PATH ANALYSIS ON FACTORS CONTRIBUTING TO VICTIMIZATION IN ADOLESCENCE

A Dissertation

by

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Submitted to the Graduate and Professional School of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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August 2022

Major Subject: School Psychology

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ABSTRACT

Victimization is a serious problem in youth, and targets of victimization consequently experience harmful effects, like loneliness/dissatisfaction, that can span across their life; however, it appears that not all victims are impacted equally. This level of influence seems to be determined by the victim's perception of the victimization experience and the emotion regulation strategies employed. The current study aimed to examine factors that lead to victimization by building upon the revised social information processing framework of victimization. Specifically, the proposed model integrated interpersonal rejection sensitivity and loneliness/dissatisfaction along with emotion processing. It was hypothesized that individuals who had higher levels of interpersonal rejection sensitivity were more likely to employ maladaptive emotional regulation strategies (i.e., expressive suppression), which would place them at risk for future victimization and associated negative outcomes such as loneliness/dissatisfaction. Although no significant associations were found in respect to interpersonal rejection sensitivity, findings indicated feelings of loneliness/dissatisfaction can have an impact on emotion regulation. Results also highlighted the perpetual cycle of victimization and associated feelings of loneliness/dissatisfaction. Limitations of the current study as well as implications for future research were discussed.

ACKNOWLEDGEMENTS

I would first like to thank my advisor and dissertation chair, Dr. Jamilia Blake. I would not be where I am without her invaluable guidance, support, and knowledge throughout this journey. I would also like to thank my committee members, Drs. Barry, Castillo, Ettekal, and Kwok for giving their time and expertise during the dissertation process. Additionally, thank you to the faculty and staff within the school psychology department for all the encouragement and knowledge they have shared with me over the past four years. You have all been vital in my success.

I would also like to thank my family for their unwavering support and always motivating me to pursue my dreams. You all believed in me even when I did not. A special thank you goes to my husband for being my rock through hard times, building me up whenever I doubted myself, and keeping me grounded and focused on my goals. None of this would have been possible without their support.

CONTRIBUTORS AND FUNDING SOURCES

This work was supervised by a dissertation committee comprised of: Dr. Jamilia Blake (chair and advisor); Dr. Linda Castillo of the Department of Educational Psychology; Dr. Idean Ettekal of the Department of Educational Psychology; Dr. Adam Barry of the Department of Health and Kinesiology; and Dr. Oi-Man Kwok of the Department of Educational Psychology. The data analyzed in the current study was secondary data collected by Dr. Castillo through her GEAR UP grant. All work conducted for this dissertation was completed independently by the student.

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CHAPTER I

INTRODUCTION

Bullying is a serious dilemma in youth with one out of five children reporting experiencing victimization (U.S. Department of Education, 2019); with 41% of those children expected to endure multiple victimization events in their lifetime (U.S. Department of Education, 2019). The terms ‘bullying’ and ‘aggression’ are sometimes used interchangeably; however, it is important to note that not all aggressive behavior is considered bullying. Bully victimization involves the persistent subjection to aggressive actions and is characterized by an imbalance of power between the bully and victim (Olweus, 1993). This imbalance of power also maintains and perpetuates victimization by causing the victim to feel like they are unable to do anything to stop the bullying. Thus, creating a horrible cycle of victimization that research has shown can lead to, possibly long-term, negative psychosocial and academic outcomes (Alavi et al., 2017; Saroyan, 2019; Wolke, Copeland, Angold, & Costello, 20131). Further research is needed in this area to understand the victimization process.

Aggression

Aggression is defined as any behavior that intends to cause immediate harm to another individual (Anderson & Bushman, 2002). Research in the field is guided by various overlapping theories of aggression such as: cognitive neoassociation theory; excitation transfer theory; social learning theory; script theory; social interaction theory. “In cognitive neoassociation theory, aggressive thoughts, emotion, and behavioral tendencies are linked together in memory” (Anderson & Bushman, 2002, p.30). This

theory posits that negative affect is caused by experiencing an aversive event which can trigger an assortment of aggressive memories, thoughts, motor and physiological responses (Anderson & Bushman, 2002). The physiological reactions prompted by the aversive event are linked to an individual's fight-or-flight response, and can cause the individual to experience feelings of either anger or fear. Feelings of anger are associated with the fight response and aggression, while feelings of fear are corelated with the flight response. Excitation transfer theory also emphasizes the importance of physiological arousal in the expression of aggressive behavior (Zillmann, Katcher, & Milavsky, 1972). Particularly, this theory is based on the notion that the effects of physiological arousal do not dissipate instantaneously which can cause individuals to mistakenly attribute their heightened arousal to a later event (Zillmann, Katcher, & Milavsky, 1972). If it is attributed to an event that makes the individual feel angry, those feelings are then only amplified which can cause the individual to remain angry and ready to aggress even after the physiological effects disappear (Anderson & Bushman, 2002). Social learning theory views aggression through a different lens than both cognitive neoassociation and excitation transfer theories in that individuals are thought to learn aggressive behavior through their environment simply by observing others or experiencing it firsthand (Bandura, 1978). This idea is guided by the concept of observational learning in which children watch others, encode the individual's behavior, and possibly imitate the observed behavior. There are many factors that influence whether the child will imitate the observed behavior, but children generally imitate others who they believe are similar to them. The imitated behavior is then rewarded or punished by those around the child

which determines whether the child will be likely to repeat the behavior. Script theory is similar to social learning theory in that it involves children observing violent behavior. However, script theory builds upon this proposition by arguing that children develop aggressive scripts after observing violent behavior (Huesmann, 1988). These scripts then represent the situation observed, and the child chooses a role to assume in the script. After a script is developed, it can be generalized across various events and guide future behavior, but scripts become more easily accessible when there is repeated exposure to aggressive behavior. Therefore, if a child observes violent behavior consistently, it can result in an easily accessible system of scripts that emphasizes aggressive behavior (Huesman, 1988). Social interaction theory is unique in that it is one of the only models to consider the motivation behind aggression (Tedeschi & Felson, 1994). This theory sees individuals as "…decision-makers whose choices are directed by the expected rewards, costs, and probabilities of obtaining different outcomes" (Anderson & Bushman, 2002, p. 32). Aggressive behavior is classified as coercive actions in this model, and these actions are thought to be an attempt to gain something valuable, dismantle perceived injustices, or change others' view of an individual.

Initially, the concept of aggression only included physical harm such as punching or pushing; however, current definitions have evolved to include the various functions, modes, and forms of aggression (Perry & Ostrov, 2018). The function of aggression explains the purpose of aggression, and the available research focuses on two functions: proactive and reactive. Deliberate, goal-oriented acts of aggression are classified as proactive aggression, whereas aggressive behavior that is in response to a perceived act

of aggression is reactive (Coyne, & Ostrov, 2018). Two modes of aggression are highlighted within the research, indirect and direct. The direct mode involves an individual engaged in aggressive actions towards another person face-to-face (Coyne & Ostrov, 2018). Direct aggression includes actions that can cause physical harm (e.g., kicking, punching, etc.) to someone as well as negative statements communicated to the target youth, whether that be orally or in written form (Coyne & Ostrov, 2018). There are various forms of aggression identified underneath the direct and indirect modes. Acts of aggression tend to only be classified as either direct or indirect, but some forms, such as relational aggression, can be seen in either mode (Coyne & Ostrov, 2018). Physical aggression and verbal aggression are two forms most commonly identified as direct. Participation in direct aggression tends to climax during early childhood and decline in late childhood (Girard, Tremblay, Nagin, & Cote, 2019; Hay et al., 2014) as children develop better self-regulation, cognitive, and language skills (Dionne, Tremblay, Boivin, Laplante, & Perusse, 2003; Girard et al., 2014; Seguin, Parent, Tremblay, & Zelazo, 2009). Indirect aggression still involves an individual causing harm to another, but those acts are more indirect in nature such as: spreading rumors, social exclusion, and dirty looks (Coyne & Ostrov, 2018). Participation in more indirect forms of aggression (e.g., social aggression, relational aggression) is seen to increase in middle childhood and adolescence as social and cognitive skills become more refined (Girard, Tremblay, Nagin, & Cote, 2019; Vaillancourt, Miller, Fagbemi, Cote, & Tremblay, 2007).

Victims of Bullying

Bullying is a subtype of aggression, but general aggressive behavior is vastly different from bullying (Ostrov, Kamper-DeMarco, Blakely-McClure, Perry, & Mutignani, 2019). Bullying is defined by repeated, purposeful, behavior that involves an imbalance of power between the perpetrator and victim (Olweus, 1993). General aggressive behavior and bullying is mainly distinguished by the absence or presence of a power imbalance between two individuals (Ostrov, Kamper-DeMarco, Blakely-McClure, Perry, & Mutignani, 2019). Additionally, the concept of bullying highlights the importance of repeated aggressive behavior while general aggression does not (Gladden, 2014; Ostrov, Kamper-DeMarco, Blakely-McClure, Perry, & Mutignani, 2019). These two characteristics are particularly important in differentiating between bullying and other forms of aggression because available research suggests bullying behavior can cause more harm than forms of aggression that do not involve a power imbalance and repeated aggressive behavior (Hunter, Boyle, Warden, 2007; Solberg & Olweus, 2003). This variability between bullying and aggression can also be seen in the effectiveness of prevention programs. Specifically, programs designed to prevent other forms of aggressive behavior (e.g., verbal aggression, physical aggression) have not been found to be successful in suppressing bullying behavior (Gladden, 2014).

Globally, bullying is considered to be the most predominant form of violence in schools (UNICEF, 2014). However, bullying was not always seen as an important issue in schools. Until the 1980's, bullying was considered a normal rite of passage for students (Allanson, Lester, & Notar, 2015). This viewpoint changed drastically when

Dan Olweus' research exposed severe problems associated with bullying such as death, violence, and poor mental health (Allanson, Lester, & Notar, 2015). In turn, bullying was then viewed as a serious issue that needed immediate attention. Olweus' work inspired many others to research the realm of bullying. Many studies have been conducted to further understand the risk factors and outcomes associated with bullying and victimization; however, not all individuals are impacted in the same way. There is still much more to discover in terms of how victimization affects individuals.

Risk Factors

Individual as well as contextual factors have been identified as predictors of both bullying and victimization. Many predictors have been identified with experiencing victimization events, but it seems as though prior victimization is the best predictor of future victimization overall (Kljakovic & Hunt, 2016). The inability to effectively control emotions can also be a risk factor for victimization since it gives rise to many powerful negative emotions (Adrian, Jenness, Kuehn, Smith, & McLaughlin, 2019; Morelen, Southam-Gerow, & Zeman, 2016). Other significant predictors include: internalizing behavior, social competence, peer status, social problem solving, self-related cognitions, externalizing behavior, home environment, school climate, and community factors (Cook et al., 2010). While bullies and victims have similar risk factors, some factors have a larger effect on one group over the other. For example, internalizing behavior, peer status, and social competence were found to be better predictors of victimization; while externalizing behavior and peer influence have a large effect on bullies (Cook et al., 2010).

Outcomes

Available research demonstrates that bullying has an effect on everyone involved. Adverse outcomes such as psychosomatic problems and aggression have been associated with individuals who bully others (Gini, 2008; Fergusson, Boden, & Horwood, 2013). That aggression can persist into adulthood as some bullies present with a higher level of engagement in violent crimes (Swearer & Napolitano, 2011). Although long-term consequences are associated with bullies, victims appear to be impacted more than any other person involved in bullying (Walters & Espelage, 2018). Compared to bullies and other children, victims generally experience an increase in social, emotional, adjustment, and behavioral issues (Shetgiri, 2013). Victims can also experience adverse mental health outcomes such as anxiety, depression, loneliness, and social dissatisfaction as a result of bullying (Saroyan, 2019; Shetgiri, 2013). Individuals who experience more directt victimization also present with higher interpersonal rejection sensitivity (Zimmer-Gembeck, Trevaskis, Nesdale, & Downey, 2013). There is variation present in how much victims are affected by experiencing bullying. Some victims' internalizing problems can lead to suicidal ideation, whereas others do not (Alavi et al., 2017). However, despite the amount of research available surrounding the outcomes associated with bullying, it still appears unclear why some victims are impacted more than others.

Study Purpose

There is a breadth of research available that examines how targets of victimization experience harmful effects that persist across their lifespan, but not all individuals are impacted in the same way by victimization (Alavi et al., 2017; Saroyan,

2019; Shetgiri, 2013). Given the negative impact it can have on students across settings and time, it is important to fully understand what factors contribute to the victimization process and the associated negative outcomes. There is emergent research that rejection sensitivity and emotional regulation independently impact victimization. Adolescents who experience more direct victimization present with more feelings of rejection sensitivity, and it seems that individuals with a heightened sensitivity to rejection have more difficulty with regulating their emotions, thus perpetuating an escalating cycle of victimization (Silvers et al., 2012; Zimmer-Gembeck, Trevaskis, Nesdale, & Downey, 2013).

The present study will extend previous research on victimization by proposing a new model to further the understanding of the victimization process. Research has shown that individuals who have higher levels of interpersonal rejection sensitivity have an automatic, hypervigilant emotional reaction to rejection events like victimization that limits their ability to regulate their emotions effectively. The hypothesized model will further this research by proposing that individuals who have higher levels of interpersonal rejection sensitivity also utilize maladaptive emotional regulation strategies, and these individuals will be impacted more by victimization events as evidenced by higher levels of loneliness and social dissatisfaction.

CHAPTER II

LITERATURE REVIEW

According to the National Center for Education Statistics and Bureau of Justice (2019), 20% of youth ages 12-18 in the U.S have experienced bullying at school. Bullying is defined by repeated, purposeful, aggressive behavior that involves an imbalance of power between the perpetrator and victim (Olweus, 1993). Bullying includes both direct (physical) and indirect (relational) forms of aggression. Targets of victimization consequently experience harmful effects that can span across their life, but some victims are impacted greater than others. This level of influence seems to be determined by the victim's perception of the bullying experience. Youth who are more sensitive to interpersonal rejection, will perceive social situations to be more hostile overall. Gaining a better understanding of the relationship between rejection sensitivity and future victimization could have important implications for explaining the persistence and impact of victimization.

Bullying and Victimization

Bullying and victimization have been present since the existence of formal schools (Allanson, Lester, & Notar, 2015). Bullying is considered to be the most predominant form of violence in schools across the U.S., but it is also a substantial problem in schools worldwide (UNICEF, 2014). It is well-known that the effects of bullying extend way beyond the school setting (Alavi et al., 2017; Fergusson, Boden, & Horwood, 2013; Huang, Lewis, Cohen, Prewett, & Herman, 2018; Saroyan, 2019; Walters & Espelage, 2018). Bullies are a heterogeneous group with differing degree of

social skill (Sutton, & Smith, 1999). On the one hand, bullies can experience difficulty relating and interacting socially with their peers that can be long lasting due to a lack of social skills (Laursen, Finkelstein, & Betts, 2001). Some research shows that some bullies believe they will be rewarded socially for bullying others (Sutton & Smith, 1999). It is also possible that some bullies can have advanced social skills allowing them to dominate over others (Hawley, 2014; Shetgiri, 2013). Regardless of their level of social skill, students who bully others are more likely to experience problems with conduct and aggression, which can be traced into adulthood (Swearer Napolitano, 2011). Longitudinal research shows that individuals who participated in bullying in school have higher rates of engagement in violent crimes later in life (Fergusson, Boden, & Horwood, 2013). Bullying can have an effect on all persons involved, but the impact seems to be the most severe for victims (Walters & Espelage, 2018). Experiencing victimization is related to severe psychological maladjustment (Alavi et al., 2017; Saroyan, 2019; Wolke, Copeland, Angold, & Costello, 2013). Victims often experience internalizing problems like anxiety, depression, loneliness, and social dissatisfaction as a result of bullying (Saroyan, 2019; Shetgiri, 2013). Depending on the victim's perceived severity of the victimization event, these internalizing problems can lead to suicidal ideation (Alavi et al., 2017). Overall, an increase in emotional, adjustment, and behavioral problems can be seen in victims (Shetgiri, 2013). Research shows that targets of victimization experience harmful effects that persist across their lifespan, but it seems unclear why some victims are more impacted than others. Given the negative impact

experiencing victimization can have on students across settings and time, it is important to fully understand the victimization process.

The social information processing model has popularly been utilized to explain victimization events (Crick & Dodge, 1994), but it appears that Lemerise and Arsenio's (2000) revised model better captures the experience as both emotional and cognitive processes are included. During a victimization interaction, the individual must first encode internal emotional cues as well as external social and affective cues before moving into analyzing them. Many different factors (i.e., current mood, relationship with other individuals involved, level of emotional intensity, emotion regulation skills, etc.) can affect the inferences the individual makes about the victimization event and the meaning they attach to it (Lemerise & Arsenio, 2000). The next step of the model involves the clarification of goals, and the individual's emotions can often motivate these goals; however, the emotions of others as well as the relationship with other individuals involved also have some influence (Lemerise & Arsenio, 2000). Emotional regulation deficits might inhibit an individual's ability to accurately assess and encode the situation, which in turn could lead to poor decision-making (i.e., goal will not result in further social interaction) regarding goal selection (Lemerise & Arsenio, 2000). For example, if the person is already worried about something and deduces that everyone around is judging them, their goal might be to escape the situation. Many responses are composed and evaluated to determine prospective outcomes, goodness of fit to the individual's goal(s), and their confidence in enacting the planned response before responding in the last portion of the revised social information processing model

(Lemerise & Arsenio, 2000). It appears that overall, individuals who experience more intense emotions or have emotional regulation difficulties, are more likely to have trouble interpreting the situation which leads to a more negative and uninformed response. The current study aims to further this model by integrating rejection sensitivity and loneliness/dissatisfaction.

Bronfenbrenner's social ecological theory is another important model that has been used to explain the victimization process (Espelage, Rao, & del la Rue, 2013; Hong & Garbarino, 2012). Human development is seen to be influenced by the multiple environments they live in (Bronfenbrenner, 1979). In the social ecological framework, experiencing a victimization event is viewed to be influenced by individual processes, connections with others (i.e., peers, family, teachers, neighbors), and society (Swearer & Hymel, 2015). It is fitting to look at the victimization process through this multi-system lens since children spend most of their time with others in their classrooms and communities (Swearer & Hymel, 2015). Swearer and Hymel expanded upon this framework to incorporate the influence of individual weaknesses and stressful experiences to understand the bullying process (Swearer & Hymel, 2015). A stressful experience such as victimization can be intensified by biological weaknesses and activate cognitive vulnerabilities that can produce adverse outcomes (Swearer & Hymel, 2015).

Research shows that experiences of victimization can result in maladjustment; however, youth experiences of emotional maladjustment can also lead to future victimization (Zimmer-Gembeck, 2016). This is due to the presence of emotional

maladjustment prompting less supportive and more rejecting behavior from peers (Zimmer-Gembeck, 2016). Although there is an abundance of research available on the outcomes of victimization, it appears there is not extensive research on the factors that place youth at-risk for victimization. Most of the existing studies are cross-sectional in nature. In a meta-analysis of longitudinal research focused on the predictors of bullying and victimization, Kljakovic and Hunt (2016) found four significant predictors of victimization, with history of victimization being the greatest factor in predicting future victimization (Kljakovic & Hunt, 2016). While internalizing problems like loneliness and social dissatisfaction are outcomes of victimization, the presence of these symptoms before victimization can also place the individual at-risk of experiencing bullying in the future (Blake et al., 2016; Kljakovic & Hunt, 2016). Youth who tend to encounter difficulties when interacting with their peers appropriately will likely continue to struggle in navigating the social environment (Kljakovic & Hunt, 2016). Conduct problems was one unique predictor of victimization identified by Kljakovic and Hunt (2016), but the effect was small; perhaps because conduct problems encompasses the engagement in aggressive and disruptive behavior usually seen in bully victims and bullies rather than victims. Environmental factors seem to have a greater impact on victimization over time as noted in one meta-analysis (Cook et al., 2010).

The studies included in Cook et al.'s (2010) meta-analysis considered individual and environmental factors that predict the likelihood of future victimization throughout childhood and adolescence. Individuals at risk for future victimization have overly negative beliefs about themselves and tend to engage in overcontrolled behaviors that

are directed inward such as withdrawal and avoidance (Cook et al., 2010). Research also shows that having a lack of social competence places an individual at risk for victimization because it inhibits peer relations (Cook et al., 2010). This lack of social competence is also associated with poor social problem-solving skills which hinders the child's ability to navigate confrontations successfully to avoid victimization by peers (Cook et al., 2010). A negative school, home, and community environment was also shown to place youth at-risk of future victimization (Cook at al., 2010). Although multiple predictors of victimization have been demonstrated in past research, more longitudinal studies are needed to expand the knowledge on this subject. Particularly, interpersonal rejection sensitivity is one area of interest that seems to be understudied in relation to victimization.

Interpersonal rejection sensitivity is a personality predisposition that is activated after exposure to rejection (Downey & Feldman, 1996). Experiences of rejection can be linked to bullying in that victimization is considered a severe form of interpersonal rejection due to the aggressive behavior that is associated with bullying (Downey et al., 1998). Past research shows individuals can be targeted for bullying due to their sensitivities and responses to stressors (Zimmer-Gembeck, 2016). Therefore, it seems imperative to examine interpersonal rejection sensitivity and the effect it has on the perception of victimization.

Interpersonal Rejection Sensitivity

Individuals with interpersonal rejection sensitivity tend to expect, eagerly perceive, and overreact to rejection (Downey & Feldman, 1996). The foundation of

interpersonal rejection sensitivity is the experience of rejection; however, engaging in rumination or avoidance as a way to cope has been linked to future interpersonal rejection sensitivity since these coping skills do not lead to social reintegration (Zimmer-Gembeck, 2015). The Rejection Sensitivity Model explains why some children experience problems with interpersonal relationships after experiencing rejection (Downey & Feldman, 1996). This model draws from both attributional and attachment theories to suggest that passive and active occurrences of rejection can sensitize individuals to future possible rejection (Downey et al., 1998). Specifically, the Rejection Sensitivity Model states that when people experience rejection, they will likely develop either anxious or hostile assumptions about future social interactions (Levy, Ayduk, & Downey, 2002). Students who develop anxious assumptions are more likely to engage in internalizing behaviors which have also been heavily linked to future victimization. Students with more hostile assumptions present with more externalizing behaviors (Zimmer-Gembeck et al., 2016). The development of these assumptions intensifies the individual's sensitivity to the likelihood of future rejection (Butler, Doherty, & Potter, 2007). Interpersonal rejection sensitivity can be linked to negative mental health outcomes that are also associated with victimization such as: symptoms of depression and anxiety and loneliness (Gao, Assink, Cipriani, & Lin, 2017).

London, Downey, Bonica, and Paltin (2007) conducted a longitudinal study to examine the link between rejection sensitivity and increased feelings of loneliness given that rejection sensitivity can negatively impact the ability to form positive peer relationships (Levy, Ayduk, Downey, 2002). One hundred and fifty sixth grade students

were surveyed initially during the fall semester of sixth grade and again in the spring semester of that same year. The Loneliness and Social Dissatisfaction Questionnaire and Children's Rejection Sensitivity Questionnaire were utilized to respectively measure feelings of isolation and level of sensitivity to rejection (London, Downey, Bonia, & Paltin, 2007). The findings indicated that loneliness was predicted by anxious and hostile rejection assumptions, but more research is needed to study if rejection sensitivity directly predicts loneliness.

Interpersonal rejection sensitivity has also been researched in relation to loneliness and victimization. Zimmer-Gembeck, Trevaskis, Nesdale and Downey (2013) conducted a cross-sectional study to assess the relationship between rejection sensitivity, direct victimization, and feelings of loneliness in Australian adolescents. Rejection sensitivity was measured by peer report as well as a self-report questionnaire. The results of this study suggest that adolescents who experience more direct victimization also present with more feelings of loneliness, depression, and rejection sensitivity (Zimmer-Gembeck, Trevaskis, Nesdale, & Downey, 2013).

Attribution Theory and Victimization

Attribution theory posits people naturally search for the cause of events when they approach a situation and respond based on their inferences (Weimer & Graham, 1984). Inferences that explain the cause of social events, like rejection, are classified as causal attributions (Weimer & Graham, 1984; Zimmer-Gembeck et al., 2016). Causal attributions are essentially the reasoning why an event occurred and are mostly apparent when something unexpected occurs or with an unfulfilled desire such as interpersonal

rejection. (Weimer & Graham, 1984). When causal attributions are created during events considered as social failures, the individual's understanding of others and future behavior is impacted (Zimmer-Gembeck, 2015). The individual's behavior can then be predicted depending on the type of causal attribution, and this response becomes automatic in nature. There are many types of causal attributions (i.e., motivation, aptitude, mood, health, etc.), but the most common types associated with victimization and rejection are self-blaming (internal) and peer-blaming (external) (Weimer & Graham, 1984; Zimmer-Gembeck, et al., 2016). If the individual perceives faults within themselves as the cause of their victimization experience, this is classified as self-blame. Those who engage in self-blame during victimization are more likely to experience internalizing symptoms such as depression and withdrawal (Zimmer-Gembeck et al., 2016). This attribution seems to be most associated with the profile of a victim (Zimmer-Gembeck et al., 2016). Engagement in aggressive behavior is expected when the targeted individual blames their peers after experiencing rejection because the individual is seeking retribution (Guerra, Asher, DeRosier, 2004). This causal attribution type seems to be linked more to the bully or bully-victim profile. Since these causal attributions evoke an automatic reaction to rejection situations, this does not allow the individual to evaluate or monitor their emotional response. This lack of emotional regulation can place the individual at-risk of experiencing future victimization (Morelen, Southam-Gerow, & Zeman, 2016).

Emotional Regulation

Emotional regulation has been minimally researched in relation to victimization and interpersonal rejection sensitivity separately. Emotional regulation is defined as "…the extrinsic and intrinsic processes responsible for monitoring, evaluation, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals…" (Thompson, 1994, pp 27-28). Emotional regulation consists of the internal processes as well as the behaviors that are involved in controlling an individual's emotional arousal and response (Morelen, Southam-Gerow, & Zeman, 2016). As discussed in the social information processing model previously, emotion processing begins with the appraisal of present cues, and depending upon the developed inferences, response tendencies (i.e., physiological, behavioral, etc.) are then activated (Gross & John, 2003; Lemerise & Arsenio, 2000). Various emotional regulation strategies have been identified in the literature, and these strategies are generally distinguished by the timing of the emotional response (Gross & John, 2003). Specifically, emotional regulation strategies are considered to be either response-focused or antecedent-focused (Gross, & John, 2003). Response-focused strategies are implemented after the emotional response has begun while antecedent-focused strategies allow individuals to intervene earlier. Since antecedent-focused strategies are implemented before the response, it allows for the emotional trajectory to be changed (Gross & John, 2003). While there are many emotional regulation techniques, the two most popular strategies are cognitive reappraisal and expressive suppression. Cognitive reappraisal is considered to be adaptive as it involves the cognitive restructuring of a

possible emotion-eliciting situation in order to change the overall impact on the individual (Lazarus & Alfert, 1964). Individuals who engage in cognitive reappraisal experience a decrease in negative affect and an increase in positive affect without any apparent adverse side-effects present (Brockman, Ciarrochi, Parker, Kashdan, 2017; Gross, 2002; Gross & John, 2003; Mauss, Cook, Cheng, & Gross, 2007). Research suggests that the expressive suppression emotion regulation strategy is considered to be maladaptive in comparison as it has been associated with less positive emotions, greater negative emotions, and poor interpersonal relationships (Brockman, Ciarrochi, Parker, Kashdan, 2017; Gross & John, 2003).

There is an increasing interest in how children's ability to regulate their emotions appropriately relates to psychological and social functioning (Morelen, Southam-Gerow, & Zeman, 2016). The inability to effectively control emotions can be a risk factor for victimization since it gives rise to many powerful negative emotions that range from anger to sadness (Adrian, Jenness, Kuehn, Smith, & McLaughlin, 2019; Morelen, Southam-Gerow, & Zeman, 2016). Sadness and anger are accompanied by high amounts of emotional reactivity, arousal, and dysregulation that is not seen with individuals who do not experience victimization events (Adrian et al., 2019). Heightened emotional reactivity is "…characterized by the speed, pattern, and intensity of an individual's emotional response to an event…" (Adrian et. al., 2019, p. 3). Individuals who experience victimization events are more likely to react negatively to peers provoking them which, in turn, leads to the continuation of victimization (Rosen, Milich, & Harris, 2012). Emotional arousal refers to a state of intensified emotion the victim experiences

in response to a situation (Adrian et al., 2019). The victimization experience produces intense adverse emotions that impair the individual's ability to appropriately control their emotional response (Adrian et al., 2019; Mahady Wilton, Craig, & Pepler, 2000). Students who experience difficulty with emotional regulation are at greater risk of victimization and tend to have more negative social outcomes while children who can effectively manage their emotions engage in more socially appropriate behavior (Perr-Parrish & Zeman, 2011). Morelen, Southam-Gerow, and Zeman (2016) assessed the relationship between children's level of emotional regulation and peer victimization. The results suggested emotional regulation was significantly related to peer victimization in that individuals who have difficulty appropriately managing their emotional arousal and response were more likely to be victimized (Morelen, Southam-Gerow, & Zeman, 2016). Gender differences were also found in relation to anger regulation difficulty with girls experiencing greater risk for victimization than boys (Morelen, Southam-Gerow, & Zeman, 2016). Traditionally, it is believed that girls are more likely to respond to victimization with worry or sadness while boys are more likely to respond with anger, and these findings seem to reflect the view that disrupting these fixed gender norms places the individual at-risk for adverse social outcomes (Crick & Dodge, 1994; Morelen, Southam-Gerow, & Zeman, 2016).

Since emotional regulation largely involves managing emotional arousal and response, individuals who experience heightened sensitivity to rejection may have more difficulty with emotional regulation. This heightened sensitivity is associated with automatic, hypervigilant responses that are guided by causal attributions. Therefore, the

individual does not have much opportunity to evaluate or modify their emotional response. Individuals who utilize self-blame to explain the cause of social conflict are more likely to experience “flight responses” such as worry and withdrawal while those who blame others are more likely to react with aggression or seek retribution (Zimmer-Gembeck et al., 2016). There is a lack of research available on the relationship between emotional regulation and interpersonal rejection sensitivity, but Silvers et al. (2012) examined the link between these two variables in adolescence. This study revealed that rejection sensitivity impacts adolescent’s ability to successfully regulate their emotions (Silvers et al., 2012). Youth with higher rejection sensitivity experienced more difficulty in utilizing cognitive reappraisal to regulate their emotional response to social situations (Silvers et al., 2012). Previous longitudinal research also suggests a link between rejection sensitivity and expressive suppression emotional regulation strategy (Gardner, Zimmer-Gembeck, & Modecki, 2020). A path model analysis revealed that increased rejection sensitivity during the first survey period significantly positively predicted expressive suppression. Furthermore, deficits in emotional regulation mediated the relationship between rejection sensitivity and internalizing problems (i.e., depression, anxiety, etc.), but further research is needed to confirm these relationships (Gardner, Zimmer-Gembeck, & Modecki, 2020).

CHAPTER III

CURRENT STUDY

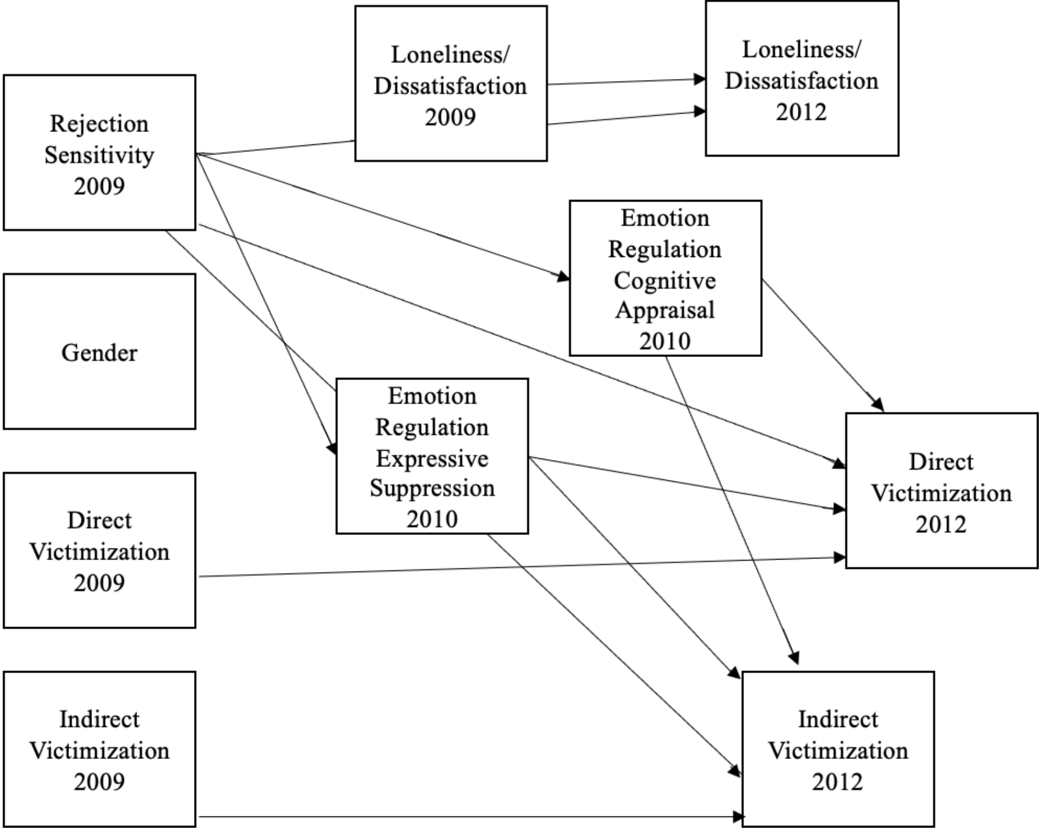
A concurrent longitudinal design was adopted to analyze the research questions. Overall, the current study aimed to examine a new model of the victimization process. It was expected that victimization ratings at the first survey period would predict victimization in the last survey period as past victimization experiences are one of the best predictors of future victimization. As previously discussed, higher levels of interpersonal rejection sensitivity and maladaptive emotion regulation strategies (i.e., expressive suppression) have also been individually linked to an increase in victimization. Interpersonal rejection sensitivity has been linked to maladaptive emotion regulation strategies. Emerging research also shows that youth with higher reported sensitivity to potential rejection experience more difficulty in utilizing cognitive reappraisal to regulate emotion responses to social situations (Silvers et al., 2012). Therefore, emotion regulation strategies were assessed as a possible mediator between interpersonal rejection sensitivity and future victimization. Assessing the relationships between these variables altogether allows for better understanding of the mechanism in which interpersonal rejection sensitivity might negatively impact victimized youth's future outcomes. The current study also expanded the existing literature by examining the victimization process with diverse individuals.

Hypothesized Model

The hypothesized model furthers Lemerise and Arsenio's (2000) revised social information processing framework of victimization by integrating interpersonal rejection

sensitivity and loneliness/dissatisfaction along with emotion processing. Under this theoretical framework, individuals who experience more intense emotions or have emotional regulation difficulties are also more likely to struggle with interpreting social situations which can lead to a more negative outcome overall (i.e., victimization; feelings of loneliness/dissatisfaction). Therefore, it was predicted that individuals who had higher levels of interpersonal rejection sensitivity were more likely to employ maladaptive emotional regulation strategies (i.e., expressive suppression), which would place them at risk for future victimization and associated negative outcomes such as loneliness/dissatisfaction. It was also expected that individuals who experience lower interpersonal rejection sensitivity would engage in more adaptive strategies (i.e., cognitive reappraisal) and report lower levels of victimization and feelings of loneliness/dissatisfaction. Figure 1 depicts the hypothesized relationships between variables:

Figure 1 Hypothesized Model



CHAPTER IV

METHODOLOGY

Participants

This study utilized longitudinal, individual-level secondary data from a larger study on post-secondary preparation, Gaining Early Awareness and Readiness for Undergraduate Program (GEAR UP). As part of the GEAR UP project eligibility, the schools included in this study had 50% or more students who qualified for free or reduced-price meals under the USDA's National School Lunch Program. All secondary schools across one school district in the Southwest United States were represented in the sample. Overall, the sample was 43.8% Latinx, 31.2% White, 22.8% African American, 1.1% Multiracial, 0.9% Asian American, and 0.3% Native American/Alaskan Native with 53.52% of the participants identifying as female and 46.48% as male. The data was collected over six years from 2008-2013. Adolescents were first surveyed when they were in middle school in 2008 (ages 12-15 years old), with the majority (95.24%) being enrolled in 7th grade. These students were then sampled at school every fall until data collection was completed in the 2013-2014 academic year; however, the design of the GEAR UP study was based on a cohort model in that new students could join in the middle of the intervention, which caused the sample size to vary across years. The target sample for this study is 1,140 students who were surveyed across 2009, 2010, and 2012. Table 1 is a representation of the available data across the three years for the variables of interest.

Table 1 Variables of Interest

2009	2010	2012
Direct Victimization n = 613	Emotion Regulation Cognitive Reappraisal n = 864	Direct Victimization n = 796
Indirect Victimization n = 612	Emotion Regulation Expressive Suppression n = 864	Indirect Victimization n = 795
Loneliness/Dissatisfaction n = 652		Loneliness/Dissatisfaction n = 795
Rejection Sensitivity n = 653		

Note. Sample size varies across variables and years of the study due to the cohort model of the GEAR UP study. The analytic method used allowed for cases with missing data to still be included, and the final sample size was 1,140.

Measures

Peer Victimization

A modified version of the Revised Peer Experiences Questionnaire (Prinstein, Boergers, & Vernberg, 2001) was used to assess if the students had experienced direct or indirect victimization. The measure included eight items and participants were asked to rate how often that happened to them that school year on a five-point Likert scale (1 = never; 2 = once or twice a month; 3 = a few times a month; 4 = about once a week; 5 = a few times a week). Two subscales were generated by calculating the mean score of the items associated with each type of victimization (i.e., direct and indirect) with higher

scores reflective of experiencing more frequent victimization. This measure was administered in 2009 and 2012. The Cronbach's alpha coefficients in 2009 for direct and indirect victimization was .69 and .83 respectively. In 2012, the measure continued to display good internal consistency with Cronbach's alpha values of 0.78 for direct victimization and 0.81 for indirect victimization.

Rejection Sensitivity Related to Victimization

This variable was assessed by presenting the students with seven scenarios in which physical, verbal, and relational victimization events were portrayed in the school setting. After each scenario, the student responded to the question, "How upset would you be if this happened to you?". This was assessed using a four-point Likert scale that ranged from not at all to very upset (i.e., 1 = not at all; 2 = a little upset; 3 = somewhat; 4 = very upset). For example, one scenario asked a student how upset they would be if a group of students tripped them and pushed them to the ground. There were five scenarios focused on indirect victimization and two portraying direct victimization (all items can be found in Appendix B). The student's overall level of rejection sensitivity related to victimization was generated by calculating the mean score of all items with higher scores reflective of increased sensitivity to perceived rejection. This measure was administered in 2009 only. For the current study, this measure showed good internal consistency with Cronbach's alpha of 0.85 for rejection sensitivity related to victimization.

Emotional Regulation

The Emotion Regulation Questionnaire assessed the students' current ability to manage their emotions (Gross & John, 2003). Specifically, two emotional regulation

strategies were considered which resulted in two subscales: cognitive reappraisal and expressive suppression. The cognitive reappraisal subscale assessed whether the student tends to cognitively restructure potential emotion-eliciting situations. Alternatively, the questions associated with the expressive suppression subscale examined the student's tendency to inhibit their emotional responses. The measure included statements like: to feel more positive, I change the way I think about the situation; I keep emotions to myself; when feeling negative, I make sure not to express it; etc. The student was asked to rate the degree to which they agreed with each statement on a 7-point Likert scale (1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = neutral; 5 = somewhat agree; 6 = agree; 7 = strongly agree). Neutral responses were later assigned a value of 0 to provide a more accurate picture of actual engagement in each emotion regulation strategy. A total score for each emotion regulation strategy were then calculated with higher scores representing higher engagement in cognitive reappraisal and expressive suppression. This measure was only administered in 2010. The measure displayed good internal consistency with Cronbach's alpha coefficients for cognitive reappraisal and expressive suppression at 0.86 and 0.75 respectively.

Loneliness and Social Dissatisfaction

The Loneliness and Social Dissatisfaction Questionnaire was utilized to assess the students' feelings about their relationships with peers (Asher, Hymel, & Renshaw, 1984). Only the primary items were utilized due to the filler items being omitted. These items are focused on feelings of loneliness, social adequacy/inadequacy, and estimations of peer relationships (Asher, Hymel, & Renshaw, 1984). The student was asked to rate

how true each sentence was on a 5-point Likert scale (1 = not at all; 2 = a little; 3 = somewhat; 4 = a lot; 5 = very much). A total score was calculated by taking the mean score of all items to represent the student's level of loneliness/dissatisfaction. however, statements focused on positive emotions/peer relationships were reverse scored (i.e., I have a lot of friends: 1 = very much; 2 = a lot; 3 = somewhat; 4 = a little; 5 = not at all) so that higher scores were indicative of increased feelings of loneliness/dissatisfaction. This measure was utilized in 2009 and 2012. The Cronbach's alpha value for the self-report of loneliness and social dissatisfaction fell in the acceptable range both years (0.84 in 2009; 0.82 in 2012).

Procedures

The Texas A&M University Internal Review Board (IRB) evaluated and approved the application to conduct the original research study in 2008 and continued approval was obtained each subsequent year of the project until its completion. For the current study, a truncated version of the IRB application was submitted, and it was determined that the current project is not considered human subjects research. All identifying information was previously removed from the data set. Data on demographic information (e.g., gender and ethnicity), victimization, interpersonal rejection sensitivity, emotional regulation, and loneliness/social dissatisfaction were analyzed. Individuals with incomplete data across 2009, 2010, and 2012 were included in the analysis.

Data Analysis

The hypothesized relationships between interpersonal rejection sensitivity, victimization, emotional regulation, and loneliness/social dissatisfaction were all

assessed through path analysis. Path analysis is a special case of structural equation modeling (SEM) which is a multivariate technique that allows the researcher to identify and test a theoretical model representative of the hypothesized causal relationships (Kline, 2016). The main difference between path analysis and SEM is that path analysis measures the relationships between observed variables while SEM can measure both observed and latent variables. The data for the current study includes only observed variables (i.e., a measurement model), therefore, the most appropriate analysis is path analysis. Although it is similar to multiple regression, path analysis is the best method to analyze the data for the current study as it allows for path coefficients to be examined concurrently in a hypothesized model (Kline, 2016).

There are many assumptions associated with path analysis that must be met to ensure the results of the analysis are valid and interpretable. Generally, a linear relationship needs to be present between the variables (Kline, 2012). The second assumption refers to the normality of residuals; this means the errors need to be approximately normal distributed, and this was assessed by utilizing skewness and kurtosis values (Kline, 2016). A large sample size and small covariance residuals are also assumed with path analysis and SEM analyses (Kline, 2016; Ullman & Bentler, 2013). Although there is much debate about sample size requirements, it is generally recommended there are a minimum of ten cases per parameter estimated in the model (Kline, 2016). Therefore, a minimum of 340 observations were needed for the current study. The next assumption states there cannot be a significant discrepancy between the data and the assumptions of the statistical method being utilized (Kline, 2012). If there is

a large discrepancy present, the results might be considered inaccurate. Lastly, the model must be theoretically driven as it is assumed that the model being hypothesized is correct; this is why specifying a model is the most important step (Kline, 2012; KIine, 2016).

Once a model is identified, the model fit must then be examined by utilizing model test statistics and approximate fit indices (Kline, 2016). Chi-square is a model test statistic that is often used to measure the models' deviation from perfect fit (Kline, 2016). The Root Mean Square Error of Approximation (RMSEA) is an approximate fit index that is designed to show how poor the model fit is, with values below 0.08 being considered to have acceptable fit and values below 0.05 to have good fit (Kline, 2016). Another approximate fit index is the Comparative Fit Index (CFI), and it involves analyzing the difference between the proposed model and the data (Kline, 2016). CFI values range from zero to one, and values close to one indicating good fit. The Standardized Root Mean Square Residual (SRMR) is similar to RMSEA in that it is designed to show poor model fit. This means that an SRMR value that is below 0.08 is indicative of fair fit (Kline, 2016). All tests and fit indices mentioned were utilized to evaluate the fit of the hypothesized model.

CHAPTER V

RESULTS

Preliminary analyses were carried out utilizing STATA to assess the assumptions associated with path analysis. When assessing normality of variables to engage in structural equation modeling analyses, Brown (2006) suggests skewness values ranging-3 to 3 and kurtosis values ranging -10 to 10 are indicative of normally distributed data as it is generally a more robust analytical tool. Three variables (i.e., Indirect Victimization 2009; Direct Victimization 2012; Indirect Victimization 2012) were identified with elevated skewness and kurtosis values (presented below in Table 2) which indicates that the data for these variables is not normally distributed. There are many considerations when handling non-normal data.

Researchers often opt to transform variables to satisfy the normality assumption, but this inherently changes the meaning of the variables in some way. The asymptotically distribution free (ADF) estimation method can be applied instead of transforming the affected variables as this method can account for data that is not normally distributed; however, the ADF estimation method also assumes that the data is missing completely at random (Kline, 2016). Little's test of missing completely at random was conducted to examine this assumption. The test was significant which indicates the data for the current study was not missing at random. It was then assumed the data was missing at random, with approximately 28% data missing overall, as participants were not consistently sampled across the years due to the cohort model of the GEAR UP study as well as a myriad of other circumstances (i.e., absences; refusal;

school setting change; etc). The ADF estimation method in STATA, by default, utilizes listwise deletion to handle any missing values. The listwise deletion method does not allow for cases with one or more missing values to be included in the analysis, so the final analytic sample size would have been impacted significantly (N=321). The maximum likelihood with missing values (MLMV) estimation method in STATA automatically employs full-information maximum likelihood to handle missing data. This technique is recommended and preferred over more traditional methods (i.e., listwise deletion) as it allows for more cases to be included in the analysis (Kline, 2016). Although the maximum likelihood estimation method also assumes endogenous variables are normally distributed, past research has shown that this method is not affected significantly by non-normal data (Benson & Fleishman, 1994). Therefore, the MLMV estimation method was utilized to examine the hypothesized model.

Descriptive statistics including number of observations, mean, standard deviation, skewness, and kurtosis were computed for each observed variable (Table 2).

Table 2 Descriptive Statistics

Variable	Obs	*M*	SD	Sk	Ku
Rejection Sensitivity (RS)	653	2.72	0.80	-0.39	2.33
Direct Victimization 2009 (DV09)	613	1.41	0.75	2.47	9.83
Indirect Victimization 2009 (IV09)	612	1.37	0.66	2.84	12.36
Loneliness/Dissatisfaction 2009 (LD09)	652	1.76	0.70	1.13	3.90
Emotion Regulation Cognitive Reappraisal (ERCR)	864	4.75	1.22	-0.45	3.51
Emotion Regulation Expressive Suppression (ERES)	864	4.24	1.28	-0.19	2.90
Direct Victimization 2012 (DV12)	796	1.12	0.42	5.89	46.5
Indirect Victimization 2012 (IV12)	795	1.20	0.47	4.19	26.15
Loneliness/Dissatisfaction 2012 (LD12)	795	1.81	0.67	1.04	3.89

Note. Sample size varies across variables and years of the study due to the cohort model of the GEAR UP study. The analytic method used allowed for cases with missing data to still be included. It seems the participants varied greatly across years, and the final sample size was 1,140.

Correlation Analysis

Correlations between the observed exogenous and endogenous variables are presented below in Table 3. Values above 0.50 were considered as strong correlations, values 0.30-0.49 were identified as moderate, and values 0.10-0.29 were considered to be weak (Cohen, 1988). No significant correlations were identified between rejection sensitivity and the other variables. Only two strong positive correlations were identified among the variables: direct victimization 2009 and indirect victimization 2009; indirect victimization 2012 and direct victimization 2012. However, there were four moderate positive correlations found (loneliness/dissatisfaction 2009 and direct victimization 2009; loneliness/dissatisfaction 2009 and loneliness/dissatisfaction 2012; emotion

regulation expressive suppression and emotion regulation cognitive reappraisal; direct victimization 2012 and loneliness/dissatisfaction 2012).

Table 3 Correlations of Analysis Variables

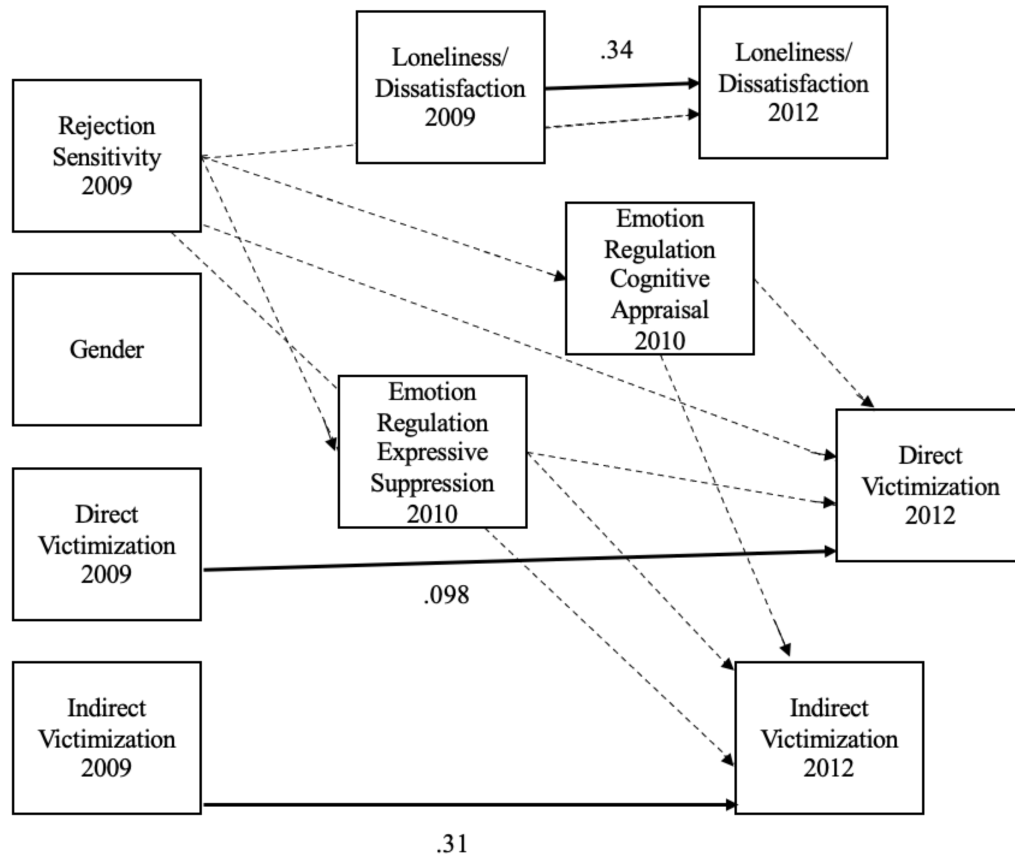
Variable	1	2	3	4	5	6	7	8	9
1. RS	-								
2. DV09	.070	-							
3. IV09	.064	.693**	-						
4. LD09	-.011	.280**	.343**	-					
5. ERCR	.046	-.031	.015	-.047	-				
6. ERES	-.042	.049	.048	.136**	.402**	-			
7. DV12	.028	.067	.073	.059	-.090*	-.090*	-		
8. IV12	.051	.177**	.263**	.104*	-.059	-.036	.739**	-	
9. LD12	-.005	.211**	.218**	.317**	-.135**	.109**	.279**	.372**	-

Note. *p < .05. **p < .01

Path Analysis

Figure 2 displays the path model analysis and standardized coefficients. The original hypothesized model did not fit the data perfectly as the overall chi square test was significant (x^2(21, *N*=1,140)= 171.38, p=.000). Additional fit indices indicated that the model had questionable fit as the CFI value was not greater than .95, but the RMSEA value did fall below .08. Only three of the hypothesized paths were significant, and they were in the hypothesized direction. Rejection sensitivity did not significantly predict any of the endogenous variables, and emotion regulation did not mediate the relationship between rejection sensitivity and victimization. Therefore, model respecification was considered to improve the overall fit.

Figure 2 Hypothesized Path Analysis Model



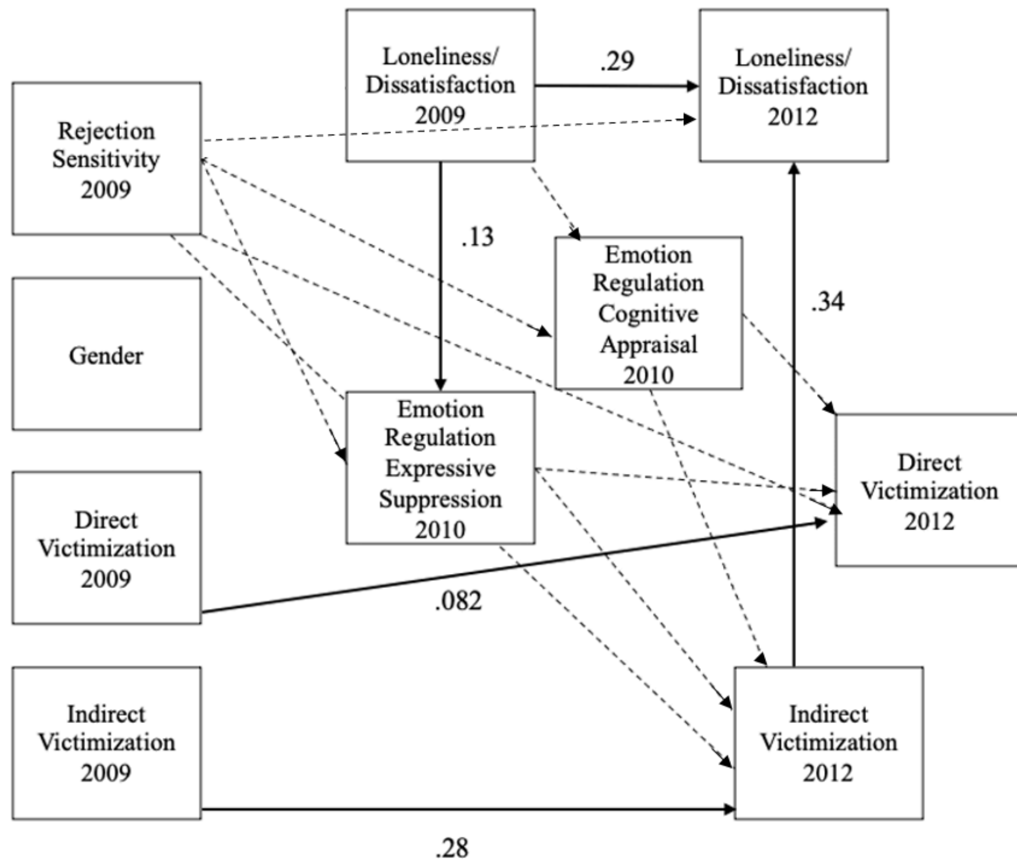
Note. Coefficients only shown for significant paths, and nonsignificant paths are denoted by a dotted line. LD09 significantly predicted LD12 (p=.000). DV09 significantly predicted DV12 (p=.014). IV09 significantly predicted IV12 (p=.000).

It is vital to consider both statistical and theoretical evidence when revising the model to prevent overparameterization (Kline, 2016). A revised model was initially tested in which all of the nonsignificant paths were removed, but they were placed back into the model as the fit did not increase significantly. The modification indices were examined, and it indicated that adding three new direct paths (loneliness/dissatisfaction

in 2009 to emotion regulation cognitive reappraisal; loneliness and dissatisfaction in 2009 to emotion regulation expressive suppression; direct victimization in 2012 to loneliness/dissatisfaction in 2012) could improve the model. Available research suggests that loneliness can lead to deficits in self-regulatory processes such as emotion regulation (Hawkley, Thisted, & Cacioppo, 2009). Victimization has also been linked to loneliness and dissatisfaction and a host of other negative outcomes throughout many studies (Saroyan, 2019; Shetgiri, 2013; Wolke, Copeland, Angold, & Costello, 2013).

The modified path analysis model and standardized coefficients are represented in Figure 3. The overall chi square test remained significant (x^2(18, *N*=1,140)= 46.79, p=.000), but the other fit statistics suggested the modified model was a better fit than the original (RMSEA<.08; CFI>.95). Two new significant paths were established in this model, with five significant paths identified overall.

Figure 3 Modified Path Analysis Model



Note. Coefficients only shown for significant paths, and insignificant paths are depicted with a dotted line. LD09 significantly predicted ERES (p=.003). LD09 significantly predicted LD12 (p=.000). DV09 significantly predicted DV12 (p=.039). IV09 significantly predicted IV12 (p=.000). IV12 significantly predicted LD12 (p=.000).

CHAPTER VI

DISCUSSION

The present study sought to further the understanding between interpersonal rejection sensitivity, emotional regulation strategies, victimization, and loneliness/dissatisfaction by proposing a new model of the victimization process. Specifically, it was theorized that adolescents who were identified as more sensitive to rejection would be more likely to employ maladaptive emotional regulation strategies which then would lead to experiencing victimization as well as feelings of loneliness/dissatisfaction. The literature is saturated with studies focused on the effects associated with experiencing victimization, and it is clear that not all individuals are impacted in the same way (Alavi et al., 2017; Saroyan, 2019; Shetgiri, 2013). Therefore, this study aimed to further the understanding of what leads to experiencing victimization and those related negative outcomes. Rejection sensitivity has been investigated minimally in relation to victimization and emotional regulation separately. Available research suggests that individuals who experience more direct victimization are more sensitive to rejection, and it appears that individuals with an increased sensitivity to rejection also struggle with regulating their emotions appropriately, consequently, perpetuating a cycle of victimization (Silvers et al., 2012; Zimmer-Gembeck, Trevaskis, Nesdale, & Downey, 2013).

The current study's findings were intended to have implications for the prevention of victimization and the negative projected outcomes associated with experiencing a victimization event. The first research question asked if victimization and

loneliness/dissatisfaction could respectively predict future victimization and loneliness/dissatisfaction. It was hypothesized that victimization as well as loneliness/dissatisfaction would positively predict victimization and loneliness/dissatisfaction respectively over time. A significant positive relationship was found between both forms of victimization (direct and indirect) across the transition from middle to high school which suggests that individuals who experienced victimization are more likely than others to experience it again. This finding was expected as available research suggests that victimization is relatively stable over-time (Juvonen et al., 2000; Salmivalli, Lappalainen, & Lagerspetz, 1998; Strohmeier, Wagner, Spiel, & von Eye, 2010). Kljakovic and Hunt's (2016) meta-analysis of eighteen studies on victimization indicated that past victimization is the strongest predictor of future victimization in comparison to many other individual and contextual factors (i.e, internalizing problems; difficulty navigating the social environment; conduct problems; age; school problems). The current research confirms that early prevention is imperative to avoid a perpetuating cycle of victimization.

A significant positive relationship was also identified between loneliness/dissatisfaction across time which implies that feelings of loneliness/dissatisfaction are relatively stable throughout the transition from middle school to high school. Previous research regarding loneliness/dissatisfaction shows that it is a common feeling in children and adolescents, but it is not stable across the developmental lifespan (Cassidy & Asher, 1992; Schinka, van Dulmen, Mata, Bossarte, & Swahn, 2013). The literature identifies various patterns of loneliness/dissatisfaction

dependent upon the individual's age (Schinka, van Dulmen, Mata, Bossarte, & Swahn, 2013). Particularly, five trajectories have been identified with most individuals experiencing relatively low loneliness/dissatisfaction across middle childhood and adolescence (Schinka, van Dulmen, Mata, Bossarte, & Swahn, 2013). The other four trajectories include: children experiencing moderate loneliness/dissatisfaction in middle childhood with an increase in adolescence; children reporting high levels throughout childhood with a gradual increase until high school; children feeling the loneliest in middle childhood and then feelings decrease; children experiencing high levels of loneliness consistently throughout both childhood and adolescence (Schinka, van Dulmen, Mata, Bossarte, & Swahn, 2013). It appears that the results of the current study are aligned with the most prominent trajectory in which the adolescents reported relatively low feelings of loneliness/dissatisfaction over time.

In the modified model, a significant positive relationship was found between indirect victimization and loneliness/dissatisfaction over time which means that individuals who experience higher levels of relational or indirect victimization are more likely to report increased feelings of loneliness/dissatisfaction. This finding was expected as the literature is replete with the negative outcomes associated with enduring a victimization event, including loneliness/dissatisfaction (Saroyan, 2019; Shetgiri, 2013; Sinclair et al., 2012; Woods, Done, & Kalsi, 2009). mediate

The second research question sought to determine whether interpersonal rejection sensitivity predicted future victimization and loneliness/dissatisfaction; however no significant paths were identified between interpersonal rejection sensitivity and any

variables across both models. The third research question examined if emotional regulation strategies predicted future victimization as it was expected individuals who engaged in cognitive reappraisal would report lower levels of victimization; while those who utilized expressive suppression would report higher levels of victimization. The model indicated that cognitive reappraisal was negatively associated with both types of victimization, while expressive suppression was positively associated, but no significant paths were established between the variables; however, a significant positive relationship was identified between loneliness/dissatisfaction and future engagement in emotional regulation strategy, expressive suppression. These results suggest that individuals who report higher levels of loneliness/dissatisfaction are more likely to engage in maladaptive emotional regulation strategies rather than more adaptive ones such as cognitive reappraisal. These results further research as the effects of loneliness on emotional regulation strategies is not heavily researched. The present literature indicates that loneliness/dissatisfaction is linked to poor emotion regulation (Cacioppo et al., 2000; Hawkley, Thisted, Cacioppo, 2009; Kearns & Creaven, 2017). In terms of emotion regulation strategies, Kearns' and Creaven's (2017) suggests that increased feelings of loneliness/dissatisfaction are associated with expressive suppression and other maladaptive strategies. It seems that the adolescents in the current study with increased loneliness/dissatisfaction tended to suppress their negative emotions rather than transform their negative thoughts to be more positive.

The final research question asked if the relationship between rejection sensitivity and victimization was mediated by emotional regulation, and this association was not

supported in either model, and came as a bit of a surprise. Research suggests that youth who are more sensitive to rejection have more difficulty with using cognitive reappraisal to regulate their emotional response to social situations, so they employ more reactional strategies like expressive suppression (Silvers et al., 2012; Gardner, Zimmer-Gembeck, & Modecki, 2020). The literature also implies that students with emotional regulation deficits are at greater risk of victimization as individuals who can effectively manage their emotions are more likely to engage in socially appropriate behavior (Perr-Parrish & Zeman, 2011). It appears that the participants' emotional regulation strategies were not related to their experiences of victimization, and this could be due to low experiences of victimization reported as well as to only measuring the regulatory strategy used. Including related components in the measurement of emotional regulation (i.e., emotional reactivity, emotional dysregulation, etc.) could have modified the results as previous research has found a strong link between emotional regulation and victimization.

Limitations and Future Directions

The proposed model did not support emotion regulation strategies as a mediator of rejection sensitivity and victimization, nor did rejection sensitivity predict any variables. Future research should extend the model to include other variables such as coping style as the available literature suggests maladaptive coping and emotion regulation strategies both mediate the relationship between victimization and loneliness (Gardner, Betts, Stiller, Coates, 2017). It seems that interpersonal rejection sensitivity

should not be removed from this model in future studies as the present research shows a strong connection between victimization, negative mental health outcomes (i.e., loneliness/dissatisfaction), and interpersonal rejection sensitivity (London, Downey, Bonica, & Paltin, 2007; Williams, Doorley, Esposito-Smythers, 2017; Zimmer-Gembeck, Trevaskis, Nesdale, Downey, 2014). The current study differs from this past research in that validated measures (i.e., The Interpersonal Sensitivity Measure; The Children's Rejection Sensitivity Questionnaire) were not utilized to assess interpersonal rejection sensitivity. The Children's Rejection Sensitivity Questionnaire assesses causal attributions (i.e., anxious or hostile) as well as assessing their expectation of rejection while the Interpersonal Sensitivity Measure examines overall sensitivity to others. The measure utilized in the present study has not been validated, and it only included a self-report of how upset the student would be after experiencing various rejection scenarios. This is a measurement limitation in that it might not allow for an accurate picture of interpersonal rejection sensitivity.

Overall, it appears that most participants reported higher levels of sensitivity to rejection scenarios when compared to their personal experiences with victimization. This is another possible limitation of the study as restricted subjective experience with either direct or indirect victimization, could have skewed the students' ratings of sensitivity related to victimization. Specifically, students who have minimal exposure to victimization, might report a higher level of expected sensitivity in comparison to students who have more experience. Previous research shows that the presence of more direct forms of victimization peaks in middle school and declines throughout high school

while indirect victimization tends to remain more stable throughout high school as social and cognitive skills become more refined in adolescence (Hay et al., 2014; Girard, Tremblay, Nagin, & Cote, 2019; Vaillancourt et al., 2007). This could explain the decline in direct victimization seen in this study as most participants were in the seventh grade during the first survey period. An increased focus on the implementation of bullying and victimization prevention programs in the schools could also explain the overall low reported exposure to victimization as these programs typically begin in elementary school and have been shown to be effective in reducing involvement in bullying (Gaffney, Ttofi, & Farrington, 2019; Jiménez-Barbero, Ruiz-Hernández, Llor-Zaragoza, Pérez-García, & Llor-Esteban, 2016; Lee, Kim, & Kim, 2015). Texas legislation (i.e., Texas Education Code §37.001; House Bill 1942) actually requires schools to actively prohibit bullying. Specifically, each school in Texas must educate all students on bullying, possible impacts, and how to respond by integrating bullying prevention and intervention into the general curriculum.

The results from the current study also cannot be easily generalized as only relatively small low-income schools located in a single district were sampled. Additionally, the majority of the students identified as Latinx. Future research should focus on gaining a better understanding of the victimization process in diverse samples as the available literature is limited, and there is emerging evidence that racially/ethnically diverse students tend to underreport experiences of victimization (Goldweber, Waasdorp, & Bradshaw, 2013). Another limitation in the sample is that only quantitative self-report information from the students was gathered. Many

researchers utilize self-report as well as peer nominations to better examine rejection sensitivity and victimization. There is always some bias associated with utilizing self-report measures, especially when there is a power dynamic involved (i.e., students and examiner), so it might be more beneficial to gather information from other sources as well. Although the data for the current work was taken from a longitudinal study, this research is limited in that only two variables were measured during multiple time points. It would be more insightful to have data for each variable at all time points to better see changes across the transition from middle school to high school years. Adopting a more traditional longitudinal design could have possibly altered the results; therefore, more research in this area is needed to better explore the victimization process over-time.

Despite the limitations of the present work, it does provide information on the victimization process in an under-researched population, Latinx youth, as much of the available research on victimization is not conducted with diverse samples (Hanish et al., 2013; Ostrander, Melville, Bryan, & Letendre, 2018; Sawyer, Bradshaw, & O,Brennan, 2008). Furthermore, the current study provided a better understanding of how interpersonal rejection sensitivity, victimization, loneliness/dissatisfaction, and emotion regulation impacts adolescents. These findings stress the importance of early prevention of victimization in schools to avoid possible long-term negative consequences.

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APPENDIX A

DETAILED PATH ANALYSIS MODELS

Figure 2 Detailed Hypothesized Path Analysis Model

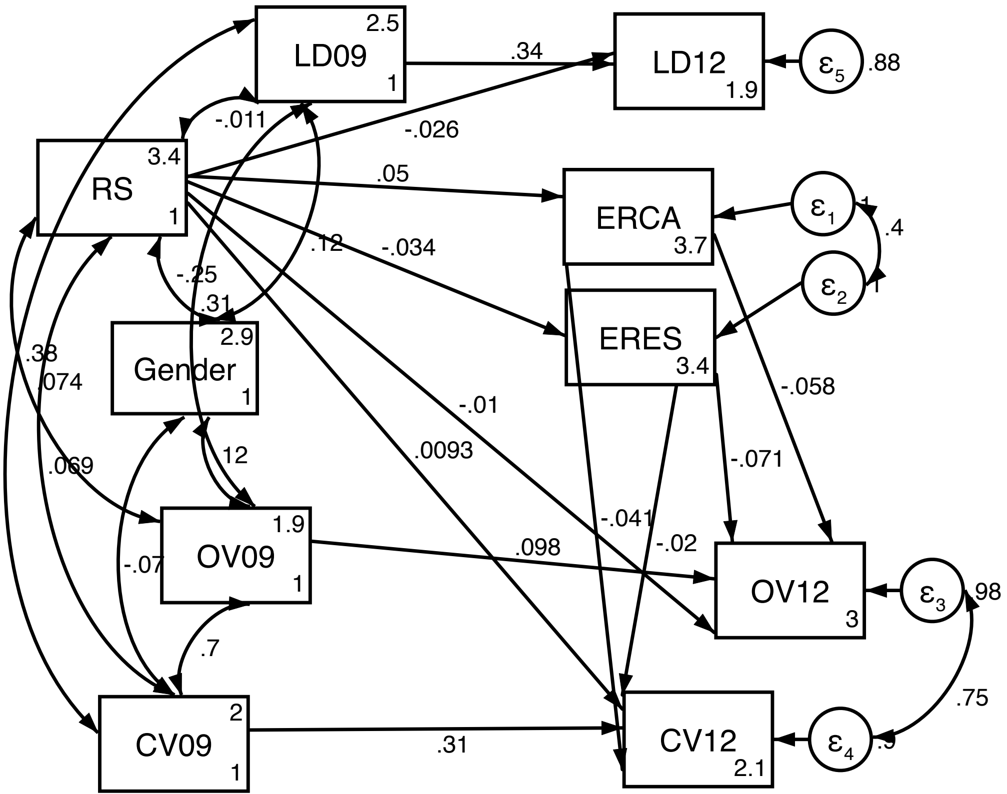
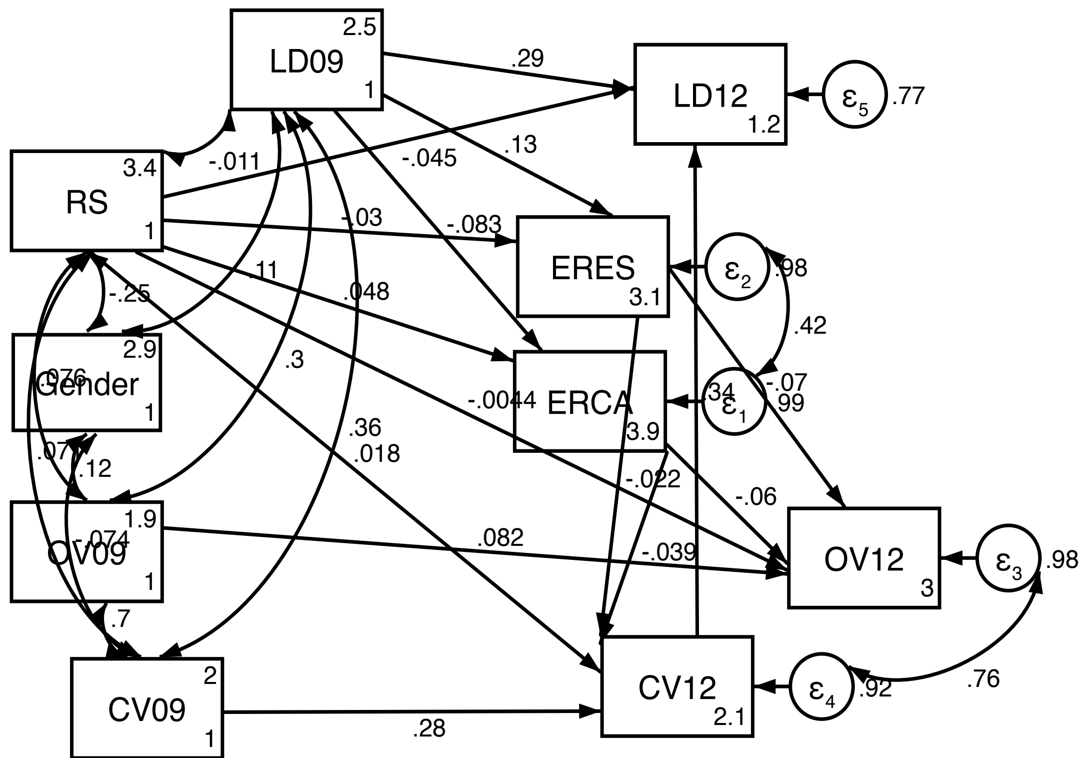


Figure 3 Detailed Modified Path Analysis Model



APPENDIX B

REJECTION SENSITIVITY RELATED TO VICTIMIZATION SCENARIOS

1. When you enter the classroom, you hear a bunch of students in the corner laughing and whispering. You look at the students for a quick second to find out what's going on and ask what's so funny? A student yells very loudly "you" and another kid asks you "what are you looking at stupid?" The whole class starts laughing.
2. Four students are talking in a group in the hallway. One of the students in the group trips you and another pushes you on purpose making you fall to the ground.
3. You are in science class and the teacher says that she will be assigning partners for a class project. The teacher tells you and another student you will be working together. The student who you are assigned to work with gives you a dirty look, rolls his/her eyes, and then asks the teacher if he/she can switch partners.
4. During lunch, a group of people you just started hanging out with are talking about a big party on Saturday. When you ask if you can come, they say "You? I don't think so." Then start laughing and walk away.
5. You are in P.E. and the class just finished playing basketball. The coach asks you to pick up the basketballs and place them in the closet. When you are not looking, one student throws a ball directly at your head and starts laughing.

6. You are walking down the hallway and you keep feeling as if students are looking at you weird. Finally, after school, you get a text message from a number you don't recognize. You look at your phone and there's a picture of you doing something very embarrassing at a party. Your friend later tells you that everyone in school has seen it.
7. You have been absent for a couple of days because of the flu. When you return to school, you find out that a nasty rumor has been spread about you.