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Student victimization and its relation to school violence

Heidi Gregoire

STUDENT VICTIMIZATION AND ITS RELATION TO SCHOOL VIOLENCE

BY

HEIDI GREGOIRE

APPROVED:

Thesis Committee

Major Professor

Elizabeth Kelley Boyles, Ph.D.
Assistant Professor of Psychology

Fred Jay Krieg, Ph.D.
Professor of Psychology

Beverly Farrow, Ph.D.
Assistant Professor of Counseling

Stephen L. O'Keefe, Ph.D.
Graduate Program Coordinator/Psychology

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as meeting the research requirements for the master's degree.

Advisor [signature]

Department of Psychology

Dean of the Graduate College [signature]

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Student Victimization and Its Relation to School Violence

The frequent depiction of school violence in the media today has led some to believe that violence in our schools is an increasing problem. Those who are most prone to be influenced by the media's perception of school violence may include those most affected by school violence such as parents, educators, and students. This influence may increase parents' concerns about sending their children to school, and create a fear of going to school on a daily basis in educators and students. Despite such fears, research suggests that school violence is, in fact, decreasing, at least with regard to school shootings. Though incidents of school shootings are relatively rare, data collected from the Department of Education shows that 10 percent of the nation's schools have experienced at least one or more violent crimes during the 1996-1997 school year. The 1999 Annual Report on School Safety indicated that a vast majority of America's schools are safe. However, it is true that some schools have serious crime and violence problems. It is important to note that though school-associated violent death incidents have decreased, the "multiple" homicide events in schools have increased (1999 Annual Report on School Safety).

Weinhold and Weinhold (2000) reported that there are three critical aspects of the culture of violence in schools. These include the emphasis that society places on the glorification of violence, the overemphasis on negativity, and the pervasiveness of bullying behavior (Weinhold &Weinhold, 2000). Bullying has so often been implicated as a cause of school violence, that the National School Safety Center now calls it the most enduring and underrated problem in American schools (Mulrine, 1999). Bullying

can also lead to violent retaliation by victims (Olweus, 1993). This revenge motive was a factor in the recent events in Littleton, CO.

National School Violence Statistics

The 1999 Annual Report on School Safety, conducted by the U.S. Department of Justice & the U.S. Department of Education, indicated that during the first half of the 1997-1998 school year (July 1 through December 31), less than 1% of the more than 2,500 children nationwide who were murdered or committed suicide died on school property. This same report also indicated that, for the complete school year, July 1 1997 through June 30, 1998, there were 58 school associated violent deaths (student and non-student) that resulted from 46 incidents. Forty-six of these deaths were homicides, 11 were suicides, and one involved a teen killed by a law enforcement officer during the course of duty. In actuality, a student is more likely to be injured from falling at school than from a violent incident (1999 Annual Report on School Safety).

There have also been fewer reports of students carrying weapons on school grounds in recent years. In fact, statistics shown in the Report on School Safety indicate that between 1993 and 1997 there was a significant decrease in the percentage of high school students carrying weapons and engaging in physical fights on school grounds (1999 Annual Report on School Safety). Surprisingly, these declines were similar among all sex, grade, and race / ethnic subgroups. However, the report also indicated that male students, as well as Black and Hispanic student's, were more likely than their peers to engage in physically violent behavior (1999 Annual Report on School Safety). These statistics also indicated that between 1993 and 1997 overall school crime declined from

about 155 school reported crimes for every 1,000 students ages 12 to 18 during 1993 to about 102 such crimes in 1997 (1999 Annual Report on School Safety). Even though nationally there is a decrease in school violence, more research is being done in the prevention of school violence.

West Virginia Reports on School Violence

Even though West Virginia schools have yet to report a school shooting, W.V. schools have been subject to acts of school violence, such as those involving students carrying weapons on school grounds. West Virginia's Department of Education reports that during the 1994-95 school year there were 34 gun incidents (West Virginia Department of Education, 2000). In 1996 West Virginia reported an increase, with 41 incidents (WVDE, 2000). During the 97-98 school year the state reported a decrease with 23 reported gun related incidents. In the 98-99 school year there were 13 reported incidents. Since then, the state has reported only 10 incidents during the 1999-2000 school year. Obviously, there has been a significant decrease in the reporting of gun related incidents in West Virginia schools. Two of the counties in West Virginia with the largest number of school incidents involving guns include Greenbrier County (Eastern Greenbrier Junior High) and Wood County (Parkersburg High School), each having four incidents between 1994 and 2000. In comparison to the state as a whole, these schools are more urbanized and have larger enrollments ranging from 1004 to 1386 students in each school.

Parental Views on School Violence

Even with the declining numbers in school violence, a recent survey showed that 64% of adults in this country believe that a school shooting is very likely to occur in their community (Adler & Springen, 1999). Accompanying this fear, comes parent concerns about sending their children to school. One West Virginia parent reported in an November interview with a newscaster, "she never knows if she will see her children happy and healthy again after sending them off on the bus because of the increase in school violence across the country" (Saxton, WSAZ News Channel 3, November 9, 2000). More parents are now wanting to get involved in the preventative measures of school violence but have a difficult time implementing their own prevention in the home. Some parents say that taking preventative measures will not decrease the violence because it is now a part of society, and that it is here to stay.

A study conducted in May of 1999 by Kandakai, Price, Telljohann, Wilson, and Carter researched mothers' perspectives of factors that influence violence in schools. This study investigated mothers from urban and suburban areas. Significant differences in their perceptions were found in relation to school location, income, family structure and race. African American mothers showed much more optimism about the possibility that violence prevention plans would reduce school violence than higher income White mothers. These mothers were also more likely to believe that it was acceptable for their child to fight at school than their counterparts. (Kandakai et al., 1999).

Teachers' Perception of School Violence

The 1999 administration of the Metropolitan Life Survey of the American Teacher, conducted annually, indicated that nearly all public school teachers (99%) report feeling safe while they are at school (U.S. Department of Education, 1999). In this same report, teachers in public schools were also unlikely to be worried about being physically attacked (85%). Teachers whose school had a poor quality of education, all or many minority students, or all or many lower income students indicated that they were more likely than others to be worried about being physically attacked in or around their schools. This study compared the 1999 data to that from 1993. Teachers in urban schools were less likely than teachers in non-urban schools to report feeling very safe (U.S. Department of Education, 1999). However teachers' perceptions in the urban school district did not differ from the suburban or rural teachers' perceptions of recent changes in the level of school violence and their opinions did not vary across grade levels. Elementary and secondary school teachers were also equally likely to feel very safe and to believe that the level of school violence in their school had decreased, and they were also equally likely to have been victims of school violence (U.S. Department of Education, 1999). Teachers reported that they believed that violence in schools was decreasing and therefore they were able to feel safe again at school. However, teachers in this same study also reported that their personal experience with school violence had not improved in the last five years (U.S. Department of Education, 1999).

Students Perception of School Violence

Generally, students feel that school is a safe environment. In a 1999 survey, 92% of all public school children reported feeling safe enough to go to school. Students who attended urban schools were less likely (44%) than those students who attended schools in a suburban or rural location (61%) to feel very safe when they were at school (U.S. Department of Education, 1999). In the same study, students whose grades were reported as good or fair were more likely than those with poor grades to feel very safe at school (U.S. Department of Education, 1999). When the 1999 data was compared to that of 1993, students in 1999 reported feeling more worried about school violence than during the previous study (U.S. Department of Education, 1999).

Mulrine 1999, conducted a nationwide survey to further assess student perceptions of school violence. He found that 43 percent of the children surveyed said they were afraid to go to the bathroom for fear of being harassed. Eight percent of school children miss a day of class monthly for fear of being bullied (Mulrine, 1999). The National Center for Education Statistics report indicated that 56 percent of students in the sixth to twelfth grades said that bullying had occurred in their schools during the previous year (1993). Within a 30-day time period, 4% of students had missed 1 or more days of school because they had felt unsafe at school or when traveling to and from school (CDC, 1997).

Student Victimization and Bullying

School related violence not only includes incidents that involve weapons, some may involve both verbal and physical behaviors that are intended to intimidate others.

Most studies on student victimization have focused on boys and physical aggression. Crick & Bigbee (1998) indicated that females may also experience peer victimization, usually in the form of hurtful manipulation of their peer relationships or friendships. The authors found that girls were subject to more relational victimization, while boys were more overtly victimized (overt aggression through physical damage or the threat of such). They also noted that victims of relational aggression experienced significant adjustment problems, and that all victimized children reported relatively high levels of emotional distress and loneliness. Relationally victimized children also reported more self- restraint problems than their peers, including more difficulty inhibiting anger and greater impulsivity (Crick, & Bigbee, 1998).

With regard to school related incidents, hate crimes have also been identified as a form of student victimization. Hate crimes are crimes against individuals where the victim was selected because of race, skin color, ethnicity, sexual orientation, gender, religion, or disability (Violent Crime Control and Law Enforcement Act of 1994). The Health Behavior of School Children Survey reports that among 11, 13, and 15-year-olds, approximately 15% report being bullied because of race or religion (1999). The incident at Columbine, Colorado, in April of 1999 brought this topic of hate crimes as related to school violence into the forefront. Other factors that may lead students to school violence included violent video games, gun accessibility, domestic violence, child and elder abuse, gang violence, and violence in the media (U.S. Department of Education, 1999).

The 1999 Annual Report on School Safety indicates that students are less likely to be bullied and victimized today than previous years (CDC, 1999). The U.S. Department of Justice's School Crime Victimization Survey in 1999 reported that about 5% of students' aged 12 through 18, said that they had been bullied at school in the last 6 months. While fewer students reported being actually bullied at school, more reported "feeling" unsafe at school. Though bullying is shown to be declining, some believe that this could be due to underreporting of these occurrences. In 1993 the National Center for Education Statistics reported that 56% of students in the 6th to 12th-grades said that bullying had occurred in their schools during the previous year. The Health and Behavior of School Children Survey reported that more students are being bullied because of their race and or religion (97-98). In 1999, The National Association of Attorneys Generals conducted a survey led by President Christine Gregoire. In this survey, youth from across the country were asked questions regarding their thoughts on school violence. Students admitted that, for the most part, they would be unwilling to report incidents of bullying. This was partly due to their fear of retaliation, and not wanting to report their peers to adults for fear of breaking the "code of silence" (U.S. Department of Education, 1999).

Bullying and Victimization

The National School Safety Center reports that bullying is often a cause of school violence and is underrated because of society's fear of school shootings (1999). Behaviors that researchers consider to be bullying include verbal threats such as name-

calling, teasing, and harassment; physical behaviors include fighting, shoving, blocking, slapping and other forms of physical contact intended to cause harm. Although bullying in the United States is usually identified first during the elementary school years, the problem becomes more frequent and severe in early adolescence (National Center for Educational Statistics, 1995). Studies show that children who are identified as bullies at age 8 are three times more likely than other youths to break the law by age 30. Bullying has been shown to not only have an effect on the perpetrator but also on the victim of the persecution. According to Mulrine (1999), one out of every four children report being victimized.

The literature identifies two types of victims: passive victims, representing about 10% of the school aged population (Oweus, 1993; Schwartz et al., 1993; Schwartz, Dodge, Petit, & Bates, 1997) and aggressive, or proactive, victims representing 2%-15% of the school aged population (Boulton & Underwood, 1992; Olweus, 1993; Schwartz et al., 1997). Passive victims tend to be nonassertive or non-dominant in their interactions with peers (Schwartz et al., 1997). Aggressive victims are also bullied by their peers, yet they display a hostile style of social interaction that often results in their aggression being reactive rather than proactive (Schwartz eat al., 1997). Unlike bullies, they use their aggression in a response to being provoked, and they are also rejected by nearly all peers and have few, if any, friends in a particular clique (Perry et al., 1998).

Studies reporting differences in gender and victimization indicate that males were more likely to be victims of bullying in grades 6 and 7 than were females, while in the

other two grades there was little difference (The Department of Justice School Crime Survey in 1999). Few differences in this same study were shown among racial and ethnic groups. Students in lower grades were more likely to be bullied than students in higher grades (Department of Justice School Crime Survey, 1999).

According to the 1998 National Assessment of Educational Progress (NEAP), higher percentages of Black and Hispanic 4th grade students reported feeling very unsafe at school than did White students at that grade level. The study also reported that compared to 4th and 8th-grade students, fewer 12th-grade students reported feeling "very unsafe" at school, regardless of race.

Student Views on Bullying and Victimization

Students surveyed in the 1999 attorney general's report believed that bullying and peer interaction was the second major cause of youth violence, with number one being the home environment. The report also indicated that verbal bullying encourages physical violence toward those who are bullied. Young people who have been bullied and tormented but have no one to talk with or means to express their feelings of anger, and cannot escape harassment, are sometimes the ones who explode (The 1999 Annual Report on School Safety, 1999). These victimized youth are not only at risk for acts of violence towards others, they are at a greater risk of suicide (The 1999 Annual Report on School Safety, 1999).

Guns in Schools

The Youth Risk Behavior Survey conducted in 1993, 1995, and 1997 indicated that males are more likely to carry weapons than females. Also, students in the 9th-grade

or lower were more likely to carry a weapon than were the students in 10th through 12th grades (Youth Risk Behavior Survey 1993, 1995, and 1997). Aggressive behaviors such as fighting and weapon carrying are extremely common in the daily lives of many adolescents (YRBS 1993, 1995,and 1997). The National School Boards Association estimated that in, the 1993-1994 school year more than 135,000 guns were brought into the schools each day.

Between 1997 and 1998, the firearm homicide rates for 15- to 19-year-olds increased 61% (Fingerhut, Ingram, & Feldman, 1992). Over three-fourths of adolescent homicides involve firearms (Federal Bureau of Investigation, 1993) and most of these are handguns. Studies indicate that the leading causes of school related deaths are homicide and suicide in which a gun was used (1999 Annual Report on School Safety).

The Metropolitan Life survey (1999) indicated five main reasons that students carried guns to school. The reasons students gave were: to impress or be accepted by peers (60%), followed by self-esteem (59%), protection to and from school (49%), protection in school (34%), and finally because they wanted to hurt someone (32%).

Victims of Crime and Students with Weapons

Comparisons of students who reported being victims of school violence and students who reported carrying guns to school indicated that the majority of students who have been victims of school violence (73%) or students who carry a weapon to school (71%) are White (Metropolitan Survey, 1999). The study also reported that victims and non-victims of school violence, and weapon carriers and non-carriers varied among Blacks and Hispanics (Black-24% victim, 20% carry weapon; Hispanics-10% victim, 12% carry

weapon). Victims and students who carried weapons were more likely to be boys. Victims and non-victims of school violence are seen across all grades. However, Incidents of carrying weapons to school were more likely to be in secondary schools. Grades were also a key aspect in the likelihood of whether a student was a victim of school violence and in the likelihood of carrying a weapon to school. Non-victims of school violence and those who do not carry weapons to school (82%) reported receiving good to fair grades (The Metropolitan Life Survey of the American Teacher, 1999). Household composition of school violence victims or students carrying guns was also examined in the relationship between victims and weapon carriers. The study found that there were no significant findings between students living in one-parent households when compared to students in two parent households. However, the report did indicate that those who had been victims of school violence were more likely to live in households where there are financial difficulties. There were no differences in economic status and weapon carrying. The amount of parental involvement reflected that students who were victims of violence and those who carried guns were less likely to report spending a lot of time talking to their parents about school, and reported little or no parental involvement. These students also reported that they were more likely to go home and stay alone. Of the students reporting that they had been victims of school violence, they were shown to be more likely than those who have not been victims to have carried a weapon to school (The Metropolitan Life Survey of the American Teacher, 1999).

Bullying as a Cause of School Violence

Some researchers are now questioning how victimization could lead to school violence. Since bullying and victimization have shown to be interrelated, could bullying behaviors lead to school violence?

The nation saw this type of "revenge" from students being bullied in 1999 in the Littleton, Colorado massacre. Eric Harris and Dylan Klebold were said to be loners who were taunted by classmates. These two "once bullied now bullies" took revenge by killing their schoolmates. Yet another act of revenge occurred in Jonesboro, Arkansa by Mitchell Johnson who was bullied because his classmates reported him as being "a pudgy outcast." He, too, went on a shooting spree in his school for revenge.

Prevention and Intervention

According to a nationwide poll (Mulrine, 1999), students reported that teachers do a poor job of handling bullies. Students said "sending a bully to the principal is basically saying that the teacher has no control over their classroom." So what is the correct way to handle bullying?

Researchers are studying a number of preventative measures for school violence. One preventative measure is that of profiling students that may be a threat and identifying early warning signs of violent behavior. The National Center for the Analysis of Violent Crime (NCAVC) and the Federal Bureau of Investigators have developed "The School Shooter: Threat Assessment Perspective" model in order to examine a potential

perpetrator and assess the risk of a threat (1999). This model looks at the motivation of a threat, the type of threat, and the different levels of threats. It also uses a four pronged assessment model to determine the likelihood that a threat may be carried out. The areas or prongs examined included the personality of the student, family dynamics, school dynamics and the students' roles in those dynamics, and social dynamics. If the student is shown to have serious problems in the majority of the four areas and if the threat is at a medium or high level, then it is taken more seriously and appropriate intervention should be initiated as soon as possible (NCAVC, 1999). This model supports developing a threat management system for schools that includes informing parents and students of the school policies, designating a threat assessment coordinator, and coordinating a multidisciplinary team that will investigate and initiate appropriate interventions in a consistent manner.

Hypothesis

It was hypothesized that there would be a significant positive relationship between the two variables, that students who report being victims of bullying are more likely to perceive ambiguous situations as threatening than students who have not been victims of bullying behavior.

Method

Subjects

Data was collected from sixth, ninth, and twelfth-graders attending schools in West Virginia. In order to provide for a diverse population, the study included school

districts located in urban and suburban areas. Classes in the schools were randomly selected to participate in a survey developed by the author and four colleagues to study student perceptions of school violence and threat. Each participant in the chosen classroom (unless parents denied permission) completed the survey.

Instrumentation

The instrument used for data collection was a survey developed by Heidi Gregoire, Randy Staats, Corey Lane, Nancy Price, Charley Bowen, and colleagues (Appendix A). The survey examined situations that students might perceive as threatening. The survey began with a series of requesting demographic questions consisting of non-identifiable data, such as age, gender, race, personal interests, (approximate) grade-point average, and the time spent with family and friends. Content of the survey consisted of eleven ambiguous scenarios that were developed on a 3rd-grade reading level so that each child would be able to participate and to ensure reliability.

Each scenario presented a student interaction or observation of a situation that may or may not be potentially violent. The students then rated the level they perceived based on a Likert-type Scale from 1-7, with 1 being not at all, and 7 being definitely.

Procedures

In order to insure that all ethical and legal standards were followed, surveys and questionnaires were anonymous and all information received was non-identifiable data. When administering this assessment, the researchers began by explaining that the purpose of the assessment was to gather student opinions related to school violence and related

issues. The test administrator explained how anonymity would be maintained throughout the research process.

Graduate Students from MUGC assisted the research team in collecting the data in order to reduce testing time and to increase accurate data collection. The estimated administration time of the survey was between 15 to 20 minutes per student. The survey was administered by a volunteer graduate student or research team member during the homeroom period so that teachers would not need to adjust their schedules or interupt their instruction.

In order to inform families and guardians about the research project, a parental notification form (Appendix B) was sent home with the students prior to administration. Parents were asked to contact the school prior to the survey administration date if they opposed having their child participate in the survey. One notification was completed and returned by a parent not wanting their child to participate in the study.

Once data was collected, a statistical analysis was conducted using a computer software package. A test for regression was used in order to compare question 1 which asked students to identify whether or not they had been bullied by responding yes or no, to each student's individual response based on a Likert Scale of the 11 scenarios in the survey form. Results were then used to determine if the students' report of whether or not they had been victims of bullying was related to the students' perception of a possible threatening situation. A descriptive analysis was then used to determine the response to the Likert raw score obtained with the students' response to question 1.

Student responses were categorized by the students' raw Likert score and compared based on the number of responses given to a particular question. This comparison was done to determine what situations the students' perceived as the most threatening and which ones they chose to perceive as less threatening.

Description of the Sample and Regression Analysis

In order to analyze responses to questions 2-12 compared to responses for question 1, students who answered "yes" to question 1 ("In the last 12 months have you ever been threatened or bullied?"), a cross tabulation procedure was used. The following results were obtained: out of 659 respondents, 617 completed question 1, of which, 211 responded yes (see Table 1).

The survey sample consisted of 332 male students and 310 female students (see Table 2). Students' threat perception was assessed through 11 items on the survey, questions 2 through 12. These were presented in a Likert scale format that ranged from 1-5 responses, 1 being the least threatening and 5 being the greatest feeling of threat in a situation. Students' responses to these items fluctuated from high responses to low throughout the survey on these questions. There was no true and significant predictor indicating if a student had been bullied or victimized in the last 12 months that he or she would score high on the Likert scale for that specific question.

To identify the responses related to each question, the Likert raw score was analyzed in accordance to an affirmative response to question one. The second question

identified a person portraying as a janitor that was not wearing a school ID badge. Of the students who responded "yes" to question 1, 88 students responded that this could be a possible threatening situation. The least number of students being 12, responded to question 2 with a score of 5, that they definitely viewed this as being a threatening situation, 39 of the students did not answer (see Table 3).

Question 3 described a situation at a school football game, where the student was placed in a situation approaching a group of students who have been known to get into fights. On question 3, 69 students responded to this situation as being somewhat likely a threatening situation. Seven students responded to the question as "not at all" likely to be a threatening situation, and 39 students did not answer (see Table 4).

The scenario described in question 4 was a situation in which a student was described as a Satan worshiper and was wearing all black clothing and a pierced eyebrow. Of the responses to this question, 80 students responded to it as being a situation that is possibly threatening. Only 20 students responded to question 4 to be definitely a threatening situation; 42 students did not respond (see table 5).

Question 5 identified a student as a troublemaker that is always causing fights, the girl is displayed in the situation as looking "angry". There were 42 students who did not respond to this question. Of the students who answered as compared to response to question 1, 67 answered with a score of 4 which indicated that they perceived the situation as very likely to be threatening. The least amount of responses occurred with a score of 1 indicating that this would not be a threatening situation; 42 students did not respond (see table 6).

Question 6 described a student who is on the basketball team and has tattoos, a gold tooth, and gold chains around his neck. The student has been known to be aggressive. Responses to question 6 occurred more that this situation is somewhat likely to be threatening with 81 students scoring the response with a 3. The least amount of responses indicated this situation as being perceived as not at all threatening, (score of 1) with only 14 responses; 42 did not answer (see Table 7).

Question 7 describes a student is displayed as a victim of bullying. He is wearing a long black trench coat and has reported that he would "kill everyone" if he were not left alone. The greatest amount of responses to question 7 occurred with a score of 4, that the situation was very likely but not definitely a threatening situation. The least amount of scores (16) fell in the not likely at all to be threatening category; 62 students did not answer (see Table 8).

Question 8 described a student who has just been defiant toward the teacher by getting up out of her seat and going to the bathroom after being told by the teacher that she was not allowed. Students responded to question 8 mostly with a score of 2, that this situation is possibly threatening (62). The least amount scored the question as a definite threatening situation (11), 63 did not respond (see Table 9).

Question 9 described a situation in which the responding student was asked by athletes that have been known to cause fights, if they wanted a ride in their car. Of the students who answered this question, 69 responded that the situation is possibly threatening while 17 responded that it was definitely a threatening situation, 62 did not respond (see Table 10).

Question 10 presents a scenario where a student was threatened by another student to make a project that they had both been assigned to do "good or else". The student making the threat was described as wearing black clothing, with multicolored hair and a pierced tongue. Of the students responding to this question, 69 described to it as being a somewhat likely situation with a score of 3. The least amount of responses occurred with a score of 5 being definitely a threatening situation, 65 did not respond (see Table 11).

Question 11 described a situation in where the respondent was being confronted by another student in a special education classroom. The respondent was told that the student tells them to "shut up". Scores to this question ranged from the most being 66 responding to this situation as being a possible threatening situation, to the least 15 responding with a score of 5, 67 did not answer (see Table 12).

Question 12 described a situation where the respondent caught a classmate cheating on an exam, and the classmate gave the respondent an evil look. Students responding to question 12 that scored it as being a possible threatening situation included 70 responses. The least amount of students scored their response as a 5 perceiving this situation as a definitely threatening; 60 did not respond (see table 13).

Following an analysis of the questions based on their response to question 1, a regression analysis was conducted in order to identify the accuracy of question 1 in the prediction of a high score on questions 2-12. A significance level of .01 was used in the analysis. A chi-square was then used to determine whether the observed frequencies, if any, differed significantly from those that were expected based on the hypothesis.

As Table 14 shows, no significant correlations were found between students who reported having been bullied in the last 12 months, to student's overall perception of situations as more threatening as indicated by a high response on the Likert scale. A low positive significance found between response to question 1 and response to question 2; however, as indicated in Table 13, it is too low to make the assumption that Q1 predicts Q2. See table 13 for further results of significance between responses.

Discussion

The results of the current study did not provide support for the hypothesis that students who had been victimized or bullied would perceive possible threatening situations as more threatening than others. The results show a variety of different responses ranging from students perceiving the situations as absolutely threatening to not at all threatening in those that had and had not been bullied. The results showed that there was no true evidence that being bullied increased threat perception of the student. The results could, however, show support for the previously mentioned "code of silence," in which children underreport such incidents to occur.

Study Limitations

There were several limitations to the current study. As indicated in the paper and shown in Tables 3 through 13, students reporting on the survey completed many of the questions on the second page; however, responses began to reduce once the student got to the third page of the survey. This could have been due to the length of the survey or to the students not having enough time to complete the survey. The study team initially

underestimated the time it would take for each student to complete the survey. Other limitations that might have occurred include the students' reading level may have been below the 3rd grade and may have needed the test to be read to them, also students may have been absent the day of data collection. Another limitation to the study may be that it was a pencil and paper test, or a hypothetical situation, and not an actual observation of the behavior.

Directions for Further Research

The study indicated many areas that warrant further research study. First, research on the validity between a paper and pencil questionnaire and actual behavior or perceptions seems a necessary step. An optimal assessment might include both pencil and paper questionnaire and an observational behavior assessment. Further research could also examine if students underreport bullying, the reasons for underreporting, and the effects bullying has on students' perception of others.

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Table 1
Classification Table

Question 1	Predicted	
	Q1	
1.00	1.00	2.00
2.00	211	406

Table 2

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
1.oo	310	47.0	48.3	48.3
2.00	332	50.4	51.7	100.0

Table 3
Q1*Q2 Crosstabulation

		Q2					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	17	88	58	37	12	212
	2.00	29	176	114	68	21	408
Total		46	264	172	105	33	620

Table 4
Q1*Q3 Crosstabulation

		Q3					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	7	40	69	59	37	212
	2.00	21	94	121	131	41	408
Total		28	134	190	190	78	620

Table 5

Q1*Q4 Crosstabulation

		Q4					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	41	80	39	31	20	211
	2.00	68	169	104	44	21	406
Total		109	249	143	75	41	617

Table 6

Q1*Q5 Crosstabulation

		Q5					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	8	32	55	67	49	211
	2.00	17	77	107	152	53	406
Total		25	109	162	219	102	617

Table 7

Q1*Q6 Crosstabluation

		Q6					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	14	55	81	44	17	211
	2.00	23	127	160	76	20	406
Total		37	182	241	120	37	617

Table 8

Q1*Q7 Crosstabulation

		Q7					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	16	39	47	69	37	208
	2.00	24	80	118	119	48	389
Total		40	119	165	188	85	597

Table 9

Q1*Q8 Crosstabulation

		Q8					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	58	62	54	23	11	208
	2.00	117	154	83	27	7	388
Total		175	216	137	50	18	596

Table 10

Q1*Q9 Crosstabulation

		Q9					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	19	69	66	37	17	208
	2.00	46	158	110	52	23	389
Total		65	227	176	89	40	597

Table 11

Q1*Q10 Crosstabulation

		Q10					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	30	49	69	40	18	206
	2.00	41	126	121	74	26	388
Total		71	175	190	114	44	594

Table 12

Q1*Q11 Crosstabulation

		Q11					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	32	66	60	33	15	206
	2.00	61	151	98	64	12	386
Total		93	217	158	97	27	592

Table 13

Q1*Q12 Crosstabulation

		Q12					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	58	70	47	23	9	207
	2.00	125	178	52	24	13	392
Total		183	248	99	47	22	599

Table 14

Block 1: Variables In the Equation

	B	df	Sig.	S.E.
Q2	-.021	1	.807	.087
Q3	-.153	1	.067	.084
Q4	-.052	1	.520	.084
Q5	-.110	1	.238	.093
Q6	-.048	1	.633	.100
Q7	-.029	1	.732	.085
Q8	-.193	1	.031	.089
Q9	-.149	1	.095	.089
Q10	.018	1	.837	.086
Q11	-.094	1	.266	.085
Q12	-.211	1	.017	.088

MUGC

Marshall University Graduate College
100 Angus E. Peyton Drive
South Charleston, West Virginia 25303-1600
(304) 746-1932 • FAX (304) 746-1942

Graduate School of Education and Professional Development
School Psychology Program

Dear Parents,

We are a research group of faculty and graduate students at Marshall University Graduate College. We have decided to explore the issue regarding school violence in your area. Most importantly, we are going to look at what behavior characteristics the students in your area *actually see as* being aggressive or non-aggressive. We are not only going to look at what children see as threatening but also what is most threatening to them, such as gender, race, class, and other types of groupings.

We ask for your help in our completion of this research by allowing us to administer a 15-20 minute, anonymous survey to your child. The survey consists of twelve short stories that may or may not be a potentially violent situation. Before completing the survey, your child will be asked to complete a demographic section consisting of the following non-identifiable data: age, gender, race, personal interests, approximate grade point average, and the amount of time they spend with their friends and parent(s)/guardian(s). Your child ***will not*** be asked his/her name. Our research team would like to stress to you that appropriate measures will be taken to assure that all ethical and legal standards are followed when this survey is given and no respondents will be identified by name.

Because the issue of school violence is such an important topic right now, we encourage you to allow your child to participate in the study. In an effort to maintain safe schools, we hope that you will join us with this challenge. Once the research study is completed, we will send a copy of the results to your child's school and you will be able to review them at your convenience.

If you decide that you would not like your child to participate in the study or if you have any questions regarding this research study, please contact Dr. Elizabeth Boyles, at MUGC (304-746-2032). Thank you for your time.

Student Survey -B

. How old are you?
- A. 12 years old or younger
- B. 13 years old
- C. 14 years old
- D. 15 years old
- E. 16 years old
- F. 17 years old
- G. 18 years old or older

2. What is your sex?
- A. Female
- B. Male

3. What grade are you in?
- A. 6th Grade
- B. 7th Grade
- C. 8th Grade
- D. 9th Grade
- E. 10th Grade
- F. 11th Grade
- G. 12th Grade

4. How would you describe yourself? (Select one or more responses)
- A. American Indian or Alaska Native
- B. Asian
- C. Black or African American
- D. Hispanic or Latino
- E. Native Hawaiian or Other Pacific Islander
- F. White
- G. Other, please indicate: _____

5. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
- B. Mostly B's
- C. Mostly C's
- D. Mostly D's
- E. Mostly F's
- F. None of these grades
- G. Not sure

6. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
- B. Less than 1 hour per day
- C. 1 hour per day
- D. 2 hours per day
- E. 3 hours per day
- F. 4 hours per day
- G. 5 or more hours per day

7. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
- A. 0 teams
- B. 1 team
- C. 2 teams
- D. 3 or more teams

Bullying is verbal threats that include name-calling, teasing, and harassment; physical behavior includes fighting, shoving, blocking, slapping, and other forms of physical contact meant to cause harm.

9. In the last 12 months, have you been threatened or bullied at school?
   A. Yes
   B. No

Aggression can be physical or verbal. Physical and verbal aggression is used for the purpose of injuring, damaging, or abusing people or property, and is intended to cause physical and/or emotional harm.

10. During class-time you ask the teacher if you may go to the bathroom. She asks you to take a hall pass. You get to the bathroom and notice a strange white man standing in the bathroom. He looked to be cleaning the bathroom. The man is wearing old torn clothes that are stained with grease. Although he looks like a janitor, you see that he is not wearing a school ID. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
	2	3	4	5

11. At the homecoming football game, you and your friends decide to go around the school to where all of the rest of the kids hang out at halftime. You walk around the dark school building and see a group of black girls. The kids have been known to get into many fights in the school and to listen to loud and angry rap music. How likely are these individuals to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

12. A 16-year-old white boy who wears black clothing all of the time and has black lipstick on decides to sit at the same table as you while you are eating lunch. He is known to not have many friends and often does not like to talk to anyone. He also has a pierced eyebrow and both of his ears have at least three piercings. He has been known to talk to himself and has been called a Satan worshiper. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

13. A large twelve-year old black boy is coming down the same hall as you and looks angry. This boy has a reputation of being a troublemaker and has been in fights with others. He is wearing a red bandana around his head, a tank top and blue jeans. He often punches his fists in his hands because he is always angry. You know that he has been kicked out of school this year after fighting with one of your friends. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

14. You are sitting quietly against the wall and a 16-year old black female who plays ball at the local high school is coming towards you. She is wearing designer blue jeans and a t-shirt with the sleeves cut out so that you can see tattoos on each of her shoulders. She also has a gold tooth and wears many gold chains. The ball player has been known to pick on younger kids. She also has a mean look on her face. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

14. In your 6th period English class, a profoundly overweight sixteen year old white boy is being picked on due to his strong body odor. After a few minutes of being picked on, he says, "If you don't leave me alone, I'll kill everyone in the school." Just then, the bell rings to change classes and go to your final class of the day. After being in your last class for ten minutes, you ask the teacher if you may use the hall pass to go to your gym locker. As you enter the gym, you see the overweight sixteen year old white boy that was being picked on in your 6th period class. He is sitting in the gym in a long black trench coat listening to hard rock music and will not speak to anyone. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

15. In your music class, a ten year old black girl asks the teacher for the 5th time if she may go to the bathroom. The teacher again says for the student to wait until the lesson for the day is completed before she can go to the bathroom. The black girl gets out of her seat and walks out of the classroom. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

16. Walking home alone from school, a red convertible with five popular black boy athletes pull up beside you and ask you if you want a ride. You know that these black boy athletes are known for picking on younger kids. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

17. In your 5th period class, your teacher assigns the class a group project. Everyone in the class will be paired up with another student in the class by the teacher. The teacher assigns you to work with a fourteen year old white girl that wears dark make-up, red, green, and orange hair, has a tongue piercing and wears all black clothing. The student is known for being a loner and has never been seen talking to anyone. The fourteen year old white girl turns to you and says, "You better make our project good, or else." How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

18. While waiting in the lunch line, a younger black boy jumps in front of you. You have seen him in the halls before and know that he is either in a class for slow learners or for kids with behavior disorders. You politely tell him to move to the back of the line. He tells you to "Shut up!" and lets another boy get in front of him. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

9. During a science test, the teacher walks out of the room. You glance over and see a white girl classmate looking at a cheat sheet. The classmate catches you looking at her and gives you mean look. When the teacher re-enters the room, the girl hides the piece of paper. After grading the papers, the teacher reports that the girl you caught cheating received the only 100% in the class. You don't know the girl very well, but you have noticed she is often very quiet and keeps to herself in the hallways and in the cafeteria. How likely is this individual to do something aggressive?

Not At All	Possibly	Somewhat Likely	Very Likely	Definitely
1	2	3	4	5

Q1 * Q2 Crosstabulation

unt

		Q2					
		1.00	2.00	3.00	4.00	5.00	Total
1	1.00	17	88	58	37	12	212
	2.00	29	176	114	68	21	408
otal		46	264	172	105	33	620

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
earson Chi-Square	.380[a]	4	.984
lkelihood Ratio	.378	4	.984
inear-by-Linear ssociation	.036	1	.850
of Valid Cases	620		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.28.

sstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
1 * Q3	620	94.1%	39	5.9%	659	100.0%

Q1 * Q3 Crosstabulation

mt

		Q3					
		1.00	2.00	3.00	4.00	5.00	Total
1	1.00	7	40	69	59	37	212
	2.00	21	94	121	131	41	408
tal		28	134	190	190	78	620

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
arson Chi-Square	9.467[a]	4	.050
elihood Ratio	9.279	4	.055
ear-by-Linear sociation	4.121	1	.042
f Valid Cases	620		

0 cells (.0%) have expected count less than 5. The minimum expected count is 9.57.

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Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.049	.090	.297	1	.586	1.050
	Q3	-.148	.086	2.990	1	.084	.862
	Q4	.020	.086	.052	1	.820	1.020
	Q12	-.211	.088	5.714	1	.017	.810
	Constant	1.401	.361	15.016	1	.000	4.058

a. Variable(s) entered on step 1: Q12.

Casewise List[a]

a. The casewise plot is not produced because no outliers were found.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q11 * Q2	620	94.1%	39	5.9%	659	100.0%

Q11 * Q2 Crosstabulation Didn't Answer

Q2

Count

	Q2					
	1.00	2.00	3.00	4.00	5.00	Total
Q11 1.00	17	88	58	37	12	212
2.00	29	176	114	68	21	408
Total	46	264	172	105	33	620

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.380[a]	4	.984
Likelihood Ratio	.378	4	.984
Linear-by-Linear Association	.036	1	.850
N of Valid Cases	620		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.28.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q11 * Q3	620	94.1%	39	5.9%	659	100.0%

Q1 * Q3 Crosstabulation

Count

		Q3					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	7	40	69	59	37	212
	2.00	21	94	121	131	41	408
Total		28	134	190	190	78	620

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.467[a]	4	.050
Likelihood Ratio	9.279	4	.055
Linear-by-Linear Association	4.121	1	.042
N of Valid Cases	620		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.57.

rosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q4	617	93.6%	[illegible]	[illegible]	659	100.0%

Q1 * Q4 Crosstabulation

Count

		Q4					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	41	80	39	31	20	211
	2.00	68	169	104	44	21	406
Total		109	249	143	75	41	617

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.658[a]	4	.047
Likelihood Ratio	9.533	4	.049
Linear-by-Linear Association	1.302	1	.254
N of Valid Cases	617		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.02.

osstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q5	617	93.6%	42	6.4%	659	100.0%

Q1 * Q5 Crosstabulation

ount

		Q5					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	8	32	55	67	49	211
	2.00	17	77	107	152	53	406
Total		25	109	162	219	102	617

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.141[a]	4	.025
Likelihood Ratio	10.782	4	.029
Linear-by-Linear Association	4.380	1	.036
N of Valid Cases	617		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.55.

crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q6	617	93.6%	42	6.4%	659	100.0%

Q1 * Q6 Crosstabulation

ount

		Q6					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	14	55	81	44	17	211
	2.00	23	127	160	76	20	406
Total		37	182	241	120	37	617

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.129[a]	4	.389
Likelihood Ratio	4.053	4	.399
Linear-by-Linear Association	1.968	1	.161
N of Valid Cases	617		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.65.

rosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q7	597	90.6%	62	9.4%	659	100.0%

Q1 * Q7 Crosstabulation

Count

		Q7					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	16	39	47	69	37	208
	2.00	24	80	118	119	48	389
Total		40	119	165	188	85	597

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.743[a]	4	.150
Likelihood Ratio	6.740	4	.150
Linear-by-Linear Association	1.585	1	.208
N of Valid Cases	597		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.94.

osstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q8	596	90.4%	63	9.6%	659	100.0%

Q1 * Q8 Crosstabulation

Count

		Q8					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	58	62	54	23	11	208
	2.00	117	154	83	27	7	388
Total		175	216	137	50	18	596

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.272[a]	4	.010
Likelihood Ratio	12.933	4	.012
Linear-by-Linear Association	8.036	1	.005
N of Valid Cases	596		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.28.

rosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q9	597	90.6%	62	9.4%	659	100.0%

Q1 * Q9 Crosstabulation

Count

		Q9					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	19	69	66	37	17	208
	2.00	46	158	110	52	23	389
Total		65	227	176	89	40	597

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.235[a]	4	.182
Likelihood Ratio	6.223	4	.183
Linear-by-Linear Association	5.655	1	.017
N of Valid Cases	597		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.94.

osstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q10	594	90.1%	65	9.9%	659	100.0%

* missing cases increase

Q1 * Q10 Crosstabulation

ount

		Q10					
		1.00	2.00	3.00	4.00	5.00	Total
:Q1	1.00	30	49	69	40	18	206
	2.00	41	126	121	74	26	388
Total		71	175	190	114	44	594

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.231[a]	4	.183
Likelihood Ratio	6.281	4	.179
Linear-by-Linear Association	.287	1	.592
N of Valid Cases	594		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.26.

osstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q11	592	89.8%	67	10.2%	659	100.0%

Q1 * Q11 Crosstabulation

Duint

		Q11					
		1.00	2.00	3.00	4.00	5.00	Total
Q11	1.00	32	66	60	33	15	206
	2.00	61	151	98	64	12	386
Total		93	217	158	97	27	592

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
earson Chi-Square	7.700[a]	4	.103
ikelihood Ratio	7.440	4	.114
near-by-Linear ssociation	2.743	1	.098
of Valid Cases	592		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.40.

sstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q12	599	90.9%	60	9.1%	659	100.0%

Q1 * Q12 Crosstabulation

mt

		Q12					
		1.00	2.00	3.00	4.00	5.00	Total
1	1.00	58	70	47	23	9	207
	2.00	125	178	52	24	13	392
ttal		183	248	99	47	22	599

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
earson Chi-Square	17.053[a]	4	.002
kelihood Ratio	16.678	4	.002
near-by-Linear ssociation	8.563	1	.003
of Valid Cases	599		

. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.60.

Model Summary

tep	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	740.234	.026	.036

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
tep 1	Q1	1.00	10	194	4.9
		2.00	12	368	96.8
	Overall Percentage				64.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
tep	Q2	.049	.093	.277	1	.598	1.050
	Q3	-.095	.101	.878	1	.349	.909
	Q4	.051	.092	.313	1	.576	1.053
	Q5	-.127	.104	1.499	1	.221	.881
	Q6	.047	.112	.179	1	.672	1.048
	Q7	-.008	.092	.007	1	.932	.992
	Q8	-.118	.102	1.331	1	.249	.888
	Q9	-.057	.099	.331	1	.565	.945
	Q10	.091	.095	.920	1	.338	1.096
	Q11	-.031	.095	.106	1	.745	.969
	Q12	-.166	.100	2.774	1	.096	.847
	Constant	1.596	.415	14.798	1	.000	4.933

a. Variable(s) entered on step 1: Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12.

Casewise List[a]

a. The casewise plot is not produced because no outliers were found.

sstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
" Q2	620	94.1%	39	5.9%	659	100.0%

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
tep	Q2	.012	.088	.018	1	.892	1.012
	Q3	-.189	.083	5.111	1	.024	.828
	Constant	1.207	.344	12.339	1	.000	3.345

a. Variable(s) entered on step 1: Q3.

ock 3: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
tep 1	Step	.094	1	.759
	Block	.094	1	.759
	Model	5.337	3	.149

Model Summary

tep	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	750.384	.009	.013

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
tep 1	Q1	1.00	0	204	.0
		2.00	0	380	100.0
	Overall Percentage				65.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
tep	Q2	.017	.090	.036	1	.850	1.017
	Q3	-.182	.086	4.452	1	.035	.834
	Q4	-.025	.083	.094	1	.759	.975
	Constant	1.235	.356	12.051	1	.001	3.440

a.. Variable(s) entered on step 1: Q4.

ock 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
ep 1	Step	10.150	8	.255
	Block	10.150	8	.255
	Model	15.487	11	.161

Classification Table[a,b]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
tep 0	Q1	1.00	0	206	.0
		2.00	0	392	100.0
	Overall Percentage				65.6

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
ep 0	Constant	.643	.086	55.887	1	.000	1.903

Variables not in the Equation

			Score	df	Sig.
ep 0	Variables	Q2	.020	1	.888
	Overall Statistics		.020	1	.888

ock 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
ep 1	Step	.020	1	.887
	Block	.020	1	.887
	Model	.020	1	.887

Model Summary

ep	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	770.160	.000	.000

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
ep 1	Q1	1.00	0	206	.0
		2.00	0	392	100.0
	Overall Percentage				65.6

a. The cut value is .500

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	755.659	.000	.000

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	204	.0
		2.00	0	380	100.0
	Overall Percentage				65.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	-.022	.087	.062	1	.803	.979
	Constant	.680	.249	7.443	1	.006	1.974

a. Variable(s) entered on step 1: Q2.

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.181	1	.023
	Block	5.181	1	.023
	Model	5.243	2	.073

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	750.478	.009	.012

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	204	.0
		2.00	0	380	100.0
	Overall Percentage				65.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step	Q2	-.012	.086	.020	1	.887	.988
	Constant	.676	.247	7.479	1	.006	1.967

a. Variable(s) entered on step 1: Q2.

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4.889	1	.027
	Block	4.889	1	.027
	Model	4.909	2	.086

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	765.271	.008	.011

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	206	.0
		2.00	0	392	100.0
	Overall Percentage				65.6

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step	Q2	.020	.087	.054	1	.816	1.021
	Q3	-.181	.082	4.828	1	.028	.834
	Constant	1.180	.339	12.083	1	.001	3.254

a. Variable(s) entered on step 1: Q3.

Block 3: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.224	1	.636
	Block	.224	1	.636
	Model	5.133	3	.162

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	765.047	.009	.012

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	206	.0
		2.00	0	392	100.0
	Overall Percentage				65.6

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.028	.089	.099	1	.753	1.028
	Q3	-.171	.085	4.073	1	.044	.843
	Q4	-.039	.082	.224	1	.636	.962
	Constant	1.225	.353	12.056	1	.001	3.404

a. Variable(s) entered on step 1: Q4.

Block 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.707	1	.017
	Block	5.707	1	.017
	Model	10.841	4	.028

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	759.340	.018	.025

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	6	200	2.9
		2.00	6	386	98.5
	Overall Percentage				65.6

a. The cut value is .500

Q1 * Q12 Crosstabulation

ount

		Q12					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	58	70	47	23	9	207
	2.00	125	178	52	24	13	392
otal		183	248	99	47	22	599

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
earson Chi-Square	17.053[a]	4	.002
likelihood Ratio	16.678	4	.002
inear-by-Linear ssociation	8.563	1	.003
of Valid Cases	599		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.60.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.231[a]	4	.183
Likelihood Ratio	6.281	4	.179
Linear-by-Linear Association	.287	1	.592
N of Valid Cases	594		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.26.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q11 * Q11	592	89.8%	67	10.2%	659	100.0%

Q1 * Q11 Crosstabulation

Count

		Q11					Total
		1.00	2.00	3.00	4.00	5.00	
Q11	1.00	32	66	60	33	15	206
	2.00	61	151	98	64	12	386
Total		93	217	158	97	27	592

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.700[a]	4	.103
Likelihood Ratio	7.440	4	.114
Linear-by-Linear Association	2.743	1	.098
N of Valid Cases	592		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.40.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q12	599	90.9%	60	9.1%	659	100.0%

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q11 * Q9	597	90.6%	62	9.4%	659	100.0%

Q1 * Q9 Crosstabulation

Count

		Q9					Total
		1.00	2.00	3.00	4.00	5.00	
Q11	1.00	19	69	66	37	17	208
	2.00	46	158	110	52	23	389
Total		65	227	176	89	40	597

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.235[a]	4	.182
Likelihood Ratio	6.223	4	.183
Linear-by-Linear Association	5.655	1	.017
N of Valid Cases	597		

a.. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.94.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q10	594	90.1%	65	9.9%	659	100.0%

Q1 * Q10 Crosstabulation

Count

		Q10					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	30	49	69	40	18	206
	2.00	41	126	121	74	26	388
Total		71	175	190	114	44	594

Q1 * Q7 Crosstabulation

ount

		Q7					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	16	39	47	69	37	208
	2.00	24	80	118	119	48	389
Total		40	119	165	188	85	597

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.743[a]	4	.150
Likelihood Ratio	6.740	4	.150
Linear-by-Linear Association	1.585	1	.208
N of Valid Cases	597		

æ. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.94.

œsstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q8	596	90.4%	63	9.6%	659	100.0%

Q1 * Q8 Crosstabulation

puint

		Q8					
		1.00	2.00	3.00	4.00	5.00	Total
Q1	1.00	58	62	54	23	11	208
	2.00	117	154	83	27	7	388
Total		175	216	137	50	18	596

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.272[a]	4	.010
Likelihood Ratio	12.933	4	.012
Linear-by-Linear Association	8.036	1	.005
N of Valid Cases	596		

a.. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.28.

Dsstabs

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.141[a]	4	.025
Likelihood Ratio	10.782	4	.029
Linear-by-Linear Association	4.380	1	.036
N of Valid Cases	617		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.55.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q6	617	93.6%	42	6.4%	659	100.0%

Q1 * Q6 Crosstabulation

Count

		Q6					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	14	55	81	44	17	211
	2.00	23	127	160	76	20	406
Total		37	182	241	120	37	617

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.129[a]	4	.389
Likelihood Ratio	4.053	4	.399
Linear-by-Linear Association	1.968	1	.161
N of Valid Cases	617		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.65.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q7	597	90.6%	62	9.4%	659	100.0%

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q11 * Q4	617	93.6%	42	6.4%	659	100.0%

Q1 * Q4 Crosstabulation

Count

		Q4					Total
		1.00	2.00	3.00	4.00	5.00	
Q11	1.00	41	80	39	31	20	211
	2.00	68	169	104	44	21	406
Total		109	249	143	75	41	617

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.658[a]	4	.047
Likelihood Ratio	9.533	4	.049
Linear-by-Linear Association	1.302	1	.254
N of Valid Cases	617		

a.. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.02.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * Q5	617	93.6%	42	6.4%	659	100.0%

Q1 * Q5 Crosstabulation

Count

		Q5					Total
		1.00	2.00	3.00	4.00	5.00	
Q1	1.00	8	32	55	67	49	211
	2.00	17	77	107	152	53	406
Total		25	109	162	219	102	617

Classification Table[a,b]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 0	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.654	.085	59.463	1	.000	1.924

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Q2	.059	1	.807
	Overall Statistics		.059	1	.807

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.061	1	.806
	Block	.061	1	.806
	Model	.061	1	.806

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	792.585	.000	.000

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	-.021	.084	.060	1	.806	.980
	Constant	.710	.243	8.549	1	.003	2.035

a. Variable(s) entered on step 1: Q2.

ock 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4.207	1	.040
	Block	4.207	1	.040
	Model	4.268	2	.118

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	788.378	.007	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.007	.085	.006	1	.937	1.007
	Q3	-.166	.081	4.161	1	.041	.847
	Constant	1.180	.337	12.280	1	.000	3.253

a. Variable(s) entered on step 1: Q3.

ock 3: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.413	1	.520
	Block	.413	1	.520
	Model	4.681	3	.197

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a. Variable(s) entered on step 1: Q4.

Block 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Model	4.681	3	.197

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
ep	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a.. Variable(s) entered on step 1: Q3.

Casewise List[a]

a.. The casewise plot is not produced because no outliers were found.

g istic Regression

Case Processing Summary

nweighted Cases[a]		N	Percent
elected Cases	Included in Analysis	617	93.6
	Missing Cases	42	6.4
	Total	659	100.0
nselected Cases		0	.0
otal		659	100.0

a. If weight is in effect, see classification table for the total number of cases.

pendent Variable Encoding

Original Value	Internal Value
.000	0
.000	1

ock 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
ep 0	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
ep 0	Constant	.654	.085	59.463	1	.000	1.924

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Q2	.059	1	.807
	Overall Statistics		.059	1	.807

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.061	1	.806
	Block	.061	1	.806
	Model	.061	1	.806

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	792.585	.000	.000

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	-.021	.084	.060	1	.806	.980
	Constant	.710	.243	8.549	1	.003	2.035

a. Variable(s) entered on step 1: Q2.

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4.207	1	.040
	Block	4.207	1	.040
	Model	4.268	2	.118

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	788.378	.007	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.007	.085	.006	1	.937	1.007
	Q3	-.166	.081	4.161	1	.041	.847
	Constant	1.180	.337	12.280	1	.000	3.253

a. Variable(s) entered on step 1: Q3.

Block 3: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.413	1	.520
	Block	.413	1	.520
	Model	4.681	3	.197

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a. Variable(s) entered on step 1: Q4.

ock 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
tep 1	Model	4.681	3	.197

Model Summary

tep	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
tep 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
tep	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a. Variable(s) entered on step 1: Q4.

Casewise List[a]

a. The casewise plot is not produced because no outliers were found.

gistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	617	93.6
	Missing Cases	42	6.4
	Total	659	100.0
Unselected Cases		0	.0
Total		659	100.0

a. If weight is in effect, see classification table for the total number of cases.

pendent Variable Encoding

riginal Value	Internal Value
.00	0
.00	1

ock 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 0	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.654	.085	59.463	1	.000	1.924

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Q2	.059	1	.807
	Overall Statistics		.059	1	.807

ock 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.061	1	.806
	Block	.061	1	.806
	Model	.061	1	.806

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	792.585	.000	.000

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	-.021	.084	.060	1	.806	.980
	Constant	.710	.243	8.549	1	.003	2.035

a. Variable(s) entered on step 1: Q2.

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4.207	1	.040
	Block	4.207	1	.040
	Model	4.268	2	.118

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	788.378	.007	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.007	.085	.006	1	.937	1.007
	Q3	-.166	.081	4.161	1	.041	.847
	Constant	1.180	.337	12.280	1	.000	3.253

a. Variable(s) entered on step 1: Q3.

Block 3: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.413	1	.520
	Block	.413	1	.520
	Model	4.681	3	.197

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a. Variable(s) entered on step 1: Q4.

ock 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.400	1	.237
	Block	1.400	1	.237
	Model	6.082	4	.193

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	786.564	.010	.014

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	205	.0
		2.00	0	386	100.0
	Overall Percentage				65.3

a.. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.038	.089	.177	1	.674	1.038
	Q3	-.158	.087	3.275	1	.070	.854
	Q4	-.022	.083	.068	1	.794	.979
	Q11	-.094	.085	1.237	1	.266	.910
	Constant	1.349	.372	13.164	1	.000	3.854

a.. Variable(s) entered on step 1: Q11.

Casewise List[a]

a.. The casewise plot is not produced because no outliers were found.

gistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	598	90.7
	Missing Cases	61	9.3
	Total	659	100.0
Unselected Cases		0	.0
Total		659	100.0

a.. If weight is in effect, see classification table for the total number of cases.

ependent Variable Encoding

Original Value	Internal Value
1.00	0
2.00	1

ock 0: Beginning Block

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.185	1	.667
	Block	.185	1	.667
	Model	5.362	3	.147

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	757.604	.009	.012

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	205	.0
		2.00	0	386	100.0
	Overall Percentage				65.3

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.028	.089	.101	1	.751	1.029
	Q3	-.178	.085	4.332	1	.037	.837
	Q4	-.035	.082	.185	1	.667	.965
	Constant	1.229	.355	12.010	1	.001	3.417

a. Variable(s) entered on step 1: Q4.

Block 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.236	1	.266
	Block	1.236	1	.266
	Model	6.598	4	.159

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	756.368	.011	.015

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	205	.0
		2.00	0	386	100.0
	Overall Percentage				65.3

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	-.011	.086	.016	1	.899	.989
	Constant	.662	.247	7.196	1	.007	1.939

a. Variable(s) entered on step 1: Q2.

Block 2: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.160	1	.023
	Block	5.160	1	.023
	Model	5.176	2	.075

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	757.790	.009	.012

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	205	.0
		2.00	0	386	100.0
	Overall Percentage				65.3

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.021	.087	.058	1	.809	1.021
	Q3	-.187	.083	5.092	1	.024	.830
	Constant	1.189	.342	12.088	1	.001	3.284

a. Variable(s) entered on step 1: Q3.

Block 3: Method = Enter

ependent Variable Encoding

Original Value	Internal Value
1..00	0
2..00	1

lock 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 0	Q1	1.00	0	205	.0
		2.00	0	386	100.0
	Overall Percentage				65.3

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.633	.086	53.610	1	.000	1.883

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Q2	.016	1	.901
	Overall Statistics		.016	1	.901

lock 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.016	1	.899
	Block	.016	1	.899
	Model	.016	1	.899

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	762.950	.000	.000

lock 4: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.042	1	.837
	Block	.042	1	.837
	Model	5.364	4	.252

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	759.303	.009	.012

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	205	.0
		2.00	0	388	100.0
	Overall Percentage				65.4

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.025	.090	.079	1	.778	1.026
	Q3	-.179	.087	4.251	1	.039	.836
	Q4	-.043	.086	.251	1	.616	.958
	Q10	.018	.086	.042	1	.837	1.018
	Constant	1.216	.368	10.897	1	.001	3.374

a. Variable(s) entered on step 1: Q10.

Casewise List[a]

a. The casewise plot is not produced because no outliers were found.

ogistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	591	89.7
	Missing Cases	68	10.3
	Total	659	100.0
Unselected Cases		0	.0
Total		659	100.0

a. If weight is in effect, see classification table for the total number of cases.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	787.964	.008	.010

Classification Table[a]

			Predicted		
			Q1		Percentage Correct
	Observed		1.00	2.00	
Step 1	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. The cut value is .500

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Q2	.017	.087	.040	1	.841	1.018
	Q3	-.153	.084	3.356	1	.067	.858
	Q4	-.052	.080	.414	1	.520	.950
	Constant	1.239	.350	12.568	1	.000	3.453

a. Variable(s) entered on step 1: Q2.

Casewise List[a]

No sig.

a. The casewise plot is not produced because no outliers were found.

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	617	93.6
	Missing Cases	42	6.4
	Total	659	100.0
Unselected Cases		0	.0
Total		659	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
1.00	0
2.00	1

Block 0: Beginning Block

gistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	617	93.6
	Missing Cases	42	6.4
	Total	659	100.0
Unselected Cases		0	.0
Total		659	100.0

a. If weight is in effect, see classification table for the total number of cases.

ependent Variable Encoding

Original Value	Internal Value
1..00	0
2..00	1

lock 0: Beginning Block

Classification Table[a,b]

Observed			Predicted		
			Q1F		Percentage Correct
			1.00	2.00	
Step 0	Q1	1.00	0	211	.0
		2.00	0	406	100.0
	Overall Percentage				65.8

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.654	.085	59.463	1	.000	1.924

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Q2	.059	1	.807
	Overall Statistics		.059	1	.807

lock 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.061	1	.806
	Block	.061	1	.806
	Model	.061	1	.806

Frequencies

Statistics

		Q1	Q2	Q3	Q4	Q5	Q6	Q7
N	Valid	623	631	631	627	628	628	612
	Missing	36	28	28	32	31	31	47

Statistics

		Q8	Q9	Q10	Q11	Q12	GENDER	GRLEVEL
N	Valid	611	612	609	607	613	642	643
	Missing	48	47	50	52	46	17	16

Frequency Table

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	213	32.3	34.2	34.2
	2.00	407	61.8	65.3	99.5
	3.00	2	.3	.3	99.8
	4.00	1	.2	.2	100.0
	Total	623	94.5	100.0	
Missing	System	36	5.5		
Total		659	100.0		

Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	47	7.1	7.4	7.4
	2.00	270	41.0	42.8	50.2
	3.00	174	26.4	27.6	77.8
	4.00	107	16.2	17.0	94.8
	5.00	33	5.0	5.2	100.0
	Total	631	95.8	100.0	
Missing	System	28	4.2		
Total		659	100.0		

Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	29	4.4	4.6	4.6
	2.00	135	20.5	21.4	26.0
	3.00	193	29.3	30.6	56.6
	4.00	193	29.3	30.6	87.2
	5.00	81	12.3	12.8	100.0
	Total	631	95.8	100.0	
Missing	System	28	4.2		
Total		659	100.0		

Q8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	179	27.2	29.3	29.3
	2.00	220	33.4	36.0	65.3
	3.00	139	21.1	22.7	88.1
	4.00	53	8.0	8.7	96.7
	5.00	20	3.0	3.3	100.0
	Total	611	92.7	100.0	
Missing	System	48	7.3		
Total		659	100.0		

Q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	69	10.5	11.3	11.3
	2.00	231	35.1	37.7	49.0
	3.00	178	27.0	29.1	78.1
	4.00	93	14.1	15.2	93.3
	5.00	41	6.2	6.7	100.0
	Total	612	92.9	100.0	
Missing	System	47	7.1		
Total		659	100.0		

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	72	10.9	11.8	11.8
	2.00	180	27.3	29.6	41.4
	3.00	195	29.6	32.0	73.4
	4.00	118	17.9	19.4	92.8
	5.00	44	6.7	7.2	100.0
	Total	609	92.4	100.0	
Missing	System	50	7.6		
Total		659	100.0		

Q11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	96	14.6	15.8	15.8
	2.00	222	33.7	36.6	52.4
	3.00	161	24.4	26.5	78.9
	4.00	99	15.0	16.3	95.2
	5.00	29	4.4	4.8	100.0
	Total	607	92.1	100.0	
Missing	System	52	7.9		
Total		659	100.0		

Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	111	16.8	17.7	17.7
	2.00	255	38.7	40.7	58.4
	3.00	145	22.0	23.1	81.5
	4.00	75	11.4	12.0	93.5
	5.00	41	6.2	6.5	100.0
	Total	627	95.1	100.0	
Missing	System	32	4.9		
Total		659	100.0		

Q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	26	3.9	4.1	4.1
	2.00	110	16.7	17.5	21.7
	3.00	163	24.7	26.0	47.6
	4.00	225	34.1	35.8	83.4
	5.00	104	15.8	16.6	100.0
	Total	628	95.3	100.0	
IMissing	System	31	4.7		
¯Total		659	100.0		

Q6

		Frequency	Percent	Valid Percent	Cumulative Percent
Walid	1.00	39	5.9	6.2	6.2
	2.00	185	28.1	29.5	35.7
	3.00	244	37.0	38.9	74.5
	4.00	122	18.5	19.4	93.9
	5.00	38	5.8	6.1	100.0
	Total	628	95.3	100.0	
Missing	System	31	4.7		
TTotal		659	100.0		

Q7

		Frequency	Percent	Valid Percent	Cumulative Percent
Walid	1.00	44	6.7	7.2	7.2
	2.00	125	19.0	20.4	27.6
	3.00	168	25.5	27.5	55.1
	4.00	190	28.8	31.0	86.1
	5.00	85	12.9	13.9	100.0
	Total	612	92.9	100.0	
Missing	System	47	7.1		
Total		659	100.0		