An exploratory factor analysis of self-reported state and trait guilt

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AN EXPLORATORY FACTOR ANALYSIS OF
SELF-REPORTED STATE AND TRAIT GUILT

by

CHRISTINA N. LACERENZA

A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College of Sciences and in The Burnett Honors College at the University of Central Florida Orlando, Florida

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Thesis Chair: Dr. Jeffrey E. Cassisi
ABSTRACT
The construct of guilt has been a subject of debate among philosophers, theologians, sociologists and psychologists for centuries. Disagreements concerning guilt have emerged on the definitional level, measurement level, and conceptual level due to the various ways guilt can be experienced and interpreted. Researchers continue to empirically investigate various aspects of guilt in an effort to advance and refine our understanding of the construct; however, differences among researchers in assessing the impact of guilt on psychological well-being still exist. The purpose of this study is to investigate the internal factor structure of three prominent measures of guilt. This will enable us to develop a more concise guilt measure en route to reconciling these differences and better conceptualizing the construct.
DEDICATION

To my thesis advisor and mentor, Dr. Jeffrey Cassisi, for his guidance throughout this process.

To my sister, Nicole, for lifting my spirits throughout this process and for all of her proofreading.

To my parents, Janice and James, for their never-ending encouragement and love.

To John for being my biggest supporter.

To all of my friends for taking me out for coffee when I needed it.
ACKNOWLEDGEMENTS

I would like to thank:

My thesis advisor and mentor, Dr. Jeffrey Cassisi, for his guidance throughout this process and for providing me with the ample amount of knowledge needed to complete this project.

My committee members, Dr. Dana Joseph and Dr. Jason Ford, for their intriguing comments and suggestions regarding this project.

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This thesis would not have been a success without them all.

TABLE OF CONTENTS
INTRODUCTION

Guilt is a highly complex multidimensional construct. Contradictions have governed research on this topic for decades. This confusion can be attributed in part to the lack of distinction between shame and guilt and the lack of well developed measurement instruments (Tangney, 1996). Throughout the past decade, a rise in empirical studies on shame and guilt has surfaced; however, many of the results have been contradictory. Specifically, there are discrepancies regarding the relationship between guilt and numerous clinical constructs such as anxiety, depression, obsessive compulsive disorder (OCD), and eating disorders (Tilghman-Osborne et al, 2010). Tilghman-Osborne et al. (2010) argue that these discrepancies are the direct result of the variability in the definition and measurements of guilt. Furthermore, Tilghman-Osborne et al. (2010) recently completed a review of prominent studies outlining distinct guilt definitions and measurements. They ascertained 23 theoretical definitions and 25 measures all portraying different features of guilt with some overlap. Their review suggested a need for quantitative research to determine commonalities between the definitions and measurements. The current study responds to this call in order to provide clarity regarding the definition of guilt by analyzing various measures of guilt and their associated definitions. Specifically, we will be investigating the underlying constructs of three prominent guilt measures and their relationships with one another.
The Historical Context

Guilt has played an important role in the evolution of human societies as it is thought to foster personal and social responsibility and motivate people to behave ethically (Izard, 1991). Throughout the years, guilt has remained a fundamental concept for theology, history, sociology, ethics, legal thinking and psychology (Berrios et al., 1992). Thus, its definition is constantly evolving.

Guilt is a derivative of the Old English term, “gylt” which meant “crime, sin, fault, or fine,” and the term was first established to denote a fault or wrongdoing (Berrios et al., 1992). References to guilt were utilized to denote the act of the wrongdoer and not the feelings of the person (Berrios et al., 1992). Guilt was also referenced in the Bible and in religion to mark a legal state of deserving punishment with the belief that individuals could escape the feeling of guilt by being punished for their sins (Izard, 1991). Eventually, the term underwent a transition and the definition changed from meaning an action of guilt to the feeling of guilt following an action (Berrios et al., 1992). Following this shift, guilt was considered to possibly refer to emotional feelings separate from a misdeed and since the 19th century, the definition has been either separate from or in conjunction with an action (Berrios et al., 1992).
Contemporary Theories of Guilt

Ironically the current definition and description of guilt seems to be even more contradictory than it was earlier. Decades ago, guilt was referred to either the action of rule breaking or associated feelings with a wrong doing (Berrios et al., 1992). Current thinking refers to guilt as an emotional construct that can be felt without having to reference a specific event or action (Berrios et al., 1992). This disassociation increases the complications in defining and measuring guilt because an event does not necessarily need to be referenced. Additionally contemporary theories recognize the variability and individual differences in the experiences of people. Although there are complications in defining and measuring guilt, current research has established general characteristics and two distinct categories, state guilt and trait guilt. Although the distinction between shame and guilt is confusing at times, there is a general consensus that they are distinct from one another (Tangney & Dearing, 2002).

Guilt motivates people to conceal something or amend an action (Izard, 1992) and most people feel guilt because of moral or social transgressions (Mosher, 1966). Contrary to other negative emotions, a person experiencing guilt does not have distinct facial or body expressions (Izard, 1992; Izard, 1977). Sometimes guilt may alter ones outside appearance; however, it is more common for a person to feel an internal sense of change. A person’s neurophysiological and hormonal processes are changed more than their outward appearance or behavior (Izard, 1992). Thus, an accepted behavioral method of assessing guilt has yet to be established. Current research has yet to identify reliable external or internal indicators of guilt. Psychophysiological
measures of guilt (e.g. the polygraph test is) known to have significant problems (Saxe, Dougherty & Cross, 1985; Izard, 1992).

Persons experiencing guilt have associated cognitive ruminations and emotional reactions (Izard, 1992). These ruminations include thoughts of the wrongful action, the wronged person, efforts to make amends and the future of the relationship (Tangney, 2002) and are described by Izard (1992) as “an intense, gnawing feeling.” Persons experiencing guilt are thought to express some level of sadness, fear, interest and shyness as well as guilt (Izard, 1992).

Definitions of Trait and State Guilt

Feelings of guilt can be conceptualized into two different categories: state guilt and trait guilt and most guilt assessments look at these categories independently of one another (Kugler & Jones, 1992; Tangney, 1996). It has been noted, however, that more assessments investigate trait guilt (Tangney, 1996). Trait guilt refers to the continuing feeling of guilt or guilt proneness. Trait guilt, unlike state guilt, is more reliable over time and is less situationally bound (Kugler & Jones, 1992). Individual differences exist regarding the degree to which one is prone to a higher feeling of trait guilt (Tangney, 1996). State guilt refers to a current experience of guilt and is directly related to a current events, or behavior (Kugler & Jones, 1992). Recent research suggests that although state and trait guilt should be highly related, researchers should assess them individually and continue to note that they are two distinctive categories of guilt (Kugler & Jones, 1992).
Distinguishing between Shame and Guilt

Historically, the distinction between shame and guilt was not emphasized and numerous researchers used these terms interchangeably (Tangney, 1996). More recently, psychologists are distinguishing the two as separate emotions in order to more accurately measure them (Tangney et al., 1994; Tangney, Miller, Flicker & Barlow, 1996; Tangney, 1994). In a study completed by Tangney and her colleagues (1994) adults’ and children’s shame, guilt and pride experiences were analyzed. They found that it was common for shame and guilt to be experienced in conjunction with each other; however, shame was more likely to be experienced when the person was alone (Tangney, 1994). Some researchers have motioned the idea that shame and guilt are triggered by different types of transgressions; however, in studies completed by Tangney and her colleagues (1994, 1996) no classic shame or guilt inducing situations were found. Tangney suggests that whether guilt or shame is experienced is not a direct result of the situation experienced, but a result of the individual’s interpretation of the event (Tangney, 1996). Most researchers rely heavily on Helen Lewis’ (1971) description of the differences between shame and guilt (Tangney, 1996). She states that shame experiences focus more on the self whereas a guilt episode focuses on the thing done or undone (Lewis, 1971). Lewis (1971) suggests that when shame is felt the person is more involved with self-scrutiny and is fixated on negatively evaluating himself or herself. Furthermore, a guilty feeling invokes an intense feeling of regret and a need to repair the action or behavior (Lewis, 1971). Although numerous empirical studies have looked at the differences between shame and guilt and many agree with Lewis’ distinctions
(Tangney, 1996) there is still some controversy between the two constructs and more research on the topic is needed.

**Resolving the Discrepancies in Theory**

The concept of guilt has created intense controversy for decades for philosophers, theologians, sociologists and psychologists. Current empirical research regarding guilt in relation to disorders also yields contradicting results. The discrepancies about guilt are on the definitional level and measurement level. Further, these discrepancies lead to contradictions regarding guilt and its relationship with various clinical disorders. It is a challenge for researchers to agree on the definition and measurement of guilt because it can be experienced and interpreted in different ways. Research continues to look at the various aspects of guilt in order to advance understanding and to provide clarity. It is vital to formulate better understanding and measurement of guilt because it is implied as a cognitive and emotional symptom in many mental health disorders.

A recent review by Tilghman-Osbourne et al, (2010), identified 23 theoretical definitions of guilt, 16 for adult guilt and 7 for child and adolescent guilt. They then coded the definitions on 18 key features and concluded that the definitions were “…highly diverse and did not conceptually converge on a common underlying construct” (Tilghman-Osbourne, et al., 2010). The major differences amongst the definitions include whether guilt is adaptive or maladaptive, trait-like or state-like, caused by an inappropriate action (or inaction), and the importance of the self in the guilt experience (Tilghman-Osbourne, et al., 2010). Whether guilt possesses positive
or negative implications on the person experiencing guilt is also a major debate. It has been noted that guilt is a positive trait in that it can motivate behavior (Kugler & Jones, 1992), regulate social functions and acclimate relationships between the self and others (De Riviera, 1984; Scheff, 1984). However, some theorists classify guilt as a negative emotion and state that an excessive amount of guilt is linked to dysfunctional experiences and clinical disorders (Lewis, 1971). It is possible that guilt could be placed along a continuum where a small amount of guilt could be considered positive where an extreme amount of guilt is problematic.

The inconsistency within the definition of guilt leads to the lack of convergence between guilt measurements. Tilghman-Osbourne et al. (2010) identify 29 measures and analyze 25 (17 adult measurements and 8 child/adolescent measurements) by coding them on 18 key features. Just as the guilt definitions, there was much heterogeneity within the measurements of guilt with an average of 60.1% similar coding for all measures. Although there was extreme diversity, some common features (present in 80% of the measures) emerged including, specificity, trait-like, behavior/activity and moral transgression. The measurements also differ in how they are presented to the individual, and the best form of measurement has yet to be established. Measurements are projective (Miller & Swanson, 1966), interviews (Sears, Maccoby & Levin, 1957), self-report inventories (Caprara, Manzi & Perugini, 1992; Klass, 1987; Mosher, 1966; Tangney, Dearing, Wagner & Gramzow, 2000), and single-item rating scales (Harder & Lewis, 1987; Otterbacher & Munz, 1973) with the most common being self-report. Another issue with measuring guilt is that the experience differs greatly amongst individuals. Furthermore, it is
difficult to measure the emotion psychophysiological and there are no current problem-free psychophysiological measures for the emotion.

Guilt plays a vital role in the etiology of many clinical disorders, and it is problematic that empirical studies have generated conflicting results regarding the relationship between guilt and these disorders. It is possible that these discrepancies are due to the inconsistencies of the definition and measurements of guilt. It is noted that guilt has exhibited a relationship with depression, anxiety, obsessive compulsive disorder eating disorders, and other social disorders; however, the strength and direction of the relationship differs among theorists.

Variability permeates obsessive compulsive disorder (OCD) research in relation to guilt. Several researchers provide evidence that guilt has a positive correlation with OCD and with obsessional compulsive complaints (Niler & Beck, 1989; Shafran, Watkins & Charman, 1996). However, there are some investigators who disagree with this finding. A study conducted by Reynolds & Salkovskis (1991), supported the notion that only depression and anxiety were predictors of obsessional difficulties and unpleasant or intrusive thoughts and guilt was not. Furthermore, Steketee et al, (1991), found that levels of guilt were not elevated in the obsessional sample as compared to the control. Research regarding the relationship between guilt and anxiety is also muddled with controversy. Lowe (1964) states that measurement scales that encompass anxiety and guilt essentially measure the same psychological construct. Others believe guilt and anxiety to be independent emotions and provoke different cognitions (Niler & Beck, 1988). The relationship between guilt and eating disorders is also controversial. It is generally accepted that
patients with eating disorders experience guilt more frequently than others (Overton, Selway, Strongman & Houston, 2005). There are also discrepancies regarding guilt in relation to depression and perfectionism. These contradictory empirical results could be explained by the inconsistencies in the definition and measurement of guilt. Thus, it is the goal of this study to formulate a more inclusive definition and measurement of guilt by extracting items and scales from existing measures of guilt and offering a more psychometrically sound approach.

**Current Study**

A lack of consensus in identifying guilt as a construct has led to inaccurate measures of guilt (Tangney, 1996), and counterintuitive empirical research results. Thus, there needs to be clarification in the definition of the construct. There are roughly 23 definitions of guilt and 29 measurements (Tilghman-Osbourne, et al., 2010). Quantitative research on the various definitions and measurements is needed and the current study aims to provide further insight regarding this issue. This study aims to reduce the current knowledge gap regarding the assessment of guilt by investigating the validity of three prominent guilt measurements and indicating common factors within them. The goal of this study is to analyze and compare three prominent guilt measurements, the Test of Self Conscious Affect Version 3 (TOSCA-3), the Revised Mosher Guilt Inventory (RMGI) and the Trauma-Related Guilt Inventory (TRGI). An exploratory factor analysis will be conducted on each measurement and the correlations between the factors will be examined.
METHOD

Participants

Participants were recruited from a large southeastern university through an online research website. All participants received credit toward an undergraduate psychology course in exchange for their participation. Data was obtained from an initial sample of 2,265 participants. The final data set excluded participants whose completion duration was below the first quartile within the final sample (32 minutes or less) and from participants who failed the validity test. The validity test consisted of three questions from the Millon Clinical Multiaxial Inventory - III: Validity scale (MCMI-III). A total of 938 participants were excluded. The mean participant age was 20.55 and 69.9% were female. With regard to race/ethnicity with the sample, 62.3% were White, 9.6% Black, 6.3% Asian/Pacific Islander, 17.6% Hispanic, 0.3% Native American and 3.9% other. Within the final sample, 4.6% of participants stated that they were currently seeking therapy or any mental health counseling and 4.5% of participants indicated that they were currently taking prescription medicine for a mental illness. Please see Table 1 for a more detailed description of the participants.

Table 1. Demographic Information

<table>
<thead>
<tr>
<th>Gender (n=1327)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>30.1</td>
</tr>
<tr>
<td>Female</td>
<td>69.9</td>
</tr>
<tr>
<td>Age (n=1327)</td>
<td></td>
</tr>
<tr>
<td>Under 18</td>
<td>.5</td>
</tr>
<tr>
<td>18-24</td>
<td>88.8</td>
</tr>
<tr>
<td>25-44</td>
<td>9.0</td>
</tr>
<tr>
<td>45-64</td>
<td>1.2</td>
</tr>
<tr>
<td>No Response</td>
<td>.5</td>
</tr>
</tbody>
</table>
## Measures

Measures described below were selected based on reported validity, reliability and whether or not they are widely accepted. We specifically selected a more historical based guilt measure.
which focuses on the moral and social transgressions regarding guilt (RMGI) and a more contemporary based measure which does not emphasize guilt in a moral and social sense (TOSCA-3). Within the regard, our goal is to examine the commonalities between a more historical representation of guilt with a contemporary approach. Also, because of the recent emphasis on guilt within Post-Traumatic Stress Disorder (PTSD), a trauma-related guilt measure was selected (TRGI). In addition to the three guilt measures, two psychopathology based measurements were utilized in order to validate the guilt measures. This is a secondary computation and is not a primary goal of the study. We expected certain standard scales within the measures to correlate with the Beck Depression Inventory (BDI) and the Psychopathic Personality Inventory – Revised Short Version (PPI-SV). Further, scores on the guilt-based scales should positively correlate with BDI scores and negatively correlate with PPI-SV scores. The Test of Self Conscious Affect – 3 (TOSCA 3 – Tagney, Dearing, Wagner & Gramzow, 2000) is a self-report measure which consists of 16 scenarios followed by common reactions to the situations. Respondents are asked to rate on a 5-point scale how likely they will respond to each scenario in that manner. The scale contains 11 negative and 5 positive scenarios yielding indices of Guilt, Shame, Externalization, Detached, Alpha Pride and Beta Pride. The authors’ reported TOSCA 3 test-retest reliabilities of 0.74 (Guilt) and 0.84 (Shame), and Cronbach’s alpha values of: 0.78 (Guilt), 0.77 (Shame), 0.48 (Alpha Pride), 0.51 (Beta Pride), 0.75 (Externalization).
Fontaine, Luyten, De Boeck & Corveleyn (2001) conducted a confirmatory factor analysis on the TOSCA using two large samples (adults and students). They first constructed 20 item parcels from the 55 TOSCA items by combining items with similar correlation patterns with the TOSCA scales and refer to similar emotional reactions. Two CFAs were then conducted with each sample using the 20 item parcels. For both populations, the first model did not result in a good fit to the data where as the second model which included cross-loadings for eight item parcels did. They also reported conducting a PCA on the measure, but results were not disclosed.

The Revised Mosher Guilt Inventory (RMGI - Mosher, 1998) is a self-report measure which consists of 114 items yielding indices of Sex-Guilt, Hostility-Guilt and Guilty-Conscience. Respondents are asked to rate on a 5-point scale how likely they are to respond to each item in the stated manner. The author reported RMGI Cronbach’s alpha levels as follows: 0.92 (Morality-Conscience), 0.96 (Hostility-Guilt) and 0.97 (Sex-Guilt).

Janda & Bazemore (2011) recently reviewed the psychometric properties of the sex-guilt scale from the RMGI and outlined a ten-item version. However, no other exploratory factor analyses have been reported on the RMGI.

Trauma-Related Guilt Inventory (TRGI – Kubany, Haynes, Abueg, Manke, Brennan and Stahura, 1996) is a 32 item self-report measure which investigates trauma-related guilt on a 5-point scale. The TRGI yields indices of Global Guilt, Distress, Guilt Cognitions, Hindsight-Bias/Responsibility, Wrongdoing and Lack of Justification. The authors reported that the coefficients alpha values for the Global Guilt, Guilt Cognitions and Distress scales range from
.89 to .91 and range from .60 to .79 for the Hindsight-Bias/Responsibility, Wrongdoing, and Lack of Justification subscales. Kubany, Haynes, Abueg, Manke, Brennan and Stahura (1996) conducted a principal-components analysis with varimax rotation and retained a five-factor solution that accounted for 62% of the total variance. Kubany, Haynes, Abueg, Manke, Brennan and Stahura (1996) conducted a principal-components analysis with varimax rotation and retained a five-factor solution that accounted for 62% of the total variance.

**Psychopathic Personality Inventory – Revised Short Version** (PPI-SV – Forshee, 2006) is a 47 item self-report measure which yields indices of Fearlessness, Amorality, Attention Seeking, Social Manipulation, Blame Externalization and Nonconformity. The PPI-SV positively correlates with the full version of the PPI (.972, p<.000) (Forshee, 2006).

**Beck Depression Inventory - II** (BDI- Beck, Steer & Brown, 1996) is a 21 item self-report measure which investigates common depression symptoms on a 4-point scale. The BDI-II is a highly prominent measure of depression symptoms with a Cronbach’s alpha level of 0.91 and a one-week test-retest reliability of 0.93 (Beck, Steer & Brown, 1996).

**Millon Clinical Multiaxial Inventory-III** (MCMI-III; Millon, 1997). The validity scale from this measure was included to ensure response validity for the above stated measures. The scale contains three items which consist of an exceptionally peculiar statement (e.g. I flew across the Atlantic 30 times last year).

**Procedure**

The data collected for this study occurred over a five month period. Informed consent forms outlining the general background of the study and describing confidentiality policy were distributed to all participants at the beginning of the study. Participants were then provided with
a biographical data survey as well as five self-report measures. All participants completed the assessments in the following order: Biographical data, TOSCA-3, RMGI, TRGI, PPI-SV and the BDI-II, with questions within each survey arranged randomly. Participants could withdraw from the study at any time and would not be penalized. Upon completion of the study, participants received full debriefing.
RESULTS

Exploratory Factor Analysis on the Test of Self Conscious Affect (TOSCA-3)

Principal axis factoring was used for the construction of this model because the primary purpose was to identify the internal factor structure of the TOSCA-3 and also because we could not assume normal distribution. Several PAF models were conducted with various rotation methods (e.g. promax, varimax and direct oblimin). Direct oblimin provided the best defined factor structure. A six factor solution was determined based on a scree plot of eigenvalues (see Figure 1). The six factor solution accounted for 31.04% of the total variance. The first six factors with their initial eigenvalue and individual variance percentage are as follows: Employment Responsibility (6.92, 10.03%), Avoidance (4.76, 6.90%), Family Dependence (3.53, 5.12%), Acceptance of Credit (2.65, 3.84%), Pride (1.99, 2.89%), Environmental Responsibility (1.57, 2.27%) The factor model is shown in Table 2.
Figure 1. Scree plot of eigenvalues for the Test of Self Conscious Affect (TOSCA-3).

Table 2. Primary Factor Loadings for the TOSCA-3 – Varimax Rotation

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>5D You make a mistake at work and find out a co-worker is blamed for the error. You would feel unhappy and eager to correct the situation.</td>
<td>.725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5C 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.</td>
<td>-.627</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td>10.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16C You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You would wish you were anywhere but the party.</td>
<td>.535</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 2</td>
<td>6.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8E You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would be proud that you repaid your debts.</td>
<td>.652</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8D You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would think: &quot;I am a trustworthy person.&quot;</td>
<td>.567</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8A You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would feel immature</td>
<td>-.455</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 3</td>
<td>5.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Factor 4. Acceptance of Credit

11C You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel your hard work had paid off. -.749
11D You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel competent and proud of yourself. -.725
11E You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel you should not accept it .594
11A You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel the boss is rather short-sighted. .490
11B You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel alone and apart from your colleagues. .485

% of variance accounted for by Factor 4 3.84

### Factor 5. Pride

3C You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would feel pleased to have made such a good impression. .843
3B You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would feel happy with your appearance and personality. .712
3E You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would probably avoid eye-contact for a long time. -.566

% of variance accounted for by Factor 5 2.89

---

#### Table 1. Primary Factor Loadings for the TOSCA-3 (continued)

<table>
<thead>
<tr>
<th>Factor 6. Environmental Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>9D You are driving down the road, and you hit a small animal. You’d feel bad you hadn't been more alert driving down the road.</td>
</tr>
<tr>
<td>9B You are driving down the road, and you hit a small animal. You would think: “I'm terrible.”</td>
</tr>
<tr>
<td>9C You are driving down the road, and you hit a small animal. You would feel: “Well, it was an accident.”</td>
</tr>
<tr>
<td>9A You are driving down the road, and you hit a small animal. You would think the animal shouldn’t have been on the road.</td>
</tr>
</tbody>
</table>

% of variance accounted for by Factor 6 2.27

% of variance accounted for by all factors 31.04
Exploratory Factor Analysis on the Revised Mosher Guilt Inventory (RMGI)

The same procedures were used to determine the factor structure of the RMGI. With a principal axis factoring extraction method and a direct oblimin rotation method, a five factor solution was extracted. We used a scree plot of eigenvalues to determine the solution (see Figure 2). The five factor solution accounted for 38.58% of the total variance. The first five factors with their initial eigenvalue and individual variance percentage are as follows: Premarital Sex (20.81, 18.26%), Dispute/Anger (9.68, 8.49%), Self-Punishment (6.46, 5.67%), Pride/Self-Esteem (3.93, 3.45%), Sexual Flexibility (3.10, 2.72%). The factor model is shown in Table 3.

Figure 2. Scree plot of eigenvalues of the Revised Mosher Guilt Inventory (RMGI).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Sex relations before marriage are good in my opinion.</td>
<td>.825</td>
<td></td>
<td></td>
<td>.872</td>
</tr>
<tr>
<td>67 Sex relations before marriage, in my opinion, should not be practiced.</td>
<td>.799</td>
<td></td>
<td></td>
<td>.851</td>
</tr>
<tr>
<td>42 Sex should be saved for wedlock and childbearing.</td>
<td>.740</td>
<td></td>
<td></td>
<td>.517</td>
</tr>
<tr>
<td>12 Sex relations before marriage are wrong and immoral.</td>
<td>.720</td>
<td></td>
<td></td>
<td>.444</td>
</tr>
<tr>
<td>88 Sex relations before marriage should not be recommended.</td>
<td>.714</td>
<td></td>
<td></td>
<td>.353</td>
</tr>
<tr>
<td>87 Sex relations before marriage help people adjust.</td>
<td>.688</td>
<td></td>
<td></td>
<td>.329</td>
</tr>
<tr>
<td>11 Sex relations before marriage should be permitted.</td>
<td>.652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68 Sex relations before marriage are practiced too much to be wrong.</td>
<td>.558</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Sex relations before marriage ruin a happy couple.</td>
<td>.551</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107 If I had sexual relations I would feel alright I think.</td>
<td>.487</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41 Sex is good and enjoyable.</td>
<td>.377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td></td>
<td>18.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 After an outburst of anger, I am sorry and say so.</td>
<td>-.751</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 After an argument, I am sorry for my actions.</td>
<td>.691</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>113 After an argument, it is best to apologize to clear the act.</td>
<td>.647</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95 After an argument, I am sorry for my actions.</td>
<td>.620</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91 After an argument, I am sorry and see no reason to stay mad.</td>
<td>.580</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 After an argument, I feel mean.</td>
<td>-.359</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td></td>
<td>8.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>98 When anger builds inside me, I usually take it out on myself.</td>
<td>.377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 I punish myself when I do wrong and don’t get caught.</td>
<td>.350</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 I detest myself for my sins and failures.</td>
<td>.322</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td></td>
<td>5.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 I detest myself for nothing, I love life.</td>
<td>.872</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47 I detest myself for nothing, I love life.</td>
<td>.851</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106 I detest myself for nothing, and only rarely dislike myself.</td>
<td>.517</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 I detest myself for nothing at present.</td>
<td>.444</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 I detest myself for not being more nearly perfect.</td>
<td>.353</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105 I detest myself for thoughts I sometimes have.</td>
<td>.329</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td></td>
<td>3.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Primary Factor Loadings for the RMGI (continued)

<table>
<thead>
<tr>
<th>Factor 5. Sexual Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Unusual sex practices don’t interest me.</td>
</tr>
<tr>
<td>36 Unusual sex practices don’t interest me.</td>
</tr>
<tr>
<td>15 Unusual sex practices might be interesting.</td>
</tr>
<tr>
<td>64 Unusual sex practices usually aren’t pleasurable because you have preconceived feelings about their being wrong.</td>
</tr>
<tr>
<td>103 Unusual sex practices are awful and unthinkable.</td>
</tr>
<tr>
<td>35 Unusual sex practices are not so unusual.</td>
</tr>
<tr>
<td>61 Unusual sex practices are unwise and lead only to trouble.</td>
</tr>
<tr>
<td>75 Unusual sex practices are dangerous to one’s health and mental condition.</td>
</tr>
<tr>
<td>62 Unusual sex practices are all in how you look at it.</td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
</tr>
<tr>
<td>% of variance accounted for by all factors</td>
</tr>
</tbody>
</table>
Exploratory Factor Analysis on the Trauma-Related Guilt Inventory (TRGI)

The same method was used to determine the internal factor structure of the TRGI. A five factor solution was determined using a principal axis factoring extraction method and a direct oblimin rotation method. The five factor solution accounted for 63.45% of the total variance and can be seen in a scree plot of eigenvalues (Figure 3). The first five factors with their initial eigenvalue and individual variance percentage are as follows: Hindsight-Bias/Responsibility (12.68, 39.62%), Distress (3.62, 11.32%), Lack of Justification (1.84, 5.76%), Violation of Personal Standards (1.16, 3.63%), Global Guilt (1.00, 3.13%) The factor model is shown in Table 4.

Figure 3. Scree plot of the eigenvalues of the Trauma-Related Guilt Inventory (TRGI).
Table 4. Primary Factor Loadings for the TRGI – Varimax Rotation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Sex relations before marriage are good in my opinion.</td>
<td>.825</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 I hold myself responsible for what happened.</td>
<td>.886</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 I was responsible for causing what happened.</td>
<td>.865</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 I blame myself for what happened.</td>
<td>.806</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 I could have prevented what happened.</td>
<td>.774</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 I should have known better.</td>
<td>.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 I did something that I should not have done.</td>
<td>.526</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 I knew better than to do what I did.</td>
<td>.521</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 I blame myself for something I did, thought, or felt.</td>
<td>.475</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 I violated personal standards of right and wrong.</td>
<td>.412</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 What I did was not justified in any way.</td>
<td>.355</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 I didn’t do anything wrong.</td>
<td>- .354</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 1</td>
<td></td>
<td>39.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 What happened causes me emotional pain.</td>
<td>.822</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 I experience severe emotional distress when I think about what happened.</td>
<td>.794</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 What happened causes a lot of pain and suffering.</td>
<td>.773</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 I am still distressed about what happened.</td>
<td>.745</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 I feel sorrow or grief about the outcome.</td>
<td>.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 When I am reminded of the event(s), I have strong physical reactions such as sweating, tense muscles, dry mouth, etc.</td>
<td>.550</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 2</td>
<td></td>
<td>11.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 I had good reasons for doing what I did.</td>
<td>.852</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 What I did made sense.</td>
<td>.787</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 What I did was completely justified.</td>
<td>.667</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 If I knew today—only what I knew when the event(s) occurred—I would do exactly the same thing.</td>
<td>.431</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 3</td>
<td></td>
<td>5.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I had some feelings that I should not have had.</td>
<td>.779</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 I had some thoughts or beliefs that I should not have had.</td>
<td>.687</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 I should have had certain feelings that I did not have.</td>
<td>.570</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 I did something that went against my values.</td>
<td>.485</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 What I did was inconsistent with my beliefs.</td>
<td>.404</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 4</td>
<td></td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Indicate how frequently you experience guilt that relates to what happened.</td>
<td>- .563</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Indicate the intensity or severity of guilt that you typically experience about the event(s).</td>
<td>- .487</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Overall, how guilty do you feel about the event(s)?</td>
<td>- .445</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 I experience intense guilt that relates to what happened.</td>
<td>- .414</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by Factor 5</td>
<td></td>
<td>3.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of variance accounted for by all factors</td>
<td></td>
<td>63.45</td>
<td></td>
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</tbody>
</table>
The correlations between the total score of the extracted factors and the PPI-SV and the BDI-II and between the standard scales were conducted for validity purposes. Results indicate a significant positive relationship between the TOSCA-3 Guilt, RMGI Sex-Guilt, RMGI Hostility-Guilt, RMGI Guilty-Conscience, TRGI Global Guilt, Distress and Guilt Cognitions scales. Table 5 outlines these results. We also found significant negative relationship between the Premarital Sex, Dispute/Anger, Sexual Flexibility, Distress and Global Guilt total factor scores and scores on the PPI-SV. Table 6 outlines these results. Correlations between all total factor scores were also computed. Table 7 outlines these results.
Table 5. Standard Scale Correlations

<table>
<thead>
<tr>
<th></th>
<th>TOSCA-3</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>RMGI</th>
<th></th>
<th></th>
<th></th>
<th>TRGI</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Guilt</td>
<td>Shame</td>
<td>Detached</td>
<td>Externalization</td>
<td>Alpha</td>
<td>Beta</td>
<td>Sex-Guilt</td>
<td>Hostility-Guilt</td>
<td>Guilty-Conscience</td>
<td>Global Guilt</td>
<td>Distress</td>
<td>Guilt Cognitions</td>
</tr>
<tr>
<td>TOSCA-3</td>
<td></td>
<td>1.00</td>
<td>.452*</td>
<td>-.320*</td>
<td>-.168*</td>
<td>-.042</td>
<td>-.017</td>
<td>.154*</td>
<td>.342*</td>
<td>.342*</td>
<td>.173*</td>
<td>.242*</td>
<td>.103*</td>
</tr>
<tr>
<td>Guilt</td>
<td>.452*</td>
<td>1.00</td>
<td>-.156*</td>
<td>.180*</td>
<td>-.088*</td>
<td>-.086*</td>
<td>-.177</td>
<td>.134*</td>
<td>.340*</td>
<td>.425*</td>
<td>.270*</td>
<td>.306*</td>
<td>.184*</td>
</tr>
<tr>
<td>Shame</td>
<td>-.320*</td>
<td>-.156*</td>
<td>1.00</td>
<td>.517*</td>
<td>.309*</td>
<td>.323*</td>
<td>-.057*</td>
<td>-.263*</td>
<td>-.311*</td>
<td>-.072*</td>
<td>-.141*</td>
<td>.070*</td>
<td></td>
</tr>
<tr>
<td>Detached</td>
<td>.180*</td>
<td>.517*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.062*</td>
<td>.009</td>
<td>.119*</td>
<td></td>
</tr>
<tr>
<td>Externalization</td>
<td>.168*</td>
<td>.168*</td>
<td>.180*</td>
<td>.517*</td>
<td>1.00</td>
<td>.183*</td>
<td>.182*</td>
<td>.177*</td>
<td>.057*</td>
<td>.235*</td>
<td>-.018</td>
<td>.023</td>
<td>.083*</td>
</tr>
<tr>
<td>Alpha Pride</td>
<td>-.042</td>
<td>-.088*</td>
<td>.309*</td>
<td>.183*</td>
<td>1.00</td>
<td>.676*</td>
<td></td>
<td></td>
<td></td>
<td>-.206*</td>
<td>-.189*</td>
<td>-.018</td>
<td>.023</td>
</tr>
<tr>
<td>Beta Pride</td>
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<td>-.086*</td>
<td>.323*</td>
<td>.182*</td>
<td>.676*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>-.230*</td>
<td>-.180*</td>
<td>-.019</td>
<td>.009</td>
</tr>
</tbody>
</table>

|                  |         |        |        |        |        |        |        |        |        |        |        |        |        |
|                  |         |        |        |        |        |        |        |        |        |        |        |        |        |

|                  | RMGI    |        |        |        |        |        |        |        |        |        |        |        |        |
|                  |         | Sex-Guilt | Hostility-Guilt | Guilty-Conscience |        |        |        |        |        |        |        |        |        |
|                  | .154*   | .134* | -.177* | -.057* | -.235* | -.204* | 1.00  | .282*  | .422* | .044  | .051  | -.044 |        |
|                  | .342*   | .340* | -.263* | -.142* | -.206* | -.230* | .282* | 1.00   | .459* | .160* | .226* | .055* |        |
|                  | .342*   | .425* | -.311* | -.078* | -.189* | -.180* | .422* | .459*  | 1.00  | .321* | .335* | .190* |        |

|                  | TRGI    |        |        |        |        |        |        |        |        |        |        |        |        |
|                  |         | Global Guilt | Distress | Guilt |        |        |        |        |        |        |        |        |        |
|                  | .173*   | .242* | -.072* | -.023 | -.044 | .044  | .160* | .321* | 1.00  | .566* | .704* |        |        |
|                  | .242*   | .306* | -.141* | .051  | .051  | .160* | .226* | .335* | .566* | 1.00  | .326* | .704* |        |
|                  | .103*   | .184* | .070*  | .083*  | .044  | .055* | .190* | .704*  | .326* | 1.00  |        |        |        |

*p<.05. two-tailed.
Table 6. Correlations of Total Scores of Extracted Factors and the BDI and PPI-SV

<table>
<thead>
<tr>
<th>TOSCA-3</th>
<th>BDI</th>
<th>Fearlessness</th>
<th>Amorality</th>
<th>Attention Seeking</th>
<th>Social Manipulation</th>
<th>Blame Externalization</th>
<th>Nonconformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>.046</td>
<td>.036</td>
<td>.059*</td>
<td>.046</td>
<td>.023</td>
<td>.055*</td>
<td>.071*</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.134*</td>
<td>- .075*</td>
<td>.019</td>
<td>- .096*</td>
<td>- .084*</td>
<td>.062*</td>
<td>- .066*</td>
</tr>
<tr>
<td>Avoidance</td>
<td>.113*</td>
<td>.006</td>
<td>.082*</td>
<td>.041</td>
<td>.038</td>
<td>.084*</td>
<td>.007</td>
</tr>
<tr>
<td>Family Dependence</td>
<td>.079*</td>
<td>- .053</td>
<td>- .108*</td>
<td>- .131*</td>
<td>- .167*</td>
<td>.013</td>
<td>- .069*</td>
</tr>
<tr>
<td>Acceptance of Credit</td>
<td>-.170*</td>
<td>.168*</td>
<td>.130*</td>
<td>.013</td>
<td>.146*</td>
<td>- .025</td>
<td>.076*</td>
</tr>
<tr>
<td>Pride</td>
<td>-.050</td>
<td>.273*</td>
<td>.195*</td>
<td>.074*</td>
<td>.211*</td>
<td>.013</td>
<td>.185*</td>
</tr>
<tr>
<td>Environmental Responsibility</td>
<td>-.170*</td>
<td>.168*</td>
<td>.130*</td>
<td>.013</td>
<td>.146*</td>
<td>- .025</td>
<td>.076*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RMGI</th>
<th>BDI</th>
<th>Fearlessness</th>
<th>Amorality</th>
<th>Attention Seeking</th>
<th>Social Manipulation</th>
<th>Blame Externalization</th>
<th>Nonconformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premarital Sex</td>
<td>-.043</td>
<td>-.144*</td>
<td>-.063*</td>
<td>-.152*</td>
<td>-.197*</td>
<td>-.081*</td>
<td>-.203*</td>
</tr>
<tr>
<td>Dispute/Anger</td>
<td>.080*</td>
<td>-.093*</td>
<td>-.094*</td>
<td>-.072*</td>
<td>-.097*</td>
<td>-.010</td>
<td>-.110*</td>
</tr>
<tr>
<td>Self-Punishment</td>
<td>.333*</td>
<td>.034</td>
<td>-.023</td>
<td>-.063*</td>
<td>-.066*</td>
<td>.159*</td>
<td>.024</td>
</tr>
<tr>
<td>Pride/Self-Esteem</td>
<td>.496*</td>
<td>-.022</td>
<td>-.070*</td>
<td>-.159*</td>
<td>-.092*</td>
<td>.177*</td>
<td>-.023</td>
</tr>
<tr>
<td>Sexual Flexibility</td>
<td>-.061*</td>
<td>-.194*</td>
<td>-.093*</td>
<td>-.160*</td>
<td>-.205*</td>
<td>-.098*</td>
<td>-.250*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRGI</th>
<th>BDI</th>
<th>Fearlessness</th>
<th>Amorality</th>
<th>Attention Seeking</th>
<th>Social Manipulation</th>
<th>Blame Externalization</th>
<th>Nonconformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindsight-Bias/Responsibility</td>
<td>.232*</td>
<td>.131*</td>
<td>.064*</td>
<td>.054*</td>
<td>.102*</td>
<td>.184*</td>
<td>.116*</td>
</tr>
<tr>
<td>Distress</td>
<td>.299*</td>
<td>-.002</td>
<td>-.023</td>
<td>-.015</td>
<td>-.015</td>
<td>.180*</td>
<td>.058*</td>
</tr>
<tr>
<td>Lack of Justification</td>
<td>-.114*</td>
<td>.056*</td>
<td>-.001</td>
<td>.013</td>
<td>.031</td>
<td>-.059*</td>
<td>.078*</td>
</tr>
<tr>
<td>Violation of Personal Standards</td>
<td>.257*</td>
<td>.163*</td>
<td>.073*</td>
<td>.064*</td>
<td>.136*</td>
<td>.226*</td>
<td>.140*</td>
</tr>
<tr>
<td>Global Guilt</td>
<td>-.322*</td>
<td>-.031</td>
<td>.014</td>
<td>-.004</td>
<td>-.016</td>
<td>-.222*</td>
<td>-.056*</td>
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</table>

*p<.05. two-tailed
Table 7. Correlations of Total Factor Scores of Extracted Factors

<table>
<thead>
<tr>
<th></th>
<th>TOSCA-3</th>
<th>RMGI</th>
<th>TRGI</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>TOSCA-3</td>
<td>1</td>
<td>0.123*</td>
<td>0.073*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.123*</td>
<td>0.125*</td>
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<tr>
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<td>3</td>
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<td>0.125*</td>
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<td></td>
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<tr>
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<td>0.096*</td>
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<td></td>
<td>3</td>
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<td>5</td>
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<tr>
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<td></td>
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*p<.05: two-tailed
DISCUSSION

The primary goal of this study was to determine the factor structure of three prominent guilt measures: The Test of Self-Conscious Affect (TOSCA-3), the Revised Mosher Guilt Inventory (RMGI) and the Trauma-Related Guilt Inventory (TRGI). An EFA was conducted for each measure using a principal axis factoring extraction and direct oblimin rotation method.

Test of Self-Conscious Affect (TOSCA-3)

A six factor model was extracted for the TOSCA-3. Although this factor solution confirms the author’s intended six factor structure, it does not yield strong factor loadings. This solution only accounts for 31.04% of the total variance and items that are intended loadings are not present. Although the author identifies six scales within the instrument (i.e, Guilt, Shame, Externalization, Detached, Alpha Pride and Beta Pride) the factors extracted in this investigation do not reflect the author’s six scales. Specifically, the factor structure did not show homogeneity of item content and there were no consistent loading patterns on any of the first six factors. For example, Factor 1 consisted of two items, one from the Guilt scale and one from the Shame scale. Factor 2 contained only one item and Factor 3 consisted of an Alpha Pride item, a Beta Pride item and a Shame item.

A pragmatic explanation for this weak factor structure is the organization of the TOSCA-3. The measure comprises 16 scenarios with each scenario containing items that measure one of the latent factors (guilt, shame, externalization, detachment, alpha pride or beta pride). However, not all of the scenarios have an item from each scale. It may be possible that the items within
each scenario are trying to load with one another which would create misspecification in the factor structure. Factors 4 and 6 are direct examples of this problem. Factor 4 contains all items in Scenario 11 and Factor 6 contains all items in Scenario 9. The TOSCA-3 also contains items that are positive and negative in nature. Further, it is possible that item loadings on each factor may have been a result of similar affect valance amongst the items.

It is also possible that the way in which the TOSCA-3 was presented to participants impacted the results. The measure was intended to be completed in a paper-and-pencil format with each participant reading the scenario and then answering the subsequent items. For the purposes of our study, we had participants complete the measure online and each question was randomly distributed. Participants may have had to re-read scenarios multiple times because the questions were not presented together. Further, in the original version of the TOSCA-3, participants were able to focus on one scenario without having to switch to others. In our presentation, participants had to divide their attention across several scenarios which may have increased their working memory thus possibly altering some of their responses.

Another possible explanation for the findings could have been a result of the method of analysis. Because the TOSCA-3 is theoretically driven, it may have been beneficial to conduct a confirmatory factor analysis instead of an exploratory factor analysis. Future investigations should perform a CFA on the TOSCA-3.
Revised Mosher Guilt Inventory (RMGI)

We expected the RMGI to yield a three factor solution because it consists of three scales. Contrary to our expectations and the author’s intended factor structure, a five factor model was extracted for the RMGI and accounted for 38.58% of the total variance. Although our results did not support our expectations, we did find strong factors within the model. All factors displayed homogeneity of item content as there were no items that loaded with other items from a different scale. For example, Factor 1 consisted of all Sex-Guilt scale items, Factor 2 consisted of all Hostility-Guilt scale items and Factor 4 consisted of all Guilty-Conscience scale items.

A pragmatic explanation for this outcome is that the items are very specific in nature where Mosher’s outlined scales are very general. For example, Factor 1 is comprised of 10 items that specifically refer to premarital sex situations and Factor 5 consists of 9 items that are specific to unusual sex practices. We propose that these factors become *Premarital Sex Guilt* and *Sexual Flexibility Guilt* instead of just *Sex-Guilt*.

Another possible explanation for our results is that the measure was used with a more modern sample than it was designed for. The Mosher Guilt Inventory was first created in the 60’s and some items may not be applicable to the current societal norms. For example, the term “petting” is used frequently within the measure and current young adults may not be aware of this term’s definition. It may be beneficial for future investigators to either omit or rephrase such items when using this measure.
Trauma-Related Guilt Inventory (TRGI)

In support of our hypothesis and the author’s intended factor structure, we found a five factor structure. The first four factors consisted of the same items as the author’s outlined model. Further, we found one additional factor that consisted of all the Global Guilt scale items. A pragmatic explanation for the extraction of this fifth factor is that the authors did not include the global guilt items in their initial exploratory factor analysis. It may be beneficial for future investigators to perform a confirmatory factor analysis on the measure and include the Global Guilt scale items. This may result in further validity of the TRGI.

Because of the growing concern of guilt as an indicator of Post-Traumatic Stress Disorder (PTSD) and because more Americans are experiencing PTSD due to the ongoing war, the focus of this project was to aid in the development of a more distinct guilt definition. There are currently 23 outlined guilt definitions and 29 guilt measures. Because of this lack of consistency within the guilt literature, it is vital for researchers to investigate the validity and reliability of prominent guilt measures. This study responded to this call by identifying the internal factor structure of three widely used guilt measurements, the TOSCA-3, the RMGI and the TRGI. Future research can expand on our findings by utilizing our results to identify the gaps in current guilt measures. Our findings strongly support the validity and use of the TRGI and the author’s proposed factor structure was confirmed with our analysis. We suggest that the RMGI should be modernized before being used with the current generation and also that the validity of the TOSCA-3 should be investigated more extensively.
Several limitations are present in this study and should be noted. Because the participants included in the study were all undergraduate students form a large southeastern university, the results may be skewed because of a lack of diversity. Future research should examine these measurements within a more diverse population. Another weakness to this study is that we did not include any religiosity questionnaires. It may be beneficial for researchers to investigate the relationship between religious identification and guilt.
APPENDIX A: DEMOGRAPHIC DATA QUESTIONNAIRE
Demographic Information

1. Please identify your gender
   a. Male
   b. Female

2. How old are you? __________

3. What is your class year?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior
   e. 5th year or above

4. What is your marital status?
   a. Single
   b. Married
   c. Divorced
   d. Separated

5. Please identify your race
   a. Asian/Pacific Islander
   b. Black
   c. Hispanic
   d. Native American
   e. White/Non-Hispanic
   f. Other

6. Are you currently receiving therapy or any other mental health counseling?
   a. Yes
   b. No

7. Are you currently taking any prescription medication for mental illness?
   a. Yes
   b. No

8. Please estimate you’re the yearly household income in your family
   a. $30,000 or below
   b. $31,000-$50,000
   c. $51,000-$100,000
d. $101,000-$150,000
e. $150,000-$200,000
f. Above $200,000
TOSCA-3

Below are situations that people are likely to encounter in day-to-day life, followed by several common reactions to those situations.

As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. We ask you to rate all responses because people may feel or react more than one way to the same situation, or they may react different ways at different times.

Please do not skip any items -- rate all responses.

For each question, you are to rate your response on a 5 point scale from 1, which means not very likely to 5, which means very likely.

Not Likely 1—2—3—4—5 Very Likely

1. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up. You would think: "I'm inconsiderate."

2. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up. You would think: "Well, they'll understand."

3. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up. You'd think you should make it up to him as soon as possible.

4. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up. You would think: "My boss distracted me just before lunch."

5. You break something at work and then hide it. You would think: "This is making me anxious. I need to either fix it or get someone else to."

6. You break something at work and then hide it. You would think about quitting.

7. You break something at work and then hide it. You would think: "A lot of things aren't made very well these days."

8. You break something at work and then hide it. You would think: "It was only an accident."
9. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would think: "I should have been aware of what my best friend is feeling."

10. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would feel happy with your appearance and personality.

11. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would feel pleased to have made such a good impression.

12. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would think your best friend should pay attention to his/her spouse.

13. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company. You would probably avoid eye-contact for a long time.

14. At work, you wait until the last minute to plan a project, and it turns out badly. You would feel incompetent.

15. At work, you wait until the last minute to plan a project, and it turns out badly. You would think: "There are never enough hours in the day."

16. At work, you wait until the last minute to plan a project, and it turns out badly. You would feel: "I deserve to be reprimanded for mismanaging the project."

17. At work, you wait until the last minute to plan a project, and it turns out badly. You would think: "What's done is done."

18. You make a mistake at work and find out a co-worker is blamed for the error. You would think the company did not like the co-worker.

19. You make a mistake at work and find out a co-worker is blamed for the error. You would think: "Life is not fair."
20. 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.

21. You make a mistake at work and find out a co-worker is blamed for the error. You would feel unhappy and eager to correct the situation.

22. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well. You would think: "I guess I'm more persuasive than I thought."

23. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well. You would regret that you put it off.

24. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well. You would feel like a coward.

25. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well. You would think: "I did a good job."

26. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well. You would think you shouldn't have to make calls you feel pressured into.

27. While playing around, you throw a ball and it hits your friend in the face. You would feel inadequate that you can't throw a ball.

28. While playing around, you throw a ball and it hits your friend in the face. You would think maybe your friend needs more practice at catching.

29. While playing around, you throw a ball and it hits your friend in the face. You would think: "It was just an accident."

30. While playing around, you throw a ball and it hits your friend in the face. You would apologize and make sure your friend feels better.
31. You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would feel immature.

32. You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. "I sure ran into some bad luck."

33. You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would return the favor as quickly as you could.

34. You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. "I am a trustworthy person."

35. You have recently moved away from your family, and everyone has been very helpful. A few times you needed to borrow money, but you paid it back as soon as you could. You would be proud that you repaid your debts.

36. You are driving down the road, and you hit a small animal. You would think the animal shouldn't have been on the road.

37. You are driving down the road, and you hit a small animal. You would think: "I'm terrible."

38. You are driving down the road, and you hit a small animal. You would feel: "Well, it was an accident."

39. You are driving down the road, and you hit a small animal. You'd feel bad you hadn't been more alert driving down the road.

40. You walk out of an exam thinking you did extremely well. Then you find out you did poorly. You would think: "Well, it's just a test."

41. You walk out of an exam thinking you did extremely well. Then you find out you did poorly. You would think: "The instructor doesn't like me."

42. You walk out of an exam thinking you did extremely well. Then you find out you did poorly. You would think: "I should have studied harder."
43. You walk out of an exam thinking you did extremely well. Then you find out you did poorly. You would feel stupid.

44. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel the boss is rather short-sighted.

45. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel alone and apart from your colleagues.

46. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel your hard work had paid off.

47. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel competent and proud of yourself.

48. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success. You would feel you should not accept it.

49. While out with a group of friends, you make fun of a friend who's not there. You would think: "It was all in fun; it's harmless."

50. While out with a group of friends, you make fun of a friend who's not there. You would feel small...like a rat.

51. While out with a group of friends, you make fun of a friend who's not there. You would think that perhaps that friend should have been there to defend himself/herself.

52. While out with a group of friends, you make fun of a friend who's not there. You would apologize and talk about that person's good points.

53. You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you. You would think your boss should have been more clear about what was expected of you.
54. You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you. You would feel like you wanted to hide.

55. You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you. You would think: "I should have recognized the problem and done a better job."

56. You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you. You would think: "Well, nobody's perfect."

57. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are. You would feel selfish and you'd think you are basically lazy.

58. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are. You would feel you were forced into doing something you did not want to do.

59. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are. You would think: "I should be more concerned about people who are less fortunate."

60. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are. You would feel great that you had helped others.

61. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are. You would feel very satisfied with yourself.

62. You are taking care of your friend's dog while they are on vacation and the dog runs away. You would think, "I am irresponsible and incompetent."

63. You are taking care of your friend's dog while they are on vacation and the dog runs away. You would think your friend must not take very good care of their dog or it wouldn't have run away.
64. ____ You are taking care of your friend's dog while they are on vacation and the dog runs away. You would vow to be more careful next time.

65. ____ You are taking care of your friend's dog while they are on vacation and the dog runs away. You would think your friend could just get a new dog.

66. ____ You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You think your co-worker should have expected some accidents at such a big party.

67. ____ You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You would stay late to help clean up the stain after the party.

68. ____ You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You would wish you were anywhere but at the party.

69. ____ You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You would wonder why your co-worker chose to serve red wine with the new light carpet.
APPENDIX C: REVISED MOSHER GUILT INVENTORY
RMGI

For the next 114 questions, you are to rate your response on a 5 point scale from 1, which means not at all true of (for) me to 5, which means extremely true of (for) me.

Not at All True of (for) Me 1 — 2 — 3 — 4 — 5 Extremely True of (for) Me

1.____I punish myself very infrequently.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

2.____I punish myself when I do wrong and don’t get caught.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

3.____When anger builds up inside me, I let people know how I feel.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

4.____When anger builds up inside me, I’m angry at myself.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

5.____“Dirty” jokes in mixed company do not bother me.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

6.____“Dirty” jokes in mixed company are something that make me very uncomfortable.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

7.____Masturbation is wrong and will ruin you.
   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

8.____Masturbation helps one feel eased and relaxed.
not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

9. ____ I detest myself for nothing, I love life.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

10. ____ I detest myself for my sins and failures.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

11. ____ Sex relations before marriage should be permitted.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

12. ____ Sex relations before marriage are wrong and immoral.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

13. ____ Sex relations before marriage ruin a happy couple.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

14. ____ Sex relations before marriage are good in my opinion.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

15. ____ Unusual sex practices might be interesting.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

16. ____ Unusual sex practices don’t interest me.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

17. ____ When I have sexual dreams, I sometimes wake up feeling excited.
not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

18. ____ When I have sexual dreams, I try to forget them.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

19. ____ After an outburst of anger, I am sorry and say so.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

20. ____ After an outburst of anger, I usually feel quite bitter.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

21. ____ When I was younger, fighting didn’t bother me.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

22. ____ When I was younger, fighting never appealed to me.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

23. ____ Arguments leave me feeling depressed and disgusted.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

24. ____ Arguments leave me feeling elated at winning.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

25. ____ “Dirty” jokes in mixed company are in bad taste.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

26. ____ “Dirty” jokes in mixed company can be funny depending on the company.
not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

27. ____ I detest myself for nothing at present.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

28. ____ I detest myself for being so self-centered.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

29. ____ When someone swears at me, I swear back.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

30. ____ When someone swears at me, it usually bothers me even if I don’t show it.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

31. ____ Petting I am sorry to say is becoming an accepted practice.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

32. ____ Petting is an expression of affection which is satisfying.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

33. ____ When I was younger, fighting disgusted me.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

34. ____ When I was younger, fighting was always a thrill.

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

35. ____ Unusual sex practices are not so unusual.
36.____ Unusual sex practices don’t interest me.

37.____ After a childhood fight, I felt good if I won, bad otherwise.

38.____ After a childhood fight, I felt hurt and alarmed.

39.____ After an argument, I am sorry for my actions.

40.____ After an argument, I feel mean.

41.____ Sex is good and enjoyable.

42.____ Sex should be saved for wedlock and childbearing.

43.____ After an outburst of anger, I usually feel quite better.

44.____ After an outburst of anger, I feel ridiculous and sorry that I showed my emotions.
45. ____ After an argument, I wish that I hadn’t argued.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

46. ____ After an argument, I feel proud in victory, understanding in defeat.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

47. ____ I detest myself for nothing, I love life.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

48. ____ I detest myself for not being more nearly perfect.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

49. ____ A guilt conscience is worse than a sickness to me.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

50. ____ A guilt conscience does not bother me too much.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

51. ____ “Dirty jokes” in mixed company are coarse to say the least.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

52. ____ “Dirty jokes” in mixed company are lots of fun.
   not at all true of (for) me  1 — 2 — 3 — 4 — 5    extremely true of (for) me

53. ____ When I have sexual desires, I enjoy it like all healthy human beings.
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<tbody>
<tr>
<td>54.</td>
<td>When I have sexual desires, I fight them for I must have complete control of my body.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
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<tr>
<td>55.</td>
<td>After an argument, I am disgusted that I allowed myself to become involved.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>56.</td>
<td>After an argument, I usually feel better.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>57.</td>
<td>Obscene literature helps people become sexual partners.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
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<tr>
<td>58.</td>
<td>Obscene literature should be freely published.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>59.</td>
<td>One should not lose his temper.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>60.</td>
<td>One should not say “one should not”.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>61.</td>
<td>Unusual sex practices are unwise and lead only to trouble.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
<td></td>
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<tr>
<td>62.</td>
<td>Unusual sex practices are all in how you look at it.</td>
<td>not at all true of (for) me</td>
<td>1 — 2 — 3 — 4 — 5</td>
<td>extremely true of (for) me</td>
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</table>
63. Very unusual sex practices are OK as long as they’re heterosexual.

64. Unusual sex practices usually aren’t pleasurable because you have preconceived feelings about their being wrong.

65. I regret all of my sins.

66. I regret getting caught, but nothing else.

67. Sex relations before marriage, in my opinion, should not be practiced.

68. Sex relations before marriage are practiced too much to be wrong.

69. After an outburst of anger, my tensions are relieved.

70. After an outburst of anger, I am jittery and all keyed up.

71. As a child, sex play is immature and ridiculous.
72. ____ As a child, sex play was indulged in.

73. ____ I punish myself by denying myself a privilege.

74. ____ I punish myself for very few things.

75. ____ Unusual sex practices are dangerous to one’s health and mental condition.

76. ____ Unusual sex practices are the business of those who carry them out and on one else’s.

77. ____ Arguments leave me feeling depressed and disgusted.

78. ____ Arguments leave me feeling proud, they are certainly worthwhile.

79. ____ After an argument, I am disgusted that I let myself become involved.

80. ____ After an argument, I feel happy if I won or still stick to my own views is I lose.
81. ____ When I have sexual desires, I attempt to repress them.

82. ____ When I have sexual desires, they are quite strong.

83. ____ Petting is not a good practice until marriage.

84. ____ Petting is justified with love.

85. ____ After a childhood fight, I felt as if I had done wrong.

86. ____ After a childhood fight, I felt like I was a hero.

87. ____ Sex relations before marriage help people adjust.

88. ____ Sex relations before marriage should not be recommended.

89. ____ If I robbed a bank, I should get caught.
<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
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<tr>
<td>If I robbed a bank, I would live like a king.</td>
<td>1-5</td>
</tr>
<tr>
<td>After an argument, I am sorry and see no reason to stay mad.</td>
<td>1-5</td>
</tr>
<tr>
<td>After an argument, I feel proud in victory and understanding in defeat.</td>
<td>1-5</td>
</tr>
<tr>
<td>Masturbation is wrong and a sin.</td>
<td>1-5</td>
</tr>
<tr>
<td>Masturbation is a normal outlet for sexual cleanse.</td>
<td>1-5</td>
</tr>
<tr>
<td>After an argument, I am sorry for my actions.</td>
<td>1-5</td>
</tr>
<tr>
<td>After an argument, if I have won, I feel great.</td>
<td>1-5</td>
</tr>
<tr>
<td>When anger builds inside me, I always express it.</td>
<td>1-5</td>
</tr>
<tr>
<td>When anger builds inside me, I usually take it out on myself.</td>
<td>1-5</td>
</tr>
</tbody>
</table>
55

not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

99. ____ After a fight, I feel relieved.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

100. ____ After a fight, I feel it should have been avoided for nothing was accomplished.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

101. ____ Masturbation is all right.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

102. ____ Masturbation is a form of self-destructions.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

103. ____ Unusual sex practices are awful and unthinkable.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

104. ____ Unusual sex practices are all right if both partners agree.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

105. ____ I detest myself for thoughts I sometimes have.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

106. ____ I detest myself for nothing, and only rarely dislike myself.

   not at all true of (for) me 1 — 2 — 3 — 4 — 5 extremely true of (for) me

107. ____ If I had sexual relations I would feel alright I think.
108.____ If I had sexual relations I would feel I was being used not loved.

109.____ Arguments leave me feeling exhausted.

110.____ Arguments leave me feeling satisfied usually.

111.____ Masturbation is all right.

112.____ Masturbation should not be practiced.

113.____ After an argument, it is best to apologize to clear the act.

114.____ After an argument, I usually feel good if I won.
APPENDIX D: TRAUMA-RELATED GUILT INVENTORY
Individuals who have experienced traumatic events—such as physical or sexual abuse, military combat, sudden loss of loved ones, serious accidents or disasters, etc.—vary considerably in their response to these events. Some people do not have any misgivings about what they did during these events, whereas other people do. They may have misgivings about something they did (or did not do), about beliefs or thoughts they had, or for having had certain feelings (or lack of feelings). The purpose of this questionnaire is to evaluate your response to a traumatic experience.

**Briefly describe what happened:**

Please take a few moments to think about what happened. All the items below refer to events related to this experience.

**For the next 32 questions, you are to rate your response on a 5 point scale.**

1. ____ I could have prevented what happened.
   
   not at all true   1 — 2 — 3 — 4 — 5   extremely true

2. ____ I am still distressed about what happened.
   
   never true   1 — 2 — 3 — 4 — 5   always true

3. ____ I had some feelings that I should not have had.
   
   not at all true   1 — 2 — 3 — 4 — 5   extremely true

4. ____ What I did was completely justified.
   
   not at all true   1 — 2 — 3 — 4 — 5   extremely true

5. ____ I was responsible for causing what happened.
   
   not at all true   1 — 2 — 3 — 4 — 5   extremely true

6. ____ What happened causes me emotional pain.
   
   never true   1 — 2 — 3 — 4 — 5   always true

7. ____ I did something that went against my values.
8. ____ What I did made sense.
   not at all true  1 — 2 — 3 — 4 — 5  extremely true

9. ____ I knew better than to do what I did.
   not at all true  1 — 2 — 3 — 4 — 5  extremely true

10. ____ I feel sorrow or grief about the outcome.
    never true  1 — 2 — 3 — 4 — 5  always true

11. ____ What I did was inconsistent with my beliefs.
    not at all true  1 — 2 — 3 — 4 — 5  extremely true

12. ____ If I knew today—only what I knew when the event(s) occurred—I would do exactly
    the same thing.
    not at all true  1 — 2 — 3 — 4 — 5  extremely true

13. ____ I experience intense guilt that relates to what happened.
    never true  1 — 2 — 3 — 4 — 5  always true

14. ____ I should have known better.
    not at all true  1 — 2 — 3 — 4 — 5  extremely true

15. ____ I experience severe emotional distress when I think about what happened.
    never true  1 — 2 — 3 — 4 — 5  always true

16. ____ I had some thoughts or beliefs that I should not have had.
    not at all true  1 — 2 — 3 — 4 — 5  extremely true

17. ____ I had good reasons for doing what I did.
    not at all true  1 — 2 — 3 — 4 — 5  extremely true

18. ____ Indicate how frequently you experience guilt that relates to what happened.
    never  1 — 2 — 3 — 4 — 5  always
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<td>19.</td>
<td>____ I blame myself for what happened.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
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<td>20.</td>
<td>____ What happened causes a lot of pain and suffering.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
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<td>21.</td>
<td>____ I should have had certain feelings that I did not have.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
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<tr>
<td>22.</td>
<td>____ Indicate the intensity or severity of guilt that you typically experience about the event(s).</td>
<td>none 1 2 3 4 5 extreme</td>
<td></td>
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<td>23.</td>
<td>____ I blame myself for something I did, thought, or felt.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
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<td>24.</td>
<td>____ When I am reminded of the event(s), I have strong physical reactions such as sweating, tense muscles, dry mouth, etc.</td>
<td>never true 1 2 3 4 5 always true</td>
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<td>25.</td>
<td>____ Overall, how guilty do you feel about the event(s)?</td>
<td>Not guilty at all 1 2 3 4 5 extremely guilty</td>
<td></td>
<td></td>
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<tr>
<td>26.</td>
<td>____ I hold myself responsible for what happened.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>27.</td>
<td>____ What I did was not justified in any way.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
<td></td>
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<tr>
<td>28.</td>
<td>____ I violated personal standards of right and wrong.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
<td></td>
<td></td>
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<tr>
<td>29.</td>
<td>____ I did something that I should not have done.</td>
<td>not at all true 1 2 3 4 5 extremely true</td>
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</tbody>
</table>
30. _____ I should have done something that I did not do.

   not at all true  1 — 2 — 3 — 4 — 5  extremely true

31. _____ What I did was unforgivable.

   not at all true  1 — 2 — 3 — 4 — 5  extremely true

32. _____ I didn't do anything wrong.

   not at all true  1 — 2 — 3 — 4 — 5  extremely true
APPENDIX E: PSYCHOPATHIC PERSONALITY INVENTORY – REVISED

SHORT VERSION
PPI-SV

Instructions: This test measures different personality characteristics – that is, the ways in which people’s personality styles make them different form each other. Read each statement carefully and decide how false or true it is a description of you. Then mark the best choice on the separate answer sheet. Use the answer choices provided below.

1) False  2) Mostly False  3) Mostly True  4) True

Even if you feel that a statement is neither false nor true about you, or if you are not sure which answer to choose, select the answer that is the closest to describing you.

Here’s an example.  I like going to the movies.

If it is true that you like going to the movies, fill in the 4 on the answer sheet.

If it is mostly false that you like going to the movies, fill in the 2 on the answer sheet.

Try to be as honest as you can. Please be sure to give your own opinion about whether each statement is false or true about you.

1.____If I’m at a dull party, I like to stir things up.
2.____I have always seen myself as something of a rebel.
3.____I might like to travel around the country with some motorcyclists and cause trouble.
4.____I would find the job of a movie stunt person exciting.
5.____When I am faced with a moral decision, I ask myself, “Am I doing the right thing?”
6.____When people mistreat me, I’d rather forgive them than try to get even.
7.____It would bother me to cheat on a test even if no one was hurt by it.
8.____Parachute jumping would really scare me.
9.____I could be a good “con artist.”
10.____I like to stand out in a crowd.
11.____It would be fun to fly a small airplane by myself.
12.____When someone is hurt by something I say or do, that’s their problem.
13. I like to act first and think later.
14. When I’m in a frightening situation, I can “turn off” my fear almost at will.
15. To be honest, I believe that I am more important than most people.
16. If I do something that gets me in trouble, I don’t do it again.
17. If I really want to, I can persuade most people of almost anything.
18. I get restless when my life gets too predictable.
19. I can’t imagine being sexually involved with more than one person at a time.
20. I don’t care about following the “rules”; I make my own rules as I go along.
21. I feel bad about myself after I tell a lie.
22. I like to watch violent movies.
23. I’m hardly ever the “life of the party.”
24. I agree with the motto, “If you are bored with life, risk it.”
25. I like (or would like) to play sports with a lot of physical contact.
26. I do not like loud, wild parties.
27. In school or at work, I try to “stretch” the rules just to see what I can get away with.
28. I’m good at flattering people who can help me.
29. When I’m told what to do, I often feel like just doing the opposite.
30. People I thought were my “friends” have gotten me into trouble.
31. I don’t take advantage of people even when it would be good for me.
32. I like to poke fun at established traditions.
33. To be honest, I try not to help people unless there’s something in it for me.
34. I sometimes lie just to see if I can get someone to believe me.
35. It might be exciting to be on a plane that was about to crash but somehow landed safely.
36. ___ It’s easy for me to talk about things I don’t know much about.
37. ___ I’m sure people would be pleased to see me fail in life.
38. ___ I get blamed for many things that aren’t my fault.
39. ___ Some people have made up stories about me to get me in trouble.
40. ___ Sometimes I do dangerous things on a dare.
41. ___ If I can’t change the rules, I try to get others to bend them for me.
42. ___ I like to do things on the spur of the moment.
43. ___ I like my life to be unpredictable and surprising.
44. ___ I would like to have a “wild” hairstyle.
45. ___ I would like to hitchhike across the country with no plans.
46. ___ I think long and hard before I make big decisions.
47. ___ When life gets boring, I like to take chances.
APPENDIX F: BECK DEPRESSION INVENTORY-II
BDI-II

**Instructions:** This section consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Click the circle beside the statement to select it. If several statements in the group seem to apply equally well, choose the highest number for that group. Be sure that you do not choose more than one statement for any group, including item 16 (Changes in Sleeping Pattern) or item 18 (Changes in Appetite).

1. Sadness
   - I do not feel sad.
   - I feel sad much of the time.
   - I am sad all the time.
   - I am so sad or unhappy that I can't stand it.

2. Pessimism
   - I am not discouraged about my future.
   - I feel more discouraged about my future than I used to be.
   - I do not expect things to work out for me.
   - I feel my future is hopeless and will only get worse.

3. Past Failure
   - I do not feel like a failure.
   - I have failed more than I should have.
   - As I look back, I see a lot of failures.
   - I feel I am a total failure as a person.

4. Loss of Pleasure
   - I get as much pleasure as ever did from the things I enjoy.
   - I don't enjoy things as much as I used to.
   - I get very little pleasure from the things I used to enjoy.
   - I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
   - I don't feel particularly guilty.
   - I feel guilty over many things I have done or should have done.
   - I feel quite guilty most of the time.
   - I feel guilty all of the time.
6. Punishment Feelings
   I don't feel I am being punished.
   I feel I may be punished.
   I expect to be punished.
   I feel I am being punished.

7. Self-Dislike
   I feel the same about myself as ever.
   I have lost confidence in myself.
   I am disappointed in myself
   I dislike myself.

8. Self-Criticalness
   I don't criticize or blame myself more than usual
   I am more critical of myself than I used to be.
   I criticize myself for all of my faults.
   I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
   I don't have any thoughts of killing myself
   I have thoughts of killing myself, but I would not carry them out.
   I would like to kill myself
   I would kill myself if I had the chance.

10. Crying
    I don't cry any more than I used to
    I cry more than I used to.
    I cry over every little thing.
    I feel like crying, but I can't

11. Agitation
    I am no more restless or wound up than usual.
    I feel more restless or wound up than usual
    I am so restless or agitated that it's hard to stay still.
    I am so restless or agitated that I have to keep moving or doing something.

12. Loss or interest
    I have not lost interest in other people in activities
    I am less interested in other people of things than before.
    I have lost most of my interest in other people or things.
It's hard to get interested in anything.

13. Indecisiveness
   I make decisions about as well as ever
   I find it more difficult to make decisions than usual.
   I have much greater difficulty in making decisions than I used to.
   I have trouble making any decisions.

14. Worthlessness
   I do not feel I am worthless
   I don't consider myself as worthwhile and useful as I used to
   I feel more worthless as compared to other people.
   I feel utterly worthless.

15. Loss of Energy
   I have as much energy as ever
   I have less energy than I used to have.
   I don't have enough energy to do very much
   I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
   I have not experienced any change in my sleeping pattern.
   I sleep somewhat more than usual.
   I sleep somewhat less than usual
   I sleep a lot more than usual
   I sleep a lot less than usual.
   I sleep most of the day.
   I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
   I am no more irritable than usual
   I am more irritable than usual
   I am much more irritable than usual.
   I am irritable all the time.

18. Changes in Appetite
   I have not experienced any change in my appetite
   My appetite is somewhat less than usual
   My appetite is somewhat more than usual.
   My appetite is much less than usual
My appetite is much greater than usual
I have no appetite at all
I crave food all the time.

19. Concentration Difficulty
   I can concentrate as well as ever.
   I can't concentrate as well as usual.
   It's hard to keep my mind on anything for very long.
   I find I can't concentrate on anything.

20. Tiredness or Fatigue
   I am no more tired or fatigued than usual.
   I get more tired or fatigued more easily than usual.
   I am too tired or fatigued to do a lot of the things I used to do.
   I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex
   I have not noticed any recent change in my interest in sex.
   I am less interested in sex than I used to be.
   I am much less interested in sex now
   I have lost interest in sex completely.
REFERENCES


