

**The Lifetime Bully: Investigating the Relationship Between Adolescent Bullying  
and Depression in Early Adulthood**

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### **Abstract**

The current study investigated the relationship between adolescent bullying behaviors and early adulthood depression. 305 education majors were given the Zung (1965) self-rating depression scale and a bullying survey containing four descriptions of bullying behavior (Victim, Bully, Non-involved, Victim/Bully) from which they were asked to select the one which best described their behavior between grades 7-9. Using ANOVA, significant differences were found between groups: the bully-victims had the highest mean depression score (N=29; 39), then the victims (N=41; 38.8), and lastly the non-involved group (N=233; 34.5). The bully-victims revealed the most severe depression. Implications for school professionals are discussed.

## **The Lifetime Bully: Investigating the Relationship Between Adolescent Bullying and Depression in Early Adulthood**

The age of believing that bullying is just a part of growing up and calls for no special recognition continues to become disputed with every bullying related school shooting and student suicide (Bulach, Fulbright, & Williams, 2003; Kim, Koh, & Leventhal, 2005; Unnever, 2005). The school counselor is frequently the professional who uses their relationships with the students to help in such times of trauma, either by counseling or referring to community resources. Whether or not it is a time of crisis, students, parents, teachers, and administrators may come to the guidance counselor for information on bullying interventions; which emphasizes the need for the guidance counselor to be up to date on best practice research. Olweus (1993), a pioneer in the research movement on bullying, estimated that one out of every seven adolescents have either bullied or been a victim of bullying. Furthermore, a study from the U.S. Department of Education confirmed this high prevalence rate by illustrating that 77 percent of middle and high school students have had some experience with bullying during their years in school (Garbarino & deLara, 2003). These studies demonstrate the relevance of bullying behaviors in the lives of students and thus, the life of the school counselor. Among the long list of responsibilities that the school counselor has, educating or intervening in school violence may be one which saves lives. Before an analysis and review of the literature in this field can be made, however, it is important to define bullying categories utilized in the literature: bullies, victims, and bully-victims.

Although some variation exists within the studies, the general definition of bullying which is widely used is defined by Nansel, Overpeck, Pilla, Ruan, Simons-

Morton, and Scheidt (2001) as a: “specific type of aggression in which (1) the behavior is intended to harm or disturb, (2) the behavior occurs repeatedly over time, and (3) there is an imbalance of power, with a more powerful person or group attacking a less powerful one” (Nansel et al., 2001, p. 2085). This definition by Nansel et al. (2001) is employed by at least four other researchers reviewed for this study and it effectively acknowledges the importance of relationship disturbance in bullying.

The imbalance of power in bullying relationships can be manifested through direct bullying, such as kicking or hitting (Seals & Young, 2003). Direct bullying is what many people first visualize when they conceive bullying; they imagine the boy who is tripped in the hallway. Indirect bullying, by contrast, is characterized by secretive victimization, such as spreading rumors or purposely excluding others (Marini, Dane, Bosacki, & YLC-CURA, 2006). Indirect bullying, which is less obvious by nature, cannot always be detected by teachers or adults and therefore many people do not associate this verbal or psychological victimization with bullying. Since insecurity and sadness are effects of bullying that may be easier to hide than bruises or scratches, identification by adults can be difficult. Even when the emotional or psychological effects of bullying become apparent to adults, the victims are given simple pieces of advice such as “stand up for yourself”. As will be discussed later, simplistic explanations or interventions may not be appropriate for the complexity and severity of the bullying relationship.

Victims of bullying tend to be described as passive and/or submissive people who lose the power struggle; whereas, bullies exert power, either directly or indirectly, over another and therefore gain power (Unnever, 2005). A term emerging in the literature is the “Bully-Victim”, which describes the adolescent who has experience

being victimized but also has bullied others (Marini et al., 2006). In terms of their place in the power struggle, Unnever (2005) and Mynard and Joseph (1997) both state that the socialization patterns of bully-victims are more similar to bullies than victims. Increasing attention is being paid to this type of student since research is indicating that their bullying experiences are unique (Unnever, 2005) and because they are adopting the psychosocial maladjustments of both victims *and* bullies (Ivarsson, Broberg, Arvidsson, & Gillberg, 2005; Marini et al., 2006). Overall, the experience of being a bully-victim is a complex one. Research suggests that these adolescents are carrying the highest and most difficult symptom load (Ivarsson et al., 2005) because they take on the dual role of bully and victim and also the respective symptoms of both. That is, a Bully-Victim may experience depression or anxiety, common in victims, along with “angry-externalizing coping” (Marini et al., 2006), common in bullies (Ivarsson et al., 2005).

### **Review of Literature**

This study investigates the relationship between adolescent bullying behaviors and depression in early-adulthood is investigated. Bullying status (victim, bully, bully-victim) is a variable that is evaluated in relation to long-term depression to see if there are any themes appearing in the bullying literature. However, bullying research is a growing field, there are still inconsistencies and methodological issues which make it difficult to generalize results across studies. Differences in the categories and/or variables used in the studies detract from supporting the data. After a careful evaluation of the research, it is hypothesized that the bully-victims will demonstrate the most depressive symptoms in early-adulthood because some of the literature is showing that

they are experiencing the most maladjustment in adolescence (Ivarsson et al., 2005; Nansel, et al., 2001). Theoretical explanations for the development of depression in terms of peer victimization and adolescence are also included.

### **Bullying**

For many years, bullying was considered to be an unavoidable experience that every child has gone through and was not given a great deal of attention. Due to lacking knowledge about its severity, it was not until the 1970s and 1980s that researchers, such as Olweus (1978), began systematically researching bullying as a psychosocial dilemma in Scandinavia (Olweus, 2003). Because of Olweus' pioneering efforts to research peer aggression, and due to the impact of recent outbreaks of school shootings in the United States, there has been an increase in the attention paid to school victimization (Spade, 2007). However, since most bullying research has origins in Scandinavia, a majority of the literature available was conducted there and in other European countries. Articles produced in other countries easily outnumbered those from researchers in the United States. The number in the United States is rising each year though.

The development of bullying as a research topic and a psychosocial crisis has taken many years to mature but now is becoming an area of interest. The increase in attention paid to bullying reflects the uprising hypothesis that the psychosocial effects can be severe. As researchers continue to investigate the association between bullies, victims, bully-victims, and their symptoms, this area of study grows and refines its knowledge base of how adolescents are affected by bullying relationships.

## **Psychosocial Effects of Bullying**

There is now a great body of research validating the wide range of psychosocial maladjustments due to bullying including, but not limited to, suicidal ideation (Kim, Koh, & Leventhal, 2005), anxiety (Swearer, Song, Cary, Eagle, & Mickelson, 2001), lowered self-esteem (Spade, 2007), and depression (Hawker & Boulton, 2000; Ivarsson et al., 2005; Schäfer et al., 2004; Sweeting, Young, West, & Der, 2006). These internalizing psychological effects, common to victims, also have externalizing psychological counterparts which are common to bullies, such as delinquency and aggression (Ivarsson et al., 2005). There is a great deal of literature on bullies and their aggressive tendencies (Bernstein & Watson, 1997) and therefore, this study will not cover this area of research. Overall, the relationship between victimization and depression has a great deal of research supporting it but requires further analysis, so the psychosocial effects will be discussed at length.

According to the American Academy of Family Physicians, major depression affects three to five percent of adolescents and children and negatively impacts their development, school performance, and peer or family relationships (Bhatia & Bhatia, 2007). Stressful life events are also a risk factor for depression which is important for this study as bullying can be extremely stressful for adolescents (Bhatia & Bhatia, 2007). A landmark meta-analysis by Hawker and Boulton (2000) on bullying and psychosocial maladjustment revealed that victimization is most strongly related to depression and less so to loneliness and anxiety. It is not surprising that many of these symptoms could interfere with peer relationships either as a bully, victim, or Bully-victim. Feelings of worthlessness and fatigue, for example, could make the depressed

adolescent an easy target for bullying. Conversely, a student with the same symptoms who instead responds to intimidation with angry-externalizing coping could become the standard bully-victim.

Knowing the general criteria for depression is important when evaluating the instruments used in research to assess depressive symptoms because often the chosen assessment is content validated by a version of the *Diagnostic and Statistical Manual of Mental Disorders*; such as the Children's Depression Inventory validated by Kovacs (1992) (see Seals & Young, 2003; Sourander et al., 2000, Swearer et al., 2001). The American Psychiatric Association (APA) (2000) defines a Major Depressive Episode as a period that lasts for at least two months and five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. Furthermore, the symptoms include: a depressed mood (such as persistent sadness or emptiness and differs from overall depression) which may be demonstrated as irritability in children and adolescents, 2) a significant weight loss or weight gain, which in children and adolescents could mean a disruption in expected developmental weight gains, 3) excessive sleeping or insomnia nearly every day, which could affect many aspects of life including school attendance, 4) an agitated or slowed down movement that is noticeable to others, 5) a fatigue that persists almost daily, 6) feeling worthless or inappropriately guilty, 7) a diminished ability to concentrate or make decisions, and 9) recurrent thoughts of death or suicide. Additionally, these symptoms should cause distress in social environments including school or home and



are not due to a medical condition or grief over a loss (American Psychiatric Association, 2000).

The negative influence of depression on various aspects of an adolescent's life including academic problems, peer difficulties, and overall poor psychosocial functioning has been investigated by researchers (see Bhatia & Bhatia, 2007; Hammen et al., 2008). Due to an adolescent's developmental level, it is assumed that they can describe or acknowledge their depressive symptoms accurately on self-report questionnaires ( i.e. answer questions about their own functioning). There seems to be an agreement between Hankin and Abramson (2001) and Bhatia and Bhatia (2007) on the adolescent's ability to accurately complete self-reports. Hankin and Abramson explain that children can accurately describe their own depressive symptoms according to Kazdin (1994) and that "children may be the best informants about their own affect after age 9 when they can recognize and identify different emotions" (Hankin & Abramson 2001, pg. 774). Kazdin (1994) examined the concordance among adolescent self-reports and the teacher's or parent's reports on the student's depression and found moderate agreement. In a study by Kovacs (1992) which evaluated the validity of the CDI, he concluded that self-report measures are appropriate for children 7 to 17 years; two years earlier than Harter (1999) proposed.

A longitudinal study by Hammen et al. (2008) investigated the relationship between early onset (by age 15) and late onset (after 15) age of depression and its effect on depressive tendencies in later life. They administered depression inventories to adolescents at age 15 and then later at 20 to determine what age they developed depression and how the age of onset affected their functioning and likelihood of

continued depressive symptoms. A total of 706 participants completed the surveys at both ages. Researchers wanted to investigate the variability within depressed populations and selected a cohort of adolescents who came from mothers with varying post-partum depression; a cohort with a higher likelihood of developing depression. Chi-square statistics revealed a marginally significant ( $p = .059$ ) connection between maternal post-partum depression and depressed children at age 15 or after. Therefore selecting this specific cohort for the study did not necessarily give them an advantage of more depressed participants

Besides being evaluated at two different ages, the participants were compared on cognitive and interpersonal variables. The factors which were relevant to bullying were the interpersonal functioning in peer, school, and family contexts; those which Bhatia and Bhatia (2007) also stated are often affected by depression. Researchers used cognitive-interpersonal models of depression including the one proposed by Hankin and Abramson (2001). To measure depression at age 15, Hammen et al. (2008) used the Schedule for Affective Disorders and Schizophrenia for School-Age Children (see Orvaschal, 1995) which was given to the child and also the mother in order to evaluate her child. At age 20, the Structured Clinical Interview for DSM-IV (see Spitzer, Gibbon, & Williams, 1995) was used to assess functioning over the years since testing at age 15. Five groups were formed that described different ages of onset and duration of depression. The "early onset" group developed depression before 15 but did not experience depression when tested at age 20. The "late onset" group experienced depression at age 20 but not at age 15. The "recurrent" group experienced early onset

depression at age 15 which continued to age 20 or later. Lastly, the “non-depressed” group served as the control as they never experienced depression at 15 or 20.

After the two assessments were administered, the “recurrent” group (i.e. early onset with recurrence after 15) had the highest percentage of participants (74%). The “recurrent” group differed from other types (early onset, later onset, non-depressed) in their poor adolescent social functioning and psychological adjustment. These adolescents had more severe and suicidal depression than the other groups on the study with worse outcomes at age 20.

Hankin and Abramson (2001) concluded that those who have a major depressive episode before 15 with reoccurrence by age 20, may be in a high risk group for continued depression. Furthermore, early-onset youth were interpersonally-impaired by the age of 15 exhibiting marked poor coping skills and often leading to social disruption, possibly triggering depression. These poor social skills apply to the model of depression proposed by Hankin and Abramson (2001) which described negative social events as leading to initial depressive affect. If this is the case, then developing depression in relation to bullying in adolescence is even more problematic due to the long-term repercussions. This background information on the proposed development of depression provides a context for analyzing research involving bullying and depression. A study by Ivarsson et al. (2005) investigated several important variables including depression and bullying status which can be evaluated with the adolescent development of depression in mind.

## **Bullying-Depression Hypotheses**

Out of the increasing number of studies done on bullying and depression, several different explanations for this relationship have been proposed. A common theme in the literature on bullying is the disturbance in the adolescent's socio-cognitive development (Bernstein & Watson, 1997; Olweus, 1993b; Shafer et al., 2004). Bernstein and Watson (1997) concur with Olweus (1993b) and proposed that the negative evaluation from peers becomes so frequent and distressing that it is internalized and becomes part of the person. Therefore, the situational feelings of anxiety, loneliness, and/or self-deprecating thoughts extend beyond bullying situations and absorb into the person's inner world. Similarly, Shafer et al. (2004) add that the general perceptions which people have about themselves and others may negatively change and then generalize to an overall lower self-esteem and a fearful, or disappointed, view of relationships. In terms of the socio-cognitive process through which adolescents are navigating, Shafer et al. (2004) synthesize and concur with the theory of internalizing experiences and how that affects development. Shafer et al. (2004) stated, "The development of social expectations, which represent internalized beliefs about the self and expectancies about partner's availability as a source of comfort and support, is an important mechanism in this process" (p. 380).

Instead of focusing on the present internalization of social disturbances as a major determinant in the bullying-depression relationship, the role of intergenerational continuity (Farrington, 1993) is also proposed as an explanation. Farrington (1993), cited in Bernstein and Watson (1997) found that 32-year-old fathers who were victimized in adolescence were significantly more likely to have children who were

victims. Farrington (1993) explained that other variables of intergenerational continuity, such as passing down anxiety to children can combine with the likelihood of being bullied to be predictive of victimized children . Thus, if a father was plagued with depression and social anxiety during adolescence and faced a great deal of bullying himself, it is likely that if he passes these characteristics onto his children then they will face similar victimization. However, the explanation which attributes depression to the internalizing of negative events is more widely accepted by researchers (Bernstein & Watson, 1997; Olweus, 1993b; Shafer et al., 2004).

### **Long-term Depression after Victimization**

A study by Olweus (1993b) researched the long-term effects of bullying in males and how these negative evaluations take over the person's social environment so that they then become "cemented" within them. It is not surprising that such deep integration of harmful beliefs could continue to affect psychosocial functioning long after bullying has ended. The research by Olweus (1993b) used various scales to assess the psychosocial functioning of a sample of 24 men at 23 years of age who self identified as victims (n=17) or bullies (n=17) in grades 6 or 9. These participants had taken an assessment in grade 9, and information was available from grade 6 as well. The assessment scales at age 23 included areas, such as social anxiety, worry, aggression, frustration tolerance, and extraversion, along with retrospective questionnaires which assessed their experience with direct and indirect bullying. Participants also completed a self-esteem questionnaire derived from the Rosenberg Self-Esteem Scale (See Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995) and depression items from the Beck Depression Inventory (Bennet et al., 1997). The complete Rosenberg Self-Esteem

Scale consists of 10 items which assess general global self-esteem. Overall, the scales used in Olweus' (1993b) study had satisfactory alpha reliability with most ranging from .80-.95.

Introductory findings on the continuity of victimization in childhood and early adulthood lead to later support of conclusions about long-term depression. Olweus (1993b) found that there was high stability of victimization continuity in the adolescent years, revealing that 16 of the 17 victims had been victimized in both grades 6 and 9. A study by Shafer et al. (2004), which investigated the stability of victimization from primary to secondary school, found that those students who were continuously bullied had lower self-esteem than the control group or those only bullied in primary or secondary school. This demonstrates that experiencing bullying for several years reasonably introduces the possibility that this long duration could result in harmful effects (Olweus, 1992b). Bernstein and Watson (1997) agree with the likelihood that being bullied over an extended period of time could impact future development, considering that even in the short term, victims suffer from physical and psychological distress. In terms of the continuity of victimization from school to early-adulthood, the results showed no significant relationship. All statistics assessing the correlation between being directly or indirectly bullied in adolescence and then in adulthood were not significant. Peer rating questionnaires in grades 6 and 9 were consistent with the results of the participants' retrospection as adults, showing a moderate positive correlation ( $r=.59$ ). This also validates that the participants had a fairly realistic and accurate view of their past peer relationships

**Early Victimization & Later Depression.** Olweus (1993b) also analyzed the past victimization with the psychosocial functioning in early adulthood. Upon comparing the control group of men with the former victimized men, there were several differences and an important similarity in the depression scores in early adulthood. Results showed that despite the differences in exposure to bullying in adolescence, victims were no more socially isolated or harassed in early adulthood. An important difference is that the victims had higher levels of depression and lowered self-esteem than the control group at age 23. The depression difference between the control group and the victims was significant ( $p < .01$ ) and the effect size was as well ( $d = .87$ ). (According to Cohen, 1977). Therefore, it seems that being victimized in adolescence is more likely to lead to depression and low self-esteem in later life than social isolation or continued victimization. In terms of depression, there was a moderate positive  $.54$  ( $p < .02$ ) correlation of degree of victimization and later depressive tendencies. Olweus explains that this high correlation could be due to chance and also emphasizes that it is not due to one or two extreme outliers. The relationship between adolescent victimization and later depression is even more impressive considering that both self-reports and peer-ratings were used; thereby eliminating the possibility of inflated results due to shared method variance. The imperative message derived from this study is that victimization in school can lead to depressive tendencies which can escalate and continue to develop 7-10 years later, thus affecting early adulthood even though former victims are no more victimized than controls at that point in time.

Olweus's (1993b) findings present evidence against several assumptions that negate the severity and long-term consequences of bullying/victimization. First, the

belief that the bullying a student experiences is only temporary is challenged by Olweus' (1993b) findings. It has been determined that not only can bullying last for several years (Olweus, 1993b), but those who suffer consistent long-term victimization experience worse outcomes in adulthood (Shafer et al., 2004). As a study by Sweeting et al. (2006) found, long-term victimization can also worsen depression during adolescence. The results of Sweeting et al. (2006) indicated that over the ages of 11, 13, and 15, students who are consistently bullied are more likely to have consistent depression. A second assumption may be that the effects of bullying aren't severe or noteworthy. Olweus (1993b) and a great deal of other researchers have revealed that bullying is highly correlated to depression (Ivarsson et al, 2005; Roland, 2002b) and low self-esteem (Shafer et al., 2004; Spade, 2007). In fact, when previous victims experience depression in early adulthood, Olweus (1993b) found that adolescent bullying was a central contributing factor to later depression since both victims and the control group no longer experienced social or victimization problems.

The study by Olweus (1993b) which found a significant correlation between early victimization and later depression adds valuable information to the bully-depression relationship. To enforce the role of depression in bullying, a meta-analysis by Hawker and Boulton (2000) found that bullying is most strongly related to depression. Hammen et al. (2008) demonstrated the sensitivity of adolescence through finding that students who have depression before 15 are more likely to have depression problems the rest of their lives. The hypothesis which is commonly used to explain the bullying-depression relationship is the disturbance in the adolescent socio-cognitive development (Bernstein



& Watson, 1997; Olweus, 1993b; Shafer et al., 2004). A review of the literature suggests that bullying leads to long-term depression.

Bullying has been a growing problem for many years and research suggests that there is a great deal of associated psychosocial problems associated with it. Whether the student is a victim, bully, or bully-victim, they all usually are more socially maladjusted than noninvolved students (Ivarsson et al., 2005). The study by Ivarsson et al. (2005) provided significant insight into which type of bullying behavior leads to the greatest depression. The results showed that those who were bully-victims experienced the worst depression symptoms according to the DSRS. Although significant, limitations arise when attempting to compare these results to many other studies that assessed depression but did not include bully-victims (Olweus, 1993b; Roland, 2002b). There is a need for more consistency between bullying studies in order to work towards a globalization of data findings. For example, although the research study by Nansel et al. (2001) was conducted using a large sample size ( $n= 15,686$ ), their finding that bully-victims suffer the worst psychosocial functioning lacks support from other researchers who included bully-victims in their study. Given evidence that bully-victims suffer the most, a majority of other studies suggest that victims suffer the most (Seals & Young, 2003; Roland, 2002b). This may be due to the fact that bully-victims aren't included in these studies or that victims really do experience the worst functioning out of all groups.

## **Method**

### **Participants**

There were a total of 305 college students who participated in this study. The participants attended a university in northwest Ohio and those enrolled in education and

human development department courses were invited to participate. According to the 2006-2007 demographic reports from these courses, 96% of graduates were under the age of 25, this being the target age group defined as early-adulthood. Participants were informed, before taking the surveys, that they had to be at least 18 years of age, thus resulting in an age group range of 18-25. Students were invited to participate in this study using two methods: classroom administration of surveys and online administration of surveys.

Group 1 (participants who took classroom surveys) consisted of 136 invited student participants from educational psychology (n=111) and educational assessment (n=25) classes from the fall of 2007 to June of 2008. The Zung Self-rating Depression Scale (ZSDS) and a multi-variant bullying survey were directly administered to this group of participants by the principal researcher in the classrooms. The participation rate was high with 81% choosing to participate. However, after eliminating 10% (n=14) of the participants due to incomplete DSRS data, the sample for group 1 consisted of 122 participants in the categories: bully (n=2), non-involved (n=233), victim (n=41) and bully-victim (n=29).

Group 2 (Participants who took online surveys) participants were also from the education and human development courses; however they received the ZSDS and bullying survey electronically. The online survey required participants to complete all items on the surveys before they could submit them and therefore no responses were eliminated. This group consisted of 183 participants. Later results will show that similarities between both groups resulted in combining them.

## Procedures

To assess the participant's bullying status in adolescence, a brief multiple-choice survey was given. This survey included the general definition of bullying which is supported by many researchers including Nansel et al. (2001). It stated that, "bullying is a specific type of aggression in which it generally has 3 characteristics: it is intended to harm or disturb someone, it occurs repeatedly over time, and there is an imbalance of power with a more powerful person or group attacking a less powerful one." Next, there was a brief section listing that various types, including verbal, physical, and psychological. Then the participants were provided with 4 descriptions of bullying behavior (Bully, Non-involved, Victim, and Bully-Victim) for which they were asked to read all of them carefully and then choose the one that best described their behavior in grades 7-9. Each description included the verbal, physical, and psychological aspects of bullying to each respective group.

In addition to the bullying survey, the ZSDS was used in this study to evaluate the relationship between adolescent bullying behavior and depression in early adulthood. First, participants were given the ZSDS which provided a quantitative depression score. The ZSDS is 20-item likert scale in which the frequency of the depressive statements are assessed. Participants indicate how often the statements were experienced over the past several days. Options varied from "A little of the time" to "Most of the time". The ZSDS includes cognitive, affective, and behavioral dimensions of depression in the statements. Statements, such as "My mind is as clear as it used to be", reflect the cognitive symptoms of depression. Affective or emotional symptoms are represented by statements, such as "I feel down-hearted and blue". Behavioral

symptoms are assessed through statements, like “I find it easy to do the things I used to”. The scale varied the positive and negative wording of the statements equally to result in reverse-coding of 10 items, for example, “I still enjoy sex” is positive and “I have trouble sleeping is negative. Additionally, the ZSDS scoring guide is accompanied by four categories in which the total score fits. These categories of severity include normal (25-49) or non-depressed group, mild (50-59), moderate (60-69), and severe (70+). Most people with depression score between 50 and 69 and the highest possible score is 80 (Zung, 1965).

A large number of rating scales have been developed to systematically assess depression, however, the ZSDS has been found to be as effective as other assessments, such as the Hamilton Rating Scale for Depression (HRS) (Biggs, Laurence, & Ziegler, 1978). When compared to the well established HRS, the ZSDS was found to have a high overall correlation (.80) in terms of reliability (Biggs et al., 1978). Therefore, the ZSDS was supported as effective and justified for use in research investigations (Biggs et al., 1978). Additionally, an inter-item correlation matrix revealed a significant alpha of .831 for the ZSDS.

## **Results**

After finding similarities in response styles of both group 1 and group 2, the groups were combined, resulting in a sample size of 305. For example, the means of group 1 (M=35) and group 2 (M=35.64) indicated similar scoring on the ZSDS. Descriptive statistics showed that only 2 participants were bullies and due to this low number the bully category was not included in further analysis. A total of 233 (76.4%) respondents were not-involved in bullying, 41 (13.4%) were victims, and 29 (9.5%) were

bully-victims (see Table 1). This high number of non-involved participants is consistent with findings in the bullying-depression literature (see Ivarsson et al., 2005; Roland, 2002a).

Table 1

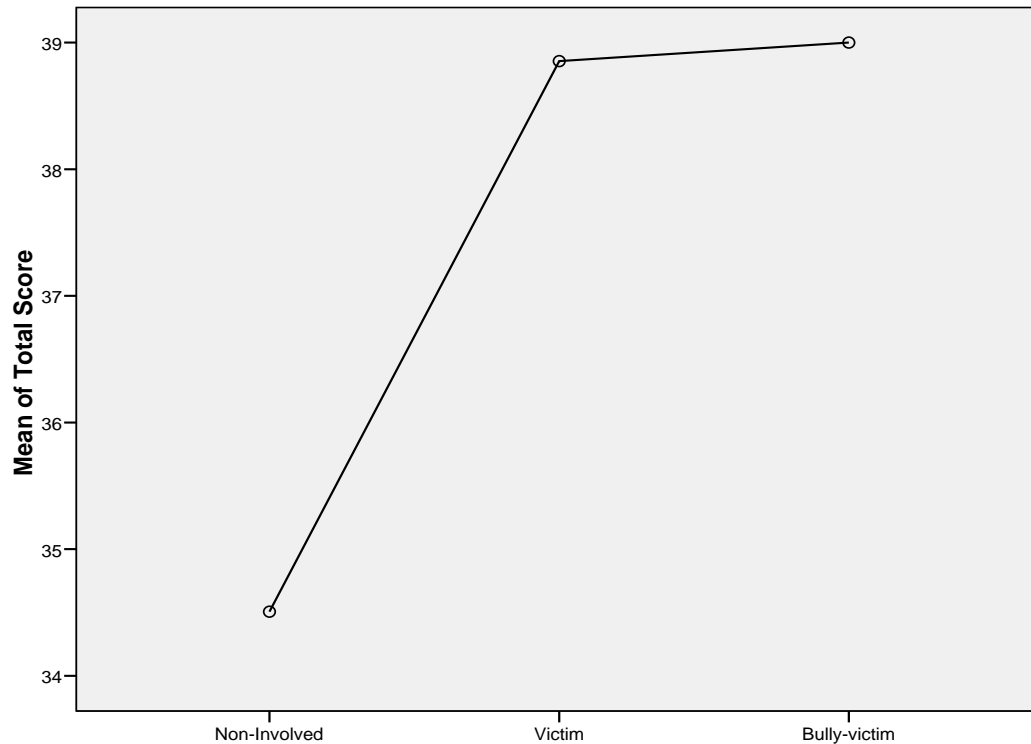
*Descriptive statistics by group*

<b>Group</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
Non-involved	34.5	233	7.2	21	62
Victim	38.8	41	9.6	26	61
Bully-victim	39.0	29	10.3	26	61

### **Depression**

All mean depression scores of the three groups (non-involved, victim, bully-victim) were below the clinical level (score > 49) according to the ZSDS. The non-involved (M=34.5, s.d. 7.2), victim (M=38.8, s.d. 9.6), and bully-victim (x=39, s.d. ) groups were found to have significant differences according to ANOVA results (see table 1). To follow up significant ANOVA findings, a Tukey Post Hoc was conducted. The non-involved group was significantly lower than both the victim and bully-victim group but the latter two are not significantly different (see chart 1). There were also overlapping ranges among the groups. According to the categories of severity of the ZSDS, the non-involved group had 225 participants who scored within normal range, 7 having mild depression, and 1 as having moderate depression.

Chart 1

*Mean Depression Scores by Group*

The victim group had 33 within the normal category, 7 in the mild depression category, and 1 in the moderate depression category. The bully-victims had 24 who scored within the normal range, 3 as having mild depression, and 2 as moderately depressed (see table 2). There were no participants who scored in the severe depression category (70+).

Table 2

*Participants in Each Group According to Depression Severity*

<b>Group</b>	<b>Normal (25-49)</b>	<b>Mild (50-59)</b>	<b>Moderate (60-69)</b>	<b>Severe (70 +)</b>
Non-involved	N = 225 (96.6%)	N = 7 (3.0%)	N = 1 (0.4%)	0
Victim	N = 33 (80.5%)	N = 7 (17.1%)	N = 1 (2.4%)	0
Bully-victim	N = 24 (82.8%)	N = 3 (10.3%)	N = 2 (6.9%)	0

### **Conclusion and Discussion**

The main focus of this study was the relationship between adolescent bullying behaviors and depression in early adulthood. The intended goals were to analyze participant bullying status with depression scores. Another goal was to determine which bullying behavior occurs most often, according to number of participants in each group. Depression scores for the Zung Self-rating Depression Scale are also separated into normal, mild, moderate, and severe categories and each group's score was categorized accordingly to see how severely each group is depressed in early adulthood.

A hypothesis for this research study was that bully-victims would report the higher and more severe depression scores in early-adulthood than bullies, victims or non-involved (Ivarsson et al., 2005; Nansel, et al., 2001). Because of suffering both the internalizing symptoms of victims (e.g. depression) as well as the externalizing symptoms of bullies (e.g. aggression), it was proposed that bully-victims would experience the most severe depression in later life (see Ivarsson et al., 2005). Results affirmed this hypothesis since the bully-victim group had the highest mean score ( $x=39.0$ ) out of the victim ( $x=38.8$ ) or non-involved ( $x=34.5$ ) groups. Additionally, the

externalizing effects common in bullying can contribute to depression by increasing the likelihood of negative events and affect, according to the cognitive vulnerability-stress model of depression projected by Hankin and Abramson (2001). By applying theories of depression development, such as the one proposed by Hankin and Abramson (2001), a framework was created for explaining how the factors of negative events, cognition, and affect play into the acquisition of adolescent depression. Therefore, if bully-victims suffer the negative events associated with being victimized and also bullying others, it was proposed that they would experience more severe negative affect than bullies or victims alone. This hypothesis was also confirmed in the categories of severity according to bully-victims, victims, and non-involved. The bully-victim group had the most moderate depression ( $n=2$ ) compared to the victim ( $n=1$ ) or non-involved groups ( $n=0$ ). Although the difference between moderately depressed participants in the bully-victim and victim groups is modest, the bully-victim group also had a higher percent in the moderate group (6.9%) than the victims (2.4%).

A lacking feature of the bullying-depression research is the need for longitudinal studies. Hawker and Boulton (2000) agreed that “there is little need now for further cross-sectional studies of peer victimization and psychological maladjustment. It is clear enough already that victims are distressed” (p. 453). Olweus (1993b) indicated that longitudinal studies are needed to test the assumption that peer victimization may have a causal relationship on later functioning. Despite the advantage that this study included the bully-victim group, it is cross-sectional and thus failed to add to the needed knowledge which is obtained by longitudinal research.



Although this area of study has limitations, the few longitudinal studies on depression and bullying that have been done, such as Olweus (1993b), provided a background and a platform for further research. His research did not include bully-victims or even females, but his groundbreaking initiative to assess the long-term effects of bullying served as a basic guideline for the following study. Olweus' (1993b) valuable finding that early victimization is significantly correlated ( $r=.54$ ) with later depressive tendencies initiated a need for further analysis of this result. The force behind this study was the irresolute possibility that victimization in adolescence can affect a person's inner cognitions about their self and others so much, that years later the individual experiences depression in early adulthood. This research tried to provide insight into this possibility in order to add a block to the foundation of long-term bullying knowledge.

There are several limitations to this study which should also be addressed. The use of a self-constructed bullying survey was less valid than utilizing an established survey that had already been validated and/or determined reliable. Although the ZSDS has been used in other studies and has been validated by Biggs et al. (1978), a better researched inventory such as the Beck Depression Inventory would have been preferred. Due to not having access to such an inventory, the ZSDS served the purposes of this study. Additional criteria on the bullying surveys, such as age, gender, and year in college, may have provided useful information and allowed a more detailed analysis to be performed. However, the main focal points of this study have always been bullying status and depression severity.

If continual support is acquired for this hypothesis there could be great implications for school counselors, parents, and the interventions that victims and

bully/victims receive. If early victimization *is* found to be a main cause of depression later in their life, then interventions should adapt to fit the increased severity of the repercussions. For school counselors, their efforts to negate some of the bullying assumptions clarified earlier ought to increase as well as their attention paid to bullying. Since their efforts would be aiding the student in adolescence *as well as* possibly preventing psychological problems in adulthood, they would carry a larger responsibility for the protection of their students. If the hypothesis that there is a causal relationship between adolescent victimization and later depression is validated, then the data already obtained could be used to identify those who are likely to be victims, bullies, or bully-victims to address the issue early on. By identifying bullying problems efficiently in adolescence, early intervention can be administered to help prevent later problems (Bernstein & Watson, 1997). Furthermore, early intervention could not only reduce the student's exposure to victimization but may also help them develop the needed social skills and self-esteem (Bernstein & Watson, 1997) to overcome much of the psychological damage that has already occurred.

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### **Biographical Statement**

Max Lencl obtained a Bachelor of Science in Foreign Language Education at Bowling Green State University in Bowling Green, Ohio (2009) while completing this study. He has taught in rural, suburban, as well as urban/inner city settings. Through this and other research, he has developed an Anti-Bullying workshop that he presents for undergraduate and graduate education classes. He is now studying to get his Master's Degree in Counseling from The University of Toledo. Research interests include: School violence, depression treatment, gender differences, and family therapy.