



California State University, San Bernardino
CSUSB ScholarWorks

Electronic Theses, Projects, and Dissertations


Office of Graduate Studies

3-2020

PERSONALITY DIFFERENCES IN PREDICTING ASSAULT AND BINGE DRINKING: VARIATION ACROSS EXPLANATORY FACTORS AND GENDER

Allison De Franco

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd>

 Part of the [Criminology and Criminal Justice Commons](#), [Personality and Social Contexts Commons](#), and the [Theory and Philosophy Commons](#)

Recommended Citation

De Franco, Allison, "PERSONALITY DIFFERENCES IN PREDICTING ASSAULT AND BINGE DRINKING: VARIATION ACROSS EXPLANATORY FACTORS AND GENDER" (2020). *Electronic Theses, Projects, and Dissertations*. 965.

<https://scholarworks.lib.csusb.edu/etd/965>

This Thesis is brought to you for free and open access by the Office of Graduate Studies at CSUSB ScholarWorks. It has been accepted for inclusion in Electronic Theses, Projects, and Dissertations by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

PERSONALITY DIFFERENCES IN PREDICTING ASSAULT AND BINGE
DRINKING: VARIATION ACROSS EXPLANATORY
FACTORS AND GENDER

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Criminal Justice

by
Allison Marie De Franco
March 2020

PERSONALITY DIFFERENCES IN PREDICTING ASSAULT AND BINGE
DRINKING: VARIATION ACROSS EXPLANATORY
FACTORS AND GENDER

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

by
Allison Marie De Franco
March 2020

Approved by:

Stephen Tibbetts, Committee Chair, Criminal Justice

Nerea Marteache Solans, Committee Member

Alexis Norris, Committee Member

© 2020 Allison Marie De Franco

ABSTRACT

General theories of offending seem to be favored in recent criminological literature, with the assumption being that the same factor(s) cause all forms of deviance and criminality. However, there is a case to be made for crime-specific models that predict different types of individuals will commit varying forms of deviant behavior. Using survey data collected from 108 female and 116 male college students, we measured their levels of various personality traits—empathy, guilt, detachment, and externalization—as well as their incidence of assault and binge drinking over the previous year. It was predicted that detachment and/or externalization would have significant positive associations with assault and binge drinking among college students and that the effects of detachment and externalization would prevail even after the influence of other emotions, such as guilt and empathy, were accounted for. It was also inferred that guilt and empathy would have varying effects regarding both types of offenses. Additionally, it was anticipated that the effects of detachment and externalization, as well as other self-conscious emotions and the acts of criminal offenses, would differ significantly by gender. Findings from estimated regression equations showed that while the predictors explained a relatively large amount of variation in both acts, virtually all predictors had opposite effects on the two behaviors. Furthermore, gender differences varied greatly across the estimated models of offenses.

TABLE OF CONTENTS

ABSTRACT.....	iii
LIST OF TABLES.....	vi
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: REVIEW OF THE LITERATURE	
Self-Conscious Emotions and Criminal Offending.....	4
Emotions of Guilt.....	9
Emotions of Empathy.....	14
Emotions of Externalization.....	19
Emotions of Detachment.....	25
Gender and Self-Conscious Emotions.....	26
Research Focus.....	30
CHAPTER THREE: METHODOLOGY	
Participants.....	34
Procedure.....	35
Measures.....	37
Offending Behavior – Assault and Binge Drinking.....	37
Measures of Self-Conscious Emotions.....	38

Measures of Gender.....	40
Demographic Variables.....	40
CHAPTER FOUR: ANALYSIS.....	41
CHAPTER FIVE: DISCUSSION AND CONCLUSIONS.....	47
Limitations of Research.....	51
APPENDIX A: EXAMPLES OF THE TEST OF SELF-CONSCIOUS AFFECT...	53
APPENDIX B: QUESTIONNAIRE MEASURE OF EMPATHIC TENDENCY.....	56
REFERENCES.....	59

LIST OF TABLES

Table 1. Correlation Matrix for all Variables.....	42
Table 2. Summary of Ordinary Least Squares Regression Analysis of Reported Criminal Offending.....	44
Table 3. Summary of Ordinary Least Squares Regression Analysis of Reported Binge Drinking by Gender.....	45
Table 4. Summary of Ordinary Least Squares Regression Analysis of Reported Assault by Gender.....	46

CHAPTER ONE

INTRODUCTION

Building on nearly 30 years of criminological research, theoretical developments and empirical studies on criminological perspectives explaining offending have emphasized general theories of crime, which attempt to explain most, if not all, forms of deviant activity with one theoretical model. The attention provided to such general models, such as low self-control theory (Gottfredson & Hirschi, 1990) and general strain theory (Agnew, 1992), are good examples of how the criminological field has shifted toward parsimonious explanations of complex psychological phenomena, namely decisions to commit criminal behavior. Gottfredson and Hirschi (1990) argued that those with low levels of self-control are likely to be “impulsive, intensive, physical, risk-seeking, and nonverbal” (p.90) and tend to disregard the lasting consequences of their behavior; therefore, allowing the likelihood of immersion in conditional temptations and further interests in deviant behavior (Zimmerman, Botchkovar, Antonaccio, & Hughes, 2015). Furthermore, Agnew (1992, 2006) ascertains that strain generates negative emotions, which creates a type of stress in an individual that will, eventually, need to be mitigated; these negative emotions have a compromising effect on the individual, which escalates the probability of criminal behavior (Keith, McClure, Vasquez, Reed, & May, 2015). However, general theories of crime are fashioned with a combination of various major criminological theories, with an integrated framework of empirical research

findings, concentrating on the principle purpose of crime. While this inductive theory aspires to gain attention towards specific variables directly involved in crime, it is also well known for determining why certain individuals tend to be more predisposed to criminal behavior (Agnew, 2005; Ngo, Paternoster, Cullen, & Mackenzie, 2011). Previous studies (Walsh & Ellis, 1999; Ellis & Walsh, 1999), in which respected, well-published criminologists were surveyed about their most favored theories, show that general theories of crime have become quite dominant and are currently more accepted by most criminologists than are more specified explanations, such as those that propose gender differences or etiological differences across offenses (e.g., violence vs. theft). It is quite clear that general models have become more popular and are the topic of more empirical research than specific models of offending. More current research dictates that criminological researchers have highlighted general theories of crime and that the theory is suitable and useful for all practical purposes. Exclusively, this pertains to all crime type offenses; as a result, the inductive and prognostic capability of this theory rests with the assumption that empirical analyses contain comprehensive dimensions of crime type offenses (Ha, 2016). The goal of the current study is to examine the validity of a psychological model of criminality regarding two types of deviant activity: assault and binge drinking. These two offenses were chosen because previous studies (e.g., Nagin & Paternoster, 1993; Tibbetts & Herz, 1996) have shown that numerous college students tend to participate in the offenses examined and that these offenses are

associated with self-conscious emotions. A further goal is to explore the degree of effectiveness of the unitary psychological model in explaining various offenses between men and women. Accordingly, if what general theories of crime claim to be true, then we would expect self-conscious emotions to have the same effect across both gender and offense.

CHAPTER TWO

REVIEW OF THE LITERATURE

Self-Conscious Emotions and Criminal Offending

In forensic practice, when it comes to the understanding and recognition of delinquent behaviors, essential cognitive features of conscientious development have been broadly examined with regard to self-conscious emotions and their influence on human behavior (Spruit, Schalkwijk, Van Vugt, & Stams, 2016). In nearly the past 20 years, significant consideration has been assigned to the emotional aspects pertaining to delinquent behavior, such as moral judgment. Self-conscious emotions are anticipated and have been predicted to be linked to a variety of ethical behaviors, in which delinquency is a determinate factor. The intensity of the association between self-conscious emotions and delinquency may be affiliated to or motivated by other factors, like additional traits associated with self-conscious emotions, behavior linked to misconduct, other empirical related articles, as well as different sampling models. According to Eisenberg (2000) and Pizarro (2000), there is a universal concurrence that self-conscious emotions navigate an individual in the moral decision-making process, consequently governing the influence of ethical behavior (Spruit et al., 2016). Therefore, it can be conferred that individuals are cognitively capable to perpetually assess their cognizance, as well as their mannerism, from their moral

testimonial of good character containing their personal beliefs and standards (Lewis, 1991; Schalkwijk, 2015; Spruit et al., 2016).

Self-conscious emotions are distinguished from other emotions in that they are, by definition, notably social in the sense that they are emotional experiences that are founded in “social relationships, in which people evaluate and judge themselves and each other. Self-conscious emotions are built on reciprocal evaluation and judgment” (Fischer & Tangney, 1995:3-4). Specifically, self-conscious emotions contain elements that definitively incorporate self-reflection and self-evaluation (Proyer, Platt, & Ruch, 2010). These elements have been distinguished from other emotions by their requirement of the awareness of self-consciousness, which many emotions do not require. For example, several “primary” emotions are present at birth, such as pain, joy, disgust, etc. (for a review, see Lewis, 1992). These primary emotions do not require self-awareness, whereas self-conscious emotions require self-awareness, which studies show is developed in healthy children between 18 and 30 months of age. Thus, there is both a theoretical and an empirically observed difference between self-conscious emotions and primary emotions. Furthermore, the activity of the conscience is intrinsically cultivated through the attentiveness and realizations of self-conscious emotions (Schalkwijk, Stams, Stegge, Dekker, & Peen, 2016; Tangney, Stuewig, & Mashek, 2007), where self-conscious emotions require self-regulation, and primary emotions do not.

Some of the more notable self-conscious emotions include guilt, shame, pride, and empathy. Each of these emotions have been shown by both criminologists and psychologists to have profound effects on human development, perceptions, and activity (Fischer & Tangney, 1995; Grasmick & Bursik, 1990; Grasmick, Bursik, & Arneklev, 1993; Hoglund & Nicholas, 1995; Lieth & Baumeister, 1998; Mehrabian & Epstein, 1972; M. Lewis, 1992; H. B. Lewis, 1971; Tangney, Wagner et al., 1996). Some individuals may even have a profound lack of self-consciousness when it comes to self-realization of their emotions; whereas, other individuals are extremely inclined to the occurrence of their self-consciousness when experiencing guilt, shame, pride, or empathy (Lansky, 2005; Schalkwijk, 2016; Shaw, 2014; Widiger & Lynam, 1998). These emotions, or lack thereof, have also been linked to many maladaptive feelings and behaviors. Thus, the levels and effects of self-conscious emotions are likely to be critical influences in the promotion or inhibition of criminal behavior. For purposes of this study, we decided to concentrate on the self-conscious emotions that have been shown (e.g., Allwood, Bell, & Horan, 2011; Brook, Brook, Rubenstone, Zhang, & Saar, 2011; Pace & Zappulla, 2012; Spruit, Schalkwijk, Van Vugt, & Stams, 2016; Schalkwijk, Stams, Stegge, Dekker, & Peen, 2016) to have the most inhibitory or predictive relationships with the criminal offenses examined (i.e., assault and binge drinking): namely guilt, empathy, externalization, and detachment.

Although psychologists have developed elaborate conceptual frameworks and performed extensive assessments of the psychometric instruments used to measure self-conscious emotions, most criminological research in this area has not utilized this extensive literature. As discussed by Maxwell, Zepeda, & Rzotkiewicz (2018), self-conscious emotions, particularly guilt and shame, are shown to be unprogressive in criminological research, yet various psychometric analyses assess the concepts of self-conscious emotions in the field of psychological research (Stuewig & McCloskey, 2005; Tangney et al., 1996; Tibbetts, 2003). On the other hand, psychologists have not recognized the extensive research on self-conscious emotions (mostly on shame and embarrassment) that has been conducted by criminologists (e.g., Blackwell & Eschholz, 2002; Braithwaite, 1989; Elis & Simpson, 1995; Hay, 2001; Wortley, 1996). This lack of consistency across disciplines has resulted in differential findings and conclusions regarding the effects of the selected self-conscious emotions on the etiology of criminal offending.

Extensive assessments have also been conducted by various past criminological studies examining the effects of self-conscious emotions where the measures were used to confound the effects of shame, guilt, and embarrassment (Elis & Simpson, 1995; Grasmick & Bursik, 1990; Grasmick, Bursik & Arneklev, 1993; Nagin & Paternoster, 1993; Wortley, 1996). For the most part, self-conscious emotions are rarely used in current criminological research as plausible determinates of criminal offending or delinquent behavior (Maxwell et

al., 2018). Criminological researchers have typically used factors such as the influences of peers (Chung & Steinberg 2006; Gainey et al., 1997; Hannon, DeFronzo and Prochnow 2001; Maxwell et al., 2018; Selfhout, Branje & Meeus 2008), the deviant actions of family members (Brownfield 1987; Chung & Steinberg 2006; Keijsers et al., 2009; Kierkus & Baer 2002; Mack, Peck & Leiber 2015; Maxwell et al., 2018), socio-structural factors, such as social relationships and social institutions within a society that produce formal and informal social controls (Chung & Steinberg 2006; Maxwell et al., 2018; Silver & Miller 2004; Spivak et al., 2011), as well as the judicial system and law enforcement (Maxwell et al., 2018; Rhineberger-Dunn & Carlson 2011). These factors have been clearly linked and are expected to directly or indirectly influence criminal offenses and delinquent behaviors. Perhaps this is why more clearly conceptualized traits and their validated psychometric measures, such as low self-control (Gottfredson & Hirschi, 1990; Grasmick, Tittle, Bursik, & Arneklev, 1993; Wright, Caspi, Moffitt, & Silva, 1999), have received more attention in the criminological literature than have self-conscious emotions. This may also explain why many studies of self-conscious emotions as predisposing factors for delinquent behaviors have typically been researched in the field of psychology (Cohen et al., 2011; Maxwell et al., 2018). Given the understanding that there is an evident need for self-conscious emotions within criminological literature, we will now review the most notable of these self-conscious emotions.

Emotions of Guilt

Guilt symbolizes an image of an emotional response within an individual who has engaged in a wrongful act (de Hooge, Zeelenberg, & Breugelmans, 2011; Maxwell et al., 2018). Individuals who are prone to have a sense of guilt, signify the susceptibility in relation to negative feelings about engaging in specific behaviors that are categorized as unacceptable or wrong within a society (Cohen et al., 2011; Gilbert, 2003; Maxwell et al., 2018). In general, when talking about self-conscious emotions and guilt, guilt is expressed as a feeling where the act or the inaction attains the focus, rather than an individual focusing on one's self as the fundamental element of an unfavorable evaluation (Ferguson & Crowley, 1997; M. Lewis, 1992; Tangney 1996; Tangney, Wagner et al., 1996). For instance, if a person was feeling emotions of guilt, it is possible that these expressions would be portrayed in a manner that recognized an awful act was committed, but that this act does not make the individual a bad person. In this case, the focus would be on the awful act committed, permitting the individual to subjectively make an evaluation on one's self, instead of aiming the attention on the individual as a person.

In contrast to feelings of guilt, shame is all-encompassing, and “represents a generally negative evaluation of one's self” (Maxwell et al., p. 323). This type of character is what differentiates between the emotions of shame and guilt, which has been acclaimed by psychologists, as well as advocated and promoted by empirical studies (Tangney, 1996; Tangney & Fischer, 1995; Tibbetts, 2003).

Furthermore, it has been illustrated that feelings of shame are shown to be more painful than feelings of guilt because guilt is less encompassing by nature. Respectively, those who are predisposed to feelings of shame, typically like to blame others and tend to show aggressive behaviors when their wrongful actions are challenged. So, individuals who display high levels of shame consciousness are more likely to portray antisocial and aggressive behaviors, whereas individuals who demonstrate high levels of guilt consciousness are more likely to represent more significant pro-social behaviors (Maxwell, 2018; Tangney et al., 2014). In addition, when looking at psychological research, the susceptible feelings of guilt that are experienced by an individual show to be different than feelings of shame, considering shame involves feelings of anguish and sorrow but does not concede general discernment for low self-worth (Quiles & Bybee, 1997; Tangney, 1996; Tangney, Miller et al., 1996).

Feelings of guilt have a certain type of influence on an individual. They may incline feelings of concern and apprehension regarding negative effects towards others, which is why an individual who experiences guilt is likely to try and mend damages done or express remorse for the harmful actions performed. On the other hand, feelings of shame may influence an individual to cover up or hide the questionable and harmful actions that have been carried out (Leith & Baumeister, 1998; Tangney & Fischer, 1995). Guilt and shame are emotions that are unavoidably connected when it comes to interpersonal behavior and arrangement (Proyer et al., 2010). The discerning factors between the two

emotions is that guilt leads to “confessing, apologizing, and the need to undo the wrongdoing,” and shame leads to “a desire to deny, hide, or escape from the interpersonal situation” (Proyer et al., 2010; Tangney, 1999, p. 546). Being that guilt is concerned with one’s effect on others, it is shown to be the more productive emotion that helps to build relationships, rather than cause harm.

On the other hand, shame possesses the motivation to hide the wrongdoing, instead of mitigating or alleviating the harmful act (Proyer et al., 2010; Tangney, 1999). Considering that feelings of guilt come with a restorative nature, it could be conceived that an individual who obtains more guilt would be less inclined to perpetrate or inflict acts of criminal offenses. This ideology has come from the assumption that an individual who is inclined to experience feelings of guilt, will be less likely to involve themselves in positions that may cause prospective feelings of guilt in the future. Guilt seemingly presents an image of negative judgment on one’s behavior, which is impressionable in the aspiration for reparative behavior (Maxwell, 2018; Roos, Hodges, & Salmivalli, 2014). Similar to findings observed for shame, both criminological and psychological studies demonstrate that women are more disposed toward feelings of guilt than are men (see Tangney et al., 1992; Tangney & Fischer, 1995). Furthermore, studies suggest that women are more influenced by self-conscious personality traits than men when making decisions about committing a crime (Tibbetts & Herz, 1996; Blackwell & Eschholz, 2002). Therefore, given these findings in both criminological and psychological literature regarding guilt, it

is predicted that guilt will have stronger associations for binge drinking and assault among females.

Although there are unequivocal differences, when looking at self-conscious emotions regarding shame and guilt, which have been recognized and established within psychological research, various studies within criminological research (Blackwell & Eschholz, 2002; Hudley, 1992; Elis & Simpson, 1995; Grasmick & Bursik, 1990; Grasmick, Bursik & Arneklev, 1993; Nagin & Paternoster, 1993; Paternoster & Simpson, 1993, 1996; Tibbetts, 1997; Wortley, 1996) that have analyzed and evaluated the impact of self-conscious emotions, have not appropriately taken advantage of these conclusive distinctions. Furthermore, these studies have only employed and made use of abstract descriptions regarding certain self-conscious emotions, which has shown to vary from psychological researchers' depictions and explanations of what shame and guilt are perceived to be. As an illustration, there have been many criminological studies that have exclusively evaluated the self-conscious emotions of shame along with embarrassment (Grasmick & Bursik, 1990, 1993; Elis & Simpson, 1995; Nagin & Paternoster, 1993; Paternoster & Simpson, 1993, 1996; Tibbetts & Herz, 1996; Tibbetts, 1997), which allows for the misinterpretation and misjudgment regarding the description of the concept between the differentiation of guilt and shame. As an example, there has been a methodological strategy appropriated by researchers (e.g., Hudley, 1992) and is shown to misinterpret the emotion of guilt by permitting individuals to describe and characterize their

perceptions of what guilt is, without first identifying feelings or perceptions of what shame and embarrassment are, in an everyday suggestive situation (Tangney, 1996). Nevertheless, within many criminological research studies, analysis has shown to use shame as a functional element in determining the extent of guilt an individual may feel if certain acts are committed. (Elis & Simpson, 1995; Grasmick & Bursik, 1990; Grasmick, Bursik & Arneklev, 1993; Grasmick, Blackwell, & Bursik, 1993; Nagin & Paternoster, 1993).

When individuals experience various types of negative emotions, this may be due to the transgressions of group norms. The transgression of group norms can be exemplified by how an individual determines if their behavior displays questionable actions, which is inevitably constructed from the norms obtained by the affiliated social group (Giguère, Lalonde, & Taylor, 2014). Questionable actions, or behaviors, such as binge drinking, have caused numerous social issues that jeopardize and weaken the progression of individuals to function efficiently and competently within society. When behaviors of questionable actions contribute to the transgression of group norms, it is counted upon for those individuals to have a sense of guilt; thus, modifying their behaviors in the future, adapting to that of the group norms. Feelings of guilt that an individual may have are usually associated with provoking the amendment of the transgression, as well as the self-regulation of the questionable actions that caused the transgression of the group norms in the first place. When it comes to binge drinking and feelings of guilt, Giguère et al., (2014) concluded that the

extent to which individuals identified with a group where the norms were transgressed, consisted of strongly identified individuals who displayed a susceptible amount of guilt, while showing apprehension or worry that their actions or behaviors may have caused the transgression of the group norms.

Emotions of Empathy

Empathy has been defined in many ways, but common to all definitions is the aspect of knowing others' experiences from the perspective of the other (Mahrbian & Epstein, 1972; Roys, 1997). Empathy allows an individual to understand and share the innermost feelings that another is experiencing (Christov-Moore, Simpson, Coudé, Grigaityte, Iacoboni, & Ferrari, 2014). The sense of empathy is an intricate phenomenon that encompasses a series of actions to achieve functional development, such as acknowledgment of the emotion, transmission of the emotion, as well as the preparation to have this type of emotion (Christov-Moore et al., 2014; Decety and Jackson, 2006, Singer, 2006, Walter, 2012). Others have defined it as the capacity to cognitively share another individual's feelings or emotional experiences (Roys, 1997). The experience of empathy involves role-taking, as well as the willingness and ability to endure a wide range of emotions (Feshbach, 1975). Davis (1983) identified several key dimensions in empathy: fantasy, in the sense of being able to transpose oneself into the feelings of another; perspective-taking, which is the ability to place oneself in another's point of view; empathic concern, referring to caring about the welfare of others to the point of becoming emotional; and

personal distress, which is one's own anxiety that is connected with the distress of another. Furthermore, with the various interpretations of how empathy has been defined, it is particularly compelling that empathy is recognized as a cognitive process and an affective capability; where an individual has the capacity to understand the emotional state of another, as well as being able to partake in that emotional state of another (Jolliffe & Farrington, 2004). Empathy is shown as an all-encompassing emotion that allows for the coordination of basic and self-conscious emotions, while assisting in the progression of social interaction (Aragno, 2008; Schalkwijk et al., 2016).

Although researchers have questioned whether empathy can be best conceptualized for being recognized as a cognitive process and affective capability, or both, researchers seemingly have a concurrence about specific elements of empathy (Jolliffe & Farrington, 2004). Researchers see empathy as a reflection within an individual, where the empathy between individuals differs. As a result, this variance is acknowledged as an individual difference factor (Eisenberg & Strayer, 1987; Farrington & Jolliffe, 2001; & Jolliffe & Farrington, 2004). Researchers also presume that the element of empathy can be measured, and when measured with appropriate means, analyses are valid and reliable. Furthermore, and presumably most appropriate in this aspect, researchers have found that empathy does have an impact on behavior (Eisenberg et al., 1996; Jolliffe & Farrington, 2004; Kaukiainen et al., 1999). Specifically, individuals who show higher levels of empathy are more likely to

exhibit prosocial behaviors and endure more receptive feelings towards others. Whereas, individuals who display lower levels of empathy, or a lack thereof, are more likely to demonstrate antisocial or aggressive behaviors and neglect to recognize or appreciate the feelings towards others (Jolliffe & Farrington, 2004).

Studies have suggested that low levels of empathy, often measured by the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972), are associated with criminal activity (Mehrabian, 1997; Roys, 1997). Research has also found a connection between low levels of empathy and criminal activity, where a greater impact is shown for cognitive empathy rather than for affective empathy (Jolliffe & Farrington, 2004; Schalkwijk et al., 2016; & Van Langen, Wissink, Van Vugt, Van der Stouwe, & Stams, 2014). This is likely due to the nature of crime and victimization. For instance, persons who have low levels of empathy may commit a crime with a sense of disconnection and, thus, not feel the negative emotional experience of the victim(s). On the other hand, people who are more likely to feel other's emotions will be less likely to offend against another, unless they are inclined to, in some way, harm themselves.

This line of thought is supported by empirical research (Leith & Baumeister, 1998) which has shown that empathy and guilt are linked. Specifically, the perspective-taking dimension of empathy increases the likelihood that offenders will feel guilt for the behavior, so it is unlikely they will choose to offend in the first place. Guilt creates the understanding of an empathetic sense, which is adapted in the direction of mending and managing

behaviors. Also, studies have shown that guilt and delinquency have a negative relationship because guilt necessitates empathy for others (Schalkwijk et al., 2016; Tangney et al., 2011). Interestingly, a chronically high level of shame has been shown to inhibit the ability to experience one's own emotions (Moses-Hrushovski, 1994), which occurs because of the focus on one's own self-worth and shame dulls the capacity to share another's emotional state. This is also consistent with the results of one empirical test that showed that the personal distress dimension of empathy was correlated with shame-proneness (Leith & Baumeister, 1998). As Maxwell et al. (2018) explains, this may be due to the fact that shame prone individuals possess preeminent requirements for recognition and acceptance (Lagattuta, 2007), bare a damaged perception of themselves (Fischer, 1995; Tibbetts, 2003), as well as endure a comprehensive lack of self-worth (Tangney et al., 2014). Thus, empathy is often lacking at times when shame levels are chronically high. Regardless of other emotions, however, studies suggest that empathy tends to inhibit criminal activity. Therefore, higher levels of empathy are seemingly looked at as a personal protective element that allows for the expectation of criminal behavior to diminish, while lower levels of empathy are expected to assist in the implementation of criminal behavior (Jolliffe & Farrington, 2004). In a previous meta-analysis of the effects of empathy on criminality, Jolliffe and Farrington (2004) concluded that empathy is inversely related to criminal activity, but their analysis did not include gender as a variable because there were virtually no studies in the extant literature that

examined this issue. In a more recent meta-analysis, which was a recreation and a continuation of Jolliffe and Farrington's (2004) meta-analysis on empathy and offending, Van Langen et al. (2014) gathered results that were unvarying of Jolliffe and Farrington's (2004) findings, showing that offenders exhibit lower levels of cognitive and affective empathy in comparison to that of non-offenders, where a greater impact is shown for cognitive empathy rather than for affective empathy. However, this meta-analysis did include gender as a moderator to determine if specific characteristics could affect the relationship between empathy and offending; results determined that gender was consistently a mediator between the relationship of empathy and offending. This is one of the key areas that the current study seeks to address. Given the consistent findings in criminological literature regarding other self-conscious emotions (e.g., shame, guilt), it is predicted that empathy will have stronger associations for binge drinking and assault among females.

According to Laghi, Bianchi, Pompili, Lonigro, & Baiocco (2019), the effects of alcohol consumption, or binge drinking, when taking empathy into consideration, has been adequately studied. Binge drinking has been shown to reduce feelings of empathy, as well as feelings of fear and pain, all the while allowing for the escalation of alcohol-related hostile behaviors (Giancola, Josephs, Parrott, & Duke, 2010). On the other hand, the consumption of alcohol, or binge drinking, has the ability to heighten positive empathic emotions, which can assist in the promotion of social gatherings (Dolder, Holze, Liakoni, Harder,

Schmid, & Liechti, 2017). Furthermore, those who are dependent on alcohol consumption are shown to be linked with low levels of empathy, where these low levels of empathy may negatively impact an individual's morals within society, which may also increase future acts of deviant behaviors (Laghi et al., 2019). Although there have been various studies linking alcohol consumption and empathy, there is still a lack of concurrence in the theoretical literature, allowing for an all-inclusive association to whether alcohol consumption has an absolute specific effect on individuals' empathic self-conscious emotions.

Emotions of Externalization

Behaviors of externalization consist of acts that are guided towards the external environment and are often characterized with extensive behavioral manifestations varying from aggressive and antagonistic behaviors, antisocial actions, disruptive and defiant natures, as well as impulsive attitudes (Achenbach & Rescorla, 2001; Guerra, Ocaranza, & Weinberger, 2019). Externalization can also be considered as behaviors that represent rebellious and delinquent conduct, where an individual portrays insensitive behaviors intended against other individuals, showing to cause actions that are conflicting to that of social norms (Brook et al., 2011). Furthermore, Tangney (1990) defines externalization as "a disposition that one tends to deflect responsibility for the event outwardly." With the various ways that have defined what behaviors of externalization may contribute to, previous studies suggest that externalization of behaviors are capable in structuring a direct connection to subsequent actions of delinquency

and behaviors of criminal acts, especially when those behaviors are formed early on in life (Walters, 2014). As an illustration, Newsome, Boisvert, and Wright (2014) ascertain that behaviors of externalization in children may lead to further exposure of various unfavorable outcomes later on in life and that those outcomes may encompass juvenile delinquency as well as criminal offenses as an adult (Campbell, Shaw, & Gilliom, 2000; Liu, 2004). For example, in a study conducted about early adolescence where behaviors of externalization were presented, it was seemingly concluded that those individuals had a higher risk for fraternizing with deviant peers as well as participating in the acts of criminal and violent offenses during the years of late adolescence and early adulthood (Brook et al., 2011; Walters, 2014).

Previous research findings of externalization propose that these behaviors are, in most cases, relatively fixed over time, even though there have been some instances of irregularity (Brook et al., 2011; Caspi & Moffitt, 1995; Sampson & Laub, 1993). One study suggested that antisocial behavior is reasonably balanced during the time between adolescence and adulthood, but that it is difficult to restrict or prevent this type of behavior (Shiner, Masten, & Roberts, 2003). On the other hand, a subsequent study exhibited that actions of delinquent behaviors presented to be a transcending predictor of future aggressive and criminally offensive behaviors as an adult (Reef, Diamantopoulou, van Meurs, Verhulst, van der Ende, 2009). Although the studies presented, show some inconsistencies, an agreeable finding from multiple

researchers is that the association and inclusion of antisocial and aggressive behaviors in nearly all serious and continuous offenses are typically established in early childhood (Farrington, 1989, 1991; Loeber, 1982; Moffitt, 1990, 1993; Newsome et al., 2014; Olweus, 1979; Sampson & Laub, 1993; White, Moffitt, Earls, Robins, & Silva, 1990). The information that signifies and supports this empiricism is incredibly substantial, showing that Robins (1978) inferred “adult antisocial behavior virtually requires childhood antisocial behavior” (p. 611). Thus, adolescents who initiate involvement in such antisocial and aggressive behaviors are more inclined to demonstrate further externalizing symptoms, which have been exhibited to influence acts of criminal behavior as an adult. Furthermore, individuals who attribute external factors as responsible for their offenses, generally perceive others as an explanation for their antisocial and aggressive behavior (Jackson, Lucas, & Blackburn, 2009); consequently, this behavior of externalizing factors may be attributed to, and allow for, further acts of criminal behaviors among these antisocial and aggressive offenders.

While some externalizing factors have shown to introduce elements of antisocial and aggressive behaviors, it is understandable that other aspects of externalization, such as rebelliousness and delinquent conduct, have the propensity to bring about or provoke acts of violent behavior (Brook et al., 2011). As noted by Brook et al. (2011), the behavior that is attributed to being rebellious and delinquent has the possibility as a forerunner, which could, in turn, allow for future acts of violent behavior, as well as inhibit one’s ability to manage their

impulses. For example, in a study conducted by Ellickson and McGuigan (2000), it was found that adolescents who were involved in delinquent behavior, happened to be more closely linked to acts of violent behavior during their late adolescence and early adulthood years. Furthermore, offenders who are particularly violent, seem to exhibit an inclination to externalize their behaviors, in conjunction with placing responsibility for their actions on those who have been victimized or other members of society who may take the blame for the offenders' violent criminal acts. Overall, an offender that participates in violent behavior generally has a higher propensity to display externalization, especially when the offender perceives others as responsible for their actions. As a result, violent offenders externalize their behaviors due to a considerable lack of multiple self-conscious emotions, which would ordinarily discourage an individual from committing such acts of violence (Jackson et al., 2009).

Although there has been extensive research on externalization, it appears to be predominantly more in the realm of psychological research, rather than that of criminological research. Even though some research on externalization as a predictor of criminal activity has been examined (e.g., Brook et al., 2011; Guerra et al., 2019; Jackson et al., 2009; Jung, Herrenkohl, Lee, Hemphill, Heerde, & Skinner, 2017; Newsome et al., 2014; Walters, 2014) it has received fairly limited concentration from criminological researchers. Therefore, Freud's concept of projection can also be used as an extension of externalization due to the similarity in definitions. Kahn & Fawcett (1993) define projection as a defense

mechanism in which individuals are “blaming somebody else for one’s own thoughts or actions. The individual unknowingly rejects emotionally unacceptable thoughts, attributing (projecting) them to others.”

Searle (1976) describes Freud’s theory of projection as the threatening of one’s ego by an undesirable personality trait, with one way to resolve this action as rejecting the reality of possessing such trait and instead attribute it to external forces. Sherwood (1981) has stated that “As a mechanism of defense, projection refers to the process by which we attribute our own shortcomings to others as a means of avoiding psychological threat” (p. 445). Along these lines, Searle’s research looked at the projection of aggression onto others, which measured aggression recording overt acts towards individuals. Searle (1976) also proclaimed that classical projection theory expresses the outcome that, individuals who illustrate aggressive behaviors or convey demanding actions, as well as decline the acceptance of these propensities, will project these tendencies towards others and perceive other individuals as the ones whom are more aggressive and have added threatening tendencies. Such findings imply that individuals that accept their own aggression will not project their aggression on others as much.

Ultimately, although there are few studies that explore projection and aggressive behavior, some experts claim the evidence and theoretical models proposed in this area suggest that externalization and assault should covary (Tangney, personal communication, 2003). However, this theoretical and

empirical evidence does not provide much guidance regarding binge drinking, but it is predicted that individuals will try to create external reasons (e.g., family, school, employment) for pressures that lead them to binge drink. Thus, externalization was predicted to be positively associated with binge drinking, as well as assault.

It has been suggested that factors such as personality traits and various emotional elements may influence and further link externalization and binge drinking (O'Leary-Barrett, Castellanos-Ryan, Pihl, & Conrod, 2016). It has also been suggested that alcohol consumption is sometimes used as a way to “self-medicate” an unfavorable state of mind, as well as aid with symptoms of mental health problems, such as anxiety, rage, or feelings of unhappiness. This design has been substantiated with a recent meta-analysis that consisted of 12 studies for combined cognitive behavioral therapy conducted by Riper, Andersson, Hunter, de Wit, Berking, & Cuijpers (2014), where findings showed that treatment effects on individuals with mental health symptoms preceded those individuals who were treated for alcohol use. When it comes to factors of externalization, various interventions that aim to address certain disruptive behaviors such as binge drinking, have resulted in lower alcohol use in young adults (van Lier, Huizink, & Crijnen, 2009). Furthermore, these interventions imply that binge drinking may be associated with symptoms of externalization, such as physical aggression or antisocial behaviors, through an essential, yet basic, externalizing characteristic (O'Leary-Barrett et al., 2016).

Emotions of Detachment

A review of the extant literature showed that there are few studies that have examined detachment as a predictor of criminological activity. Tangney (1990) defines detachment “as a disposition to respond in such a way that diminishes the importance of such a situation.” Proyer et al. (2010) also presents detachment as having “unconcern with emotional aspects in day-to-day situations.” However, detachment has received virtually no attention in criminological literature; therefore, we will examine the literature that appears within the realm of psychological research regarding emotional detachment among parent-adolescent relationships.

Detachment has been defined by Ingoglia, Coco, Liga, & Grazia Lo Cricchio, (2011) as “a more radical form of distancing from parents, associated with experiencing a lack of parental support and acceptance, feelings of disengagement from parents, as well as mistrust and alienation towards them” (p. 271). For this reason, emotional detachment could result in adolescents not being able to properly cope with a normal social environment (Pace & Zappulla, 2012). This type of emotional detachment has been shown to be persistently associated with that of substandard psychological functioning and has also been linked to lower levels of self-esteem and reduced levels of academic performance (Ingoglia, Coco, Liga, & Grazia Lo Cricchio, 2011). A study conducted by Chen and Dornbusch (1998) concluded that detachment presented a higher rate of vulnerability towards negative peer pressure, higher levels of

psychological distress, decreased amounts of educational achievements, and a diminished self-esteem. It can also be presumed that those who experience emotional detachment may endure controversial psychological adjustment, which may be associated with behavioral problems in the future. In a study conducted by Pace and Zappulla (2012), emotional detachment was shown to be positively related to externalizing problem behaviors, exhibiting that those who are emotionally detached tend to present higher levels of anxiety, greater levels of depressive symptoms, as well as aggressive and troublesome behaviors. Furthermore, those who experience emotional detachment are associated with having a lower inclination and consideration for one's emotional state (Ingoglia et al., 2011). With those who display these emotional detachments, while also taking into consideration the lower inclination and a lack of consideration to one's emotional state, we can confer that there may also be an association to lack of empathy, which permits the possibility of future delinquent and criminal behaviors. However, virtually no studies have examined the relationship between detachment and criminal offending (Tangney, personal communication, 2003). Still, it is likely that individuals attempt to detach themselves, or at the least, portray some characteristics of emotional detachment, when acknowledging the importance of both binge drinking and assaultive behavior.

Gender and Self-Conscious Emotions

The vast majority of psychological studies examining gender differences in guilt suggest that women score higher than men on measures of guilt (for

reviews, see Tangney & Fischer, 1995; Zahn-Waxler & Robinson, 1995; Ferguson & Crowley, 1997a, 1997b; Ferguson, Eyre & Ashbaker, 2000). Although previous evidence suggests that such conclusions are tenuous due to bias in the types of scenarios in the commonly used measures (see Ferguson et al., 2000), studies generally find that females are more prone to guilt. Similarly, in more recent findings, analysis conveys that both males and females, develop less anticipated experiences to self-conscious emotions, where females encounter more prone experiences to self-conscious emotions such as guilt (Bybee, 1998; Else-Quest, Higgins, Allison, & Morton, 2012; Spruit et al., 2016). Criminological research has consistently shown that individuals who have feelings of guilt while even thinking about committing a crime are shown to have persistently reported fewer criminal offenses; this also holds true in relation to gender and the anticipation of guilt (De Boeck, Pleysier, & Put, 2018). This is consistent with criminological research that suggests women are more inhibited by guilt (Finley & Grasmick, Grasmick, 1985; Blackwell & Bursik, 1993; Tibbetts & Herz, 1996; Blackwell & Eschholz, 2002).

The psychological research on gender differences regarding empathy (see Zahn-Waxler & Robinson, 1995) has previously suggested that females are more likely to experience empathy. However, in a more recent psychological study, research continues to show that there does appear to be a difference in gender; specifically, regarding the capacity for empathy when considering that of cognitive and affective empathy (Christov-Moore et al., 2014). Cognitive empathy

depicts males as exhibiting more practical and effective behaviors while displaying an advanced ability to manage cognitive control and acknowledgment. Alternatively, affective empathy illustrates females as expressing more emotional sensitivity, being more receptive to the pain of others, as well as portraying a more effective ability to identify others' emotions. Females are also shown to immerse themselves in sentimental situations during cognitive processes of social interactions, while also displaying more friendly and unselfish behaviors. While there are gender differences in cognitive and affective empathy, women are clearly shown to experience empathy in a heightened manner (Christov-Moore et al., 2014). Criminological research on empathy was previously examined in an extensive meta-analysis by Jolliffe and Farrington (2004), where it was concluded that gender could not be a variable in their meta-analysis because virtually no studies had examined it thus far. However, meta-analyses by Stams, Brugman, Dekovic, Rosmalen, van der Lan, & Gibbs (2006) and Van Langen et al. (2014) have concluded that the relationship amongst moral judgment, when compared to empathy and delinquency, was stronger when looking at males than that of females (Schalkwijk et al., 2016). On the other hand, a study conducted by Broidy, Cauffman, Espelage, Mazerolle, and Piquero (2003), identified that between males and females, there are slight divergences when taking into consideration the affiliation among empathy and offending.

The psychological research on gender differences regarding externalization suggests that males are more likely to experience externalizing

behaviors (Hay, 2003; Jung et al., 2017). It has been presumed that males are more likely than females to have different responses to environmental elements due to the fact that gender is socialized in a contradictory manner. Since males are socialized to convey their emotions in an external or outward fashion, while females are socialized to direct their emotions in an internal or inward fashion, it is understandable and expected that men would display greater behaviors of externalization (Broidy, 2001; Hay, 2003). Furthermore, in a study conducted by Jung et al. (2017), research concluded that behaviors of externalization had an undoubtable relationship with criminal offenses for adult males, whereas females did not show to have the same predictive behaviors. Criminological research regarding externalization of behavior shows that previous research has expressed higher reported levels of externalizing behaviors in association to males rather than females; although, behaviors of externalization, especially early on, have shown to be efficient in anticipating subsequent delinquency in both males and females (Green, Gesten, Greenwald, & Salcedo, 2008; Leadbeater, Kuperminc, Blatt, & Hertzog, 1999; Simonoff, Elander, Holmshaw, Pickles, Murray, & Rutter, 2004). Furthermore, Walters (2014) proclaims that there are characteristics that possess both connections as well as divergences that may influence behaviors of criminality for males and females, showing a possibility for a greater relationship among externalization and sequential delinquency and crime.

Unfortunately, virtually no studies have examined gender differences in the effects of detachment, particularly when criminal offenses are being considered. However, studies have consistently shown that women tend to be more affected by most self-conscious emotions (see Blackwell & Eschholz, 2002; Bybee, 1998; Else-Quest, Higgins, Allison, & Morton, 2012; Spruit et al., 2016; Tibbetts & Herz, 1996), so it is likely that women are more likely to be affected by detachment in their decisions to engage in criminal activity. Thus, it is predicted that women will be more influenced by these emotions of self-consciousness in their propensities to binge drink and commit assault.

Research Focus

The present study will attempt to examine the effects of self-conscious emotions on two forms of criminality—assault and binge drinking—among a non-chronic population of individuals, which has rarely, if ever, been done in psychological studies of deviant behavior. The conclusions are drawn from criminological studies that have estimated the effects of externalization, detachment, guilt, and empathy are in question because they have neither defined nor distinguished these constructs based on theoretical models and measures that have been established by extensive psychological research. It is vital to acknowledge the established conceptual frameworks and psychometric measures utilized by psychological research in order to advance our

understanding of the effects of self-conscious emotions in criminological research.

This understanding is particularly important in determining differences between men and women in violation of the law. Thus, this study uses established psychometric measures of externalization, guilt, empathy, and detachment to predict criminal offending among women and men. It is predicted that 1) detachment and/or externalization will have significant positive associations with assault and binge drinking, 2) the effects of guilt will vary across the measures for assault and binge drinking, 3) the effects of detachment and externalization will remain even after the influence of other emotions (e.g., guilt, empathy) are accounted for, and 4) the effects of detachment and externalization, as well as other self-conscious emotions (and offending itself), will differ significantly by gender.

The offenses of binge drinking and assault were chosen because they have been recognized in previous studies (e.g., Nagin & Paternoster, 1993; Tibbetts & Herz, 1996), exhibiting that many college students have a tendency to commit these acts. These two offenses were chosen in an attempt to examine if self-conscious emotions have an effect on these two forms of criminality, regarding a non-violent and violent offense. Although there is little research regarding self-conscious emotions and crime, we thought it was important to analyze a non-violent and violent offense in order to understand further how self-conscious emotions have an effect on college students and their deviant

behaviors. It is also important to note that binge drinking and assault have a feasible connection to externalization and detachment, showing that there are previous studies (e.g., Chester, 2018; Davis, 2017; Giancola, Helton, Osborne, Terry, Fuss, & Westerfield, 2002) associating alcohol consumption and the progression of aggressive behaviors. As we have learned, those who display characteristics of externalizing factors, tend to demonstrate aggressive and antagonistic behaviors, as well as have the capability to develop a connection to subsequent actions of delinquency and behaviors of criminal acts. Whereas, those who display characteristics of emotional detachment, tend to demonstrate lower levels of self-esteem, feelings of sadness, and has been associated to that of substandard psychological functions (Pace & Zappulla, 2012). Also, emotional detachment has been positively associated with externalizing problem behaviors, showing that individuals who are emotionally detached are more likely to demonstrate higher levels of anxiety, greater levels of depressive symptoms, as well as aggressive and troublesome behaviors.

With respect to the first hypothesis, it is predicted that both detachment and externalization will have positive relationships with both types of reported offending (assault and binge drinking). For the second hypothesis, it is predicted that guilt will have varying effects on both binge drinking and assaultive behavior, given that these behaviors are quite different and likely will not have the same associations with feelings of guilt (especially in terms of binge drinking). Regarding the third hypothesis, it is predicted that externalization and

detachment will have significant effects on binge drinking and assault even after other predictors (which includes guilt and empathy) are accounted for in estimated models. As for the fourth hypothesis, it is predicted that externalization and detachment, as well as other emotions (guilt and empathy), will have significantly stronger effects on binge drinking and assault for women than for men given past research (Tibbetts, 2003; Tibbetts & Herz, 1996).

CHAPTER THREE

METHODOLOGY

Participants

While at a large southeastern state university, an anonymous questionnaire was dispersed between 232 students who were enrolled in six different introductory behavioral science courses. All of the 232 introductory students had volunteered to participate in the survey and were present on the day the survey was conducted. Of the 232 students who participated in the survey, only 224 students had finished and returned the full and complete questionnaire. The completed questionnaires consisted of 116 men and 108 women, where the mean age was shown to be 21.4 years. The eight questionnaires that were not included in the study were unable to be analyzed due to the fact that information was missing; therefore, the questionnaires were incomplete. The introductory courses that were included in the sample consisted of various majors, which satisfied university requirements in a general sense. Be that as it may, 38% of first years students were shown to be disproportionate due to the fact that the survey was given to students within these introductory courses.

Although the use of student sampling has been criticized within the field of criminological research (Williams & Hawkins, 1986), where the main disapproval

is that college students are not seen as a large percentage of individuals with serious and significant offenses, there has been preceding analyses (e.g., Nagin & Paternoster, 1993; Tibbetts & Herz, 1996) that have demonstrated that various college students do, in fact, commonly participate in the transgressions that are expressed within this current study, regarding assault and binge drinking. Additionally, it is beneficial to utilize a survey conducted within the introductory courses that also meet the university requirements, because it is the most advantageous way to obtain and illustrate a cross-sectional sample of college students. Using introductory college students is favorable because we are using convenience sampling, which is a non-probability sampling method, in order to gain data from students who are readily available. With this convenience sample, we measure time stable personality differences, assuming that emotion doesn't have considerable changes from the scale used.

Procedure

Students from the various introductory courses were asked to take part in an anonymous questionnaire that would inspect and analyze the participants' overall offending behaviors. The students who voluntarily agreed to partake in the survey gave their authorization and were given the questionnaires. The surveys were distributed and completed while the students were in their regular class periods, throughout the six different introductory courses. An employee of

the university was given instructions in regard to the questionnaire and was advised to answer any questions that the students had regarding the survey being conducted. From those instructions, the students were asked to answer questions on the survey accordingly. The questionnaire asked respondents to complete several scales, including the Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989) which contains measures of guilt, shame, pride, externalization, and detachment, as well as the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972), which measures empathic emotional responses. Respondents were also asked to report prior offending behavior and demographic information. The methodology for using a questionnaire was decided upon because it gave the availability to easily reach a large number of students needed for participation in the data collection process, as well as allowed for quantifiable answers regarding our current research topic concerning the behaviors of assault and binge drinking.

In the current study, a cross-sectional design was used in order to capture information based on the data gathered from the questionnaire given to the introductory college students. This design is beneficiary to this study because it allows us the ability to test the assumptions made regarding our multiple hypotheses, it did not require a great deal of time to perform, and most importantly, it captures a specific point in time in which we are trying to gain information from. Using a cross-sectional design in this study is acceptable

because self-conscious emotions are measured in TOSCA and EETS as time-stable traits, so it is unlikely that there will be much change over time.

Measures

Offending Behavior—Assault and Binge Drinking.

The dependent variable will be measured by two questions on an offending scale, including participants' responses to questions concerning how often they had committed certain behaviors over the past six months. These acts included how many times respondents had (a) drunk more than four drinks at one sitting, where according to the Centers for Disease Control and Prevention (2018), binge drinking occurs after men consume five or more drinks or women consume four or more drinks in a setting; therefore, the consumption of four or more drinks was used to measure both male and female participants in this study as a way to standardize our data, or (b) seriously threatened to or actually did hit someone else. A majority (51%) of respondent scores on the assault measure were non-zero, and a large majority of scores (66%) on the binge drinking measure were non-zero.ⁱ Still, due to the skewed nature of the scores, the natural log of the offending scores was taken so it would be more suitable for multivariate regression analysis (with scores of zero being recoded as -1).

Measures of Self-Conscious Emotions

The TOSCA (Tangney, Wagner, & Gramzow, 1989) is a scenario-based measure that estimates and evaluates a sequence of events regarding various self-conscious emotions. In this assessment, individuals who participated were ranked on a 5-point scale, regarding the plausibility and probability of answering questions concerning 15 different situations, where the responses have been classified to illustrate and express discerning self-conscious emotions. (see examples in Appendix A). The EETS (Mehrabian & Epstein, 1972) is a 33-item scale (see Appendix B) that was created and outlined with the intention to evaluate an individual's susceptibility to experience the imagery, feelings, or emotions of other individuals, such as the emotions of empathy.

The TOSCA and the EETS were chosen for this study because they have shown to symbolize a widely used measure for self-conscious emotions within the aspect of psychological research, on account that past research analyses (e.g., Mehrabian & Epstein, 1972; Tangney et al., 1989, 1996; Tibbetts, 2003) have demonstrated and exhibited that measures from the TOSCA and the EETS, are to be a valid and reliable standard for the self-conscious emotions of externalization, detachment, guilt, and empathy. All item responses to the TOSCA items will be measured on a 5-point scale ranging from 1 (not likely) to 5 (very likely). Responses to items of the EETS will be measured on a 9-point scale ranging from -4 (very strong disagreement) to +4 (very strong agreement).

For each scale, items are summed to form a score. (summation of the EETS was done after recoding some items).

Coefficient alphas for the guilt, externalization, and detachment scales of the TOSCA were .79, .72, and .69, respectively, and the alpha for the EETS was .84, which support the internal consistency among items in each of the scales. Furthermore, for the items of each scale presented, an analysis consisting of principal component factors, as well as comparable and reciprocal scree plots, were analyzed. In these analyses, responses were presented, which depicted that nearly all items represented high loading factors on an observed variable, which symbolizes that the scales were generally, and for the most part, peripheral and did not consist of multiple dimensions. In this manner, the analysis consisted of estimating and calculating the measurement of one factor, which can be assumed to be the corresponding emotional traits characterized within this study.

The scores that were obtained regarding the self-conscious emotion of shame illustrated the mean score to be 58.56, with a standard deviation of 8.22, on the TOSCA. These scores show to be comparable to scores noted by Tangney et al. (1992), where the mean score was 58.34, and the standard deviation was 6.59. In particular, these scores were observed and related to those of former research studies, where samples were comparable because they had made use of these measures when analyzing individuals between the age of 17 and 30 who were either adults or actively attending college. The mean score

on empathy in our sample was 34.48, with a standard deviation of 28.85 on the EETS scale; this score was similar to the average mean score of 36.3, with a standard deviation of 23.7, which was reported by Mehrabian (1997) for a similar sample of 101 college students. After conducting t-test analyses, the results demonstrated that the mean scores did not show to differ in a significant manner when comparing the scores from our sample to those of comparable scores from preceding research analyses, which unequivocally reinforces the validity and efficacy of these measures.

Measures of Gender

Gender was coded 1 (female student) or 2 (male student).

Demographic Variables

Other demographic variables were examined, such as age (as reported), academic classification (e.g., freshman, sophomore, junior, senior; 1 to 4, respectively), and Greek affiliation (e.g., fraternity or sorority; coded as 0 for non-Greek, 1 for Greek affiliation), and they were representative of other students. No significant differences were found between the sample and the other students in the intro level classes. These measures were only used to check for the representation of the sample, which showed no significant difference in the bivariate correlations, and thus were not used in subsequent analyses.

CHAPTER FOUR

ANALYSIS

Bivariate correlation coefficients (Table 1) were examined to check for multicollinearity among the independent variable measures and assess the direct relations between predictors and dependent measures. Examination showed one relationship—guilt and empathy—that had a correlation higher than .60. However, estimated diagnostic statistics (e.g., variance inflation factors [VIF], tolerance) indicated that neither of these variables had such high collinearity with other predictors that estimates in linear regression analyses would be misspecified; specifically, the estimated VIF for this association was far less than 4.0.

Bivariate correlations (Table 1) were examined for both binge drinking and assault to see which independent variables were significantly related to each behavior. Regarding binge drinking, the only personality trait that had a positive relationship was detachment, whereas guilt was negatively associated with binge drinking, as predicted. Males were significantly more likely to report binge drinking. It is notable that binge drinking was significantly related to assault ($r = .18$), but not to the extent that was expected. In contrast, the only independent variable that positively predicted assault was externalization, as predicted, whereas both guilt and empathy were negatively associated with assault, which

is consistent with previous studies. Interestingly, gender was not associated with assault.

Table 1. Correlation Matrix for all Variables ($N=224$)

Variable	M	SD	<i>r</i>						
			1	2	3	4	5	6	
1. Binge drinking	14.48	31.28							
2. Assault	7.39	36.04	.18**						
3. Externalization	39.26	7.51	.01	.16*					
4. Detachment	32.57	5.85	.25**	.03	.33**				
5. Guilt	58.56	8.22	-.31**	-.35**	-.21**	-.35			
6. Empathy	34.48	28.85	-.10	-.34**	-.15*	-.26**	.61**		
7. Male	1.52	.50	.23**	-.01	.18**	.23**	-.31**	-.57**	

* $p < .05$, two-tailed. ** $p < .01$, two-tailed.

The ordinary least squares (OLS) regression analysis of both binge drinking and assault are reported in Table 2. Regarding the model for binge drinking, it is somewhat surprising that every variable had a highly significant relationship. Specifically, both externalization and guilt had an inverse association, whereas detachment, empathy, being male, and reports of assault were positively related to binge drinking. The findings for empathy may seem surprising but make sense because there is no other person to empathize with if one is binge drinking.

The second estimated model for assault showed positive associations with externalization and binge drinking, whereas detachment, guilt, empathy, and being male was negatively related to assault. Several relationships are of particular interest. Specifically, the positive association of externalization on assault is an opposite relationship that was observed for binge drinking. This is somewhat predicted by previous literature, in the sense that with binge drinking there is no one else to blame, whereas in assault there is always another person (at least) to blame. However, the differential findings for detachment are not as readily explanatory. This will be explored further in the conclusion section.

Another major differentiation in the two models is the observed relationships of empathy. Empathy was shown to be strongly associated with binge drinking but inversely related to assault. This also makes sense according to previous literature in the sense that there is nobody to feel sorry for or put oneself into their shoes in cases of binge drinking, but there is inherently another party involved with cases of assault. This context makes the observed findings not only possible but credible. The other differential finding across models is for male participants, which shows that males are significantly more likely to engage in binge drinking but are less likely to engage in assault. This is perhaps the most surprising finding, but recent reports of assaultive behavior show that females engage in violent behavior at a higher ratio than previously believed (US Department of Justice, 2010).

Table 2. Summary of Ordinary Least Squares Regression Analysis of Reported Criminal Offending ($N=224$)

Variable	Binge Drinking		Assault	
	Beta	<i>t</i>	Beta	<i>t</i>
Externalization	-.17	-2.55**	.16	2.58**
Detachment	.21	3.09**	-.15	-2.35*
Guilt	-.32	-4.04**	-.16	-2.03*
Empathy	.36	4.01**	-.44	-5.19**
Male	.33	4.33**	-.35	-4.77**
Assault	.22	3.16**	----	----
Binge Drinking	----	----	.20	3.16**

Note. For Equation 1 $R^2 = .22$; for Equation 2 $R^2 = .27$. Dashes indicate no applicable estimate. * $p < .05$, two-tailed. ** $p < .01$ two-tailed.

To further explore the gender differences in both binge drinking and assault, separate gender-specific models were estimated for both behaviors. Regarding binge drinking (Table 3), the estimated model appeared to be much more valid for males than females. To clarify, the explained variation (R-squared) for male binge drinking was 45%, whereas the explained variation of the female model was only 16%. Much of the explained variation in the male-specific model was accounted for in variation of the other offense (assault), but other variables had important effects. Specifically, empathy had a positive association, whereas guilt had an inverse relationship with binge drinking. Finally, detachment had a positive relationship on binge drinking as predicted.

This finding was exclusive to males because the estimated female-specific model of binge drinking found no relationship with detachment. On the other hand, the female model showed an inverse relationship between externalization and bingeing, which was not predicted. Furthermore, the female-specific model showed no significant relationship with reports of assault, which was the strongest association in the male-specific model. This finding is consistent with those of other studies that past experiences and offending is a stronger predictor of offending for males than females (see Tibbetts & Herz, 1996). The other significant associations observed in the female-specific model are consistent with the male-specific model; namely, empathy was positively related, and guilt was inversely related to binge drinking. The primary gender differences observed for binge drinking were those regarding the focus of this study, that of detachment and externalization. This gender difference became further pronounced with estimated models of our other offense, namely assault.

Table 3. Summary of Ordinary Least Squares Regression Analysis of Reported Binge Drinking by Gender

Variable	Males (<i>n</i> = 116)		Females (<i>n</i> = 108)	
	Beta	<i>t</i>	Beta	<i>t</i>
Externalization	-.12	-1.57	-.28	-2.93**
Detachment	.22	2.55**	.06	.70
Guilt	-.19	-2.04*	-.41	-3.54**
Empathy	.23	2.82**	.30	2.39*
Assault	.56	7.59**	.03	.26
Binge Drinking	—	—	—	—

Note. For Equation 1 $R^2 = .45$; for Equation 2 $R^2 = .16$. Dashes indicate no applicable estimate. * $p < .05$, two-tailed. ** $p < .01$, two-tailed.

The gender-specific models of assault are presented in Table 4.

Regarding the male-specific model, the only significant association on assault for males was the respondents' reports of binge-drinking. In contrast, the female-specific model showed that binge-drinking did not have a significant association with assault. Furthermore, several variables did have a significant association with female reports of assault. Specifically, externalization was positively related to assault, and both empathy and guilt had significant inverse associations with reports of assault. It is notable that the model explained 47% of the variation in assault for females, but only 40% of the variation in assault for males.

Table 4. Summary of Ordinary Least Squares Regression Analysis of Reported Assault by Gender

Variable	Males (<i>n</i> = 116)		Females (<i>n</i> = 108)	
	Beta	<i>t</i>	Beta	<i>t</i>
Externalization	.08	.95	.21	2.75**
Detachment	-.11	-1.23	-.05	-.62
Guilt	-.06	-.64	-.22	-2.32*
Empathy	-.14	-1.59	-.49	-5.39**
Assault	---	---	---	---
Binge Drinking	.61	7.59**	.02	.26

Note. For Equation 1 $R^2 = .40$; for Equation 2 $R^2 = .47$. Dashes indicate no applicable estimate. * $p < .05$, two-tailed. ** $p < .01$ two-tailed.

Footnote: Although there is often an expected strong relationship between binge drinking and assault, in our survey, there was not a strong correlation between the self-reported incidence of these two types of behaviors. This is shown by the low, albeit significant, estimated bivariate correlation (.18) between the two offenses.

The majority of responses were non-zero, however, a substantial portion of the values were zero. Therefore, TOBIT regression equations were estimated for each estimated OLS model, but the results were substantively the same (i.e., significant coefficients remained significant and in the same direction). For simplicity, only the OLS results are reported here.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

This study examined the associations of key self-conscious emotions on binge-drinking and assault, as well as gender differences regarding such relationships. The findings show that all variables included in the study—externalization, detachment, guilt, empathy, and gender—played a significant role in determining scores on both types of behavior. Furthermore, the key variables examined in this study—externalization, and detachment—were found to have substantively different associations on the two types of offenses examined, especially when gender-specific relationships were estimated.

Specifically, the effects of externalization were generally found to be inversely related to binge drinking, especially for females, but were positively associated with assault, again mostly for females. This finding is rather hard to explain, but the most likely possibility is that externalization is more positively related to assault because there is someone else to blame. Externalization involves the perception that someone else is responsible for his/her actions and given the nature of assault which inherently involves more than one person, it is more likely that an individual can use externalization as an excuse or neutralization technique for engaging in such behavior. The same argument cannot be as readily used for binge drinking. Thus, this finding appears to be

logical. However, why women tend to use this excuse more than men is a question for future research.

Regarding the other key construct in this study, detachment was generally found to be positively associated with binge drinking, especially for males, but was found to be inversely related to assault. Detachment involves the perception that a certain activity is not important and given the nature of binge-drinking it only directly affects that person. Although a strong case can be made for others affected, the person engaging in such behavior may not realize, or rather want to realize, its effect on others. Thus, this finding also appears logical. Respondents who engage in binge-drinking are more likely to be disposed toward assigning personal behaviors as not important.

The findings for empathy generally show a positive association with binge-drinking, but a negative relationship with assault. The latter finding is logical. After all, another person is, by definition, involved in an incident of assault. Therefore, the influence of feeling of empathy, which involves mentally placing one's self in the role of another, is likely to play a role in engaging in such behavior. However, the former finding is not so obvious. Perhaps the fact that no other person is involved in binge-drinking alleviates those who have high levels of empathy, thereby allowing a sense of responsibility. Regarding the last key construct, guilt showed relatively consistent inverse associations with both assault and binge drinking, and gender-specific models did not deviate from this conclusion (although the male-specific model for assault was not significant).

Finally, the gender-specific models revealed that although most previous studies (e.g., Blackwell & Eschholz, 2002, Tibbetts & Herz, 1996) have shown that females are more influenced by self-conscious emotions when it involves deviant behavior, this study has demonstrated that it depends on what types of behavior are being examined. Specifically, the male-specific model for binge-drinking explained far more (nearly three times the) variation than the female-specific model. Thus, it appears that explanatory models of deviance should always examine gender differences when testing the empirical validity of such frameworks.

The importance of this study lies in the fact that self-conscious emotions do, in fact, play a significant role in both binge drinking and assault. However, we have concluded that self-conscious emotions are shown to be unprogressive and are not commonly used within the field of criminological research regarding plausible determinants of criminal offending or delinquent behavior. Therefore, in order to better understand our findings from this current study, it is greatly exhibited that there is an evident need for self-conscious emotions within criminological literature for future research. It is suggested that future research focuses on developing new measures that implement a comprehensible assessment of the distinguishing types of emotional experiences across various situations (e.g., interpersonal situations, intellectual situations). With this new measurement, anticipated studies will likely have further associations and conclusions regarding self-conscious emotions and delinquent behaviors,

particularly an assessment of self-conscious emotions as a potential component by which certain emotional experiences contribute to acts of delinquency or violent behaviors, such as the offenses examined in the present study (e.g., binge drinking and assault). Prospective research should also focus on associations among externalizing factors and emotional detachment in the prevision of future delinquent or violent behaviors. Such research may influence analytical strategies for determining and intervening certain self-conscious emotions, particularly externalization and detachment, as well as help guide criminal justice policies that affect offenses committed, with regard to self-conscious emotions. It is also suggested that future policy is enacted that may allow males to become further socialized more closely to females, in order to increase their levels of self-conscious emotions. This policy could allow males and females to be socialized in a manner that permits one's self-conscious emotions to be expanded, granting an individual further awareness and familiarity with one's own self-conscious emotions. Perhaps, this type of socialization would cause an overall positive effect on the association between self-conscious emotions and criminal behaviors, as well as enhance the comprehensive knowledge and understanding of the intricate self-conscious emotions that men and women portray.

Limitations of Research

This study suffers from several important limitations. Specifically, not all important personality traits were measured, such as low self-control (Gottfredson & Hirschi, 1990; Piquero & Tibbetts, 1996) and other key emotional traits that have been shown to contribute to or inhibit criminal behavior (e.g., shame [see Hay, 2001; Tibbetts, 2003]). Additionally, this study only examined one relatively small sample from one location, so the generalization to other populations is limited; however, we believe that this sample is representative of most other college-student populations in terms of behavior. Furthermore, only two types of behavior—binge-drinking and assault—were examined in this study. Still, given the profound differences observed in the relationships for emotional factors and these two behaviors, which many believe to be highly related, it is likely that even more drastic relationships will be found when other forms of deviance are compared. Despite the limitations of the current study, we believe the findings of this study clearly demonstrate that the associations of emotions and other personality traits are a key factor in dispositions to commit deviant and criminal activity.

Ultimately, the influence of detachment and externalization on behavior has been neglected far too long in criminological research. More investigation is needed in this area, as well as further specification of the relation of other self-conscious emotions, such as guilt and empathy, in explanatory models of deviance and criminal offending. This is an area that the psychological literature

has clearly shown to be vital in every individual's decision making, but criminological research has not yet embraced.

APPENDIX A

EXAMPLES OF THE TEST OF SELF-CONSCIOUS AFFECT

Examples of The Test of Self-Conscious Affect

You break something at work and then you hide it.

- You would think: “This is making me anxious. I need to either fix it or get someone else to.”
- You would think about quitting.
- You would think: “A lot of things aren’t made very well these days.”
- You would think: “It was only an accident.”

At work you wait until the minute to plan a project, and it turns out badly.

- You would feel incompetent.
- You would think: “There are never enough hours in the day.”
- You would feel: “I deserve to be reprimanded.”
- You would think: “What’s done is done.”

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.
- You would think: “Life isn’t fair.”
- You would keep quiet and avoid the co-worker.
- You would feel unhappy and eager to correct the situation.

You are driving down the road, and you hit a small animal.

- You would think the animal shouldn’t have been on the road.

- You would think: “I am terrible.”
- You would feel: “Well, it was an accident.”
- You would probably think it over several times wondering if you could have avoided it.

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.
- You feel like you wanted to hide.
- You would think: “I should have recognized the problem and done a better job.”
- You would think: “Well, nobody’s perfect.”

Tangney, J. P., Wagner, P. E., & Gramzow, R. (1989). The test of self-conscious affect. Fairfax, VA: George Mason University.

APPENDIX B

QUESTIONNAIRE MEASURE OF EMPATHIC TENDENCY

Questionnaire Measure of Empathic Tendency

1. It makes me sad to see a lonely stranger in a group
2. People make too much of the feelings and sensitivity of animals
3. I often find public displays of affection annoying
4. I am annoyed by unhappy people who are just sorry for themselves
5. I become nervous if others around me seem to be nervous
6. I find it silly for people to cry out of happiness
7. I tend to get emotionally involved with a friend's problem
8. Sometimes the words of a love song can move me deeply
9. I tend to lose control when I am bringing bad news to people
10. The people around me have a great influence on my moods
11. Most foreigners I have met seemed cool and unemotional
12. I would rather be a social worker than work in a job training center
13. I don't get upset just because a friend is acting upset
14. I like to watch people open presents
15. Lonely people are probably unfriendly
16. Seeing people cry upsets me
17. Some songs make me happy
18. I really get involved with the feelings of the character in a novel
19. I get very angry when I see someone being ill-treated
20. I am able to remain calm even those around me worry

21. When a friend starts to talk about his problems, I try to steer the conversation to something else
22. Another's laughter is not catching for me
23. Sometimes at the movies I am amused at the amount of crying and sniffing around me
24. I am able to make decisions without being influenced by people's feelings
25. I cannot continue to feel ok if people around me are depressed
26. It is hard for me to see how some things upset people so much
27. I am very upset when I see an animal in pain
28. Becoming involved in books and movies is a little silly
29. It upsets me to see helpless old people
30. I become more irritated than sympathetic when I see someone's tears
31. I become very involved when I watch a movie
32. I often find that I can remain cool in spite of the excitement around me
33. Little children sometimes for no apparent reason

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525-544.

REFERENCES

- Achenbach, T., Rescorla, L. (2001). *The manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont, Research Center for Children, Youth, and Families.
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30, 47-87.
- Agnew, R. (2005). Why do criminals offend? A general theory of crime and delinquency. Los Angeles: Roxbury. pp. vi, 246. *Criminal Justice Review*, 33(1), 101-102.
- Agnew, R. (2006). Pressured into crime: An overview of general strain theory. Los Angeles: Roxbury. v, *International Criminal Justice Review*, 18(4), 473-474.
- Allan, S., Gilbert, P., & Goss, K. (1994). An exploration of shame measures: Psychopathology. *Personality and Individual Differences*, 17, 719-722.
- Allwood, M.A., Bell, D.B., & Horan, J. (2011). Posttrauma numbing of fear, detachment, and arousal predict delinquent behaviors in early adolescence. *Journal of Clinical Child & Adolescent Psychology*, 40(5), 659-668.
- Ausubel, D. P. (1955). Relationships between shame and guilt in the socializing process. *Psychological Review*, 62, 378-390.
- Baumeister, R. F., Dale, K., & Sommer, K. L. (1998). Freudian defense mechanisms & empirical findings in modern social psychology: Reaction

- formation, projection, displacement, undoing, isolation, sublimation, & denial. *Journal of Personality*, 66, 1081-1124.
- Berkowitz, A., & Perkins, H. (1986). Problem drinking among college students: A review of recent research. *Journal of American College Health*, 35, 21-28.
- Blackwell, B. S., & Eschholz, S. (2002). Sex differences and rational choice: Traditional tests and new directions. In Piquero, A. R., & Tibbetts, S. G. (Eds.), *Rational choice and criminal behavior: Recent research and future challenges* (pp. 109-135). New York: Routledge.
- Blackwell, B., Grasmick, H., & Cochran, J. (1994). Racial differences in perceived sanction threat: Static and dynamic hypotheses. *Journal of Research in Crime and Delinquency*, 31, 210-224.
- Braithwaite, J. (1989). *Crime, shame and reintegration*. Cambridge, MA: Cambridge University Press.
- Broidy, L. (2001). A test of general strain theory. *Criminology*, 39, 9-36.
- Broidy, L., Cauffman, E., Espelage, D. L., Mazerolle, P., & Piquero, A. (2003). Sex differences in empathy and its relation to juvenile offending. *Violence and Victims*, 18, 503-516.
- Brook, D. W., Brook, J. S., Rubenstone, E., Zhang, C., & Saar, N. S. (2011). Developmental associations between externalizing behaviors, peer delinquency, drug use, perceived neighborhood crime, and violent behavior in urban communities. *Aggressive Behavior*, 37(4), 349-362.

- Brownfield, D. (1987). Father–son relationships and violent behavior. *Deviant Behavior, 8*(1),65–78. doi: 10.1080/ 01639625.1987.9967732
- Bunn, D., Caudill, S., & Gropper, D. (1992). Crime in the classroom: An economic analysis of undergraduate student cheating behavior. *Research in Economic Education, 23*, 197-207.
- Bybee, J. (1998). The emergence of gender differences in guilt among adolescents. J. Bybee (Ed.), *Guilt and children*, 113-125. Academic Press, London/New York.
- Campbell, S. B., Shaw, D. S., Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. *Development and Psychopathology, 13*, 467-488.
- Caspi, A., & Moffitt, T. (1995). The continuity of maladaptive behavior: From description to understanding in the study of antisocial behavior. In: Cicchetti D, Cohen D (eds). *Manual of Developmental Psychopathology*, Vol. 2. New York: Wiley, 472–511.
- Chesney-Lind, M. (1989). Girls' crime and woman's place: Toward a feminist model of female delinquency. *Crime and Delinquency, 35*, 5-30.
- Chesney-Lind, M. (1997). *The female offender, girls, women, and crime*. London: Sage.
- Chester, David S. (2018). Aggression is associated with greater subsequent alcohol consumption: A shared neural basis in the ventral striatum. *Aggressive Behavior, 44*(3), 285-294.

- Christov-Moore, L., Simpson, E. A., Coudé, G., Grigaityte, K., Iacoboni, M., & Ferrari, P. F. (2014). Empathy: Gender effects in brain and behavior. *Neuroscience and Biobehavioral Reviews*, *46*(4), 604-627.
- Chung, H. L., & Steinberg, L. (2006). Relations between neighborhood factors, parenting behaviors, peer deviance, and delinquency among serious juvenile offenders. *Developmental Psychology*, *42*(2), 319–331. doi: <http://dx.doi.org/10.1037/0012-1649.42.2.319>
- Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the gasp scale: A New measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, *100*(5), 947–966. doi: [http://dx.doi.org/10.1016/0191-8869\(87\)90036-5](http://dx.doi.org/10.1016/0191-8869(87)90036-5) <http://dx.doi.org/10.1037/a0022641>.
- Daly, K., & Chesney-Lind, M. (1988). Feminism and criminology. *Justice Quarterly*, *5*, 497-538.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*, 113-126.
- Davis, Alan K. (2017). Binge-drinking and non-partner aggression are associated with gambling among Veterans with recent substance use in VA outpatient treatment. *Addictive Behaviors*, *74*, 27-33.
- De Boeck, A., Pleysier, S., & Put, J. (2018). The social origins of gender differences in anticipated feelings of guilt and shame following

- delinquency. *Criminology & Criminal Justice: An International Journal*, 18(3), 291-314.
- de Hooge, I. E., Zeelenberg, M., & Breugelmans, S. G. (2011). A functionalist account of shame-induced behavior. *Cognition and Emotion*, 25(5), 939–946. doi: <http://dx.doi.org/10.1080/02699931.2010.516909>.
- Delbert S., David Huizinga, and Suzanne S. Ageton. (1985). *Explaining Delinquency and Drug Use*. Beverly Hills, CA: Sage Publications.
- Decety, J., & Jackson, P.L. (2006). A social–neuroscience perspective on empathy. *Current Directions in Psychological Science*, 15(2), 54-58.
- Dolder, P. C., Holze, F., Liakoni, E., Harder, S., Schmid, Y., & Liechti, M. E. (2017). Alcohol acutely enhances decoding of positive emotions and emotional concern for positive stimuli and facilitates the viewing of sexual images. *Psychopharmacology*, 234(1), 41–51.
- Dorahy, M. J., & Schumaker, J. F. (1997). Dissociative functioning and its relationship to state and trait guilt in the non-clinical population. *Personality and Individual Differences*, 23, 967-972.
- Edelmann, R. J. (1987). *The psychology of embarrassment*. Chichester, England: Wiley.
- Einstein, D., & Lanning, K. (1998). Shame, guilt, ego development, and the five-factor model of personality. *Journal of Personality*, 66, 555-582.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51, 665-97.

- Eisenberg, N., & Strayer, J. (1987). Critical issues in the study of empathy. In N. Eisenberg, & J. Strayer (Eds.), *Empathy and its development* (pp. 3 – 16). Cambridge, UK: Cambridge University Press.
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Smith, M., & Maszk, P. (1996). The relations of children's dispositional empathy-related responding to their emotionality, regulation and social functioning. *Developmental Psychology, 32*, 195 – 209.
- Elis, L. A., & Simpson, S. S. (1995). Informal sanction threats and corporate crime: Additive versus multiplicative models. *Journal of Research in Crime and Delinquency, 32*, 399-424.
- Ellickson, P. L., & McGuigan, K. A. (2000). Early predictors of adolescent violence. *American Journal of Public Health, 90*(4), 566-572.
- Ellis, L., & Walsh, A. (1999). Criminologists' opinions about causes and theories of crime and delinquency. *The Criminologist, 24*, 1-4.
- Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin, 138*, 947.
- Farrington, D. P. (1989). Early predictors of adolescent aggression and adult violence. *Violence and Victims, 4*, 79-100.
- Farrington, D. P. (1991). Antisocial personality from childhood to adulthood. *The Psychologist, 4*, 389-394.

- Farrington, D. P., & Jolliffe, D. (2001). Personality and crime. In N. J. Smelser, & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences*. Amsterdam: Elsevier.
- Ferguson, T. J., & Crowley, S. L. (1997a). Measure for measure: A multitrait-multimethod analysis of guilt and shame. *Journal of Personality Assessment, 69*, 425-441.
- Ferguson, T. J., & Crowley, S. L. (1997b). Gender differences in the organization of guilt and shame. *Sex Roles, 37*, 19-44.
- Ferguson, T. J., Eyre, H. L., & Ashbaker, M. (2000). Unwanted identities: A key variable in shame-anger links and gender differences in shame. *Sex Roles, 42*, 133-157.
- Feshbach, N. D. (1975). Empathy in children: Some theoretical and empirical considerations. *Counseling Psychologist, 5*, 25-30.
- Finley, N., & Grasmick, H. (1985). Gender roles and social control. *Sociological Spectrum, 5*, 317-325.
- Fischer, K. W., & Tangney, J. P. (1995). Self-conscious emotions and the affect revolution: Framework and overview. In Tangney, J. P., & Fischer, K. W. (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 3-23). New York: Guilford Press.
- Gainey, R. R., Catalano, R. F., Haggerty, K. R., & Hoppe, M. J. (1997). Deviance among the children of heroin addicts in treatment: Impact of parents and

peers. *Deviant Behavior*, 18(2), 143–159. doi:

10.1080/01639625.1997.9968050.

Gfroerer, J. C., Greenblatt, J. C., & Wright, D. A. (1997). Substance use in the US college-age population: Differences according to educational status and living arrangement. *American Journal of Public Health*, 87, 62-65.

Giancola, P., Helton, E., Osborne, A., Terry, M., Fuss, A., & Westerfield, J. (2002). The effects of alcohol and provocation on aggressive behavior in men and women. *Journal of Studies on Alcohol*, 63(1), 64-73.

Giguère, B., Lalonde, R., & Taylor, D. (2014). Drinking too much and feeling bad about it? How group identification moderates experiences of guilt and shame following norm transgression. *Personality and Social Psychology Bulletin*, 40(5), 617-632.

Gilbert, Paul. (2003). Evolution, social roles, and the differences in shame and guilt. *Social Research*, 70(4), 1205–1230.

Giancola, P. R., Josephs, R. A., Parrott, D. J., & Duke, A. A. (2010). Alcohol myopia revisited: Clarifying aggression and other acts of disinhibition through a distorted lens. *Perspectives on Psychological Science*, 5(3), 265–278.

Goss, K., Gilbert, P., & Allan, S. (1994). An exploration of shame measures: The other as shamer scale. *Personality and Individual Differences*, 17, 713-717.

- Gottfredson, M., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Grasmick, H., & Bursik, R. (1990). Conscience, significant others, and rational choice: Extending the deterrence model. *Law and Society Review, 24*, 837-861.
- Grasmick, H., Blackwell, B., & Bursik, R. (1993). Changes over time in gender differences in perceived risk of sanctions. *Law and Society Review, 27*, 679-705.
- Grasmick, H., Bursik, R., & Arneklev, B. (1993). Reduction in drunk driving as a response to increased threats of shame, embarrassment, and legal sanctions. *Criminology, 31*, 41-67.
- Green, A. E., Gesten, E. L., Greenwald, M.A., & Salcedo, O. (2008). Predicting delinquency in adolescence and young adulthood: A longitudinal analysis of early risk factors. *Youth Violence and Juvenile Justice, 6*, 323–342.
- Guerra, C., Ocaranza, C., & Weinberger, K. (2019). Searching for social support moderates the relationship between polyvictimization and externalizing symptoms: A brief report. *Journal of Interpersonal Violence, 34*(3), 653-663.
- Ha, O. K. (2016). Sex offending and low self-control: An extension and test of the general theory of crime. *Journal of Criminal Justice, 47*, 62-74.

- Hagan, J., Simpson, J., & Gillis, A. R. (1987). Class in the households: A power-control theory of gender and delinquency. *American Journal of Sociology*, 92, 788-816.
- Hay, C. (2001). An exploratory test of Braithwaite's reintegrative shaming theory. *Journal of Research in Crime and Delinquency*, 38, 132-153.
- Hay, C. (2003). Family strain, gender, and delinquency. *Sociological Perspectives*, 46, 107-135
- Hindelang, M., Hirschi, T., & Weis, J. (1981). Measuring delinquency. Beverly Hills, CA: Sage.
- Hoglund, C. L., & Nicholas, K. B. (1995). Shame, guilt, and anger in college students exposed to abusive family environments. *Journal of Family Violence*, 10, 141-157.
- Hudley, C. A. (1992). Attributions for pride, anger, and guilt among incarcerated adolescents. *Criminal Justice and Behavior*, 19, 189-205.
- Ingoglia, S., Coco, S., Liga, F., & Grazia Lo Cricchio, M. (2011). Emotional separation and detachment as two distinct dimensions of parent-adolescent relationships. *International Journal of Behavioral Development*, 35(3), 271-282.
- Jackson, A. L., Lucas, S. L., & Blackburn, A. G. (2009). Externalization and victim-blaming among a sample of incarcerated females. *Journal of Offender Rehabilitation*, 48(3), 228-248.

- Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior, 9*(5), 441-476.
- Jung, H., Herrenkohl, T. I., Lee, J. O., Hemphill, S. A., Heerde, J. A., & Skinner, M. L. (2017). Gendered pathways from child abuse to adult crime through internalizing and externalizing behaviors in childhood and adolescence. *Journal of Interpersonal Violence, 32*(18), 2724-2751.
- Kahn, A. P., & Fawcett, J. (1993). *The encyclopedia of mental health*. New York, NY: Facts on File Inc.
- Kaplan, H. (1975). *Self-attitudes and deviant behavior*. Pacific Palisades, CA: Goodyear.
- Kaplan, H., Martin, S. S., Johnson, R. J., & Robbins, C. A. (1986). Escalation of marijuana use: Application of a general theory of deviant behavior. *Journal of Health and Social Behavior, 27*, 44-61.
- Kaplan, H., Martin, S. S., and Robbins, C. A. (1982). Application of a general theory of deviant behavior: Self-derogation and adolescent drug use. *Journal of Health and Social Behavior, 23*, 274-294.
- Katz, J. (1988). *The seduction of crime: Moral and sensual attraction of doing evil*. New York: Basic Books.
- Katoomba, S., Markus, H. R., & Matsumoto, H. (1995). Culture, self, and emotion: A cultural perspective on self-conscious emotions. In J. P. Tangney and K. W. Fischer (Eds.), *Self-conscious emotions: The*

psychology of shame, guilt, embarrassment, and pride (pp. 439-464). New York: Guilford.

Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationship between social intelligence, empathy, and three types of aggression. *Aggressive Behavior, 25*, 81–89.

Keijsers, L., Frijns, T., Branje, S. J. T., & Meeus, W. (2009). Developmental Links of adolescent disclosure, parental solicitation, and control with delinquency: Moderation by parental support. *Developmental Psychology, 45*(5), 1314–1327. doi: 10.1037/a0016693

Keith, S., McClure, T., Vasquez, L., Reed, M., & May, D. (2015). How does gender identity affect the relationship between strain and negative emotions? *Sociological Spectrum, 35*(2), 179-206.

Kierkus, C. A., & Baer, D. (2002). A social control explanation of the relationship between family structure and delinquent behavior. *Canadian Journal of Criminology, 44*(4), 425–458.

Klein, H. (1992). Self-reported reasons for why students drink. *Journal of Alcohol and Drug Education, 37*, 14-28.

Lagattuta, K. H. and Thompson, R. A. (2007). The development of self-conscious emotions and their underlying appraisals. Pp. 91–113 in *The Self-Conscious Emotions*, edited by J. L. R. Tracy, R. W. Robins, and Tangney, June Price. New York, NY: Guilford Press.

- Laghi, F., Bianchi, D., Pompili, S., Lonigro, A., & Baiocco, R. (2019). Cognitive and affective empathy in binge drinking adolescents: Does empathy moderate the effect of self-efficacy in resisting peer pressure to drink? *Addictive Behaviors, 89*, 229-236.
- Lamborn, S.D., & Groh, K. (2009). A four-part model of autonomy during emerging adulthood: Associations with adjustment. *International Journal of Behavioral Development, 33*(5), 393–401.
- Lansky, M. R. (2005). Hidden shame. *Journal of the American Psychoanalytic Association, 53*, 865-890.
- Leadbeater, B. J., Kuperminc, G. P., Blatt, S. J., & Hertzog, C. (1999). A multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Developmental Psychology, 35*, 1268–1282.
- Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality, 66*, 1-37.
- Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities.
- Lewis, M. (1992). *Shame: The exposed self*. New York: Macmillan.
- Lewis, M. (1995). Embarrassment: The emotion of self-exposure and evaluation. In J. P. Tangney and K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 198-218). New York: Guilford.

- Lewis, M. (1991). Self-conscious emotions and the development of self. *Journal of the American Psychoanalytic Association, 39*, 45–73.
- Liu, X., & Kaplan, H. (1996). Gender-related differences in circumstances surrounding initiation and escalation of alcohol and other substance use/abuse. *Deviant Behavior, 17*, 71-106.
- Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing, 17*, 93-103.
- Lobel, T. (1993). Gender differences in adolescents' cheating behavior: An interactional model. *Personality and Individual Differences, 14*, 275-277.
- Loeber, R. (1982). The stability of antisocial and delinquent child behavior: A review. *Child Development, 53*, 1431-1446.
- Lutwak, N., & Ferrari, J. R. (1996). Moral affect and cognitive processes: Differentiating shame from guilt among men and women. *Personality and Individual Differences, 21*, 891-896.
- Mack, K. Y., Peck, J. H., & Leiber, M. J. (2015). The effects of family structure and family processes on externalizing and internalizing behaviors of male and female youth: A longitudinal examination. *Deviant Behavior, 36*(9), 740–764. doi: 10.1080/01639625.2014.977117
- Maxwell, S. R., Zepeda, A., & Rzotkiewicz, A. (2018). Peers, social control, or guilt? Self-conscious emotions as explanation for antisocial behavior. *Deviant Behavior, 39*(3), 322-332.

- Mehrabian, A. (1997). Relations among personality scales of aggression, violence, and empathy: Validation evidence. *Aggressive Behavior, 23*, 433-446.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525-544.
- Melton, H. C., & Belknap, J. (2003). He hits, she hits: Assessing gender differences and similarities in officially reported intimate partner violence. *Criminal Justice and Behavior, 30*, 328-348.
- McCabe, D., & Trevino, L. (1996). What we know about cheating in college: Longitudinal trends and recent developments. *Change, 28*, 28-33.
- Miller, R. S. (1995). Embarrassment and social behavior. In J. P. Tangney and K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 322-339). New York: Guilford.
- Moffitt, T. E. (1990). Juvenile delinquency and attention deficit disorder: Boys' developmental trajectories from age 3 to age 15. *Child Development, 61*, 893-910.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*, 674-701.
- Moses-Hrushovski, R. (1994). *Deployment: Hiding behind power struggles as a character defense*. Northvale, NJ: Jason Aronson, Inc.

- Nagin, D., & Paternoster, R. (1993). Enduring individual differences and rational choice theories of crime. *Law and Society Review, 27*, 467-496.
- Newsome, J., Boisvert, D., & Wright, J. P. (2014). Genetic and environmental influences on the co-occurrence of early academic achievement and externalizing behavior. *Journal of Criminal Justice, 42*(1), 45-54.
- Ngo, F.T., Paternoster, R., Cullen, F. T., & Mackenzie, D. L. (2011). Life domains and crime: A test of Agnew's general theory of crime and delinquency. *Journal of Criminal Justice, 39*(4), 302-311.
- Novacek, J., Raskin, R., & Hogan, R. (1991). Why do adolescents use drugs? Age, sex, and user differences. *Journal of Youth and Adolescence, 20*, 475-492.
- O'Leary-Barrett, M., Castellanos-Ryan, N., Pihl, R.O., & Conrod, P. (2016). Mechanisms of personality-targeted intervention effects on adolescent alcohol misuse, internalizing and externalizing symptoms. *Journal of Consulting & Clinical Psychology, 84*(5), 438-453.
- Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin, 86*, 852-875.
- Pace, U., Zappulla, C. (2013). Detachment from parents, problem behaviors, and the moderating role of parental support among Italian adolescents. *Journal of Family Issues, 34*(6), 768-784.

- Paternoster, R., & Simpson, S. (1993). A rational choice theory of corporate crime. In Clarke, R., & Felson, M. (Eds.), *Advances in Criminological Theory*, Volume 5 (pp. 37-58). New Brunswick, NJ: Transaction Press.
- Paternoster, R., & Simpson, S. (1996). Sanction threats and appeals to morality: Testing a rational choice model of corporate crime. *Law and Society Review*, 30, 378-399.
- Piers, G., & Singer, M. B. (1971). Shame and guilt. New York: Norton.
- Piquero, A., & Tibbetts, S. (1996). Specifying the direct and indirect effects of low self-control and situational factors in offenders' decision making: Toward a more complete model of rational offending. *Justice Quarterly*, 13, 481-510.
- Proyer, R. T., Platt, T., & Ruch, W. (2010). Self-conscious emotions and ridicule: Shameful gelotophobes and guilt free katagelasticians. *Personality and Individual Differences*, 49(1), 54-58.
- Quiles, Z. N., & Bybee, J. (1997). Chronic and predispositional guilt: Relations to mental health, prosocial behavior, and religiosity. *Journal of Personality Assessment*, 69, 104-126.
- Reef, J., Diamantopoulou, S., van Meurs, I., Verhulst, F., & van der Ende, J. (2009). Child to adult continuities of psychopathology: A 24-year follow-up. *Acta Psychiatrica Scandinavica*, 120(3), 230-238.

- Rhineberger-Dunn, G. M., & Carlson, S. (2011). An analysis of the mediating effects of social relations and controls on neighborhood crime victimization. *Western Criminology Review, 12*(1),15–34.
- Robins, L. N. (1978). Sturdy childhood predictors of adult antisocial behavior: Replications from longitudinal studies. *Psychological Medicine, 8*, 611-622.
- Robinson, M. B., & Zaitzow, B. H. (1999). Criminologists: Are we what we study? A national self-report study of crime experts. *The Criminologist, 24*, 1-17.
- Roos, S., Hodges, E. V. G., & Salmivalli, C. (2014). Do guilt- and shame-proneness differentially predict prosocial, aggressive, and withdrawn behaviors during early adolescence? *Developmental Psychology, 50*(3), 941–946. doi: <http://dx.doi.org/10.1037/a0033904>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Roys, D. T. (1997). Empirical and theoretical considerations of empathy in sex offenders. *International Journal of Offender Therapy and Comparative Criminology, 41*, 53-65.
- Sampson R.J., Laub J.H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Schalkwijk, F. (2015). *The conscience and self-conscious emotions in adolescence. An integrative approach*. Hove/New York: Routledge

- Schalkwijk, F., Stams, G. J., Stegge, H., Dekker, J., & Peen, J. (2016). The conscience as a regulatory function: Empathy, shame, pride, guilt, and moral orientation in delinquent adolescents. *International Journal of Offender Therapy & Comparative Criminology*, 60(6), 675-694.
- Searle, A. (1976). The perception of filmed violence by aggressive individuals with high or low self-concept of aggression. *European Journal of Psychology*, 6, 175-190.
- Selfhout, M. H., Branje, S. J., & Meeus, W. H. (2008). The development of delinquency and perceived friendship quality in adolescent best friendship dyads. *Journal of Abnormal Child Psychology*, 36(4), 471–485. doi: 10.1007/s10802-007-9193-5
- Shaw, D. (2014). *Traumatic narcissism: Relational systems of subjugation*. Hove, UK: Routledge.
- Sherwood, G. G. (1981). Self-serving biases in person perception: A re-examination. *Psychological Bulletin*, 90, 445-459.
- Shields, I. W., & Whitehall, G. C. (1991). The Pride in Delinquency scale. Paper presented at the eastern Ontario correctional psychologists' winter conference, Burritts Rapids, Canada.
- Shiner R.L., Masten, A.S., Roberts, J.M. (2003). Childhood personality foreshadows adult personality and life outcomes two decades later. *Journal of Personality*, 71(6), 1145-1170.

- Silver, E., & Miller L. L. (2004). Sources of informal social control in Chicago neighborhoods. *Criminology*, 42(3), 551–583.
- Simonoff, E., Elander, J., Holmshaw, J., Pickles, A., Murray, R., & Rutter, M. (2004). Predictors of antisocial personality: Continuities from childhood to adult life. *British Journal of Psychiatry*, 184, 118–127.
- Simourd, D. J. (1997). The criminal sentiments scale-modified and pride in delinquency scale: Psychometric properties and construct validity of two measures of criminal attitudes. *Criminal Justice and Behavior*, 24, 52-70.
- Simpson, S. (1989). Feminist theory, crime and justice. *Criminology*, 27, 605-632.
- Singer, T. (2006). The neuronal basis and ontogeny of empathy and mind reading: review of literature and implications for future research. *Neuroscience and Biobehavioral Reviews*, 30(6), 855-863.
- Smith, D. (1979). Sex and deviance: An assessment of major sociological variables. *Sociological Quarterly*, 20, 183-195.
- Smith, D., & Paternoster, R. (1987). The gender gap in theories of deviance: Issues and evidence. *Journal of Research in Crime and Delinquency*, 24, 140-72.
- Spivak, A. L., Fukushima, M., Kelley, M. S., & Sanford Jenson, T. (2011). Religiosity, delinquency, and the deterrent effects of informal sanctions. *Deviant Behavior*, 32(8), 677–711. doi: 10.1080/ 01639625.2010.514211

- Spruit, A., Schalkwijk, F., Van Vugt, E., & Stams G. J. (2016). The relation between self-conscious emotions and delinquency: A meta-analysis. *Aggression and Violent Behavior, 28*, 12-20.
- Stams, G. J., Brugman, D., Dekovic, M., van Rosmalen, L., van der Laan, P., & Gibbs, J. J. (2006). The moral judgment of juvenile delinquents: A meta-analysis. *Journal of Abnormal Child Psychology, 34*, 697-713.
- Stannard, C., & Bowers, W. (1970). The college fraternity as an opportunity structure for meeting academic demands. *Social Problems, 17*, 371-390.
- Stipek, D. (1995). The development of pride and shame in toddlers. In J. P. Tangney and K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 237-252). New York: Guilford.
- Stone, E. M. (1988). *American Psychiatric Glossary*. 6th ed. Washington, DC: American Psychiatric Press, Inc.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review, 22*, 664-670.
- Szycer, D. (2019). Forms and Functions of the Self-Conscious Emotions. *Trends in Cognitive Sciences, 23*(2), 143-158.
- Tangney, J. P. (1989). Shame-proneness, guilt-proneness, and interpersonal processes. Paper presented at the annual meeting of the Society for Research in Child Development, Kansas City, KS.

- Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the self-conscious affect and attribution inventory. *Journal of Personality and Social Psychology, 59*, 102-111.
- Tangney, J. P. (1995). Shame and guilt in interpersonal relationships. In Tangney, J. P., & Fischer, K. W. (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 114-139). New York: Guilford Press.
- Tangney, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behavioral Research Therapy, 34*, 741-754.
- Tangney, J. P. (2004 [February 6]) Personal communication via e-mail.
- Tangney, J. P., Burggraf, S., & Wagner, P. (1995). Shame-proneness, guilt-proneness, and psychological symptoms. In Tangney, J. P., & Fischer, K. W. (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 343-367). New York: Guilford Press.
- Tangney, J. P., & Fischer, K. W. (1995). *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: Guilford Press.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 6*, 1256-1269.
- Tangney, J. P., Wagner, P. E., Barlow, D., Marschall, D., & Gramzow, R. (1996). The relation between shame and guilt to constructive vs. destructive

- responses to anger across the lifespan. *Journal of Personality and Social Psychology*, 70, 797-809.
- Tangney, J. P., Wagner, P. E., Gavlas, J., & Gramzow, R. (1991). The test of self-conscious affect for adolescents (TOSCA-A). Fairfax, VA: George Mason University.
- Tangney, J. P., Wagner, P. E., & Gramzow, R. (1989). The test of self-conscious affect. Fairfax, VA: George Mason University.
- Tangney, J. P., Wagner, P. E., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, 103, 469-478.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345-372.
- Tangney, J. P., Stuewig, J., & Martinez, A. G. (2014). Two faces of shame: The roles of shame and guilt in predicting recidivism. *Psychological Science*, 25(3), 799–805. doi: 10.1177/0956797613508790
- Tibbetts, S. G. (1997). Shame and rational choice in offending decisions. *Criminal Justice and Behavior*, 24, 234-255.
- Tibbetts, S. G. (2003). Self-conscious emotions and criminal offending. *Psychological Reports*, 93, 101-126.
- Tibbetts, S. G., & Herz, D. (1996). Gender differences in factors of social control and rational choice. *Deviant Behavior*, 17, 183-208.

- Van Langen, M. A. M., Wissink, I. B., van Vugt, E. S., Van der Stouwe, T., & Stams, G. J. J. M. (2014). The relation between empathy and offending: A meta-analysis. *Aggression and Violent Behavior, 19*, 179-189.
- van Lier, P. A. C., Huizink, A., & Crijnen, A. (2009). Impact of a preventive intervention targeting childhood disruptive behavior problems on tobacco and alcohol initiation from age 10 to 13 years. *Drug and Alcohol Dependence, 100*, 228 –233.
- Walsh, A. (2002). *Biosocial Criminology: Introduction and Integration*. Cincinnati, OH: Anderson.
- Walsh, A., & Ellis, L. (1999). Political ideology and American criminologists' explanations for criminal behavior. *The Criminologist, 24*, 1 & 14.
- Walter, H. (2012). Social cognitive neuroscience of empathy: concepts, circuits, and genes. *Emotion Review, 4* (1), 9-17.
- Walters, G. D. (2014). Sex as a moderator and perceived peer pressure as a mediator of the externalizing-delinquency relationship: A test of gendered pathways theory. *Journal of Criminal Justice, 42*(3), 299-306.
- Widiger, T. A., & Lynam, D. R. (1998). Psychopathy and the five-factor model of personality. In T. Millon, E. Simonsen, M. Birket-Smith, & R. D. Davis (Eds.), *Psychopathy: Antisocial, criminal and violent behavior* (pp. 171-187). New York: Guildford Press.
- Wechsler, H., Dowdall, G. W., Maenner, G., Gledhill-Hoyt, J., & Lee, H. (1998). Changes in binge drinking and related problems among American college

- students between 1993 and 1997. *The Journal of American College Health, 47*, 57-68.
- White, J. L., Moffitt, T. E., Earls, F., Robins, L., Silva, P. A. (1990). How early can we tell?: Predictors of childhood conduct disorder and adolescent delinquency. *Criminology, 28*, 507-535.
- Whitley, B., Nelson, A. B., & Jones, S. (1999). Gender differences in cheating attitudes and classroom cheating behavior: A meta-analysis. *Sex Roles, 41*, 657-681.
- Williams, K. R., & Hawkins, R. (1986). Perceptual research on general deterrence: A critical review. *Law and Society Review, 20*, 545-561.
- Wortley, R. (1996). Guilt, shame and situational crime prevention. In Homel, R. (Ed.), *The politics and practice of situational crime prevention* (pp. 115-132). New York: Criminal Justice Press.
- Wright, B., Caspi, A., Moffitt, T., & Silva, P. (1999). Low self-control, social bonds, and crime: Social causation, social selection, or both? *Criminology, 37*, 479-514.
- Zahn-Waxler, C., & Robinson, J. (1995). Empathy and guilt: Early origins of feelings of responsibility. In Tangney, J. P., & Fischer, K. W. (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 143-173). New York: Guilford Press.
- Zimmerman, G. M., Botchkovar, E.V., Antonaccio, O., & Hughes, L. A. (2015). Low self-control in "bad" neighborhoods: Assessing the role of context on

the relationship between self-control and crime. *JQ: Justice Quarterly*, 32(1), 56-85.