, 1985; Galand & Hospe, 2013; Lee et al., 2006; Rueger, Malecki, Pyun, Aycock, & Coyle, 2016), suggesting that youth and young adults may benefit from positive perceptions of family support regardless of their stressful experiences.

However, as was found with perceptions of friend support, several caveats to the general protective nature of family support must be considered. Perceptions of family support were not independently associated with anxious symptomology for either youth or young adults. Again, this finding was surprising, given the documented protective effects of family support on depressive symptoms (Rueger et al., 2016). However, previous findings from the bullying and anxiety literatures may help explain the complex nature of family support. For example, victimized youth often report being unlikely to share their bullying experiences with their parents or other adults (Juvonen & Gross,

2008; Mishna et al., 2009; Smith et al., 2008). These findings mirror the developmental literature in which adolescents begin seeking out peer support more often than they previously did during their childhood years (Collins & Laursen, 2004). While the current study did not measure participants' support preferences or the likelihood in which they would seek out different sources of support, these factors may play an important role in forming perceptions of available support. In addition, parental responses to their children's anxiety symptoms have also been found to play an important role. For example, family accommodation, or the behavioral responses parents make to help their youth avoid or alleviate their anxiety, has been associated with more severe anxious symptoms (Jones, Lebowitz, Marin, & Stark, 2015; Lebowitz et al., 2013). Jones and colleagues (2015) found that family accommodation mediated the relationship between parental and child anxiety symptoms. Thus, while anxious youth may experience support from their family members, this support may consist of accommodations that worsen their symptoms and reinforce avoidant behaviors. As with perceptions of friend support, helping youth and young adults to identify and connect with supportive family members may help protect them from significant depressive symptoms. However, the potential protective impact of these supports for reducing symptoms of anxiety is less clear.

Implications

Implications for Future Research. Based on the findings above, further research is needed on the co-occurrence of traditional and cyberbullying. Specifically, given the well-supported prevalence of polyvictimization and rise in technology use (Cross, Lester, & Barnes, 2015; Kessel Schneider et al., 2012; Kowalski et al., 2013; Lenhart, 2015; Modecki et al., 2014; Perren, Dooley, Shaw, & Cross, 2010; Raskauskas & Stoltz, 2007;

Smith et al., 2008), researchers may be best served by including measures of both traditional and cyberbullying behaviors in all future studies on bullying victimization. In addition, researchers should continue to examine the unique experiences of those involved in both traditional and cyberbullying. The results of this study, as well as previous findings (Cross et al., 2015; Gradinger et al., 2009; Hinduja & Patchin, 2018; Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015), suggest that victims of both forms of bullying may be at-risk for particularly worrisome levels of psychosocial concerns. Future studies should continue to examine the relative impact of polyvictimization over and above single forms of bullying with regards to other psychological, social, and academic outcomes. Researchers should also consider other polyvictimization roles. For example, previous research within the traditional and cyberbullying literatures have found that bully-victims are more likely to experience harm to their well-being when compared to perpetrators or victims alone (Gradinger, Strohmeier, & Spiel, 2009; Kaltiala-Heino, Rimpelä, Pantanen, & Rimpelä, 2000; Kowalski & Limber, 2013; Kumpulainen et al., 1998; McLoughlin, Spears, Taddeo, & Hermens, 2019; Özdemir & Stattin, 2011; Swearer et al., 2001). Thus, bully-victims of both traditional and cyberbullying may be even more at-risk than polyvictims alone.

Future research should also continue to explore potential protective factors for those involved in single or multiple forms of bullying. Previous studies within the traditional and cyberbullying literature bases have typically examined the relative impact of victimization or perpetration on various psychosocial outcomes, as well as the factors that predict involvement in various bullying roles. However, it is critical that future research continues to go beyond this level of study and instead consider what can be done

to mitigate the impact of bullying for youth and young adults. In addition, given the mixed findings within the research on coping with traditional and cyberbullying, future studies should continue to examine how both perceptions of coping and reports of enacting various coping resources impact the relationship between victimization and various psychosocial outcomes. Previous research has repeatedly shown that experiencing victimization does not automatically result in significant psychological or social harm. Therefore, future research must continue examining how youth can best cope with their victimization experiences in order to minimize the impact on their well-being.

Implications for Clinical Practice. This study also has important implications for clinical practice. For example, the current study found that polyvictims reported experiencing significantly greater anxious and depressive symptoms when compared to those who experienced single forms of bullying or no victimization at all. While this finding is likely not surprising for clinicians, mental health practitioners should note the severity of the symptoms reported by victims of co-occurring forms of bullying. The current study found that those who experienced polyvictimization reported depressive and anxious symptoms in the moderate to severe ranges. Thus, clinicians should assess for and be aware of the potential additive impact of polyvictimization experiences for their clients. Not doing so could result in practitioners failing to account for sources of anxiety and depressive symptoms that meet or exceed the clinical range.

In addition, findings from the current study reflect the importance of fostering positive appraisals of coping and support to lessen the severity of internalizing concerns, as these served as protective factors for youth and young adults across all victimization

histories. However, this may be particularly important for victims of co-occurring forms of bullying, given the severity of their symptoms at low levels of perceived coping and support. Therapeutic styles that address maladaptive cognitions, such as cognitive-behavioral therapy, may be particularly effective for victims of bullying, given the negative thoughts and schemas associated with victimization (Calvete, Fernández-González, González-Cabrera, & Gámez-Guadi, 2017; Swearer, Wang, Berry, & Myers, 2014). As mentioned above, items on the Brief Resilient Coping Scale and the Multidimensional Scale of Perceived Social Support reflect positive perceptions of one's ability to access effective support, as well as to their ability to adapt and grow from difficult situations. Cognitive-behavioral interventions may be best suited for helping victims of bullying to challenge and reappraise their negative perceptions of coping and support. For example, using cognitive-behavioral techniques, such as examining the evidence and cognitive reappraisal skills, may help youth and young adults to foster more adaptive challenge appraisals and positive perceptions of their self-efficacy. Doing so may help victimized youth, as these positive appraisals have been linked to more adaptive coping and reductions on internalizing symptomology (Folkman et al., 1986; Kokkinos et al., 2015; Trompeter et al., 2017).

Limitations and Future Research Directions

While the novelty of the current study provides important implications for future research and clinical practice, these findings should be interpreted with the study's limitations in mind. Each limitation is described in detail below.

Targeted Sampling Approach. Data for the current study were collected through a targeted sampling approach by active recruitment of participants through social media

platforms (e.g., Lady Gaga's personal Twitter account), organizations (e.g., Mattel, Life is Good), and the Born This Way Foundation. This sampling approach resulted in a diverse pool of participants who reported a variety of sexual orientations, gender identities, geographic locations, and education levels. However, the sampling approach may have also resulted in over-represented demographic groups that do not reflect accurate levels within the population. For example, only 27% of participants identified as heterosexual. In addition, given the various recruitment sources' affiliations with Lady Gaga, the majority of participants identified as fans of her music. Therefore, given the various unique aspects of the recruited sample, caution should be made when generalizing these findings to other adolescent and young adult populations.

Self-Report Measurement. As with the majority of studies within the bullying literature, the current study used self-report measures to assess all constructs of interest. Bullying is often assessed via self-report measures for number of reasons, including as a means of measuring covert behaviors, as well as due to convenience for the researcher (Furlong, Sharkey, Felix, Tanigawa, & Green, 2010; Underwood & Card, 2013). Others have argued for the use of self-report measures, citing the usefulness of this technique for assessing the prevalence of bullying behaviors (Solberg & Olweus, 2003). However, several limitations of self-report measures should be noted. For example, researchers have questioned the validity of self-report measures as the only form of assessing bullying, noting the moderate associations with peer reports of bullying behaviors (Lee & Cornell, 2010). In addition, authors have noted the potential for youth to under or over-report their bullying histories, thus, questioning the accuracy of their reports (Underwood & Card, 2013). While these concerns should be noted and considered in future bullying

research, the use of self-report measures is a useful method for assessing bullying given that these behaviors are typically covert or difficult to observe. Therefore, future research may benefit from the inclusion of a multi-informant assessment style in which peer, family, and/or teacher reports of bullying are included as a supplement to self-report measures.

Cross-Sectional Analyses. In addition, the current study collected data concurrently. This cross-sectional style of analysis prevented the inclusion of longitudinal analyses of traditional, cyberbullying, and coping. Longitudinal analyses have been proposed by researchers in the bullying literatures to help discern potential developmental trajectories and stability estimates for the various bullying roles (Underwood & Card, 2013). Longitudinal analyses would also help to better understand the relationship between co-occurring forms of bullying with both psychosocial concerns and coping across different timepoints. While a longitudinal approach to data collection and analysis was not possible due to the constraints of the current study, future research would benefit from the inclusion of longitudinal methods.

Coping Measurement. Lastly, the current study only examined perceptions of support and coping. While this assessment method should not be considered a limitation, including additional measures of coping and support may have provided other important findings. For example, research within the traditional and cyberbullying fields have often compared coping preferences or reported coping use across various bullying roles. While the Transactional Model of Stress and Coping makes clear the importance of coping appraisals, youth must still use these primary and secondary appraisals to identify and enact coping behaviors. Given the previous research in support of using approach or

problem-focused coping resources (Compas et al., 2017; Connor-Smith & Compas, 2002; Ebata & Moos, 1991; Hampel & Petermann, 2006; Rodríguez-Naranjo & Caño, 2016; Vannucci, Flannery, & McCauley Ohannessian, 2018), future research would likely benefit from including measures of both coping appraisals and enacted coping resources. Doing so would allow researchers to examine the impact of secondary appraisals on coping resource selection, as well as how various victimization experiences may impact this process.

Conclusions

Victimization through traditional and cyberbullying methods represent significant social stressors that place youth and young adults at-risk for a plethora of psychosocial concerns. Studies within the bullying literatures are beginning to reach a consensus regarding the likelihood of youth experiencing multiple forms of victimization. The current study sought to better understand the unique impact of polyvictimization on youth and young adults' internalizing symptoms. Furthermore, this study sought to go beyond traditional methods of examining psychosocial risk by also examining the potential protective role of coping and support perceptions. Findings from the current study support previous research that suggests that a sizeable number of young people experience co-occurring forms of victimization and that these youth are at an elevated risk for experiencing moderate to severe internalizing symptoms. In addition, the current study found limited support for the stress-buffering models of coping and support, suggesting that holding positive perceptions of resilient coping and support helps protect youth from significant internalizing symptoms regardless of their victimization experiences.

Findings from this study provide numerous implications for future research and clinical practice. For example, the prevalence of polyvictimization suggests that researchers should include measures of both traditional and cyberbullying in future research lest they neglect an important risk factor for significant internalizing symptoms. Additionally, while the current study did not find consistent differences in the buffering effect of positive coping appraisals across victimization experiences, clinicians and researchers alike should consider the importance of fostering these positive appraisals in polyvictimized youth, given the severity of their reported internalizing symptoms. These findings represent important contributions to the traditional and cyberbullying literatures. While these findings should be replicated in future research, this study underscores the importance of holding positive perceptions of one's ability to cope and access support from important relationships. Therefore, research and clinical practice that seeks to assist youth in accessing the protective nature of adaptive appraisals is encouraged to best help all youth cope with victimization and other difficult life events.

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Table 1

Frequency Counts of Victimization Experiences By Gender Identity, Sexual Orientation, and Age

<u>Gender Identity</u>	Victimization Group			
	No Victimization (<i>n</i> = 1,830)	Traditional Victimization Only (<i>n</i> = 895)	Cyberbullying Victimization Only (<i>n</i> = 175)	Polyvictimization (<i>n</i> = 560)
Male	40.4% (<i>n</i> = 739)	44.5% (<i>n</i> = 398)	52.0% (<i>n</i> = 91)	38.8% (<i>n</i> = 217)
Female	53.3% (<i>n</i> = 976)	44.0% (<i>n</i> = 394)	38.9% (<i>n</i> = 68)	45.0% (<i>n</i> = 252)
Transgender	1.8% (<i>n</i> = 33)	2.8% (<i>n</i> = 25)	3.4% (<i>n</i> = 6)	5.5% (<i>n</i> = 31)
Pangender, Genderqueer	2.7% (<i>n</i> = 49)	6.0% (<i>n</i> = 54)	2.3% (<i>n</i> = 4)	6.4% (<i>n</i> = 36)
Other, Didn't report	1.8% (<i>n</i> = 33)	2.7% (<i>n</i> = 24)	3.4% (<i>n</i> = 6)	4.3% (<i>n</i> = 24)
<u>Sexual Orientation</u>	No Victimization (<i>n</i> = 1,830)	Traditional Victimization Only (<i>n</i> = 895)	Cyberbullying Victimization Only (<i>n</i> = 175)	Polyvictimization (<i>n</i> = 560)
Heterosexual	29.1% (<i>n</i> = 533)	24.6% (<i>n</i> = 220)	23.4% (<i>n</i> = 41)	24.1% (<i>n</i> = 135)
Gay or Lesbian	35.6% (<i>n</i> = 651)	37.2% (<i>n</i> = 333)	40.0% (<i>n</i> = 70)	33.9% (<i>n</i> = 190)
Pansexual, Bisexual, or Queer	26.7% (<i>n</i> = 488)	29.4% (<i>n</i> = 263)	28.0% (<i>n</i> = 49)	32.1% (<i>n</i> = 180)
Questioning	4.3% (<i>n</i> = 79)	5.4% (<i>n</i> = 48)	2.9% (<i>n</i> = 5)	5.4% (<i>n</i> = 30)
Other, Didn't report	4.3% (<i>n</i> = 79)	3.4% (<i>n</i> = 31)	5.7% (<i>n</i> = 10)	4.5% (<i>n</i> = 25)
<u>Age</u>	No Victimization (<i>n</i> = 1,830)	Traditional Victimization Only (<i>n</i> = 895)	Cyberbullying Victimization Only (<i>n</i> = 175)	Polyvictimization (<i>n</i> = 560)
Youth (13-18)	21.6% (<i>n</i> = 395)	31.2% (<i>n</i> = 279)	24.0% (<i>n</i> = 42)	35.7% (<i>n</i> = 200)
Young Adults (19-25)	78.4% (<i>n</i> = 1435)	68.8% (<i>n</i> = 616)	76.0% (<i>n</i> = 133)	64.3% (<i>n</i> = 360)

Table 2

ANOVA Describing the Mean Anxiety Scores Across Victimization Status for Youth and Young Adults.

		Victimization Status (Youth Ages 13-18)									
		Non-Victimized (<i>n</i> = 395)		Traditional Victim (<i>n</i> = 279)		Cybervictim (<i>n</i> = 42)		Polyvictim (<i>n</i> = 200)		ANOVA (<i>n</i> = 916)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Anxiety Score (MASC)		56.66	18.81	61.47	18.43	63.12	16.45	67.51	19.67	15.229	< .001

		Victimization Status (Young Adults Ages 19-25)									
		Non-Victimized (<i>n</i> = 1,435)		Traditional Victim (<i>n</i> = 616)		Cybervictim (<i>n</i> = 133)		Polyvictim (<i>n</i> = 360)		ANOVA (<i>n</i> = 2,544)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Welch's F</i>	<i>p</i>
Anxiety Score (BAI)		16.57	12.12	23.51	13.67	18.98	12.39	28.63	15.03	89.70	< .001

Table 3

ANOVA Describing the Mean Depression Scores Across Victimization Status for Youth and Young Adults.

		Victimization Status (Youth Ages 13-18)								ANOVA	
		Non-Victimized (<i>n</i> = 395)		Traditional Victim (<i>n</i> = 279)		Cybervictim (<i>n</i> = 42)		Polyvictim (<i>n</i> = 200)		<i>(n</i> = 916)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Welch's F</i>	<i>p</i>
Depression Score (BDI)		17.09	13.26	23.71	14.35	25.40	12.72	28.17	15.47	30.29	< .001

		Victimization Status (Young Adults Ages 19-25)								ANOVA	
		Non-Victimized (<i>n</i> = 1,435)		Traditional Victim (<i>n</i> = 616)		Cybervictim (<i>n</i> = 133)		Polyvictim (<i>n</i> = 360)		<i>(n</i> = 2,544)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Welch's F</i>	<i>p</i>
Depression Score (BDI)		16.57	12.80	22.77	14.15	18.85	12.82	26.21	14.59	60.854	< .001

Table 4

Correlations Between Traditional Victimization, Cyberbullying Victimization, Coping, Perceptions of Friend Support, Perceptions of Family Support, Anxiety, and Depression.

	1	2	3	4	5	6	7	8
1. MASC	---	.582**	---	-.240**	-.166**	-.244**	.205**	.254**
2. BDI	.582**	---	.612**	-.369**	-.408**	-.374**	.307**	.288**
3. BAI	---	.612**	---	-.204**	-.231**	-.177**	.412**	.327**
4. Friend Support	-.240**	-.369**	-.204**	---	.330**	.266**	-.198**	-.166**
5. Family Support	-.166**	-.408**	-.231**	.330**	---	.237**	-.189**	-.178**
6. Coping	-.244**	-.374**	-.177**	.266**	.237**	---	.053	-.014
7. Cyberbullying Victimization Total	.205**	.307**	.412**	-.198**	-.189**	.053	---	.495**
8. Traditional Victimization Total	.254**	.288**	.327**	-.166**	-.178**	-.014	.495**	---

** $p \leq .001$

Table 5

Regression Results for Youths' MASC Scores

Variable	<i>b</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Cybervictimization Total	.427	.278	.113	1.537	.126
Traditional Victimization Total	.283	.111	.190	2.544	.012
Coping	-1.156	.392	-.208	-2.951	.004
Friend Support	-.496	.222	-.157	-2.235	.027
Family Support	-.049	.199	-.018	-.245	.806

Table 6

Regression Results for Youths' BDI Scores

Variable	<i>b</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Cybervictimization Total	.493	.176	.172	2.808	.006
Traditional Victimization Total	.158	.070	.139	2.246	.026
Coping	-1.256	.248	-.296	-5.060	<.001
Friend Support	-.428	.140	-.178	-3.047	.003
Family Support	-.645	.126	-.307	-5.122	<.001

Table 7

Regression Results for Young Adults' BAI Scores

Variable	<i>b</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Cybervictimization Total	.856	.146	.335	5.874	<.001
Traditional Victimization Total	.133	.056	.130	2.355	.019
Coping	-.736	.206	-.178	-3.571	<.001
Friend Support	-.033	.122	-.014	-.269	.788
Family Support	-.179	.100	-.091	-1.788	.075

Table 8

Regression Results for Young Adults' BDI Scores

Variable	<i>b</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Cybervictimization Total	.496	.138	.193	3.593	<.001
Traditional Victimization Total	.122	.053	.118	2.274	.024
Coping	-1.167	.195	-.281	-5.979	<.001
Friend Support	-.358	.116	-.153	-3.102	.002
Family Support	-.395	.095	-.200	-4.160	<.001

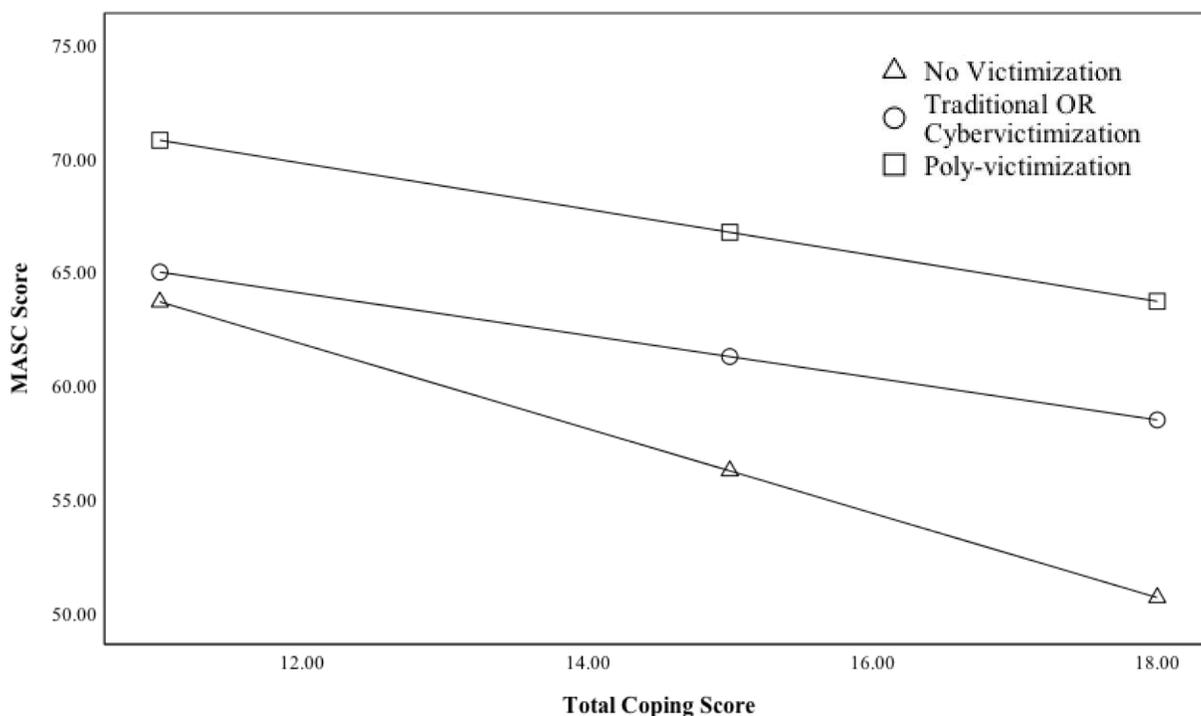


Figure 1. Youth anxiety scores across coping perception scores for each of the victimization groups. A significant difference was found between the no victimization and the single victimization group (i.e., Traditional or Cybervictimization) in that among youth who scored 12.87 or higher on perceptions of coping, youth with single victimization experiences (i.e., Traditional or Cybervictimization) reported a significantly higher severity of anxiety symptoms when compared to non-victimized youth.

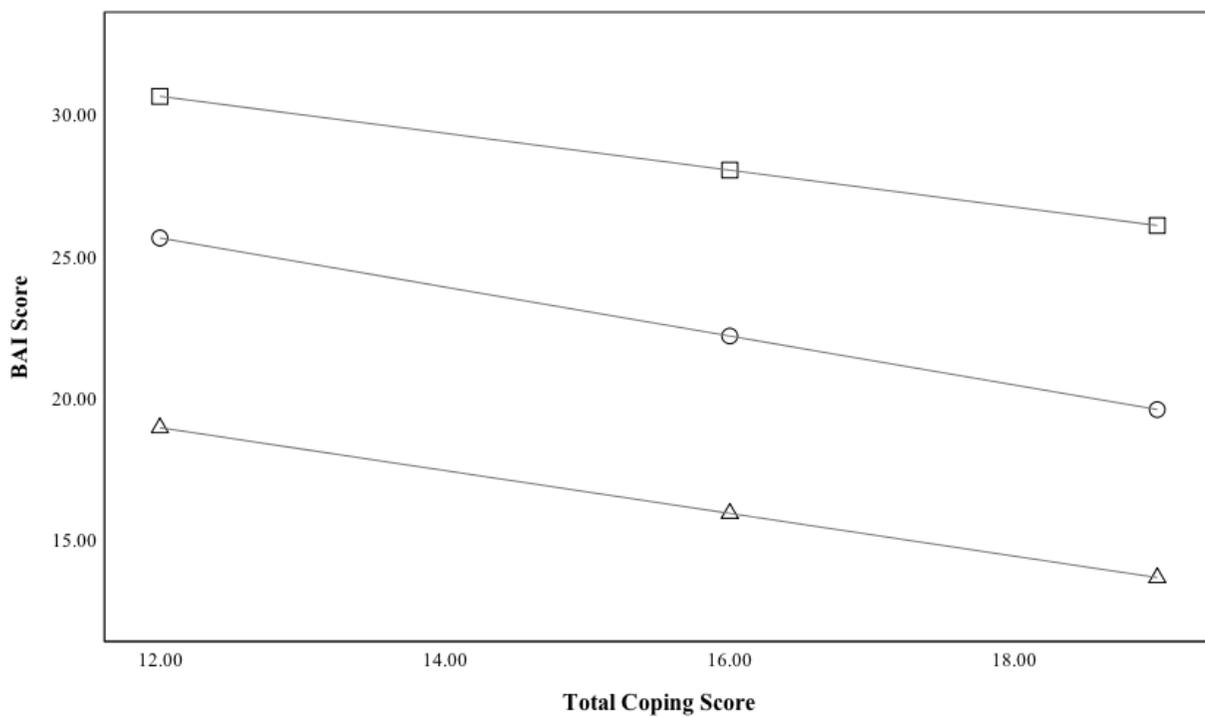


Figure 2. Young adult anxiety scores across coping perception scores for each of the victimization groups. No significant difference was found for the three groups.

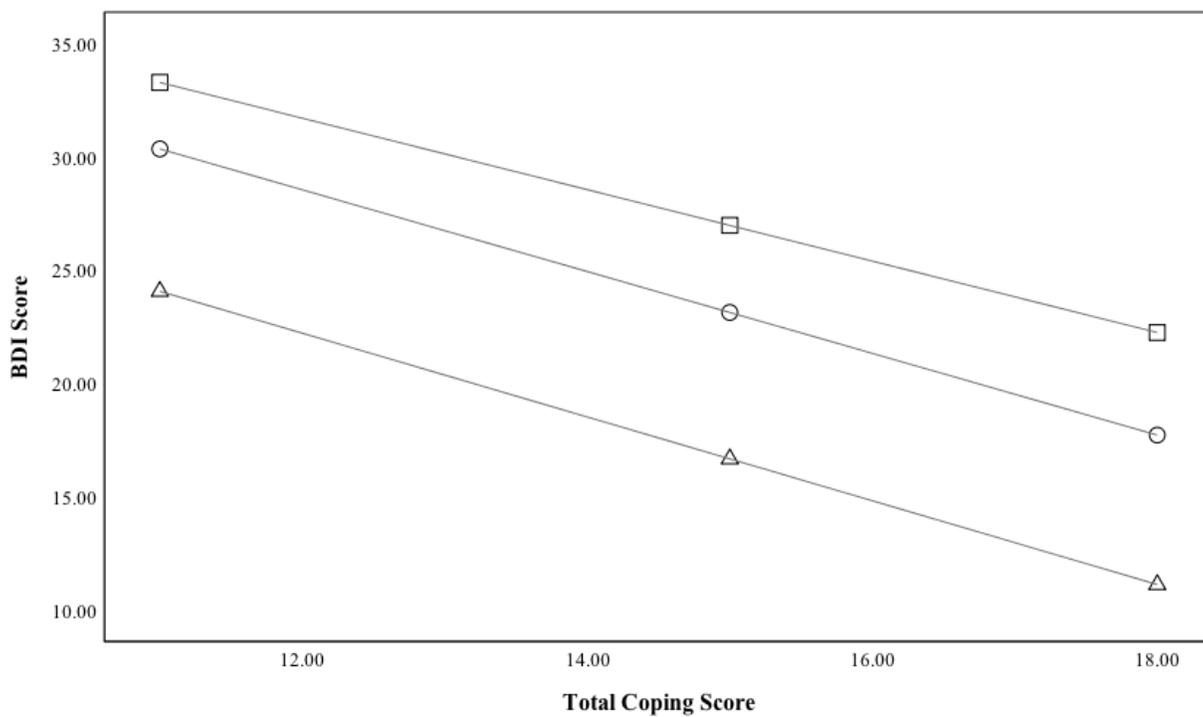


Figure 3. Youth depression scores across coping perception scores for each of the victimization groups. No significant difference was found for the three groups.

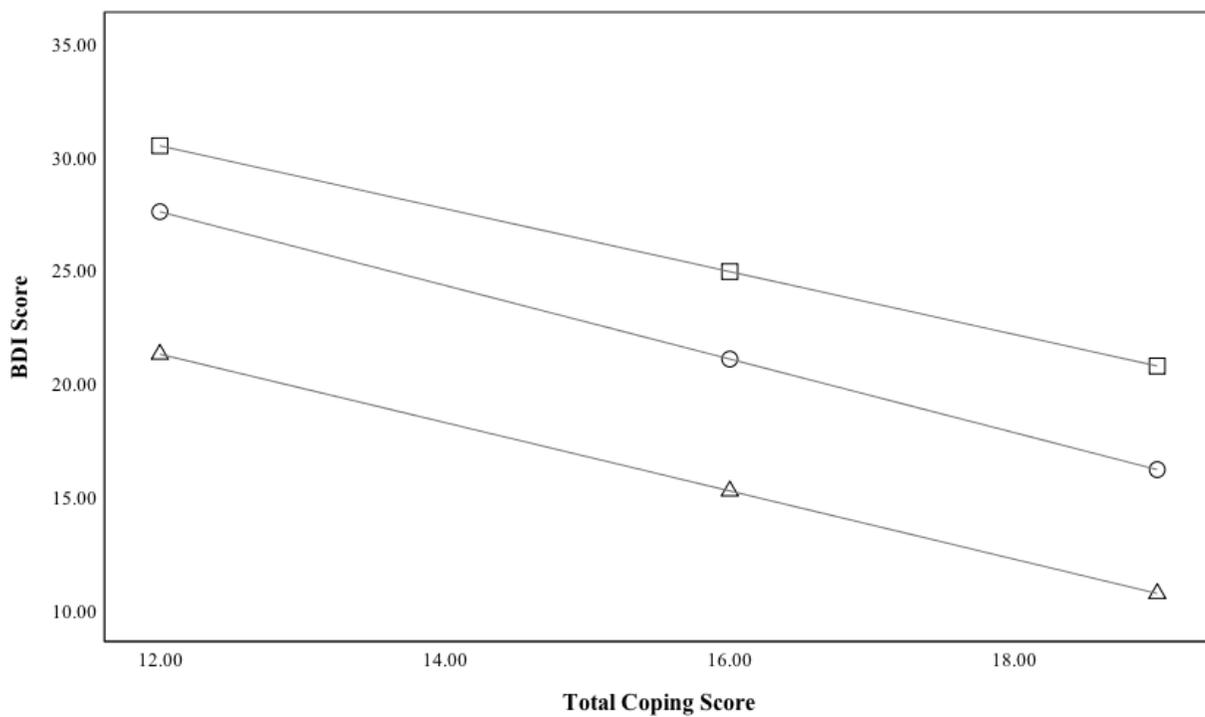


Figure 4. Young adult depression scores across coping perception scores for each of the victimization groups. No significant difference was found for the three groups.

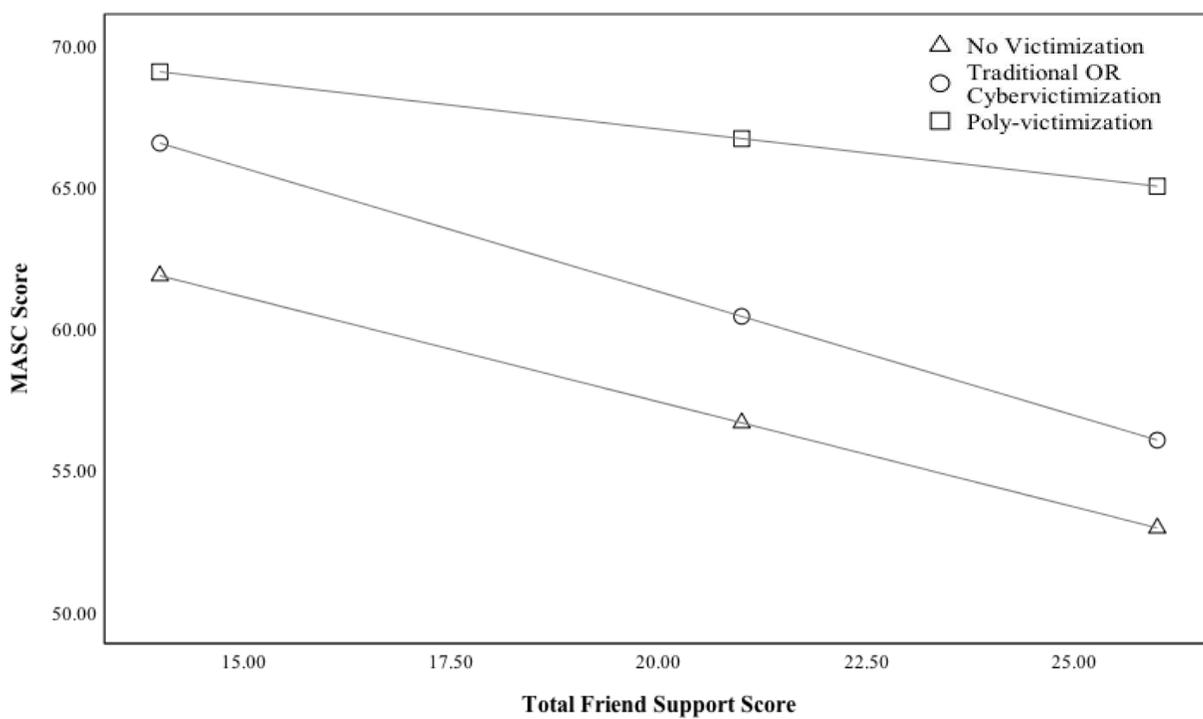


Figure 5. Youth anxiety scores across perception of friend support scores for each of the victimization groups. No significant difference was found for the three groups.

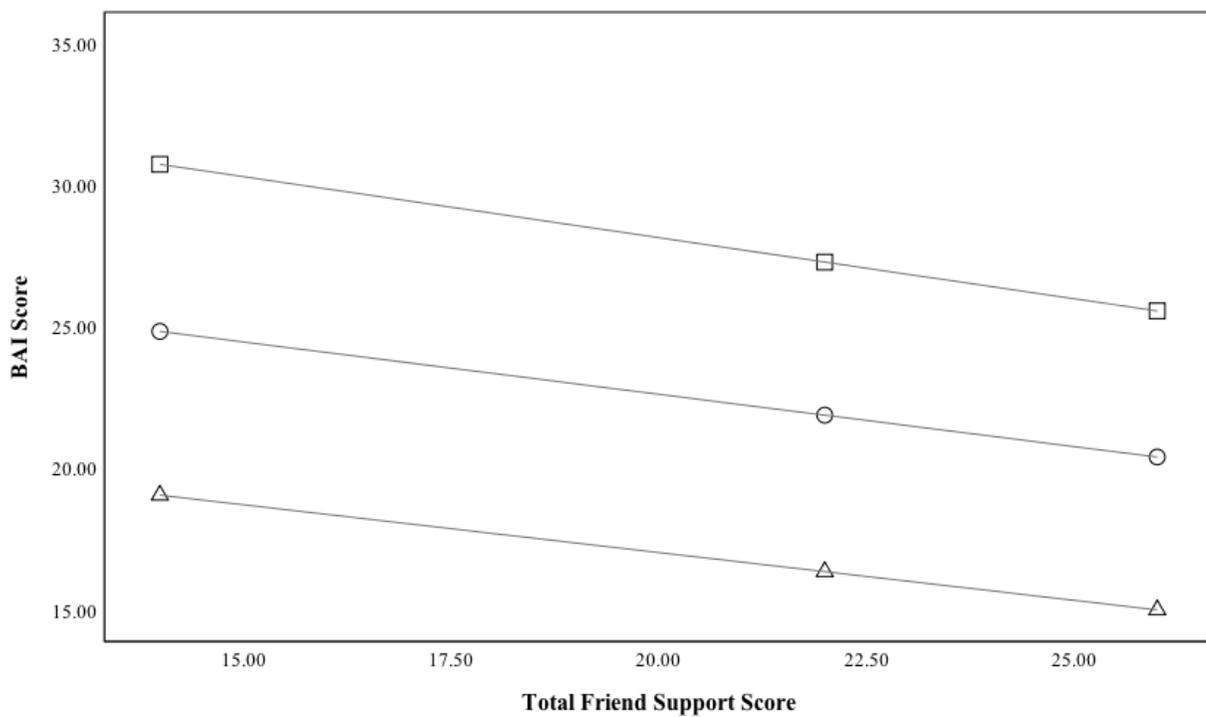


Figure 6. Young adult anxiety scores across perception of friend support scores for each of the victimization groups. No significant difference was found for the three groups.

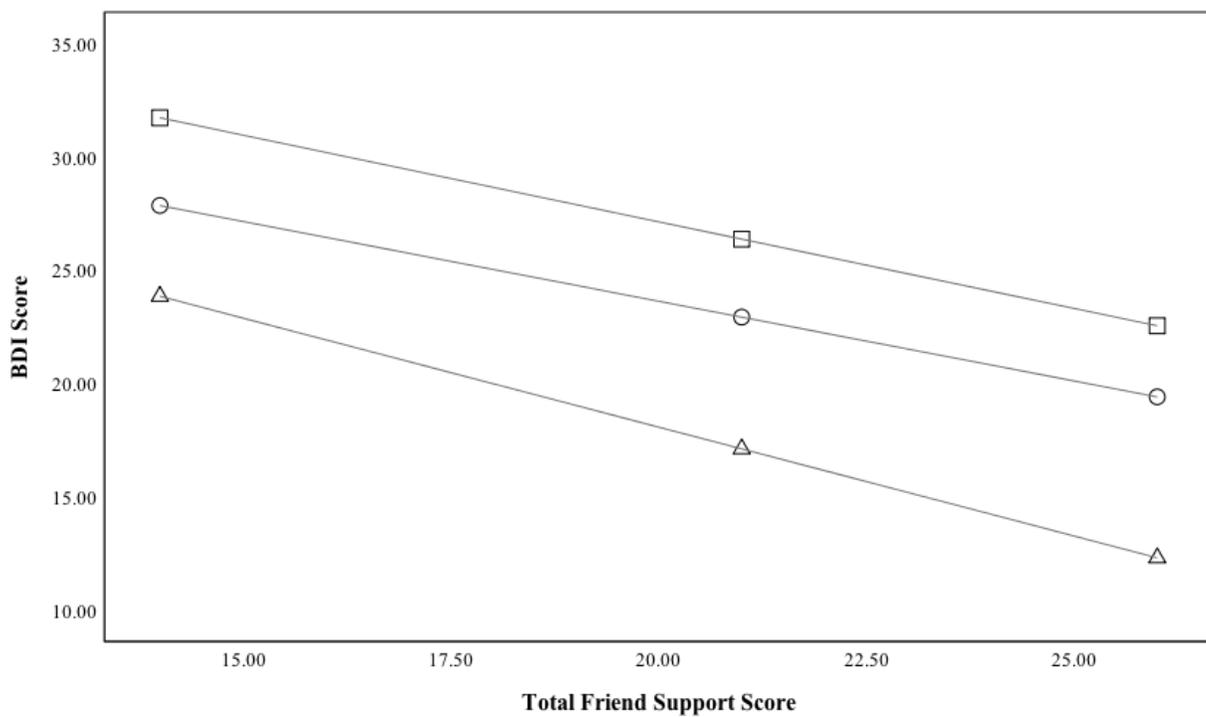


Figure 7. Youth depression scores across perception of friend support scores for each of the victimization groups. No significant difference was found for the three groups.

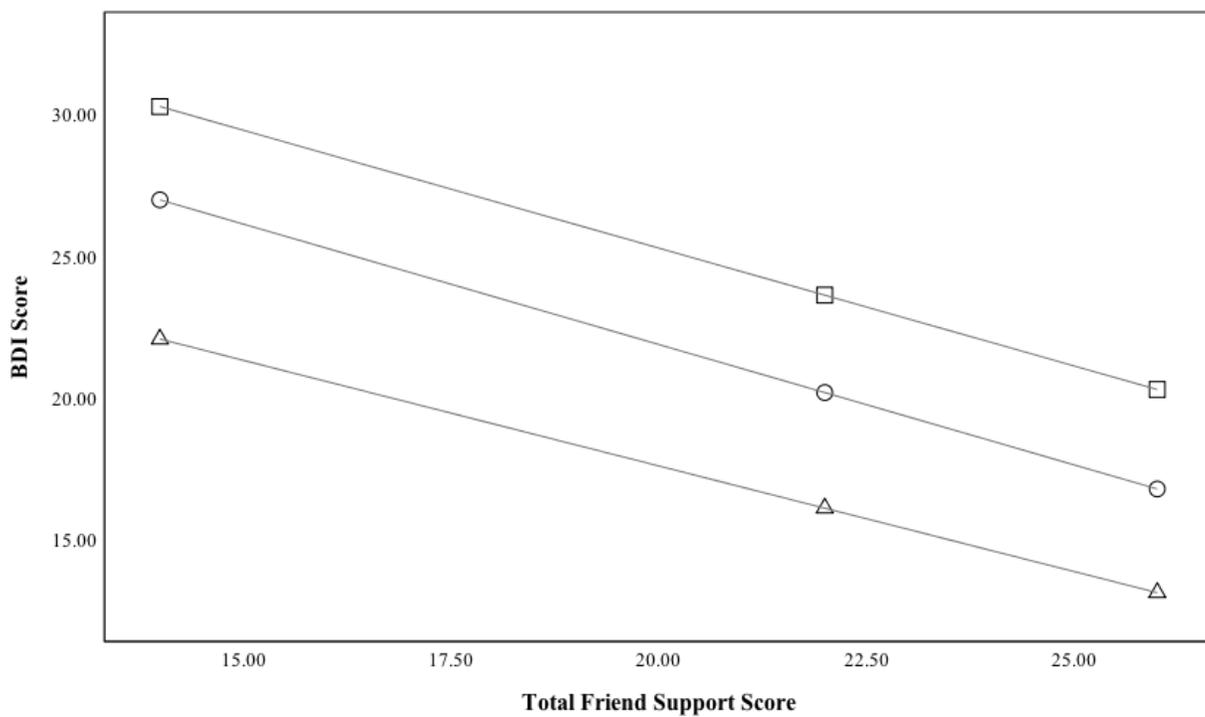


Figure 8. Young adult depression scores across perception of friend support scores for each of the victimization groups. No significant difference was found for the three groups.

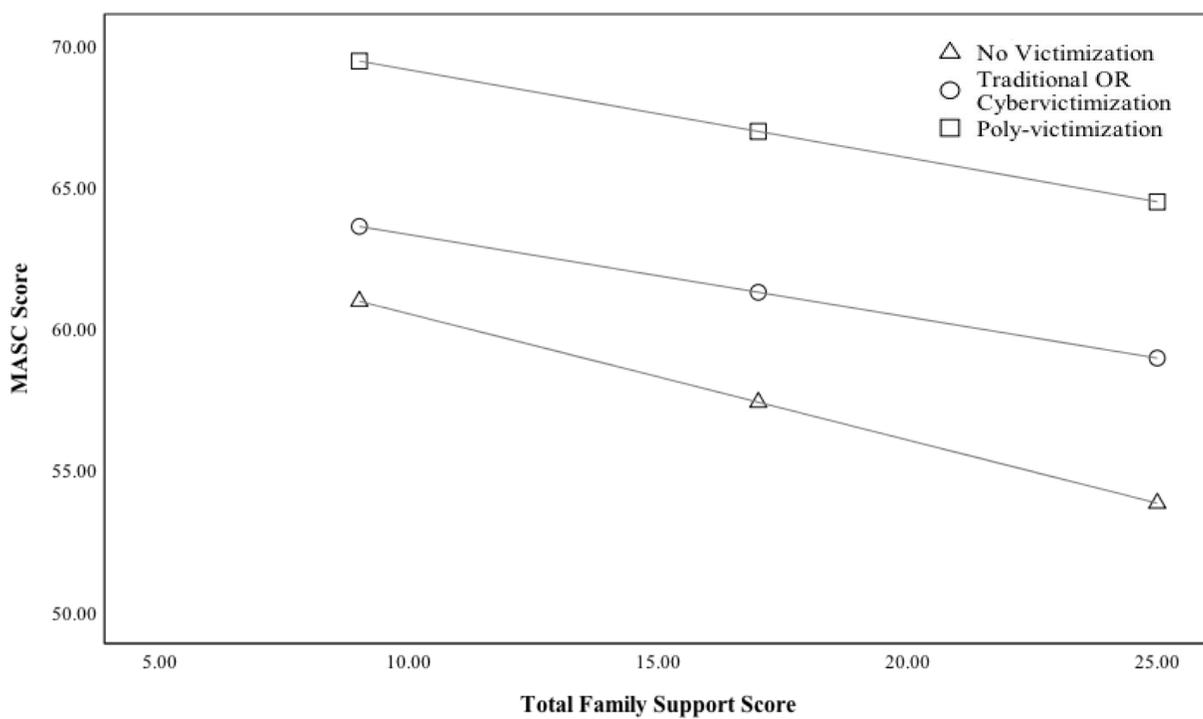


Figure 9. Youth anxiety scores across perception of family support scores for each of the victimization groups. No significant difference was found for the three groups.

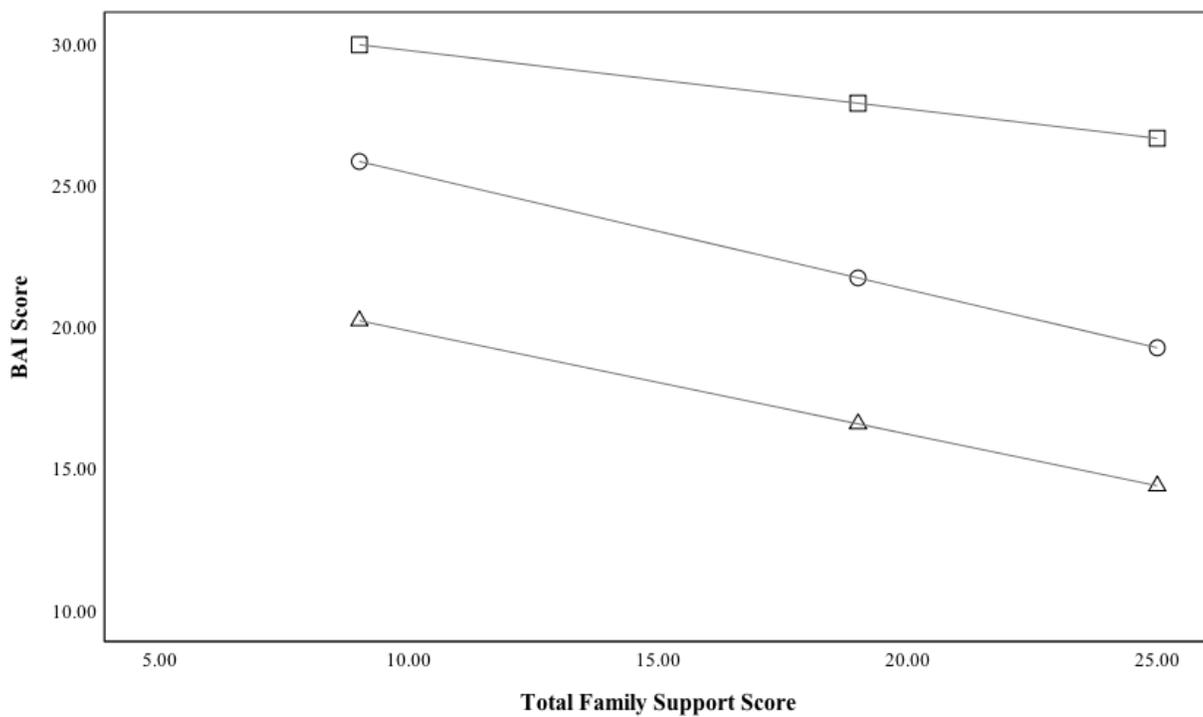


Figure 10. Young adult anxiety scores across perception of family support scores for each of the victimization groups. No significant difference was found for the three groups.

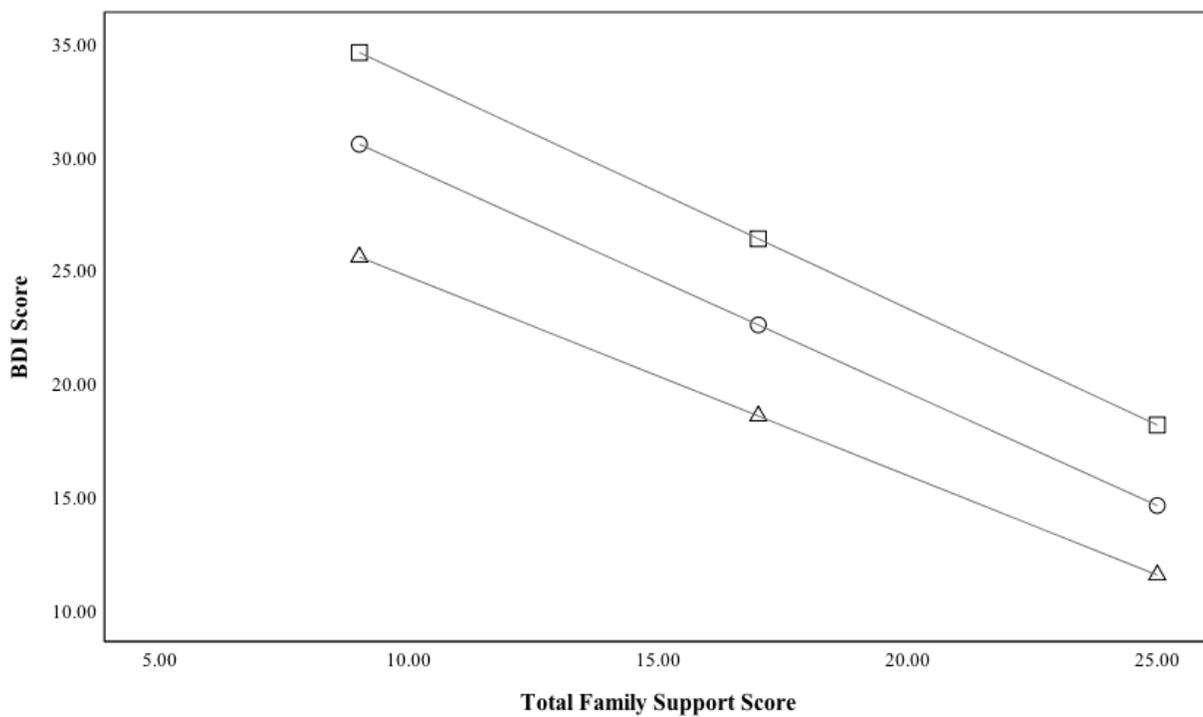


Figure 11. Youth depression scores across perception of family support scores for each of the victimization groups. No significant difference was found for the three groups.

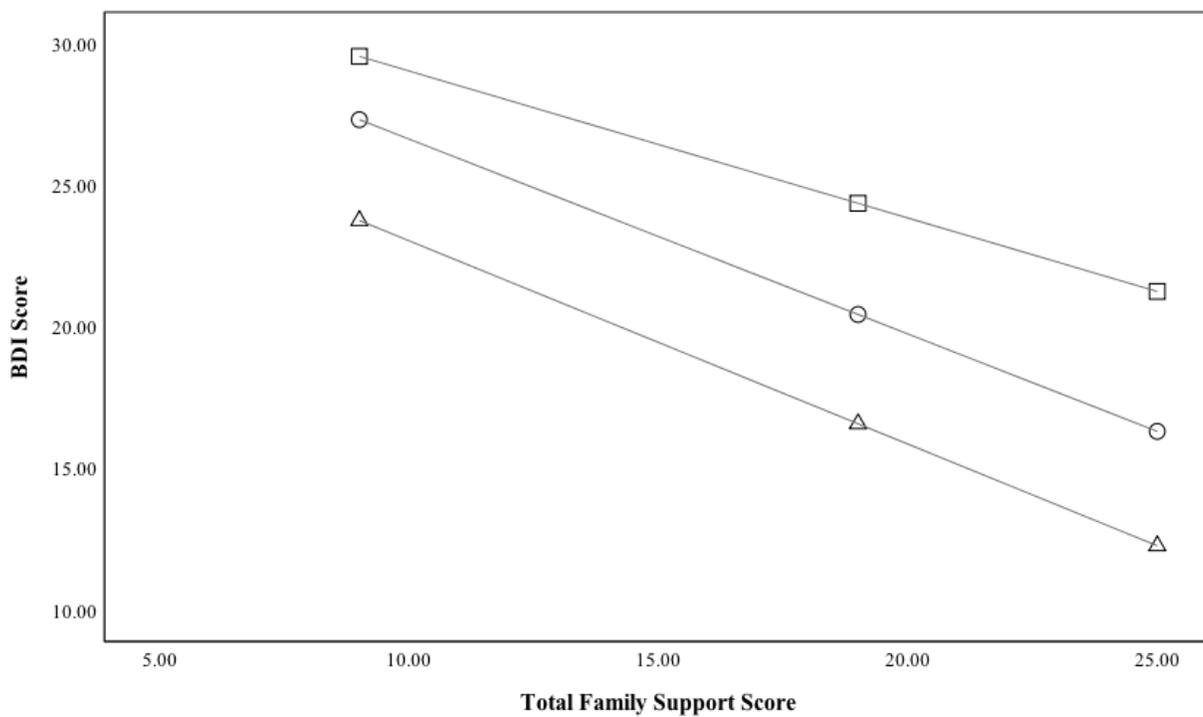


Figure 12. Young adult depression scores across perception of family support scores for each of the victimization groups. No significant difference was found for the three groups.

Appendix A.

Demographic Items

1. What is your age?

*Open ended response

2. In what country do you live?

*Qualtrics-generated drop list of countries

3. D6 What is your current grade or level of schooling?

6

7

8

9

10

11

12

College

Graduate School, Law School, Medical School or other post-graduate school

4. The following questions are about your gender and/or sex. When a person's sex and gender do not match, they might think of themselves as transgender. Sex is what a person is born. Gender is how a person feels. Which one response best describes you?

- I am male
 - I am female
 - I am transgender and identify as a boy or man
 - I am transgender and identify as a girl or woman
 - I am transgender and identify in some other way
 - I am genderqueer
 - I am pangender
 - I prefer not to disclose
 - Other (please specify)
-

5. What is your race?

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Pacific Islander
- White
- Multiple (2 or more races)
- Other _____

6. What is your sexual orientation?

- Straight
 - Lesbian
 - Gay
 - Bisexual
 - Queer
 - Pansexual
 - Questioning
 - I prefer not to disclose
 - Other (please specify)
-

Appendix B.**Bullying Involvement: Verbal and Physical Bullying Scale**

Bullying happens when someone hurts or scares another person on purpose and the person being bullied has a hard time defending himself or herself. Usually, bullying happens over and over and includes: (1) punching, shoving or other acts that hurt people physically; (2) spreading bad rumors about people; (3) keeping certain people out of a group; (4) teasing people in a mean way; and (5) getting certain people to “gang up” on others.

1. Have you been bullied this past year?

Yes

No

2.

V2_1	I was called bad names.
V2_2	I was made fun of.
V2_3	People said they would do bad things to me.
V2_4	People played jokes on me.
V2_5	People wouldn't let me be a part of their group.
V2_6	People broke my things.
V2_7	People attacked me.
V2_8	Nobody would talk to me.
V2_9	People wrote bad things about me.
V2_10	People said mean things behind my back.
V2_11	People pushed or shoved me.
V2_12.	People posted mean things or made things up online about me (i.e., Facebook, Instagram, Twitter, etc.)
V2_13	People called me gay (or another homophobic name)

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Agree

6 = Slightly Disagree

Appendix C.

Cyberbullying Involvement: Cyberbullying Questionnaire

The following questions will ask about your experiences of cyberbullying. Definition of **cyberbullying**: Bullying is unwanted, aggressive, repetitive behavior that involves a real or perceived power imbalance. Cyberbullying is bullying that takes place using electronic technology. Electronic technology includes devices and equipment such as cell phones, computers, and tablets as well as communication tools including social media sites and applications, text messages, chat, online video games, and websites.

Examples of cyberbullying include:

- Mean text messages or emails
- Rumors sent by email or posted on social media sites
- Embarrassing pictures, videos, websites, or fake profiles

1. Have you been cyberbullied this past year?

Yes

No

2. CV5 In the past 12 months, how often were you cyberbullied by...

CV5_1	Mean text messages (making threats and comments)
CV5_2	Pictures/videos recorded on a cell phone
CV5_3	Silent or threatening phone calls
CV5_4	Rude or mean emails
CV5_5	Others posting something mean on your social media site or application (e.g., Facebook, Twitter, Instagram, Snapchat)
CV5_6	Others saying mean things or not letting you join/play while playing online games (e.g., Xbox Live)
CV5_7	Insults while Instant Messaging (e.g., AIM, WhatsApp, Facebook Messenger, Google Hangout; Please list where)
CV5_8	Mean or rude comments in a chat room, messaging board, or blog posts
CV5_9 Other (Please list)	Other (Please list)

Recode as:

0= Never

1= Rarely

2= Occasionally

3= A Great Deal

Appendix D.

Email Correspondence Containing Permission to Adapt the Cyberbullying Questionnaire from Original Author, Dr. Peter K. Smith

Peter Smith

April 29, 2015 at 1:27 AM

PS

Re: Univ. of Nebraska Student Dissertation Question

To: myers.zach12@gmail.com

Yes you are welcome to do that with due acknowledgement. Peter Smith

Sent from Samsung Mobile

----- Original message -----

From: Zach Myers <myers.zach12@gmail.com>

Date:

To: Peter Smith <p.smith@gold.ac.uk>

Cc: Susan M Swearer <sswearernapolitano1@unl.edu>

Subject: Re: Univ. of Nebraska Student Dissertation Question

Hi Dr. Smith,

Thank you so much for these resources. It is greatly appreciated. I was hoping to use the updated Cyberbullying Questionnaire and was wondering if I had your permission to modify it for my dissertation? Thank you again!

Best,

Zach

Zach Myers, M.A.

School Psychology Doctoral Student

Myers.zach@huskers.unl.edu

Nebraska Center for Research on Children, Youth, Families, & Schools

216 Mabel Lee Hall

University of Nebraska-Lincoln

Cyfs.unl.edu

Empowerment Initiative Research Lab: empowerment.unl.edu

Appendix E.

Get Help Now Webpage on the Born This Way Foundation Website

BORN THIS WAY FOUNDATION
EMPOWERING YOUTH ★ INSPIRING BRAVERY

[GET HELP NOW](#) [DONATE TODAY](#)

Get Help

Use the hotlines and help resources below to find help lines and chat services for the issue you're facing. If you or someone you know is in immediate danger, call emergency services (911 in the U.S., 999 in the U.K.)

- + Body Image Resources
- + Drug + Alcohol Issues
- + Sexual Abuse
- + LGBT + Questioning
- + Suicide Prevention

[SHARE](#)

BORN THIS WAY FOUNDATION
EMPOWERING YOUTH ★ INSPIRING BRAVERY

[GET HELP NOW](#) [DONATE TODAY](#)

- + Dating Abuse & Domestic Abuse
- + PTSD
- + Bullying, Abuse + Depression
- + Chronic Pain

[SHARE](#)

To add a resource to Get Help Now, please email info@bornthisway.foundation.

BORN THIS WAY FOUNDATION
EMPOWERING YOUTH ★ INSPIRING BRAVERY

[f](#)
[t](#)
[i](#)
LITTLE MONSTERS |
 [Share Your Story](#) |
 [Join the Born Brave Nation](#)

Appendix F.

Original University of Nebraska-Lincoln IRB Approval Form



Official Approval Letter for IRB project #13052

December 21, 2012

Susan Swearer Napolitano

Department of Educational Psychology

40 TEAC, UNL, 68588-0345

John Creswell

Department of Educational Psychology

241 TEAC, UNL, 68588-0345

IRB Number: 20121213052EP

Project ID: 13052

Project Title: The Born Brave Experience: Analysis and Evaluation

Dear Susan:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46). Your project has been approved as an Expedited protocol, category 6 & 7.

Dates of EP Review: 11/04/2012 & 12/16/2012

You are authorized to implement this study as of the Date of Final Approval: 12/21/2012. This approval is Valid Until: 12/20/2013.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;

- * Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

Julia Torquati, Ph.D.

Chair for the IRB



University of Nebraska-Lincoln Office of Research and Economic Development
nugrant.unl.edu

NUGrant

Appendix G.

Phase III Born Brave Experiences Study Continuing Review Approval University of Nebraska-Lincoln IRB



Official Approval Letter for IRB project #13052

December 7, 2015

Susan M Swearer
Department of Educational Psychology
40 TEAC, UNL, 68588-0345

Michelle Howell Smith
Nebraska Center for Research on Children, Youth, Families and Schools
MABL 216D, UNL, 68588-0235

IRB Number: 20121213052EP
Project ID: 13052
Project Title: The Born Brave Experience: Analysis and Evaluation

Dear Susan M:

This is to officially notify you of the approval of your project's Continuing Review by the Institutional Review Board for the Protection of Human Subjects. It is the committee's opinion that you have provided adequate safeguards for the rights and welfare of the subjects in this study based on the information provided. Your proposal is in compliance with DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Date of review and approval: 12/07/2015

1. Your stamped and approved informed consent form has been uploaded to NUgrant. Please use this form to make copies to distribute to participants. If changes need to be made, please submit the revised informed consent form to the IRB for approval prior to using it.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;

* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;

- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

It is the responsibility of the principal investigator to provide the Board with a review and update of the research project each year the project is in effect. This approval is valid until 12/06/2016.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Rachel Wenzl, CIP
for the IRB



University of Nebraska-Lincoln Office of Research and Economic Development
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Appendix H.

Parental Consent Form: Participants Ages 13-18



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Educational Psychology

Parental/Guardian Consent Form

The Born Brave Experiences Research Study

Dear Parent or Guardian:

Your child is invited to participate in this research study. The following information is provided in order to help you make an informed decision whether or not you want to allow your child to participate. You are being asked to complete this consent form because your child is less than 19 years of age. If you have any questions please do not hesitate to ask. The long-term goal of this research project is to better understand the factors that support youth empowerment and engagement, and to develop effective mental health interventions for youth and young adults. Additionally, we hope to gain a better understanding of the psychological and social functioning of youth who participate in the Born This Way Foundation experiences. Overall, this project will help answer the question, “What do youth need in order to create a kinder and braver world?”

You and your son or daughter are eligible to participate in this study because your child is between 13 and 18 years old and has accessed the link on the Born This Way Foundation website. The research project will take place using your computer or tablet and accessing the Youth Survey link on <http://bornthisway.foundation/>.

This study will take approximately 30-40 minutes of your child’s time, and will be completed one time during 2015. Your child will be asked to complete several questionnaires that are randomly selected from a larger battery of questionnaires. Specifically, he or she may be asked questions about his or her demographics (e.g., grades, gender, age), experiences with the Born This Way Foundation activities, school climate, school engagement, empathy, peer and family support, involvement in bullying/victimization, cognitions, hope for the future, self-concept, sexual and gender identity acceptance, and internalizing issues, such as anxiety and depression. Additionally, your son or daughter may be selected to be invited (via phone, e-mail, or Twitter) to participate in an in-person or on-the-phone interview. If your son or daughter is interested, he or she will be asked to provide your contact information and your consent will be obtained prior to your child participating in any interviews.

Your child may experience mild discomfort when completing the questionnaires (for example, it is possible that this will cause psychological discomfort for some participants who are experiencing problems with bullying or who feel at risk for psychological or health problems). If problems should arise, please click on the “Get Help Now” link on the Born This Way Foundation website: <http://bornthiswayfoundation.org/help>.



Parent/Guardian's Initials _____

However, it is possible that participants may appreciate being asked about these experiences. Also, answering questions about their experiences often helps people process them.

Any information obtained during this study that could identify you and your son or daughter will be kept strictly confidential. Any identifiable, sensitive data will be replaced with a numerical value to protect the anonymity of your child. Your child's e-mail address will be stored separately in a secure location in the event that they are chosen to be invited to participate in an interview. The information obtained in this study may be published in scientific journals, books, or presented at scientific meetings, but your child's identity will be kept strictly confidential and responses will be aggregated. Study records will be kept for seven years on a password-protected website (i.e., Qualtrics) or secure computer file, which will only be accessed by the investigators of this study.

If your child chooses to participate, he or she will be entered into raffles for Lady Gaga merchandise (to be determined by Haus of Gaga). If your child wins, he or she will receive the prize at the completion of data collection (approximately December 2014). Odds of winning are based on the number of participants.

Your child's participation is completely voluntary. You are free to decide not to enroll your child in this study or to withdraw at any time without adversely affecting your child's or your relationship with the investigators, the University of Nebraska-Lincoln, or The Born This Way Foundation. Your decision will not result in any loss of benefits to which your child is otherwise entitled.

Your child's rights as a research participant have been explained to you. If you decide to participate in this study, please sign this form and have your child complete the remaining online forms. If you have any questions about this study, please contact Dr. Susan Swearer at (402) 472-1741. If you have any questions concerning your or your child's rights as a research participant that have not been answered by the investigator, or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board (UNL IRB), telephone (402) 472-6965.

DOCUMENTATION OF INFORMED CONSENT

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR ELECTRONIC SIGNATURE CERTIFIES THAT YOU HAVE DECIDED TO ALLOW YOUR CHILD TO PARTICIPATE HAVING READ AND UNDERSTOOD THE INFORMATION PRESENTED. YOU MAY PRINT OUT A COPY OF THIS FORM FOR YOUR RECORDS.

SIGNATURE OF PARENT/GUARDIAN

DATE

PRINT YOUR CHILD'S NAME

Susan M. Swearer, Ph.D.
Michelle Howell Smith, Ph.D.

Office: 402-472-1741
Office: 402-472-2298

Appendix I.

Youth Assent Form: Participants Ages 13-18



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Educational Psychology

Youth Assent Form

The Born Brave Experiences Research Study

Dear Born Brave Experiences Participant:

You are invited to participate in this research study. The following information is provided in order to help you make an informed decision whether or not you want to participate. You are being asked to complete this assent form because you are less than 19 years of age. If you have any questions please do not hesitate to ask. The long-term goal of this research project is to better understand the factors that support youth empowerment and engagement, and to develop effective mental health interventions for youth and young adults. Also, we hope to gain a better understanding of the psychological and social functioning of youth who participate in the Born This Way Foundation experiences. Overall, this project will help answer the question, “What do youth need in order to create a kinder and braver world?”

You are eligible to participate in this study because you are between 13 and 18 years old and has accessed the link on the Born This Way Foundation website. The research project will take place using your computer or tablet and accessing the Youth Survey link on <http://bornthisway.foundation/>.

This study will take approximately 30-40 minutes of your time, and will be completed one time during 2015. You will be asked to complete several questionnaires that are randomly selected from a larger battery of questionnaires. You might be asked questions about your demographics (e.g., grades, gender, age), experiences with the Born This Way Foundation activities, school climate, school engagement, empathy, peer and family support, involvement in bullying/victimization, cognitions, hope for the future, self-concept, sexual and gender identity acceptance, and internalizing issues, such as anxiety and depression. In a final phase of the study, you may be invited (via phone, e-mail, or Twitter) to participate in an in-person or over-the-phone interview. If you are interested, you will be asked to provide your contact information and your parent or guardian’s consent will be obtained prior to you participating the interview phase of the study.

You may experience mild discomfort when completing the questionnaires (for example, it is possible that this will cause psychological discomfort for some participants who are experiencing problems with bullying or who feel at risk for psychological or health problems). If problems should arise, please click on the “Get Help Now” link on the Born This Way Foundation website: <http://bornthisway.foundation/get-help-now>.



Participant's initials _____

However, it is possible that you may appreciate being asked about these experiences. Also, answering questions about your experiences often helps people process them.

Any information obtained during this study that could identify you will be kept strictly confidential. Any identifiable, sensitive data will be replaced with a numerical value to protect your anonymity. Your e-mail address will be stored temporarily in a secure location in the event that you are chosen to be invited to participate in an interview. The information obtained in this study may be published in scientific journals, books, or presented at scientific meetings, but your identity will be kept strictly confidential and responses will be aggregated. Study records will be kept for seven years on a password-protected website (i.e., Qualtrics) or secure computer file, which will only be accessed by the investigators of this study.

If you choose to participate, you will be entered into raffles for Lady Gaga merchandise (to be determined by Haus of Gaga). If you win, you will receive the prize at the completion of data collection (approximately December 2015). Odds of winning are based on the number of participants.

Your participation is completely voluntary. You are free to decide not to enroll in this study or to withdraw at any time without adversely affecting your relationship with the investigators, the University of Nebraska-Lincoln, or The Born This Way Foundation. Your decision will not result in any loss of benefits to which you is otherwise entitled.

Your rights as a research participant have been explained to you. If you decide to participate in this study, please sign this form and complete the remaining online forms. If you have any questions about this study, please contact Dr. Susan Swearer at (402) 472-1741. If you have any questions concerning your rights as a research participant that have not been answered by the investigator, or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board (UNL IRB), telephone (402) 472-6965.

DOCUMENTATION OF INFORMED CONSENT

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR ELECTRONIC SIGNATURE CERTIFIES THAT YOU HAVE DECIDED TO PARTICIPATE HAVING READ AND UNDERSTOOD THE INFORMATION PRESENTED. YOU MAY PRINT OUT A COPY OF THIS FORM FOR YOUR RECORDS.

SIGNATURE OF PARTICIPANT

DATE

PRINT YOUR NAME

IDENTIFICATION OF PRIMARY INVESTIGATOR(S)

Susan M. Swearer, Ph.D.
Michelle Howell Smith, Ph.D.

Office: 402-472-1741
Office: 402-472-2298

Appendix J.

Young Adult Consent Form: Participants Ages 19-25



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Educational Psychology

Young Adult Consent Form

The Born Brave Experiences Research Study

Dear Born Brave Experiences Participant:

You are invited to participate in this research study. The following information is provided in order to help you make an informed decision whether or not you want to participate. You are being asked to complete this consent form because you are over 18 years of age. If you have any questions please do not hesitate to ask. The long-term goal of this research project is to better understand the factors that support individual empowerment and engagement, and to develop effective mental health interventions for youth and young adults. Also, we hope to gain a better understanding of the psychological and social functioning of individuals who participate in the Born This Way Foundation experiences. Overall, this project will help answer the question, “What do people need in order to create a kinder and braver world?”

You are eligible to participate in this study because you are between 19 and 25 years old and have accessed the link on the Born This Way Foundation website. The research project will take place using your computer or tablet and accessing the Young Adult Survey link on <http://bornthisway.foundation/>.

This study will take approximately 30-40 minutes of your time, and will be completed one time during 2015. You will be asked to complete several questionnaires that are randomly selected from a larger battery of questionnaires. You might be asked questions about your demographics (e.g., grades, gender, age), experiences with the Born This Way Foundation activities, school/work climate, school/work engagement, empathy, peer and family support, involvement in bullying/victimization, cognitions, hope for the future, self-concept, sexual and gender identity acceptance, and internalizing issues, such as anxiety and depression. In a follow-up phase of the study, you may be invited (via phone, e-mail, or Twitter) to participate in an in-person or over-the-phone interview. If you are interested, you will be asked to provide your contact information so researchers can contact you for the interview phase of the study.

You may experience mild discomfort when completing the questionnaires (for example, it is possible that this will cause psychological discomfort for some participants who are experiencing problems with bullying or who feel at risk for psychological or health problems). If problems should arise, please click on the “Get Help Now” link on the Born This Way Foundation website: <http://bornthisway.foundation/get-help-now>.



Participant's initials _____

However, it is possible that you may appreciate being asked about these experiences. Also, answering questions about your experiences often helps people process them.

Any information obtained during this study that could identify you will be kept strictly confidential. Any identifiable, sensitive data will be replaced with a numerical value to protect your anonymity. Your e-mail address will be stored temporarily in a secure location in the event that you are chosen to be invited to participate in an interview. The information obtained in this study may be published in scientific journals, books, or presented at scientific meetings, but your identity will be kept strictly confidential and responses will be aggregated. Study records will be kept for seven years on a password-protected website (i.e., Qualtrics) or secure computer file, which will only be accessed by the investigators of this study.

If you choose to participate, you will be entered into raffles for Lady Gaga merchandise (determined by Haus of Gaga). If you win, you will receive the prize at the completion of data collection (approximately December 2015). Odds of winning are based on the number of participants.

Your participation is completely voluntary. You are free to decide not to enroll in this study or to withdraw at any time without adversely affecting your relationship with the investigators, the University of Nebraska-Lincoln, or The Born This Way Foundation. Your decision will not result in any loss of benefits to which you is otherwise entitled.

Your rights as a research participant have been explained to you. If you decide to participate in this study, please sign this form and complete the remaining online forms. If you have any questions about this study, please contact Dr. Susan Swearer at (402) 472-1741. If you have any questions concerning your rights as a research participant that have not been answered by the investigator, or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board (UNL IRB), telephone (402) 472-6965.

DOCUMENTATION OF INFORMED CONSENT

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR ELECTRONIC SIGNATURE CERTIFIES THAT YOU HAVE DECIDED TO PARTICIPATE HAVING READ AND UNDERSTOOD THE INFORMATION PRESENTED. YOU MAY PRINT OUT A COPY OF THIS FORM FOR YOUR RECORDS.

SIGNATURE OF PARTICIPANT

DATE

PRINT YOUR NAME