

2022

The Relationship between Adolescent Risk-Taking Behavior and Guilt versus Shame Proneness

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Recommended Citation

Kernan, Ashley and Sullins, Jeremiah (2022) "The Relationship between Adolescent Risk-Taking Behavior and Guilt versus Shame Proneness," *Modern Psychological Studies*: Vol. 28: No. 1, Article 12.

Available at: <https://scholar.utc.edu/mps/vol28/iss1/12>

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Abstract

This study examined the correlation between adolescent risk-taking behaviors and guilt versus shame proneness. The participants were given an adolescent risk-taking questionnaire that focused on negative high and low risk-taking behaviors and the TOSCA-3 questionnaire. The adolescent risk-taking questionnaire focused on the participants past behaviors from the ages of 13-18. The TOSCA-3 was used to determine if a participant was guilt-prone or shame-prone. The data collected from both instruments were analyzed for whether adolescent risk-taking behaviors were correlated with guilt proneness or shame proneness. The results of the Pearson r correlations indicated a significant negative correlation between adolescent risk-taking, shame and guilt. The results of the t Tests also indicated that those with a lower shame scores and lower guilt scores had significantly higher adolescent risk-taking scores. Overall, this means that adolescents who are less shame and guilt prone are more likely to engage in risk-taking behaviors.

Keywords: adolescent, risk-taking, shame, guilt, TOSCA-3

The Relationship between Adolescent Risk-Taking Behavior and Guilt versus Shame Proneness

Adolescence is a developmental stage where many transitions begin to take place as an individual moves through the process of being a child to becoming a young adult. This developmental stage, though considered to be one of the healthiest stages, has an increase in morbidity and mortality rates from childhood to adulthood by 300% (National Center for Health Statistics, 2013). The reason for this is mainly attributed to an increase in risk-taking behaviors during this period of development. The Centers for Disease Control and Prevention (2012) found that each year over 70% of deaths in adolescents are due to some form of risk-taking behaviors. These behaviors can include underage drinking, drug use, crime, and reckless driving. Engaging in such behaviors can lead to unintentional injuries as well as damage to relationships with peers and family (Zhang, Zhang, & Shang, 2016). It is important to address why adolescents engage in such risky behaviors to help with prevention at an early age. By investigating these behaviors, stronger intervention strategies can be formed to target risk-prone adolescents.

There are many reasons adolescents engage in risk-taking behaviors. Most people attribute these behaviors to the result of peer pressure. When evaluating domain-specific risk-taking, social risk-taking was found to be the most prominent risky behavior (Zhang, Zhang, & Shang, 2016). Peers begin to play an active role in their lives and in return, more weight in their decision-making process is given to benefit than risk, such as impressing a friend even though the act may be against the law (Zhang, Zhang, & Shang, 2016). Telzer, Fuligni, Liebermann, Miernicki, and Galvan (2015) found that reward sensitivity increases overall during adolescence and that region of the brain is further strengthened when peer influence is involved. The quality versus the quantity of peer relationships has a stronger role in whether an adolescent is involved

in risky behaviors (Telzer et al., 2015). Parental presence is a strong predictor of adolescent risk-taking as well. Adolescence has been linked with a heightened reward sensitivity; but when a parent is present for the decision-making process, certain neural mechanisms are triggered that decrease risk-taking (Telzer, Ichien, & Qu, 2015). In return, maternal presence can redirect this reward sensitivity toward safer behaviors and away from risk (Telzer, Ichien, & Qu, 2015). This presence could help adolescents be more deliberate with their actions.

Emotions and their regulation can also play a large role in adolescent risk-taking behaviors. Emotions can be broken down into many different categories. Self-conscious emotions are those emotions that focus on evaluation and respect to the self. Some of the emotions that fall under this category shame, guilt, pride, and embarrassment (Tangney, 2002; Tracy & Robins, 2004; Tracy, Robins, & Tangney, 2007). The focus of the current study will remain on the self-conscious emotions of shame and guilt. Many professionals, including psychologists, have difficulty in distinguishing the differences between shame and guilt. In many cases, they are considered synonymous. Helen Block Lewis (1971) gave detail on fundamental differences between guilt and shame. In short, feelings of guilt involve negative evaluation of a specific behavior whereas feelings of shame involve negative evaluation of the entire self (Lewis, 1971). For example, an individual experiencing guilt would think “I did a bad thing” whereas an individual experience shame would think “I am bad”.

Guilt and shame have distinct effects on the person experiencing them. The focus remains on the person’s individual character or behavior compared to the situation overall. When a person experiences guilt, he/she is focusing on the certain behavior which is followed by “a sense of tension, remorse, and regret” (Tangney, 2002, p. 201). These feelings can be channeled into confession, apologies, or atonement. In contrast, since shame focuses on self-scrutiny, those

who experience it tend to feel worthless, powerless, and exposed (Tangney, 2002). This leads to a desire to hide and escape the feelings and self. In many cases, a person is prone to either guilt or shame. Guilt-proneness is an emotional style that appears to be more constructive and adaptive, whereas shame-proneness can carry long-lasting personal costs (Stuewig et al., 2015). Feelings of guilt lead a person to focus on the behavior and therefore are more likely to change their ways the next time whereas shame can lead a person to end up in a cycle of the behavior because of seeing the self as defective (Tangney, 2002). The proneness to either guilt or shame can affect the occurrence of certain behaviors and whether a person will continue risky behaviors or not.

Motivation also plays an active role within shame and guilt. Guilt has been found to have greater motivational features. These features can lead to a greater likelihood of self-forgiveness and healing. Those who are guilt-prone are more likely to engage in self-forgiveness than those who are shame-prone (Carpenter et al., 2016). Carpenter, Tignor, Tsang, and Willet (2016) found that the motivational features of guilt-proneness are what lead to an increased self-forgiveness instead of the focus on the behavior which is what is normally attributed to guilt. In return, they found that shame-proneness was negatively linked to self-forgiveness and that shame motivates others to protect one's self-image which may not lead to self-forgiveness (Carpenter et al., 2016). Shame and guilt can help balance motivations between the self and others, especially in adolescents. Although seen as negative emotions, these can act as social regulators that are a result of an increase in self-consciousness (Whittle et al., 2016). Motivation resulting from these emotions can contribute to risk-taking tendencies.

Once a child reaches adolescence, the intensity and frequency of shame and guilt increases as the brain of this group begins to alter (Whittle et al., 2016). As these self-conscious

emotions gradually evolve into adolescence, they help with equipping people to deal with social and intimate relationships (Muris & Meesters, 2014). Muris and Meesters (2014) discussed how emotions such as shame and guilt start to emerge in their “true” forms throughout middle childhood and they continue to refine during adolescence. This means an individual really begins to use and understand the use of shame and guilt during adolescence. It can be easy at this time to notice an overuse or absence of these emotions which can be considered maladaptive. Such use was found to be indicative of various psychological symptoms that could lead to problems in the future, including future delinquent behaviors (Muris & Meesters, 2014). It is important to monitor the occurrence of self-conscious emotions in adolescents as they begin to experience these emotions in full and use them adaptively for their purpose.

Emotion regulation works alongside guilt and shame, especially in adolescents. As earlier discussed, adolescents have low cognitive control and high reward sensitivity which relates to emotion regulation. Szentagotai-Tatar and Miu (2016) found that adolescents who are shame-prone tend to think about how negative events are and avoid confronting negative events by thinking of positive issues instead. They also found those who are guilt-prone are more likely to look for positive meaning in negative events (Szentagotai-Tatar & Miu, 2016). These differences in adjustment within an emotional state can reflect how likely an adolescent would be to continue a risk-taking behavior. Those who are shame-prone may be less likely to confront their behaviors whereas guilt-prone adolescents may find a positive from their behavior and grow from it. This change in emotion regulation, shame, and guilt starts to extend and sometimes increases into adulthood so tackling risky behaviors at this age is important for a better outcome in adulthood (Szentagotai-Tatar & Miu, 2016).

Whether an individual is guilt or shame prone can have lasting effects from childhood through adolescence to adulthood. Stuewig, Tangney, Kendall, Folk, Meyer, and Dearing (2015) found that children who were shame prone were more likely to engage in risky behaviors during young adulthood than children who were guilt prone. Once a person who is shame-prone does something wrong, he/she is inclined to rationalize the actions and take out the feelings on him/herself instead of moving past it (Stuewig et al., 2015). Shame-prone children can end up in a cycle of shame where bad behaviors trigger shame which lead to the same behaviors occurring. Guilt-prone children are more inclined to take responsibility for their actions and form positive relationships which can continue through adulthood (Stuewig et al., 2015). It is possible that guilt-prone adolescents would value their peers and parents' opinions and want to be seen in a positive light by them, but those who are shame-prone care more about the negative self-concept. Knowing the differences between the two and their direct effect on children and adolescents can help with interventions for this group to prevent risk-taking behaviors.

Previous literature investigated contributing factors to adolescent risk-taking, including shame and guilt. However, when specifically looking at the research done on adolescent risk-taking behaviors and shame and guilt, the focus has been on predicting these behaviors by collecting data from children. Stuewig et al. (2015) suggested on looking at this data bi-directionally which is what this study does by focusing on past behaviors and current shame and guilt-proneness. This study focuses on the relationship between risk-taking behaviors in adolescents and whether those who engaged in such are more prone to experiencing shame or guilt. Investigating this relationship can help identify underlying factors of adolescent risk-taking which is important to work towards more effective interventions. The hypothesis of this study is that those who engaged in more risk-taking behaviors during adolescence were more shame-

prone than those who engaged in less risk-taking behaviors. In return, those who engaged in less risk-taking behaviors during adolescence were more guilt-prone.

Method

Participants

The participants for this study included 190 college students enrolled at a private liberal arts university in the southern United States in the Spring of 2017. The ages of the students ranged from 18 to 25 with a mean age of 19.92. 98 women and 86 men took part in the study. The majority of participants were Caucasian (86.8%). The remaining participants were African-American (3.7%), Latino (2.1%), Asian (1.6%), or specified as other (2.6%). Six participants did not specify their gender, classification, or ethnicity.

Materials

This study included two questionnaires as the materials with each questionnaire being given to each participant. The first questionnaire includes 22 items that refer to past behaviors that the participant may have taken part in between the ages of 13 to 18. Each questionnaire featured the same items that ask questions on how often the participant engaged in the risk-taking behavior asked about. An example question is “How often did you talk to a stranger online?” Each question included a five-point Likert scale response corresponding to frequency of participation in the risk behaviors. In conjunction with previous research, two websites provided information on what are considered risk behaviors in adolescents (Kids Helpline, 2016 & Centers for Disease Control and Prevention, 2015). A Cronbach’s Alpha test of reliability was ran on the first questionnaire given to a random pool of 25 participants that focused on past adolescent risk-taking behaviors. The coefficient alpha for the scale was .873 which is considered a good degree of reliability.

The second questionnaire given to participants was the Test of Self-Conscious Affect-3 (TOSCA-3). The TOSCA-3 (Tangney & Dearing, 2002) was developed as a tool to measure guilt-proneness, shame-proneness, proneness to externalization, and proneness to unconcern. The TOSCA-3 consists of 15 scenario-based situations that test takers may encounter in their day to day lives. Following each scenario, participants were asked to rate the likelihood of reacting to each of the options on a five-point scale (1=extremely unlikely; 5=extremely likely). For example, one item was: *If you make a mistake at work and find out a co-worker is blamed for the error, you would keep quiet and avoid the co-worker.* Participants provided ratings (1-5) that indicated their likeliness of responding in a way that suggested they tended to have guilt-proneness, shame-proneness, proneness to externalization (blame others), and/or proneness to be unconcerned.

The Likert scale responses for both questionnaires were analyzed for correlations. The demographic responses were cross examined to see if any relationships could be found between the responses and correlations of the main data.

Procedure

Before receiving a questionnaire, participants were verbally given instructions on the procedure. It was explained how their responses were not going to be given to the university and that they would not reflect their current character if there was worry with reporting behaviors that go against the current standards of the university. They were presented the instructions for the first questionnaire and the TOSCA-3, and then they were reminded again that their responses would remain anonymous and confidential. Participants were then given the first questionnaire that refers to the risk-taking behaviors in adolescence. After each person was finished, the participant was asked to leave the first questionnaire on their desk and raise his/her hand for the

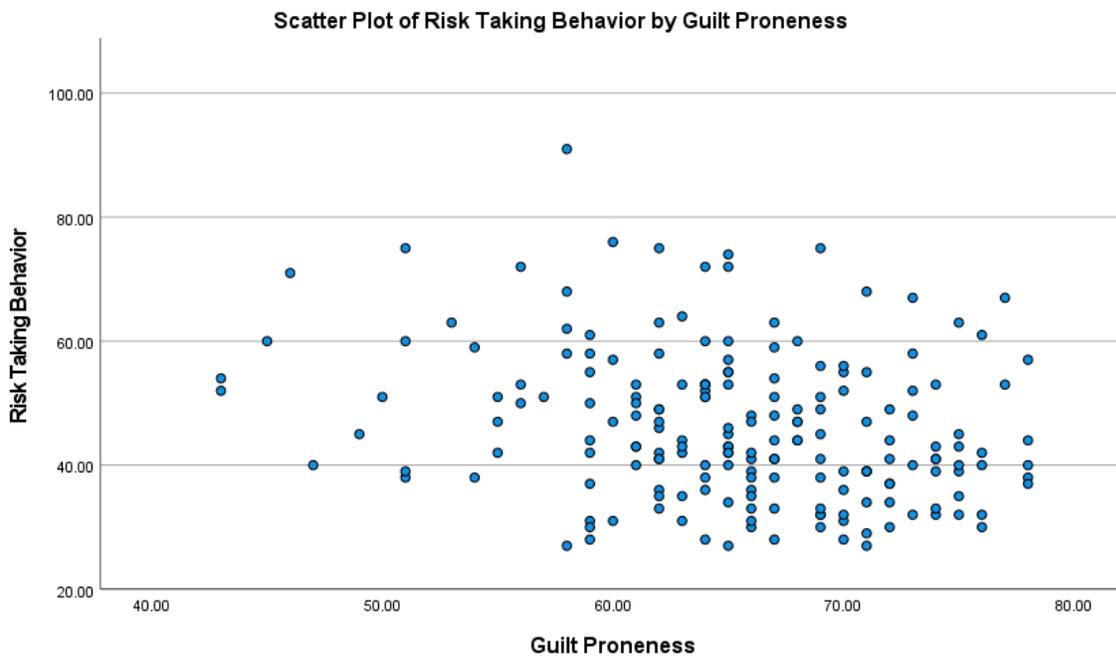
TOSCA-3 to be administered. After each participant was finished with the TOSCA-3, the questionnaires were taken back up together by the researcher to avoid questionnaires mixing between participants. The participants were thanked for their participation.

Results

Multiple Pearson *r* Correlations were used to analyze the data. The first indicated a significant negative correlation between the total risk-taking score, $r(188)=-.255, p=.0004$, and guilt proneness (See Figure 1).

Figure 1

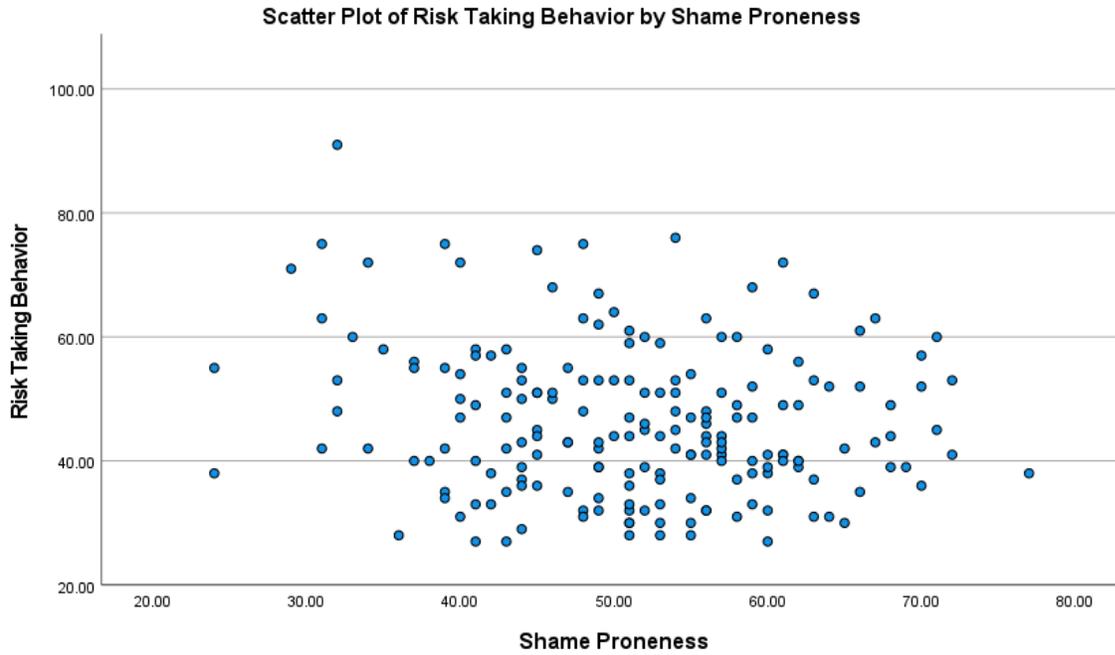
Scatterplot Depicting the Correlation Between Risk Taking Behavior and Guilt Proneness



A significant negative correlation existed between total risk-taking score, $r(188)=-.168, p=.021$, and shame proneness (See Figure 2).

Figure 2

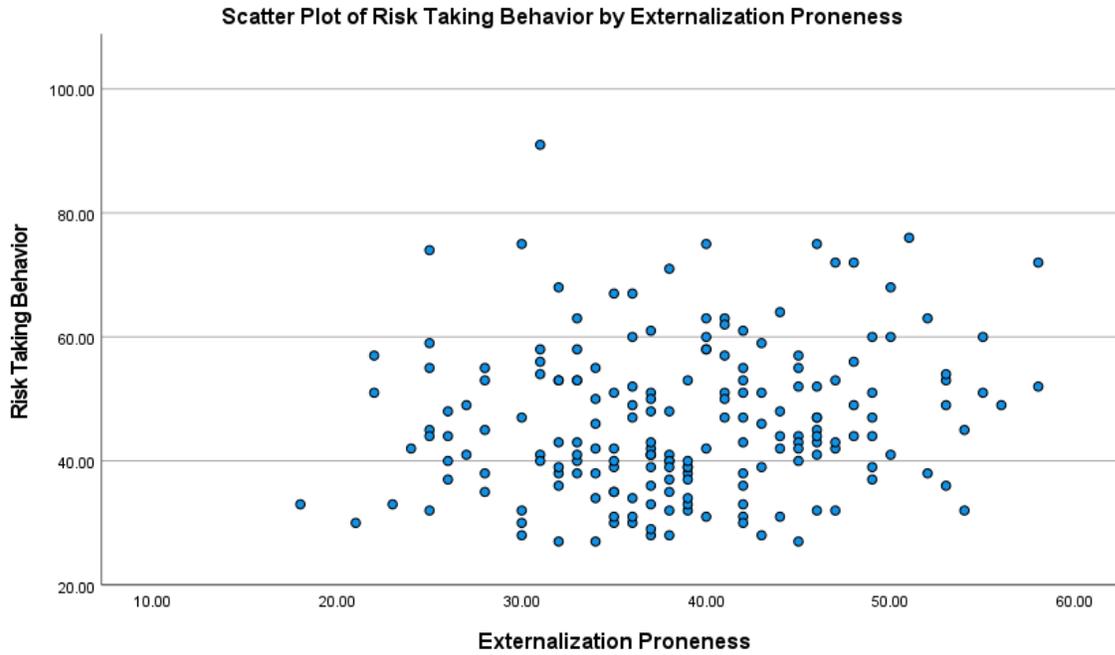
Scatterplot Depicting the Correlation Between Risk Taking Behavior and Shame Proneness



This means that those who engaged in more risk-taking in their adolescence were less shame-prone and less guilt-prone than those who engaged in less risk-taking. When looking at the externalization scale on the TOSCA-3, there was a significant positive correlation between total risk-taking score, $r(188)=.145, p=.045$, and externalization-proneness.

Figure 3

Scatterplot Depicting the Correlation Between Risk Taking Behavior and Externalization Proneness

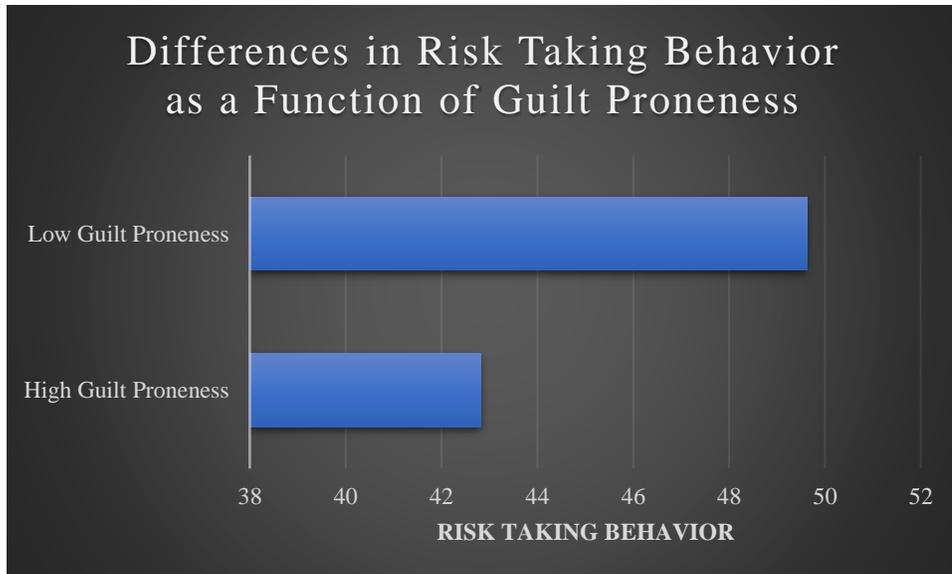


In essence, those who engaged in more risk-taking during adolescence are/were more prone to blame something outside of themselves than to take responsibility for their actions.

Shame and guilt scores were broken down into high and low categories. Those who had a high level of guilt proneness ($M= 42.82, SD=10.24$) had significantly lower total risk-taking scores than those with a low level of guilt proneness ($M=49.62, SD=12.73$), $t(188)=4.05, p=.0002, d=.59$.

Figure 4

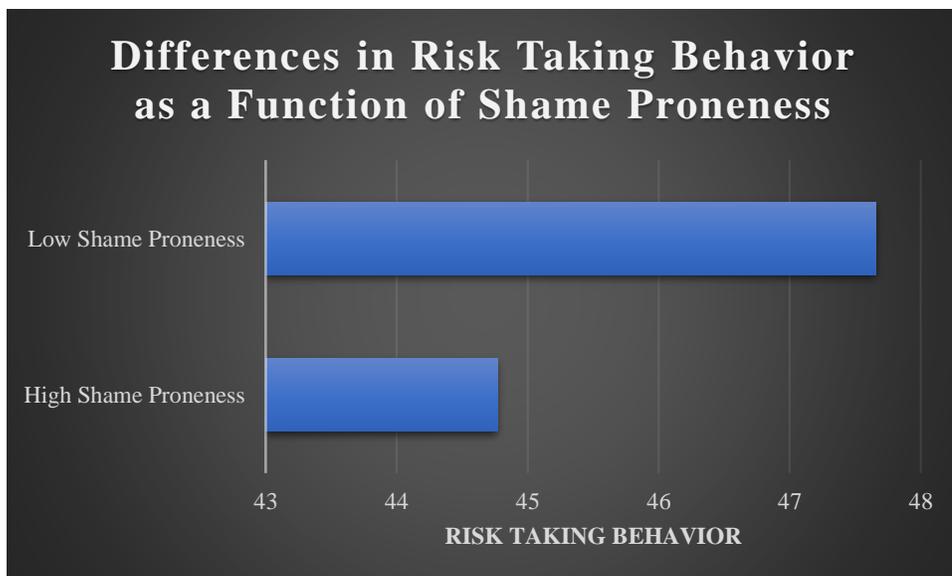
Differences in Risk Taking Behavior as a Function of Guilt Proneness



Similarly, those who had a high level of shame proneness ($M=44.78, SD=10.38$) had significantly lower total risk-taking scores than those with a low level of shame proneness ($M=47.66, SD=13.35$), $t(188)=1.66, p < .05$ (one-tailed), $d=.24$. Those who engaged in risk-taking during adolescence were found to be less guilt prone and less shame prone.

Figure 5

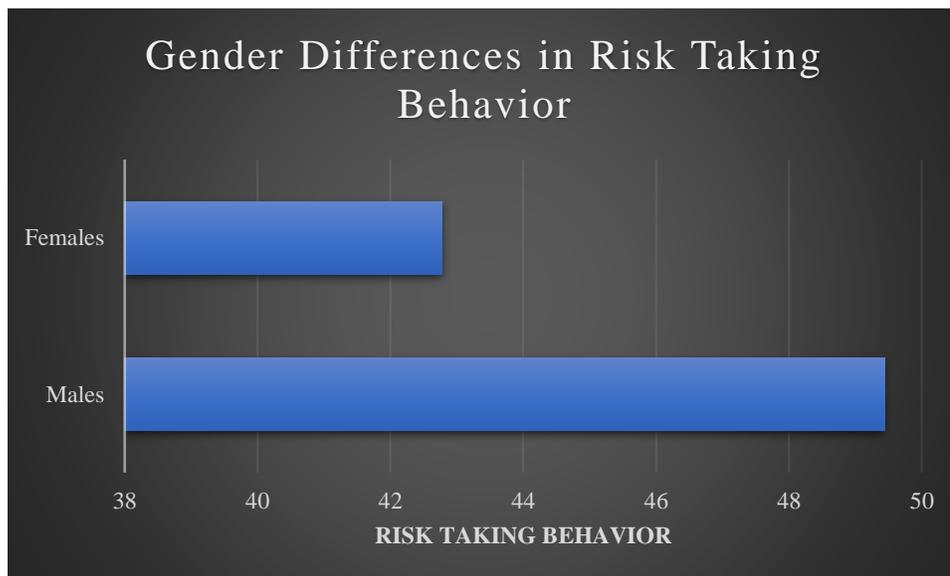
Differences in Risk Taking Behavior as a Function of Shame Proneness



The last t Test ran was used to answer the question on whether males or females were more likely to engage in risk-taking. Results showed that males ($M=49.44$, $SD=12.15$) engaged in significantly more risk-taking behaviors than females ($M=42.79$, $SD=10.12$), $t(182)=4.01$, $p < .001$, $d=.59$.

Figure 6

Graph Depicting Gender Differences in Risk Taking Behavior



Discussion

Nearly every person engages in risk-taking behavior at some point during his/her adolescence. It is important to note that not all risk-taking is negative; in fact, some risk-taking is considered beneficial to a person's development. The focus on negative risk-taking is important to better understand adolescents and increase their safety. The results of this study are useful in aiding intervention and prevention strategies by filling in gaps regarding guilt and shame's role in adolescent risk-taking behaviors. Current intervention strategies on the matter focus on targeting specific behaviors, using skill-based components, and focusing on social behaviors theories (University of California Los Angeles, 2007). These factors are important and can lead

to success when used in home and school settings. However, there is a lack of focus on the role emotions may have on risk-taking, especially guilt and shame. Guilt and shame are still a new topic of conversation and this research works to clarify the role they play in adolescent risk-taking.

Overall, the results show that those who are less shame prone and less guilt prone are more likely to engage in risk-taking behaviors of adolescents. This agrees with part of the hypothesis, but not all. The hypothesis stated that those who engaged in more risk-taking behaviors would be more shame-prone, which was not found. However, it also stated that those who engaged in more risk-taking would be less guilt-prone, which was found. Another useful scale on the TOSCA-3 is externalization which measures whether the respondent blames the situation or others for the actions he/she may have taken part in. When looking at the relationship between externalization and risk-taking, those who took more risks during adolescence were found to have higher externalization scores. Those who are engaging in risk-taking may not want to take responsibility for their actions, but instead blame others to justify the act. There were significant gender differences when it comes to risk-taking as well.

Although males were found to engage in significantly more risk-taking behaviors than females, it is important to note that females were still engaging in these behaviors. The findings show that those who engaged in less risk-taking or nearly abstained from it during adolescence were had a higher level of guilt proneness. This lines up well with previous literature where children who were found to be guilt-prone were less likely to engage in risky behaviors during adolescence (Stuewig et al., 2015). However, when it comes to shame, there are still a lot of questions in the field. Looking at shame and risky behaviors, the results differ depending on the behavior. In some cases, like aggression and drug use, it is positively correlated (Tracy, Robins,

& Tangney, 2007). In others, like delinquency and criminal behavior, it has no correlation (Tracy, Robins, & Tangney, 2007). And then with this research, when looking at risk-taking overall, there was a negative correlation.

The Cronbach's Alpha ran on the first questionnaire yielded a good degree of reliability. This is a suitable place to start with an instrument measuring past adolescent risk-taking behaviors, but there is room for growth to make the instrument more reliable. There is bound to be variance between responses, especially items that measure low versus high risk-taking behaviors. Item 6 ("How often did you drive over the speed limit?") would be beneficial to remove from the instrument which would increase the reliability coefficient to .877. The reason for this may be that most respondents said they sped "sometimes" or "often" which may indicate it is not a strong predictor of risk-taking behaviors. Although the reliability of the questionnaire was good, it may be a limitation to the study that it did not have a reliability coefficient of .90 or above which is considered the strongest reliability.

There are a few more limitations to the current study that may have affected the result. Even though the resulting correlation coefficients were significant, they all had small effect sizes ranging from .156-.255. This means the correlations are not as strong as they could be with a larger effect size. The population of the study consisted of predominantly Caucasian participants. This lack of diversity may not provide accurate conclusions from the analysis. Future research would benefit from trying to expand the pool of participants to a greater range of ethnicities. Possibly the largest limitation of this research was that it assumed that shame and guilt proneness remains steady from adolescence into young adulthood. The results gathered from the TOSCA-3 were correlated with previous risk-taking behaviors of the participants. By doing this, there was

an implication made that the results from the TOSCA-3 would have been nearly the same when a participant was an adolescent and his/her current state.

Further research would be beneficial to continue building knowledge on the subject of shame and guilt's role in adolescent risk-taking. One suggestion would be to look at adolescent risk-taking behaviors by breaking them up into categories and looking at the relationship to guilt and shame. By looking at individual categories such as substance use, criminal behaviors, and sexual risk-taking, clearer results may come about. Tangney, Stuewig, Mashek, and Hastings (2011) found evidence when looking at criminal behavior with these self-conscious emotions. Inmates who were shameful but who did not blame others were less likely to end up in jail again. Guilt proneness predicted less recidivism. Future research may benefit to consider this concept with adolescents and help with preventing the youth who may engage in risky behaviors from continuing down that path into possible delinquent behavior down the road. Continued investigation into adolescent risk-taking can help strengthen the youth, their emotional regulation, and their outcomes.

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