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Abstract

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Keywords

Youth Violence, Violence Prevention, Adolescent Development, Interactive Qualitative Analysis, and Adolescent Sex Differences

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Introduction

Despite recent prevention efforts, violence and aggression among our youth remain at unacceptable levels. Approximately one-third of adolescents (26.5% female; 44.4% male) in high school report being actively involved in one or more physical fights during the past 12 months and 7.8% (5.4% female; 10.2% male) report being verbally threatened or injured with a weapon on school property one or more times during the past 12 months with 9.2 % of ninth grade students reporting the highest incidence rates (Centers for Disease Control and Prevention, 2008). Student perceptions of danger at school negatively influence their sense of school engagement, connectedness, and ability to meet school-related demands and challenges (Bowen, Richman, Brewster, & Bowman, 1998).

Studies within the current literature largely examine violence and aggression-related behavioral, social, or psychological outcomes. The results from this study provide insight regarding male and female adolescents' fundamental perceptions of behavioral, social, and psychological influencers. Such knowledge has the potential to better create a safe and healthy school environment by improving the effectiveness of violence prevention programs; understanding the underlying sex-specific influencers to such behaviors may add a critical component to a prevention program. In designing effective violence and aggression prevention programs, sex-specific differences, as examined in this study, may equate to sex-specific prevention strategies.

Review of the Literature

Peer relationships and affiliations

Psychological well-being is positively associated with general friendship support among various ethnic groups and socio-economic levels. Positive perceptions of school climate are associated with positive perceptions of close friendship support (Way & Chen, 2000) which play a pivotal role in adolescent development. Understanding the influence of peer relationships in conjunction with psychological well-being, perceived school climate, and the social hierarchy within a school setting is essential to prevention efforts.

Peer acceptance plays a key role in adolescent identity development (Harter, 1997) as well. Peer crowds, which are reputation-based groups of similar youth, serve as a means to gaining peer acceptance and power within the larger social hierarchy (Brown, 1990). Peer crowds typically include a high status group, an athletic group, an academic group, a socially rebellious group, a deviant group, and a low-status group (i.e., loners). Adolescent peer crowd affiliation with a high-status crowd as well as a low status crowd appears to serve as a protective factor for social anxiety (La Greca & Harrison, 2005). Similarly, high levels of close friendship support among victims of relational aggression have been shown to serve as a buffer for youth vulnerable to social adjustment difficulties (Prinstein, Boergers, & Vernberg, 2001).

Peer rejection is associated with a variety of negative outcomes including delinquency and aggression (Coie, Lochman, Terry, & Hyman, 1992; Ollendick, Weist, Borden, & Greene, 1992). It has been suggested that rejection from mainstream social groups may deprive rejected youth of key opportunities for positive social interaction with peers. Rejected youth, who are typically deficient in social skills, may learn more maladaptive behaviors in association with other rejected peers. These behaviors may be reinforced due to such associations (Kupersmidt, Coie, & Dodge, 1990). Social affiliation with a delinquent peer group predicts school-related problems and anti-social behavior (Elliot, Huizinga, & Ageton, 1986; Jessor & Jessor, 1977; Patterson & Dishion, 1985).

Negative peer interactions, such as teasing, taunting, and threatening behaviors, directly influence the development of volatile events. Current literature defines overt or direct aggression as behaviors that are intended to harm another individual via physical means or threats of physical abuse. Conversely, relational or indirect aggression is defined as less direct behaviors, such as spreading rumors and enforcing social isolation via intentional exclusion, that harm others by manipulating the peer relationship and social hierarchy to gain popularity and security (Crick & Grotpeter, 1995). Whether aggression is overt or relational, the key component of physical and/or psychological intimidation that occurs creates a pattern of harassment and abuse (Batsche & Knoff, 1994; Olweus, 1993).

Grotpeter and Crick (1996) found that relationally aggressive children report receiving high levels of disclosure from their peers suggesting that relationally aggressive children are able to elicit private information from peers and/or that these children tend to selectively choose friends who openly disclose. Conversely, overtly aggressive children report valuing the use of aggression together with their friends to harm those outside their friendship circle suggesting that affiliation with overtly aggressive children may

influence others to behave aggressively even if they are not typically aggressive. Overtly aggressive children's friendships tend to be goal-oriented (i.e., gaining peer dominance), whereas relationally aggressive children's friendships focus on establishing intimacy (Crick & Dodge, 1996).

Sex and violence

Males typically use more overt forms of aggression while females tend to engage in relational or indirect aggression (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Crick & Grotpeter, 1995; Pepler, Craig, Connolly, Yuile, McMaster, & Jiang, 2006; Smith & Gross, 2006). Within an examination of sex differences Smith and Gross' study findings indicate Grade six males demonstrate higher levels of overt bullying behavior than their female counterparts and Grade ten females exhibit higher levels of relational or indirect, covert bullying behaviors than their male counterparts. Similarly, Owens, Shute and Slee (2000) report high rates of indirect aggression among female teens with explanations for such high rates including a desire to create excitement, the need for close personal relationships, and the wish to be a part of the peer group. Moreover, high rates of indirect, covert aggression appear to be linked to consistently high bullying through elementary and high schools which signals significant risks for problems in current and future relationships (Pepler, Jiang, Craig, & Connolly, 2008). Although studies have found females to use more indirect aggression than males, regardless of the sex of the perpetrator, indirect aggression is either unrelated or negatively related to social rejection among both sexes (when the level of direct aggression is controlled for). Salmivalli, Kaukiainen, and Lagerspetz (2000) report that when males use indirect aggression, it appears to contribute to their acceptance among peers. Additionally, males tend to tolerate indirect aggression better than females; therefore, it is possible that males view indirect aggression as less serious or less harmful as direct aggression (Salmivalli et al.).

Specific to dating violence, Sears, Byers, Whelan, and Saint-Pierre (2006) have found specific sex differences. For example, males tend to define relationship or dating abuse by its intent whereas females define the same abuse by its impact. Moreover, adolescents perceive males as engaging in physical abuse more frequently than females and females engaging in psychological abuse more frequently than their male counterparts primarily as a result of gender expectations regarding appropriate responses to stressful situations (Sears et al.). Interestingly, Pepler et al. (2006) found no sex differences in the prevalence of indirect and direct (physical) forms of dating aggression. Indirect aggression was reported more frequently than physical aggression with over 25% of high school males and females reporting participation in indirect dating aggression. The equally high rates of dating aggression are alarming and may foretell relationship problems in the future as well as the potential for physical violence among intimate partners.

A link exists between gender non-normative forms of aggression and social-psychological adjustment (Crick, 1997). For example, girls who engage in overt forms of aggression have been shown to be at greater risk for social and psychological maladjustment (Crick) such as low self-esteem and depressive symptoms than their overtly aggressive male counterparts (Prinstein et al., 2001). Contrary to Salmivalli et al. (2000), Prinstein et al. report boys who engage in high levels of relational aggression

experience higher levels of loneliness than females who engage in similar behaviors. Furthermore, Moretti, Holland, and McKay (2001) found that negativity of self-representation is associated with relational aggression in females and overt aggression and assaultive behavior among males and females.

Violence prevention programs

Although the role of peer relationships has been studied comprehensively among violence prevention researchers world-wide and often serves as a foundation in the development of prevention programs, research addressing sex differences appears to be missing in school-based programming efforts as indicated in the descriptions of the "gold standard" programs that follow. Based upon a strict scientific standard, the Center for the Study and Prevention of Violence (n.d.) at the University of Colorado at Boulder has identified 11 model and 18 promising programs implemented in American communities and schools that have been effective in reducing aggression, violent crime, delinquency, and substance abuse. Of these, the following are the only programs that include a school-based violence, aggression, and/or delinquency-based prevention component at the middle or high school level.

The Olweus Bullying Prevention Program is a multilevel, multi-component program designed to prevent bullying in the elementary and middle schools/junior highs. The program aims at reducing opportunities and rewards for bullying through the actions of school staff, who work to improve peer relationships and the overall school climate. The Olweus program does not specifically address other violent behaviors. The Olweus program was developed in 1983 in Norway and since 2001 has been implemented on a large-scale basis in elementary and middle schools throughout Norway. Due to its success in Norway and other countries, the program was implemented in the mid-1990s in the United States (Olweus Bullying Prevention Program, n.d.). The first systematic evaluation of the Olweus program in the United States assessed 18 middle schools in South Carolina. This evaluation revealed significant decreases in boys' and girls' reports of bullying others and significant decreases in reported victimization and social isolation among boys after one year of implementation (Limber, 2004).

The Behavioral Monitoring and Reinforcement Program (BMRP) is an intervention program that aims to prevent juvenile delinquency, substance use, and school failure for middle school adolescents identified as at-risk based upon low academic motivation, family problems, or frequent or serious school discipline referrals. BMRP is a two-year intervention which requires program staff to check school attendance and discipline records for participants as well as contacting parents to inform them of their children's progress. Weekly meetings with participants include discussions related to actions and consequences, role-playing prosocial alternatives to problem behaviors, and distribution of rewards/incentives for refraining from disruptive behaviors. The outcomes of this program include higher grades and better attendance as well as less self-reported delinquency, drug abuse, and school-based problems when compared to control group participants. Additionally, a five-year follow-up study found that BMRP participants had fewer county court records than their control group counterparts (Center for the Study and Prevention of Violence, n.d.).

The Seattle Social Development Project (SSDP) is a universal (school-wide effort), multidimensional intervention program designed to decrease problem behaviors among elementary and middle school students. A full intervention of this program includes teacher training, parenting classes, and developmentally-adjusted social competency training for students in grades one through six. Of the 643 participants involved in a longitudinal study beginning in fifth grade, 598 were interviewed at a nine-year follow-up. Participants who received the full intervention reported significantly lower rates of lifetime violence and school misbehavior by age 18 years (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999).

The Project Towards No Drug Abuse is a substance abuse prevention program that targets high school youth. While the program was initially developed for high-risk students attending alternative schools, it has been adapted for students attending traditional high school settings. The 12-lesson, classroom-based curriculum is designed to assist students in developing self-control and communication skills, acquiring resources to help them resist drug use, improving decision-making strategies, and developing motivation to not use drugs. A review of three experimental trials assessing two, 468 high school youth in 42 Southern California schools found relative reductions in weapon carrying (21% reduction among all participants for Trial 1 alternative school setting and 19% reduction among males for Trial 1 regular school setting) and reports of victimization (23% reduction among all participants for Trial 1 alternative school setting; 17% reduction among males for Trial 1 regular school setting; and 6% reduction among males for Trial 2 alternative school setting; Sussman, Dent, & Stacy, 2002).

In addition to U.S. programming efforts deemed model or promising by the Center for the Study and Prevention of Violence, there are similarly hopeful violence prevention efforts being conducted worldwide. For example, the Centre for Addiction and Mental Health Centre for Prevention Science in Ontario, Canada has developed the Fourth R, a comprehensive school-based program addressing adolescent physical dating violence. This 21-lesson curriculum addresses personal safety and injury prevention, healthy growth and sexuality, and substance use and abuse. Relationship skills to promote safer decision-making with peers and dating partners are also emphasized within the program. Results of a 2 ½ year study assessing 1,722 students aged 14-15 years of age indicate higher rates of physical dating violence among the control versus intervention students, with a greater effect for boys. Moreover, condom use was higher among sexually active boys in the intervention schools than the control schools (Wolfe, Crooks, Jaffe, Chiodo, Hughes, Ellis, et al., 2009).

None of the school-based programs described above address differences in males and females beyond outcomes. As research indicates differences in behavior, relationships, and adjustment, the question becomes do males and females perceive similar or different critical influences to violence and aggression. Studies within the current literature predominantly examine violence and aggression-related behavioral, social, or psychological outcomes; however, this study uniquely examines male and female adolescents' fundamental perceptions of behavioral, social, and psychological influencers. Understanding the underlying sex-specific influences of such behaviors may add a critical component to a prevention program.

Purpose and Significance of Study

The purpose of this study was to fill a void in the literature by ascertaining the perceptions of critical triggers to violence and aggression for males and females. The highest incidence of violent behaviors occurs during the middle and early high school years with first year high school students exhibiting the highest rates as compared to their older high school counterparts (Centers for Disease Control and Prevention, 2008). Moreover, adolescents within the high school setting may be better able to communicate their perceptions and experiences within a focus group and/or interview setting than younger middle school students. As a result, this age group was assessed.

The research questions examined were:

(1) In a sample of adolescents aged 14-16 years, what are the critical factors and themes that are identified as salient influencers of overt and relational aggression among youth?
(2) What is the relationship among these critical factors and themes in a sample of adolescents aged 14-16 years?
(3) What phenomena are associated with any similarities and differences in the models of adolescent violence and aggression among male and female adolescents?

This study has multiple significances. In addition to examining sex-specific perceptions of triggers, this study also uses a novel qualitative methodological approach, Interactive Qualitative Analysis (IQA; Northcutt & McCoy, 2004), within the violence and aggression research domain. Moreover, I was the first researcher to use IQA with an adolescent population. The findings from this study can serve as a foundation for the development of a sex-specific school violence prevention program targeting those factors perceived by adolescent males and females as most critical.

Method

Interactive Qualitative Analysis was used to produce a systematic representation of the meaning that violence holds for high school students. Participants named emergent themes (referred to as affinities within IQA), systematically articulated relationships between affinities, and quantified the relative importance of each affinity. The final product of this study was a graphical representation of the entire system of influences and outcomes. In this case the final models display sex-specific adolescent perceptions of salient school-related violence and aggression triggers.

Participants

The Human Subjects Institutional Review Board at the University of Texas at Austin approved the study protocol. Participants for this study were recruited from a sample of students enrolled in a large suburban high school freshman campus in Central Texas during 2003. Two parental consent forms requesting permission to participate in a focus group session or an interview session were distributed to 175 students, meaning

that parents had the choice to sign the focus group consent form, the interview consent form, both, or neither. The active parental consent rate was 61% (106 students returned at least one signed consent form). According to IQA protocol, each focus group conducted should consist of approximately eight to 15 participants. If the focus group is too large, participants may feel that their voice will not be heard and simply share with the participants close in proximity rather than the entire group. Conversely, focus groups with only a few participants may result in a smaller pool of generated ideas and opinions. Additionally, IQA protocol suggests that individual interview sessions with participants not included within the focus groups be conducted until saturation occurs (Northcutt & McCoy, 2004); therefore, a total of 48 adolescents were randomly chosen to participate in this qualitative study (N=24 focus group; N=24 interview). Stratified random selection based upon ethnicity was used to obtain a reflection of the typical high school student's perceptions and experiences. The participants were between 14 and 16 years of age, with a mean age of 14.79 years (standard deviation of 0.55 years); both male (N=24) and female (N=24); and from a variety of ethnic backgrounds. The following percentages represent the ethnicity of the campus student body and the study participants respectively: white, non-Hispanic (42.5%, 37.5%); African-American (8.4%, 10.4%); Hispanic/Latino (49.1%, 45.8%); other (N/A, 6.3%). All participants within the study were classified as first year high school students based upon course credits earned. All participants were informed that they could discontinue participation without penalty at any time if they felt uncomfortable and the campus counseling department was notified if any participant needed emotional or psychological support as a result of discussing this issue.

IQA primer

The development of IQA was strongly influenced by streams of inquiry such as grounded theory, concept mapping, action research, and systems theory. Interactive Qualitative Analysis is unique in that no other single qualitative research method integrates a theory of epistemology with systems theory to create a clear set of rules by which studies can be conducted and documented (Northcutt & McCoy, 2004). The principles of IQA support constructs of rigor such as credibility, transferability, and dependability as well as the concepts of validity and reliability through a set of accountable and systematic procedures of which a detailed description follows.

Through the use of IQA, the most salient factors related to adolescent violence and aggression emerge (Northcutt & McCoy, 2004) and their underlying meanings are examined. The primary strengths of IQA are two-fold. Interactive Qualitative Analysis is participant oriented. Participants assist in refining the research questions. Focus group participants generate and code their ideas. Subsequent participants use the ideas developed within the focus group to guide and elaborate on their thoughts within an interview session. The final model created through the use of these methods is a reflection of the participants' ideas and is not unduly influenced by researcher bias. Interactive Qualitative Analysis is an ideal method for use with the adolescent population in that participants are guided through the focus group and/or interview processes while maintaining ownership and refinement of the ideas generated.

The focus group

The IQA research process begins with a focus group session. Within this study sex-specific focus group sessions, male (N=12) and female (N=12), were conducted. To be reflective of the campus population, a stratified random sample based on ethnicity was used to select focus group participants. The product of each focus group was the development of affinities or themes, which served as a foundation for the remaining study components. Consistent with IQA protocol, participants were given blank note cards and identical markers. Participants were shown a series of images depicting adolescents engaging in various forms of violence. The following statements were given, "Violence and aggression have multiple forms and are influenced by a variety of factors. Today, you will be asked to reflect upon your experiences and beliefs regarding the most powerful influencers to youth violence and aggression. Using the blank cards provided, silently write your thoughts and experiences related to this issue on the cards, one thought per card." This process is similar to the "All on the Wall" technique for brainstorming and clustering ideas (Guila Muir & Associates, n.d.). This process allows participants with more introverted personalities to engage fully in the focus group process with ease. Moreover, participants were provided identical markers and asked to print their responses to enhance anonymity as aggression is a sensitive issue and participants may feel uncomfortable revealing experiences such as victimization or perpetration.

Participants were given approximately 15 minutes to create as many brainstorming cards as possible. After producing a multitude of cards, the group members taped their cards along a wall. The researcher and participants discussed the meaning of each card for clarity. For example, a card stating the phrase "boyfriend issues" would be discussed with the group to determine its underlying meaning such as females may often engage in verbal arguments over a specific male in school. Next, the participants silently grouped the cards into groups of meaning, an activity known as inductive coding (Northcutt & McCoy, 2004). Immediately following, the researcher facilitated a discussion in which all focus group participants reviewed each set of cards similar in meaning and brainstormed for a possible affinity name that captured the essence of the similar cards. The grouped cards were then named by the participants based upon a majority vote of affinity name options (axial coding) to reflect the perceived fundamental characteristics of each affinity (Northcutt & McCoy).

Next, participants were asked to define the causal relationship between each possible pair (presented as "A" and "B") of affinities (theoretical coding) according to established rules: A→B, B→A, or A<>B which indicates no clear relationship (Northcutt & McCoy, 2004). For example, participants were instructed to determine whether the affinity popularity influences the affinity bullying, if the affinity bullying influences the affinity popularity, or if there is not a relationship between these two affinities. Participants recorded their responses by drawing an arrow in the appropriate direction or drawing the symbol for no clear relationship, <>, in an Affinity Relationship Table (ART; See Appendix A), a matrix containing the perceived relationships in the system.

The affinities established by the male and female focus groups included similar as well as distinct themes; therefore, a second meeting with each focus group was held to consolidate the affinities. The affinities were consolidated into nine distinct themes.

During the second focus group meeting, participants were asked to complete an additional ART for the nine affinities established by both groups. Any discrepancies between affinity pair relationships provided in the initial and final focus group sessions were discussed individually with each participant. Each focus group member gave a final decision regarding the appropriate relationship direction. Not only did this process allow for each participant's final ART to be included within the appropriate Male Model or Female Model but also allowed the researcher to gain a greater understanding of each participant's perceptions via individual in-depth discussions (see Appendix A for the Consolidated Affinity Focus Group ART form).

The primary purpose of the focus groups was to induce the names and primary characteristics of the "building blocks" (affinities) of the participants' violence meaning system. Subsequent interviews with participants not included within the focus group sessions followed, which allowed for an exploration in greater depth of the meaning of the affinities as well as a detailed elaboration of how these affinities are connected.

Individual interviews

The interview protocol and script (see Appendix B) were developed based upon the responses from the focus group sessions. In order to get a broader view of the issues and increase sample size, interviews were conducted with 12 male and 12 female participants who had not participated in the focus group sessions. Again, to be more reflective of the campus population a stratified random sample based on ethnicity was used to select the interview participants. For each interview session, I identified various axial codes by noting key words or phrases that described the affinity and documented each code within an Axial Code Table (ACT; Northcutt & McCoy, 2004). Moreover, I identified the series of perceived causal relationships among each affinity pair as established by the interviewee (A→B, B→A, or A<>B no relationship) and recorded each relationship within a Theoretical Code Table (TCT), referred to as an Affinity Relationship Table (ART) within the IQA focus group phase (See Appendix A; Northcutt & McCoy, 2004).

Model development protocol

Following IQA protocol, data from each male focus group and individual interview participant were combined, analyzed and converted into a Male Interrelationship Diagram matrix (IRD), a representation of the perceived causal strength of each affinity (delta). This process was repeated using the female data. The creation of the Male IRD and Female IRD begins by calculating a cumulative frequency on the perceived relationships between each pair of affinities provided by the appropriate sex-specific group. This allows the researcher to establish a guideline for examining the strongest connections between the affinities (see Appendices C and D).

The conversion to graphic data begins by calculating delta (Δ). The frequency of an affinity being a cause ("out"), represented by an up arrow, versus being acted upon ("in"), represented by a left arrow, in each relationship is counted. The difference between the "out" sum and the "in" sum numerically indicates the relative causal strength of each affinity in the system, known as delta.

The value of delta is used as a marker for the relative position of an affinity within the graphical model of the system. Affinities with a strong positive delta are perceived relative drivers or causes and those with a strong negative delta are perceived relative outcomes or effects. A pivot/circular occurs when the affinity has either a delta of zero or close to zero in comparison to the remaining affinities' meaning, or the affinity has an equal or almost equal number of ins and outs indicating a position in the middle of the system. Placement within the models is based upon delta values.

Interactive Qualitative Analysis rationalization is a set of strictly deductive or rule-driven protocols that produce a graphic representation, called a Systems Influence Diagram or SID. A SID represents a theory, a set of relationships from which hypotheses can be deduced, that is consistent with the data and, following Occam's principle, the simplest possible representation (Northcutt & McCoy, 2004). Interactive Qualitative Analysis is a qualitative approach to representing social systems that borrows from path analytic representation in that it arranges the affinities (called "variables" in the quantitative path analytic arena) from drivers to outcomes. Within the SID, primary drivers are located to the left, the primary outcomes to the right, the secondary drivers, and secondary outcomes between the primaries, and pivots/circulars are located in the middle of the system. Each is named and arrows (links) are drawn to connect them according to causative relationships explicated in the sex-specific IRDs.

Within a SID, recursions known as feedback loops may develop. Path analytic techniques do not allow for recursion or feedback loops. Recursion is represented as a loop in which a relative outcome feeds back to a relative driver. In addition, every affinity in the feeback loop influences, directly or indirectly, every other affinity within the loop. Recursion is a critical dimension of social systems, and requires at least three affinities, because a two element "loop" is a cliché to the extent that each one influences the other and offers no explanation for this reflexive relationship.

Recursions/feedback loops by their very nature are dynamic and are not done justice by a static two-dimensional representation. If one visualizes a loop as a carousel, with the affinity preceding it as a child jumping on a horse as it passes by, then a more accurate picture is formed. Social system loops tend to be perniciously self-reinforcing and do not tend to "correct" themselves (i.e., antisocial behaviors and attitudes feed off each other, resulting in a cycle that increases in intensity). This conceptualization of elements of a social system (affinities) in recursive relationship to each other (looping) has the following primary implications: (a) a loop can be modified by changing the affinity that "feeds into" it, (b) although changing the dynamics of a loop by focusing on its internals is difficult, some of the affinities in the loop may be more malleable than others, and (c) "new" affinities may be introduced into the existing loop (Northcutt & McCoy, 2004). In other words, identifying the systemic relationships, particularly recursive ones, in a social system create the opportunity to break up the vicious cycles that so often characterize social systems. Due to this fact, determining whether sex-specific cycles exist may be beneficial toward the development of effective school-based approaches to violence prevention.

Results

Male generated affinities

The results of the initial male focus group session revealed seven affinities: emotions, gang issues, peer relationships, physical fighting, popularity (reputation), talking trash, and weapon use and carrying (See Table 1).

Table 1

Male Affinity Descriptions

Affinity Name	Affinity Description
Emotions	A feeling of superiority or "feeling bigger than everyone else;" anger, rage, madness, fear; hate-focused (racism and homophobia); adrenaline rush or excitement; hilarity and a form of entertainment.
Gang Issues	Fighting for honor of gang, fighting for the color one represents, or defending a "homeboy;" true gang issues not considered problematic, however, actions of "wanna-be" gang members problematic due to racially driven altercations; gang members viewed as fighters, trash talkers, weapon carriers, and bullies that demand respect via fear.
Peer Relationships	Friends "watch your back" or "back you up;" feeling of pressure to fight exists; friends are instigators and cheerleaders; who one associates with determines behavior. For example, "During a fight most peers will cheer you on…." "If you hang out with people that talk smack, you're going to talk smack."
Physical Fighting	Hitting, punching, choking, and pushing; viewed as non-problematic with regard to safety on school campus because adult will intervene.
Popularity (reputation)	Reputation is key; feeling tough, "big and bad" or "like a man" increases reputation and respect. For example, "The tougher your reputation the less likely others are to mess with you."
Talking Trash	Threats, yelling, screaming, and loud talking; racial slurs, name calling, use of slang terms, and teasing viewed as normal talk among adolescents.
Weapon Use and Carrying	Guns, knives, brass knuckles, etc.; used for protection, however, some males felt that only weak guys needed weapons. For example, "People that aren't too secure about themselves use weapons."

Female generated affinities

The results of the initial female focus group session revealed eight affinities: bullying, consequences, emotions, peer relationships, physical fighting, popularity, talking trash, and weapon use/carrying (See Table 2).

As discussed previously, the focus group affinities were consolidated to create nine themes: bullying, consequences, emotions, gangs, peer relationships, physical

fighting, popularity, trash talking, and weapon carrying/use. The statistical analysis and results that follow are based upon these nine affinities.

Table 2

Female Affinity Descriptions

Affinity Name	Affinity Description
Bullying	Continuously teasing, making others afraid, physically and verbally harassing others; viewed as problematic only by victims of bullying.
Consequences	Primarily described as school punishments such as detention, referrals, fines, and expulsion; potential for bodily harm was noted by few; viewed as "after-effects" and not deterrents.
Emotions	Anger; sadness for victim; frustration of no solution; impulsivity; fear; feelings of guilt for not coming to peers' aid when violence occurs.
Peer Relationships	Significant other relationships, primarily boyfriends, have great value; cliques define one's daily experiences; peers serve as instigators, confidants, encouragers, messengers, and protectors.
Physical Fighting	Hitting, scratching, choking, kicking, and slapping; viewed as problematic on school campus; most female fights due to boyfriend issues and rumors.
Popularity (attention and social status)	Primarily viewed as positive and negative attention; attention enhances one's social status and level of influence; cliques define one's popularity; cliques included athletes, cheerleaders, and dance team members.
Talking Trash	Threatening, screaming, cursing, name-calling, spreading rumors, exposing personal information, and teasing; considered problematic; lack of teacher involvement viewed as increasing frequency of verbal abuse. For example, "If they [teachers] see it [verbal abuse], they don't say anything…they just go about their own business."
Weapon Use and Carrying	Guns, knives, bats, etc.; should be used only for self-defense and protection. For example, "Weapon carrying is stupid, unless you are in a really dangerous situation."

The creation of the Male and Female IRDs (see Tables 3 and 4 respectively) began by calculating a cumulative frequency of the perceived relationships between each affinity pair. A total of 776 male votes were cast for a total of 72 possible relationships between the affinities (See Appendix C). A total of 741 female votes were cast for a total of 72 possible relationships between the affinities (See Appendix D). After sorting the relationships in descending order of frequency and calculating cumulative frequencies and percentages, I was able to determine the optimal number of relationships for the construction of the model. Using the Pareto Principle (Juran, 1988) the fewest number of relationships that represented the greatest amount of variation were included to create the models (Northcutt & McCoy, 2004). Within the Male model 39 pairs accounted for

80.3% of the total connections within the system and were thus used to create the Male model. Similarly, within the Female model 42 pairs accounted for 83.9% of the total connections within the system and were used to create the Female model.

Table 3

Male Interrelationship Diagraph Matrix

Tabular IRD												
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**OUT**	**IN**	**Δ**
1		←	↑	←	←	←	←	↑	←	2	6	-4
2	↑		↑	←	←	←	↑	↑	↑	5	3	2
3	←	←		←	←		←	←	←	0	7	-7
4	↑	↑	↑		↑	←	↑	↑	↑	7	1	6
5	↑	↑	↑	←		←	↑	↑	↑	6	2	4
6	↑	↑		↑	↑		↑	↑		6	0	6
7	↑	←	↑	←	←	←		←	↑	3	5	-2
8	←	←	↑	←	←	←	↑		↑	3	5	-2
9	↑	←	↑	←	←		←	←		2	5	-3

Table 4

Female Interrelationship Diagraph Matrix

Tabular IRD												
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**OUT**	**IN**	**Δ**
1		←	↑	←	←	←	←	←		1	6	-5
2	↑		↑	↑	←	←	↑	↑	↑	6	2	4
3	←	←		←	←	←	←	←	←	0	8	-8
4	↑	←	↑		↑	←	↑	↑	↑	6	2	4
5	↑	↑	↑	←		↑	↑	↑	↑	7	1	6
6	↑	↑	↑	↑	←		↑	↑	↑	7	1	6
7	↑	←	↑	←	←	←		←	↑	3	5	-2
8	↑	←	↑	←	←	←	↑		↑	4	4	0
9		←	↑	←	←	←	←	←		1	6	-5

Placement within the SIDs were determined based upon the delta values in Tables 3 and 4. This is reflected in Tables 5 and 6 that follow.

Table 5

Male Interrelationship Delta and Model Placement

		Out	In	Delta (Δ)
Primary Driver	Emotions	7	1	6
Primary Driver	Peer Relationships	6	0	6
Secondary Driver	Gang Issues	6	2	4
Secondary Driver	Bullying	5	3	2
Pivot	Talking Trash	3	5	-2
Pivot	Physical Fighting	3	5	-2
Secondary Outcome	Weapon Use/Carrying	2	5	-3
Secondary Outcome	Popularity	2	6	-4
Primary Outcome	Consequences	0	7	-7

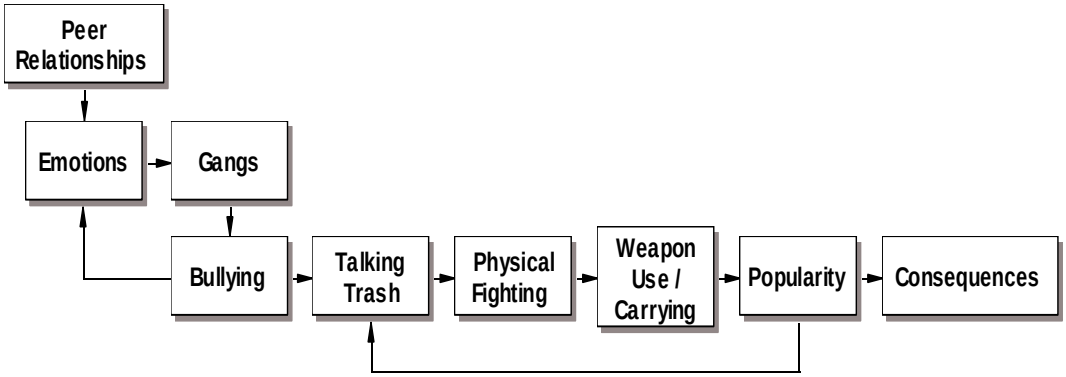
Table 6

Female Interrelationship Delta and Model Placement

		Out	In	Delta (Δ)
Primary Driver	Gang Issues	7	1	6
Primary Driver	Peer Relationships	7	1	6
Secondary Driver	Bullying	6	2	4
Secondary Driver	Emotions	6	2	4
Pivot	Talking Trash	4	4	0
Pivot	Physical Fighting	3	5	-2
Secondary Outcome	Popularity	1	6	-5
Secondary Outcome	Weapon Use/Carrying	1	6	-5
Primary Outcome	Consequences	0	8	-8

The Male System

Figure 1. Male Systems Influence Diagram.



Within the male system, peer relationships were perceived to have a direct influence on the emotions of male participants. Statements of support for this idea included: “Friends back you up. You feel good that friends are behind you. They give you a good feeling.” “Friends look out for each other and this makes you feel good.” Additional thoughts in support of peers influencing emotions included the role of peer pressure. Many participants revealed feeling pressure from friends to fight or tease/bully other individuals.

Peer relationships and emotions were perceived to have a direct influence on the secondary driver, gangs, through the mediating influence of emotions. Participant statements suggested that individuals become involved with gangs as a result of insecurity and low self-esteem. Similarly, peers influenced gang involvement. “If you hang out with people from a gang and make friends, you will likely join that gang,” which suggested that “who you hang out with influences what you do.”

Peer relationships, mediated by gangs and emotions, were also thought to have a direct influence on the secondary driver, bullying behavior. Statements to support this included the idea that peers instigate or pressure other peers to behave in certain ways such as teasing or bullying an individual. For example, “If your friends bully people then you will bully people also.” This concept supports the literature regarding the association between peer group affiliation, such as gangs, and deviant behaviors. With regard to the mediating effect of emotions, it was suggested that one must have a reason to bully another person. For example, “If you don’t feel good about yourself, you are going to try to put other people down.”

Talking trash and physical fighting were considered pivots. Peer relationships and emotions were perceived to influence talking trash and physical fighting through the mediation of gangs and bullying behaviors. Moreover, the pivot affinities were thought to influence consequences through the mediating affinities of weapon use/carrying and popularity. Statements in support of the above influences follow: “Talking smack can lead to weapon use because eventually you will get tired of it and you want to stop them so you bring a weapon.” “If you lose a fight badly, you could bring a weapon to win.” Individuals fight, talk trash to others, and carry weapons to prove that they are not weak. A participant responded, “If I knew someone who carried a gun, I would not mess with them. I wouldn’t even talk to them. I’d be friendly.”

Popularity for males was primarily based upon reputation. Being powerful increases one’s reputation and level of respect. “The tougher your reputation the less likely others will mess with you.” Sociological researchers (Hawley, 2003; Pellegrini & Long, 2002, 2003) explain this phenomenon in terms of status, prestige, and dominance. Research suggests that consensually popular youth display a variety of behaviors associated with social dominance and prestige. Consensually popular youth are characterized as articulate yet controversial and aggressive individuals. However, consensually popular youth are recognized by peers as trendsetters and high on the social dominance hierarchy. This in turn has been shown to increase self-esteem levels among these youth (Bruyn & van den Boom, 2005) which may influence perceptions of future consequences as well as future violent and aggressive behaviors.

The primary outcome of the male system was consequences. The common perception was that consequences were an after-effect and rarely, if ever, deterred or prevented one from participating in violent and aggressive acts. Male participant

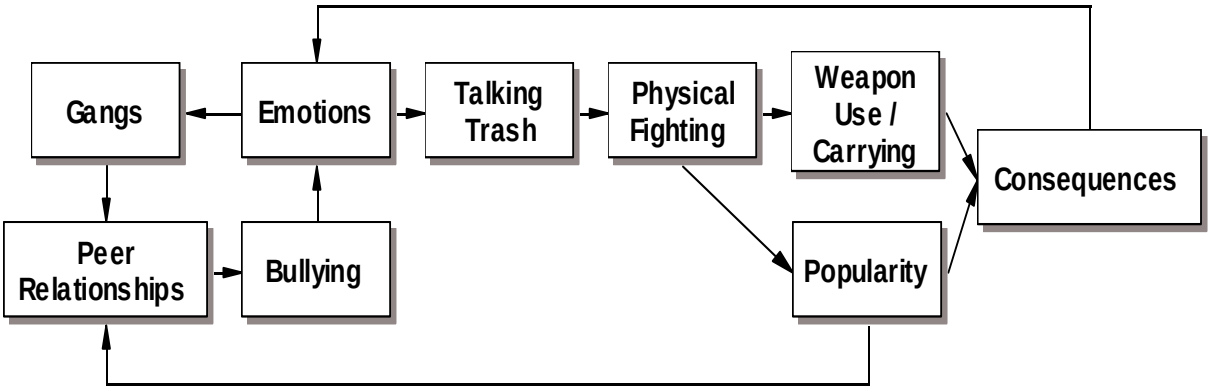
responses regarding consequences included: "Your emotions run so high when someone starts talking stuff to you that you do something to them without thinking of the consequences." Males also suggested that there are no consequences to fighting, trash talking, and bullying if you do not get caught and that there are no consequences serious enough that would prevent one from engaging in a fight. "When someone hits you first, the potential consequences do not matter." This suggests that reactive or enforcement strategies that focus on punishment may not be effective at preventing acts of violence and aggression among male adolescents.

After examining the model's linear relationships, it should be noted that two feedback, or recursive loops, developed out of the system. Using IQA protocol, the identification of such recursions were highlighted and examined more closely. Feedback loop 1, *The Big, The Bad, and The Mad,* included the affinities emotions, gangs, and bullying. This feedback loop as well as the additional loops discussed within the male and female results sections were titled based upon the included affinities' general meaning provided by the male or female participants' responses and my coding interpretations. For example, the big refers to the bully, the bad refers to gangs, and the mad refers to emotion. Here, emotions related to insecurity and low self-esteem issues, as well as a desire for respect, were thought to influence gang involvement, which has an impact on bullying behavior, which in turn influences one's emotions or feelings about oneself. Thoughts to support this cycle include: Most individuals become involved with gangs because they "are insecure about themselves." When you are in a gang you bully others, so they [other gang members] won't think you are a wimp." Additionally, bullying others "makes you feel high…no one wants to mess with you." This cycle provides evidence that internal insecurities interact with group dynamics to produce violent social behavior.

Feedback loop 2, *Not Your Typical Class Clown,* included the affinities talking trash, physical fighting, weapon use/carrying and popularity. The phrase, Not Your Typical Class Clown, is intended to express the role of popularity with regard to violent behaviors. Many adolescents use humor as a means of gaining peer acceptance and popularity; however, male participants report that violence and aggression can serve the same purpose. Talking trash was believed in many instances, to lead to physical fighting which may influence an individual to use or carry a weapon which will influence one's popularity status or reputation. Popularity, which is specifically reputation-based for males, then influences additional trash talking behaviors. As reported in Bruyn and van den Boom's (2005) work, consensually popular youth tend to engage in social dominant acts which may include verbal abuse, physical fighting, and weapon use. Participant responses supporting this cycle are: "It all starts verbally. You start talking lip to each other. The next thing you know, you start hitting each other." "If you are losing a fight, you may choose to use a weapon." However, "you can't truly win a fight with a weapon, because you had to use a weapon to beat them." Your reputation determines what you do. "If you have a reputation in the school [being cool] and someone disrespects you and others are around, you have to do something about it." As with the previous feedback loop, group dynamics via social status and reputation serve as both an outcome and driver of violent and aggressive behaviors among adolescents.

The Female System

Figure 2. Female Systems Influence Diagram.



Issues related to gangs and peer relationships were perceived to have a strong influence on the many other affinities within the female system; thus these affinities were identified as primary drivers. Both gangs and peer relationships were directly related to the secondary driver bully behaviors. Moreover, bullying served as a mediating influencer on emotions. Statements supporting this concept were: "Gangs bully people... that is what they do." "Being in a gang makes you feel welcome, like you fit in." However, others "feel unsafe when gangs are around because they might hurt you." The desire to fit in with one's peer group drives bullying behavior. For example, "bullying makes peers laugh, so individuals try to make their friends laugh by bullying people." It should be noted that these affinities are recursive. This loop, Feedback loop 1, is detailed later in the female results section.

Peer relationships for females primarily dealt with significant other relationships, specifically boyfriends. Goldstein and Tisak (2004) found that "females were more likely to react aggressively towards a dating partner who excluded them, as compared to a friend or acquaintance." The role of peer perceptions is critical to adolescent aggression. Relational aggression in females is a reflection of anxiety regarding peer acceptance and one's role in peer relationships. The belief that others do not accept them gives rise to relationally aggressive acts and attempts to control the relationship. Once control is established, females are in a position to manipulate, expose, and potentially bully others (Crick & Grotpeter, 1996).

The secondary drivers, bullying behaviors and emotions, were thought to influence talking trash and physical fighting, the two system pivots or circulators. Supporting participant responses included: "When you bully people, you yell and curse which leads to fighting." "Emotions lead to fighting by getting upset or mad."

Gangs and peer relationships were perceived to influence the pivot affinities, talking trash, and physical fighting through the mediating affinities, bullying behaviors, and emotions. Talking trash, and physical fighting, in turn had an impact on two secondary outcomes which are independent of one another: popularity and weapon use/carrying. Support statements included: Some females "always yell at people. . .just to get attention." "Some girls want attention, however they can get it." After a fight,

"everyone is talking about them." You fight "because you want attention and the reputation of being above everyone else."

Popularity as termed and defined by the female participants was two-fold: attention-based and social status-based. Females responded that various cliques or social groups defined one's popularity. Athletes, cheerleaders, dance-team members (high status groups) received a great deal of attention from their peers and were thus considered popular. Research on adolescent peer crowds validates this statement (Brown, 1990). According to the female participants, popularity enhances one's level of influence over other adolescents. Moreover, it was believed that popularity or increased social status also influenced the level of punishment or consequence that one received when engaging in aggressive behaviors. For example, a popular student would receive punishment to a lesser degree, if in fact he/she received any punishment at all, than a less popular student.

Popularity and weapon use/carrying were perceived as influencing the primary outcome of the female system, consequences. It should also be noted that each affinity within the system was thought to influence consequences either directly or through mediating affinities. Statements in support of these influential relationships follow: "Who you are determines what you get." "If a popular person gets in trouble, the consequences are not going to be as bad like it would for one of the freaks at schools." The influential role of popularity and cliques is a critical finding and is detailed in within Feedback loop 3, *The Truth about Consequences* description. Regarding weapon use, consequences are viewed as punishments rather than the potential for injury. "Weapon use may lead to jail time." Additionally, females, like their male counterparts, viewed consequences as a punishment after-the-fact rather than a deterrent.

There are several feedback loops in the female model. Feedback loop 1, *To Belong or not to Belong: That is the Question*, consists of the affinities, gangs, peer relationships, bullying behaviors, and emotions. The label for this feedback loop is intended to emphasize the influence of a sense of belonging and connectedness to a group as expressed by the female participants. Participants revealed that belonging to a group, whether a negative or positive group, serves a purpose for the adolescent by providing a sense of connectedness and belonging. For example, "Being in a gang makes you feel welcome, like you fit in." "If you want to be in a gang, you probably want to feel tough ... gangs make you feel good about yourself." It was also suggested that an individual's personality, temperament, or emotional state influences one's innermost circle of friends, which in turn influence behaviors such as bullying. Again, the desire to belong plays a role in behavior. Participants disclosed that "bullying makes peers laugh…you are trying to make friends and fit in so you bully others." The attention, such as laughter, that one receives from peers acts to reinforce negative behavior by instilling a sense of belonging and bonding with a particular group.

Feedback loop 2, *The Social Hierarchy*, consists of the affinities labeled peer relationships, bullying behaviors, emotions, talking trash, physical fighting, and popularity. Again, the label for this feedback loop is intended to express the influential role of peers, cliques, and the desire for attention/popularity. Participants indicated that peers drive most behaviors, whether they are positive or negative in nature. The feedback or response one receives from peers reinforces such behaviors as bullying, trash talking, and physical fighting via enhancing one's perceptions of his/her popularity as well as lessening one's internal insecurities. As stated previously, the desire to belong, to be

known as a trendsetter, and to climb to the top of the social ladder serves as a principal determinant of behavior. Whether the outcome is a stable step up the social hierarchy or merely "15 minutes of fame," one's craving for attention and popularity drives the behavior of choice.

The last feedback loop, *The Truth about Consequences,* contains the affinities labeled emotions, talking trash, physical fighting, popularity or weapon use/carrying, and consequences. The title of this feedback loop is intended to express the female participants' meaning of consequences as a punishment and after-the-fact of rather than deterrent to behavior as well as the influential role of popularity or cliques with regard to potential consequences (punishments) for behavior. Within the loop, it should be noted that popularity and weapon carrying are not related in any way and that the recursive loop may be completed via the affinity popularity or the alternative affinity weapon use/carrying. Emotions, such as anger, rage, and revenge, as well as frustration, impulsivity, and fear, may act to promote certain negative behaviors (i.e., talking trash, physical fighting, and weapon use/carrying), which in turn influence how one is perceived by others, popularity. Many times participation in negative behaviors yields consequences, which include various forms of punishment which are often determined by one's level of popularity or social affiliation with a particular group or clique. Rather than serving as deterrents of behaviors, females revealed that consequences often act to heighten one's anger, frustration, and revenge, which in turn serve as a cyclical catalyst.

Discussion

Peer relationships were viewed as a primary driver within both the male and female system supporting peer group affiliation research (Coie et al., 1992; Elliot et al., 1986; Jessor & Jessor, 1977; Kupersmidt et al., 1990; Ollendick et al., 1992; Patterson & Dishion, 1985). Male participants indicated that "who one associates with will determine behavior," a fundamental theme of peer group affiliation research. For female participants the role of peer relationships in aggressive behavior predominantly focused on boyfriend concerns as well as peer acceptance and the desire to control all aspects of a relationship, consistent with Goldstein and Tisak (2004) and Crick and Grotpeter (1996).

Moreover, both sexes viewed peers as instigators and cheerleaders of negative behaviors which are reflective of Brown's (1990) peer crowd affiliation research which notes that peer crowds are based upon reputation and gaining power within the larger social dynamic. Qualitative data from this study suggested that peer reinforcement serves to increase the likelihood of negative behaviors such as physical fighting, talking trash, and bullying. Additionally, participants revealed observing and anticipating various outcomes such as peer acceptance and popularity via participation in negative behaviors. Although high controls for deviant behavior serve to buffer the adolescent from negative behavior engagement, the absence of such controls appear to encourage negative behaviors.

Although this study is supported by numerous adolescent development and violence and aggression research (e.g., Brown, 1990; Coie et al., 1992; Crick & Grotpeter, 1996; Goldstein & Tisak, 2004; Ollendick et al., 1992; Smith & Gross, 2006), a key finding unique to this study is the adolescents' perception of consequences. Discussions with both sexes regarding consequences revealed that the results of violent

and aggressive behaviors are primarily after-thoughts or after-effects and, thus, do not deter behaviors. This finding suggests that "reactive law enforcement strategies" focusing primarily on consequences and punishments are ineffective with regard to violence, aggression, and gang behavior. The findings from this study demonstrate the complexity of the determinants of violent and aggressive behaviors. Thus, I suggest proactive interventions which employ comprehensive curriculum-based strategies that emphasize peer mediation, conflict resolution, and anger management techniques, as well as character development activities and strategies that heighten social connectedness may be more effective at reducing negative behaviors than reactive strategies that focus primarily on consequences and punishments.

Moreover, consequences were predominantly viewed as punishments served by school officials, parents, and police officers. While the potential for bodily harm was discussed minimally among female focus group members, female and male interviewees did not consider getting hurt or killed as a possible result of physical fighting, bullying, talking trash, or weapon use/carrying. This was consistent with the adolescent development literature, particularly, the adolescent issues surrounding personal fable, the belief that one is invincible, invulnerable, unique, and omnipotent (Vartanian, 2000), and optimistic bias, the idea that bad things happen to others (Chapin & Gleason, 2004). Personal fable, associated with conformity to peer group norms and risk-taking behaviors, is an integral component of adolescent development (Vartanian). Moreover, it is suggested that personal fable may best characterize the beliefs of troubled adolescents (Vartanian & Powlishta, 1996); however, individual variables such as peer status and peer attachments may influence one's engagement in personal fable beliefs (Vartanian) and should therefore be examined in future empirical studies. Chapin and Gleason found that the students as a group consistently exhibited optimistic bias toward personal risks and environmental risks, suggesting that a small amount of self-protective pessimism may serve as a protective factor with regard to violence. Thus, programs designed to reduce optimistic bias and increase self-protection among adolescents are warranted. The notion that adolescents act on perceptions rather than reality is key to the development of effective programming.

Popularity and emotions also played integral roles within both systems. However, the roles and meanings of the affinities differed somewhat for each sex. Popularity for males was primarily based upon reputation, such as having others see you as "big and bad" or as "a man," as well as having others "not wanting to mess with you" as supported by Bruyn and van den Boom's (2005) work. In contrast, females associated popularity with attention received from other peers such as "15-minutes of fame," as well as social status and affiliation with high status peer groups (Brown, 1990). Interestingly however, both sexes specifically named this affinity "popularity" rather than reputation or attention-seeking/social status.

Similarly, the emotions related to bullying, physical fighting, and talking trash were sex-specific. Males indicated that these behaviors, particularly fighting, provided an adrenaline rush. Additionally, although males did report fighting out of anger, many males viewed fighting as a form of entertainment. A statement to this effect included "fighting is fun to watch." Females on the other hand not only reported anger as a common emotional driver to fighting but also indicated feelings of sadness and empathy for victims of bullying and verbal/physical assault. Moreover, female participants

revealed feelings of guilt when choosing not to intervene during a verbally or physically abusive situation.

Lastly, differences regarding overt and relational aggression fell along sex-specific lines. Females described behaviors such as the spreading of rumors and disclosing of others' personal information as common and problematic. Conversely, males described the inclusion of friends to harm others, both physically and verbally, outside of their peer group. These findings are consistent with Crick and Grotpeter's (1995) work that reports that females engage in acts of relational aggression most often and males typically participate in acts of overt aggression. Moreover, relationally aggressive youth's friendships focus on obtaining intimacy with others whereas overtly aggressive youth's friendships focus upon specific goals such as dominating peers (Crick & Dodge, 1996).

Conclusion

The findings from this study support the idea that prevention programs must address numerous social issues such as peer norms toward acceptance of prosocial behavior and rejection of negative behaviors, as well as the influential role of social hierarchies and peer affiliation among adolescents. Moreover, instilling a sense of connectedness to a positive social body, as well as addressing the numerous internal insecurities possessed by many adolescents, is essential to effective programming. Furthermore, the adolescents' view of consequences as ineffective at deterring behavior is critical to the development of effective programs and thus warrants further investigation.

The inclusion of numerous feedback loops within both models warrants further inquiry in future studies. Feedback loops by their very nature are interesting points of investigation and they may be more amenable to interventions. An in-depth examination of such cycles may provide more specific insight into the cyclical effects of violence and aggression. The affinities most commonly represented with the feedback loops included popularity, peer relationships, and emotions; therefore, these affinities should be sex specific areas of focus within violence prevention programs.

A limitation to this study is that participants used for this study were derived from a convenience sample of students enrolled in a high school freshman campus in Central Texas and, thus, may not be generalizable to the entire population of high school students throughout the United States or other countries. Therefore, it is necessary to repeat this study with a variety of adolescent populations—both within the United States and in other countries—before the results can be generalized. Additionally, the participants in this study were required to obtain active parental consent and, thus, this study may be limited to children of parents who were willing to allow their child to share experiences and information regarding violence and aggression. Both quantitative and qualitative research contain a variety of uncontrollable factors, which include the participants' interpretation of questions asked and the researcher's bias in coding of the data. Interactive Qualitative Analysis theoretical coding techniques attempt to minimize researcher coding bias through the use of participant ARTs and TCTs; however, other forms of researcher bias may still exist. Additionally, participants' interpretations and/or socially desirable responses to questions may serve as a limitation of this study. Interactive Qualitative Analysis is useful for developing theory (in which the affinities are not already identified) or for testing existing theories (in which the affinities are

presumed to be known); however, IQA may not be best suited for younger children as they may require extensive facilitator assistance and guidance, specifically during completion of the ART/TCT. Traditional individual interviews and naturalistic observations may serve as the best strategy to assess the violence and aggression perceptions of young children. Moreover, the need to bring members of a constituency together as required by IQA methods can be a problem. A final operational consideration is that the quality of the data from the focus group and interviews is heavily dependent on the skill of the facilitator/interviewer, since a high degree of trust must be achieved. Utilizing a facilitator similar in one or more characteristics (age, sex, religion, culture, ethnicity) to the participants may increase trust and enhance the quality of qualitative data obtained. Additionally, at the beginning of the session, the facilitator may establish a safe zone, where participants create and post a list of criteria necessary for a safe, comfortable, and honest atmosphere. Moreover, the facilitator should reinforce confidentiality, particularly when discussing more personal or sensitive research topics.

The use of IQA was shown effective within this age group. Therefore, it is recommended that this study be expanded to include middle school as well as older high school students to obtain a broader understanding of the aforementioned influences as well as determine if these influences change over time. The effective use of IQA indicates a new direction and focus for study that should continue in other areas of adolescent development and risk-taking.

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Appendix A

Sample Affinity Relationship Table: Consolidated Affinity Focus Group ART Form

Affinity Name
1. Popularity (Attention)
2. Bullying
3. Consequences
4. Emotions
5. Gang Issues
6. Peer Relationships
7. Physical Fighting
8. Verbal/Trash Talking
9. Weapon Use/Carrying

Possible Relationships
A → B
A ← B
A <> B (No Relationship)

Affinity Relationship Table

Affinity Pair Relationship		Affinity Pair Relationship		Affinity Pair Relationship
1 → 2		3 <> 4		6 → 7
1 → 3		3 ← 5		6 → 8
1 → 4		3 ← 6		6 → 9
1 <> 5		3 ← 7		7 ← 8
1 ← 6		3 ← 8		7 ← 9
1 ← 7		3 ← 9		8 ← 9
1 ← 8		4 → 5		
1 ← 9		4 ← 6		
2 → 3		4 → 7		
2 → 4		4 → 8		
2 ← 5		4 → 9		
2 ← 6		5 ← 6		
2 → 7		5 → 7		
2 → 8		5 → 8		
2 → 9		5 → 9		

Appendix B

Interview Script

Interview Subject #____

Axial Interview
A focus group of your peers has identified several common themes or affinities that describe violence, specifically physical fighting and overt aggression. In a moment, I am going to ask you about each of these themes but I want to ask a few other questions first for background.

Tell me about your experiences with physical fighting and/or verbal fighting.

Now, let's look at each of these themes one at a time and tell me about your experiences with these.

1. **Attention/Popularity:**
Some individuals state that they are verbally aggressive and physically fight for the fame or attention that results. For example, one's 15 minutes of fame. Additionally, some suggest that fighting makes you look big and bad, or like a man. Tell me your thoughts about this.

2. Bullying Behavior:
Bullying behavior includes such things as continuously picking on someone, trying to make others afraid of you, as well as constantly harassing an individual. Tell me about the bullying behavior that you have witnessed.

- Follow-up:

Do you think that bullying is a problem at your school? Explain why or why not.

3. **Consequences:**
Consequences to violence include injuries, death, and the possibility of getting in trouble. Tell me about the range of consequences that could result from violence. What are other consequences to violence?

- Follow-up:

Do you think about the consequences that may result before getting into a verbal fight or physical fight? Do the consequences deter or prevent you from fighting or are they an after effect? Explain why or why not.

4. **Emotions:**
Emotions describe the feelings that students have when they witness, participate in or are victims of violent behavior. Tell me about the range of emotions related to violence.

5. **Gangs:**
Gangs are a group of three or more individuals who participate in violent and illegal behaviors. Tell me about your experiences with gangs.

- Follow-up:

Are gangs a problem on your campus? Explain why or why not.

6. **Peer Relationships:**

Peer relationships represent those relationships with your inner circle of close friends as well as other adolescents within one's age group. Tell me about your experiences with your friends and other peers with regard to violence.

7. **Physical Fighting:**

The physical act of assaulting another person. Examples of physical contact or fighting include hitting, punching, choking, and pushing. Tell me about your experiences with physical fighting.

- Follow-up:

What caused you to get into a fight during your last altercation?

Do you think that fighting is a problem at school? Explain why or why not.

If students do not fight at school, where do they typically fight? Why?

8. **Talking Trash (Verbal Abuse):**

Verbal abuse or talking trash includes use of threats, yelling, screaming, and loud talking in one's face. Tell me about your experiences with verbal abuse.

- Follow-up:

What caused you to get into a verbal fight during your last altercation?

Did that verbal argument lead to a physical fight? If not, why not…..what happened to cause you not to physically fight? If yes, what happened to cause the verbal argument to lead to a physical fight?

9. **Weapon Use:**

Weapon use describes the carrying and use of guns, knifes, and other objects that cause bodily harm and injury. Tell me about your experiences with weapons.

- Follow-up:

Tell me about your attitude toward weapon use.

Are weapons a problem on your school's campus? Explain why or why not.

End of Interview Follow-Up Items

- Do parents or other family relationships play a role in whether or not one participates in violent behaviors? In other words, do your parents or other family members encourage, discourage, or are they neutral with regard to your fighting?
- What suggestions do you have regarding actions taken toward violence prevention in schools and communities?
- What could you do to reduce the number or physical and/or verbal fights that occur on school campuses?
- Is there anything else that you would like to share at this point regarding youth violence?

Appendix C

Male Affinity Relationship Pair Frequency

Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency
1 > 2	6	2 > 4	10	3 > 7	4	5 > 7	21
1 < 2	16	2 < 4	13	3 < 7	19	5 < 7	2
1 > 3	15	2 > 5	6	3 > 8	3	5 > 8	20
1 < 3	6	2 < 5	14	3 < 8	20	5 < 8	3
1 > 4	7	2 > 6	3	3 > 9	4	5 > 9	18
1 < 4	14	2 < 6	15	3 < 9	18	5 < 9	6
1 > 5	4	2 > 7	22	4 > 5	14	6 > 7	17
1 < 5	19	2 < 7	1	4 < 5	3	6 < 7	4
1 > 6	7	2 > 8	14	4 > 6	7	6 > 8	18
1 < 6	17	2 < 8	7	4 < 6	16	6 < 8	4
1 > 7	10	2 > 9	17	4 > 7	22	6 > 9	7
1 < 7	13	2 < 9	3	4 < 7	2	6 < 9	7
1 > 8	11	3 > 4	8	4 > 8	14	7 > 8	2
1 < 8	10	3 < 4	14	4 < 8	8	7 < 8	22
1 > 9	11	3 > 5	0	4 > 9	19	7 > 9	22
1 < 9	12	3 < 5	20	4 < 9	3	7 < 9	2
2 > 3	18	3 > 6	7	5 > 6	4	8 > 9	24
2 < 3	4	3 < 6	9	5 < 6	14	8 < 9	0
						Total Frequency	**776**

Appendix D

Female Affinity Relationship Pair Frequency

Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency	Affinity Pair Relationship	Frequency
1 > 2	10	2 > 4	12	3 > 7	1	5 > 7	18
1 < 2	12	2 < 4	10	3 < 7	22	5 < 7	3
1 > 3	15	2 > 5	4	3 > 8	1	5 > 8	17
1 < 3	2	2 < 5	17	3 < 8	19	5 < 8	5
1 > 4	11	2 > 6	9	3 > 9	1	5 > 9	19
1 < 4	11	2 < 6	13	3 < 9	22	5 < 9	3
1 > 5	8	2 > 7	20	4 > 5	10	6 > 7	18
1 < 5	11	2 < 7	3	4 < 5	9	6 < 7	5
1 > 6	10	2 > 8	13	4 > 6	8	6 > 8	19
1 < 6	13	2 < 8	10	4 < 6	12	6 < 8	2
1 > 7	7	2 > 9	16	4 > 7	20	6 > 9	15
1 < 7	15	2 < 9	3	4 < 7	2	6 < 9	1
1 > 8	6	3 > 4	10	4 > 8	18	7 > 8	2
1 < 8	11	3 < 4	10	4 < 8	5	7 < 8	22
1 > 9	7	3 > 5	0	4 > 9	17	7 > 9	23
1 < 9	5	3 < 5	17	4 < 9	3	7 < 9	1
2 > 3	19	3 > 6	4	5 > 6	14	8 > 9	20
2 < 3	2	3 < 6	11	5 < 6	6	8 < 9	1
						Total Frequency	**741**

Author Note

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