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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

SHAME, AGGRESSION, AND SELF-COMPASSION
IN AT-RISK ADOLESCENTS

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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College of Education and Behavioral Sciences
Department of Applied Psychology and Counselor Education
Counseling Psychology

August 2018

This Dissertation by: Sara Ashline Hofmann

Entitled: *Shame, Aggression, and Self-Compassion in At-Risk Adolescents*

Has been approved as meeting the requirement for the Degree of Doctor of Philosophy in
College of Education and Behavioral Sciences in Department of Applied Psychology and
Counselor Education, Program of Counseling Psychology

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ABSTRACT

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Prior research has identified a strong link between experiences of shame and aggressive behavior in at-risk and offender populations but the mechanisms of this relationship are unclear. One potential interrupter of this relationship is self-compassion, a teachable emotional regulation skill. The purpose of this study was to investigate whether nonoffender at-risk youth differed significantly in levels of self-compassion, shame, and aggression from nonviolent offender and violent offender youth with the goal of evaluating these relationships to aid in the future development of more tailored and effective interventions for court-involved youth. One hundred and six at-risk adolescents in the Rocky Mountain region completed self-report questionnaires on experiences of shame, aggression, self-compassion, and criminal history. Multivariate analysis revealed main effects of gender in experiences of shame and main effects of offender status on all measures. These findings highlighted the importance of tailoring treatment for young offenders by specific characteristics such as offense type and gender in order to reach maximum efficiency. Other implications of these findings for clinical work and further research were also discussed.

Keywords: shame, aggression, self-compassion, juvenile offender, youth offender, at-risk, adolescent

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CHAPTER I

INTRODUCTION

Juvenile offenders, defined as individuals less than 18 years of age who have committed a criminal violation, are a small but noteworthy segment of the American adolescent population. Juvenile offenders account for approximately two million annual arrests, an estimated 16% of all violent crime arrests, and 25% of all property crime arrests (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2013). While the overall juvenile arrest rate has been steadily dropping since 1997 (Sickmund & Puzzanchera, 2014), on average, over 70,000 youthful offenders are still held in juvenile residential facilities across the United States in a typical year (OJJDP, 2013). Each offense results in substantial tangible and intangible costs to offenders and victims as well as the larger society. Chronic offending results in additive long-term costs via ongoing intervention, extended juvenile incarceration, future costs of adult offending, and multiple other expenses (Kennedy, Burnett, & Edmonds, 2011; Lai, Zeng, & Chu, 2015; McCollister, French, & Fang, 2010; Sickmund & Puzzanchera, 2014).

Youth offending often results in higher societal costs over time as a larger proportion of the lives of chronic offenders is spent in expensive residential and incarceration settings paid for by government sources. In specific financial terms, one research team estimated that for every youth who does not become a chronic offender,

taxpayers save an estimated five million dollars (McCollister et al., 2010). Youth crime is an expensive and persistent social issue that requires immediate attention and action.

Prior research has identified a group of relatively fixed factors that appear to be related to juvenile crime including genetic influences (Beaver, 2008); intelligence (Donnellan, Ge, & Wenk, 2000; Vermeiren, De Clippele, Schwab-Stone, Ruchkin, & Deboutte, 2002); parental factors such as prenatal smoking, parental marital status, and parental education (Green, Gesten, Greenwald, & Salcedo, 2008); and living in a low-income neighborhood (Jones & Lynam, 2009). Other research suggested relationships between specific life experiences and juvenile delinquency such as past trauma (Bruce & Waelde, 2008), negative family environmental factors such as high-conflict family interactions or family violence (Burt, Barnes, McGue, & Iacono, 2008; Kim & Kim, 2008) as well as changes in neurological structure in response to exposure to violence that are also correlated with delinquency (Morley, 2015; Yang & Raine, 2009). While prior research identified a variety of elements related to juvenile crime, the impacts of other related factors such as socioeconomic status are likely confounded with these areas of study.

A vast body of prior research and intervention in the fields of psychology, social work, medicine, and public health has explored potential methods to impact factors related to juvenile crime rates and has documented the effects of targeted treatment in areas of risk that might respond to intervention such as family interactions. These efforts are ongoing but researchers have recently begun to look more closely at person-based factors that might be targets for intervention with juvenile offenders who have already been negatively affected by risk factors. Although service providers cannot retroactively

prevent young offenders from experiencing adversity, person-based factors such as skills, beliefs, and attitudes might be taught and/or modified to help individuals demonstrate better coping strategies both at the present and in the future and to make behavioral choices that result in more positive outcomes for themselves and those in their environments. Person-based factors might also help reduce symptoms of a variety of mental health conditions that can pose significant problems within juvenile offender populations. In fact, researchers estimate as many as 65 to 75% of youthful offenders have one or more diagnosable psychiatric disorders (Ruchkin, Koposov, Vermeiren, & Schwab-Stone, 2003; 't Hart-Kerkhoffs et al., 2015; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Thus, juvenile offenders are likely to enter the legal system with clear and present mental health needs; any benefit from services during their involvement could potentially continue to positively impact behavior and well-being in multiple ways after their sentence ends. These improvements would also theoretically result in a falling recidivism rate, which could reduce the societal financial burden of incarceration, reduce the number of victims of juvenile crime, and increase the probability that juvenile offenders could live healthy, productive lives without criminal involvement.

Offender Subtypes

Like adult offenders, juvenile offenders can be divided into offense-type subgroups that vary significantly across a wide range of factors. Research studies with offender populations typically use the presence of a violent offense as the main criterion for group assignment with one or more violent arrests indicating membership in the “violent offender” group and the lack of violent arrests indicating membership in the

“nonviolent offender” group (Barry, Loflin, & Doucette, 2015; Kennedy et al., 2011). A smaller number of studies also included a grouping of juveniles who had committed both nonviolent and nonviolent offenses, termed *violent plus* (Lai et al., 2015), who were classified and studied separately from strictly violent offenders. In general, violent offenders showed more serious offenses (i.e., felony vs. misdemeanor convictions) and higher rates of recidivism than nonviolent offenders (Baglivio, Wolff, Jackowski, & Greenwald, 2017; Mulder, Vermunt, Brand, Bullens, & Marle, 2012) and were more likely to use substances than their nonviolent counterparts (Vaughn, Salas-Wright, DeLisi, & Maynard, 2014). Violent offenders were also more likely to report lower levels of self-control than nonviolent offenders or nonoffenders (Piquero, MacDonald, Dobrin, Daigle, & Cullen, 2005; Pratt & Cullen, 2006), a finding which has been replicated in adult as well as juvenile samples (Vaughn, DeLisi, Beaver, Wright, & Howard, 2007). Violent juvenile offenders also reported lower levels of social connectedness (Sampson & Laub, 1992; Taylor, Loney, Bobadilla, Iacono, & McGue, 2003) and a stronger sense of personal inadequacy (Kennedy et al., 2011). Finally, violent juvenile offending also seemed to be linked to self-esteem, though not in a consistent fashion. Individuals reporting low levels of self-esteem were more likely to commit violent offenses overall but, in some circumstances, those reporting high levels of self-esteem were also likely to commit violent acts (Schalkwijk, Stams, Stegge, Dekker, & Peen, 2016). In a 2015 study by Barry et al., aggression scores for at-risk adolescent male respondents were significantly correlated with low self-esteem scores but also with high self-esteem scores for individuals who also endorsed grandiose narcissism. In their discussion, the authors speculated that in situations involving ego threat, the fragile self-

esteem of more grandiose individuals was threatened and they were likely to respond with violence.

The experience of shame is likely to draw upon many of the identified factors related to violent offenses: challenges to self-esteem, threats to already poor social connections, and feelings of personal inadequacy. Shame has been consistently linked to aggressive behavior in juvenile offenders as well as many other populations (Dearing & Tangney, 2011; Scheff, 1987; Tangney & Dearing, 2002; Velotti, Elison, & Garofalo, 2014) but the mechanism behind that relationship is not as clear. One promising line of research might be the concept of self-compassion, which is a teachable, person-based skill for emotional regulation that could address many of the cognitive and behavioral correlates of aggression and more general delinquent behavior. Because of differences among types of juvenile offenders, however, effective self-compassion interventions will likely require different structure and presentation for each well-defined group of offenders.

Theoretical Framework

Shame, along with guilt, pride, and embarrassment, is typically classified within the family of self-conscious emotions, which is generally defined as those emotions that arise from evaluations of the self and one's actions (Tangney, 1996). Feelings of shame are usually elicited when "an individual realizes that he or she has committed an offense or violated a standard that is held to be important" (Dearing & Tangney, 2011, p. 11) and this realization is combined with a cognitive evaluation of the self as fundamentally flawed (Tangney & Tracy, 2012). Prior research has linked feelings of shame to specific negative psychological states such as depression and anxiety (Kim, Thibodeau, &

Jorgensen, 2011; Orth, Berking, & Burkhardt, 2006) as well as more general psychological maladjustment (Dearing & Tangney, 2011; Tangney & Dearing, 2002; Tangney, Wagner, & Gramzow, 1992).

Shame experiences, while deeply unpleasant, serve multiple social functions. In large and small social groups, the major function of shame is to manage social relationships and maintain access to multiple types of interpersonal and practical resources (Fessler, 2007). Using this premise, Scheff (1994) posited that feelings of shame serve as an internal cue that an individual's social bonds and group membership are under threat. Armed with that knowledge, an individual can adjust behavior to avoid shame or, if shame has already occurred, withdraw from the group temporarily to mitigate the negative effects of the shameful behavior. In this way, the experiences of anticipated and actual shame help maintain standards for conduct within a social group.

Social mentality theory (Gilbert, 1989; Gilbert & Irons, 2005) offers a more complex look at the function of shame. This theory suggests that over time, human beings have evolved many social behaviors and roles to develop socially complex and interdependent societies. Via membership in a social group, individuals create strong social bonds with other members but those bonds are malleable and fluid. Following group norms for behavior increases an individual's chances of maintaining physical and psychological safety and gaining access to resources while breaking norms puts the individual at risk of losing the benefits of group membership. Therefore, group members continually seek the acceptance of others to avoid conditions such as rejection, isolation, and shame that might result in damage to social bonds or, in extreme cases, losing access

to tangible and non-tangible group resources (Gilbert, 1989; Wolfe, Lennox, & Cutler, 1986).

In light of possible negative consequences, it becomes essential for individuals to maintain relationships and follow group norms. Social mentality theory asserts these goals are behaviorally represented by five *mentalties* defined as “organizing systems that choreograph motive, emotions, thoughts, and behaviors” (Gilbert & Irons, 2005, p. 325): care eliciting, caregiving, formation of alliances, social ranking, and sexuality. *Social ranking* (forming and maintaining relationships that influence social rank and access to resources) is the mentality most closely related to the concept of shame. Shame is a direct reflection of one’s view of social rank and acceptance; it is an emotional response to beliefs about social acceptance, social ranking, and attractiveness to others (Gilbert, 2007; Velotti et al., 2014).

However, shame is not just a feeling--shame also drives behavior. Gilbert and Irons (2005) suggested social approval is the largest and most influential motivating force behind human behavior because lack of approval threatens an individual’s basic human need to belong (Baumeister & Leary, 1995; DeWall & Bushman, 2011; Velotti et al., 2014). Individuals respond to actual or perceived threats to belonging in multiple ways using specific shame-regulation strategies. Nathanson (1992) organized various well-studied methods of shame coping into four families of scripts used to manage shame: withdrawal, avoidance, attack self, and/or attack others. The more passive styles of withdrawal and avoidance are commonly and effectively used in small doses for effective coping and making space for emotions to cool and coping mechanisms to kick in but can be detrimental when used in the extreme. The other two groups of regulation styles

outlined by Nathanson are more active. People using the *attack self* style of coping are likely to feel helpless and isolated by shame and psychologically or physically attack themselves to atone for shameful behavior (Elison, Pulos, & Lennon, 2006; Nathanson, 1992). Used sparingly, this regulation strategy is a valued social response to shame--demonstrating humility. In its more intense forms though (i.e., self-denigration or groveling), this style reduces respect from others, diminishing social rank and stressing social bonds. In the fourth shame regulation group, *attack others*, potential threats to social rank (signaled by shame) are the impetus for aggressive behavior. Nathanson theorized individuals using this method react intensely to feelings of devaluation in the shame experience. These individuals are least able to tolerate cognitive perceptions of inferiority and feelings of shame and attempt to manage those experiences through silencing perceived attackers and/or thwarting the distressing cognitions and feelings by asserting dominance over others (Elison et al., 2006).

Shame and Aggressive Behavior

H.B. Lewis published the first link between shame and aggression in 1971 using the term “humiliated fury” to denote anger and aggression generated by shame experiences. Since that point, extensive empirical research has documented a strong relationship between shame and anger with aggression identified as a common behavioral correlate of shame-based anger (see Dearing & Tangney, 2011; Hejdenberg & Andrews, 2011; Scheff, 1987; Tangney & Dearing, 2002; Velotti et al., 2014). One major study in this area of research summed up the relationship among shame, anger, and aggression in this way:

When experiencing shame, people evaluate the self as worthless, defective, and inferior. Feeling powerless and in pain, shamed individuals may become angry, blame others, and aggressively lash out in an attempt to regain a sense of agency and control. (Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010, p. 92)

Shame can be conceptualized as occurring at individual, micro, and macro “manifestations of humiliation” that interact in often unpredictable ways (Hartling & Lindner, 2017, p. 705). While the relationship between feelings of shame and hostile or aggressive behavior is well-established, the actual mechanisms of the relationship are not as clear (Stuewig et al., 2010). In an early influential study, Tangney, Wagner, Hill-Barlow, Marschall, and Gramzow (1996) found positive correlations between shame-proneness and physical aggression in samples of adults, adolescents, and children (but not college students) and found positive correlations between shame-proneness and verbal aggression for all four participant groups. More recently, Robinson, Roberts, Strayer, and Koopman (2007) found the particular experience of shame, as opposed to more general antisocial attitudes, was significantly related to both verbal and physical aggression. Stuewig et al. (2010) theorized, “Negative feelings of shame should lead to externalization of blame, which in turn should lead to higher levels of verbal and physical aggression” (p. 93), and their empirical investigation supported this hypothesized link. Their findings suggested individuals high in shame-proneness were more likely to blame others for shame events and uncomfortable feelings, leading to a greater propensity for verbal and physical aggression toward others.

Shame and Culture

Although the majority of research on shame has been conducted in Western (meaning North American and Western European) societies, research in other cultures suggested the conceptualization and manifestation of shame vary significantly in other parts of the world. Beliefs specific to a culture, or *ethnotheories*, provide perspective and guidelines for socially acceptable reactions in response to specific actions of members of the culture (Lutz & White, 1986). Variations in ethnotheories across cultures can help to explain the wide differences in reactions to events that might produce feelings of shame and/or guilt in the West but a very different consequence in another society. Acceptable shame reactions in Western societies rely on three major assumptions: there exists some type of individual self that is not merged with the collective society; values and structure of the independent self are not necessarily reflected in the individual's actions; and being negatively evaluated by self or others is in itself a negative event (Wong & Tsai, 2007). Using this framework, shame becomes a negative and isolating experience that should be fixed and forgotten as soon as possible (Sheikh, 2014; Simon, 2005). In more collectivist cultures, though, shame is still a negative experience but it is also widely conceptualized as an opportunity to make interpersonal amends, strengthen relationships, and learn valuable coping skills for negative experiences (Brown, González, Zagefka, Manzi, & Cehajic, 2008; Fung, 1999; Furukawa, Tangney, & Higashibara, 2012).

Shame and Aggressive Behavior in Incarcerated Populations

As part of a larger review of literature related to shame and aggression, Tangney, Stuewig, Mashek, and Hastings (2011) noted shame appeared to also serve as a warning of social threat among incarcerated individuals but produced significantly different

patterns of response to feelings of shame. In incarcerated populations, the rate of aggressive response to shame far exceeded that of a community sample. In a related review, Tangney, Stuewig, and Hafez (2011) found strong empirical support for a link between shame and a wide range of criminal behaviors. In their 2012 article, Schoenleber and Berenbaum argued that shame plays a central role in the development and maintenance of more aggressive personality pathologies such as narcissistic and antisocial personality disorders, which are represented among incarcerated populations at a much higher rate than the general population.

Available published studies conducted with criminally involved individuals also suggested a robust relationship between shame and aggression among members of this population. Wright, Gudjonsson, and Young (2008) found that for adult inmates, offense-related shame feelings were positively correlated with increased difficulty in the regulation of negative emotion, especially anger. Another study (Shanahan, Jones, & Thomas-Peter, 2011) reported high levels of both nonviolent and violent maladaptive shame coping in a sample of adults incarcerated for violent offenses. Using both inmate and community adolescent samples, Robinson et al. (2007) found shame-proneness was positively related to anger and aggression in both samples but the relationship was stronger for the inmate sample. A seminal longitudinal study (Hosser, Windzio, & Greve, 2008) also indicated inmates' increased shame ratings predicted higher post-release recidivism rates over a period of six years, suggesting intense shame experiences without accompanying coping skills were related to aggression and criminality across longer periods of time.

While Tangney and Dearing (2002) claimed the purposes and behavioral results of shame are generally similar in child, adult, community, and inmate samples, limited empirical evidence thus far supports that claim as related to juvenile offenders. Shame studies in clinical and non-clinical child populations have found significant differences in shame by gender (Else-Quest, Higgins, Allison, & Morton, 2012), mimicking results with adult samples, and have also linked shame to externalizing behavior and aggression, just as in adult samples (Ferguson, Stegge, Miller, & Olsen, 1999; Paulhus, Robins, Trzesniewski, & Tracy, 2004; Stuewig et al., 2010; Tangney et al., 1996) so it is reasonable to hypothesize these patterns are also likely to hold true with juvenile offender samples. One recent longitudinal study (Stuewig, Tangney, Kendall, Folk, Meyer, & Dearing, 2015) provided support for this prediction, linking early shame-proneness to later risky and illegal behavior. However, this premise was by no means universally supported by all results with children and adolescents (see Schalkwijk et al., 2016; Stuewig & McCloskey, 2005; Stuewig et al., 2010; and Van Tijen, Stegge, Meerum Tergwot, & Van Panhuis, 2004 for examples of other result patterns).

Because juvenile offenders are both developmentally different from adults and evidence atypical behavior as compared to their age peers, it is unclear to what extent prior findings would extend to this population. Exceptionally limited available research in this area pointed to a strong link between shame and aggression in this population as in others (Robinson et al., 2007; Stuewig & McCloskey, 2005; Thomaes, Stegge, Olthof, Bushman, & Nezlek, 2011) but suggested a much more extreme effect of gender (Aslund, Starrin, Leppert, & Nilsson, 2009) within juvenile offender populations. However, one recent study (Hornsveld et al., 2018) found no significant difference in aggression

between male and female violent offenders. Additionally, one study using a different measurement but a similar concept found scores related to an individual's sense of inadequacy helped predict offender type in a sample of young offenders, suggesting feelings of shame might play a role in the type of criminal activity in which a young person engages (Kennedy et al., 2011).

Although theoretically germane, the concept of shame has not been widely empirically investigated within the population of young offenders. Like other child and adult populations, the relationship between shame and aggression is probably not direct in juvenile offenders and might be moderated by other factors (Muris & Meesters, 2014). Due to its potential effect on aggressive behavior, self-compassion emerged as an ideal area of study and a potentially important target for intervention within this population.

Self-Compassion

Many researchers have recently published calls to move psychological research in a more strengths-based and preventative direction (Kewley, 2017; Polaschek, 2017) and the concept of self-compassion emerged as a natural fit for this adjustment in perspective. Self-compassion has been a key component of Eastern philosophy for centuries, originating in Buddhist texts and meditation practices (Neff, 2003b). Self-compassion is generally defined as follows:

Self-compassion involves being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering nonjudgmental understanding to one's pain, inadequacies, and failures,

so that one's experience is seen as part of the larger human experience. (Neff, 2003b, p. 87)

This conceptualization of self-compassion involves three components, each with two contrasting poles that overlap and mutually interact: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification (Neff, 2003a, 2003b). Self-compassion is an active, engaged strategy for understanding suffering (including shame-based suffering) and coping with suffering or pain effectively. As opposed to avoidant strategies, self-compassion involves “being *more* willing to experience difficult feelings and to acknowledge them as valid and important” (Neff, 2015, p. 59).

The aim of self-compassion is to actively alleviate suffering by using mindfulness strategies to detach from the emotionally immersive experience of suffering, fight feelings of isolation by reconnecting with a sense of common humanity, and manage negative feelings effectively by offering kindness and comfort to oneself. During the experience of shame, which challenges valuations of self and feelings of belongingness, self-compassion offers individuals an opportunity to provide empathy and soothing to themselves and protect against the potentially damaging effects of shame (Bluth & Blanton, 2014; Neff, 2003b; Neff & McGehee, 2010). The mindfulness component of self-compassion allows for emotional detachment from the experience of suffering and creates an opportunity to use more active coping strategies such as self-kindness. In turn, self-kindness increases self-acceptance and decreases emotional reactivity, giving the individual more control over his or her emotional and behavioral reactions and potentially reducing aggressive behavior toward self and others (Jativa & Cerezo, 2014).

Self-compassion has been empirically linked to a wide range of biological and psychological phenomena (Kirby, Tellegen, & Steindl, 2017). Prior studies have found self-compassion is positively associated with higher levels of happiness, optimism, general positive affect, contentedness, wisdom, and adaptive coping (Allen & Leary, 2010; Hollis-Walker & Colosimo, 2011; Neff, Hsieh, & Dejittthirat, 2005; Neff, Kirkpatrick, & Rude, 2007); self-determination (Neff, 2011); emotional intelligence (Neff, 2003b); effective emotional regulation (Dundas, Binder, Hansen, & Stige, 2017; Jazaieri et al., 2017); and greater life satisfaction (Allen & Leary, 2010). Self-compassion also appears to have a positive effect on those in the larger social world. Individuals higher in self-compassion report more empathy toward others, forgiveness, and altruism (Neff & Pommier, 2013) and appear to have better functioning in interpersonal relationships (Neff & Beretvas, 2012; Yarnell & Neff, 2013), findings that have specific relevance to aggressive behavior. Self-compassion has also been inversely linked to a variety of interpersonal and intrapersonal mental health concerns such as interpersonal cognitive distortions (Akin, 2011) and self-criticism (Neff, 2003b). Higher levels of self-compassion are also consistently associated with lower levels of depression, anxiety, and stress, with two recent meta-analyses reporting large effect sizes for the negative relationship among self-compassion and depression, anxiety, and stress (MacBeth & Gumley, 2012; Marsh, Chan, & MacBeth, 2017). Biological studies of the effect of self-compassion on threat arousal also support its effectiveness as a helpful coping strategy; higher self-compassion scores were linked to a lower hormonal stress response in both acute and chronic stress conditions (Breines et al., 2015; Breines,

Thoma, Gianferante, Hanlin, & Chen, 2014) and lower heart rate variability (Matos et al., 2017).

Social mentality theory also positions self-compassion as an effective tool for emotional self-regulation. Gilbert and Irons (2005) asserted social threats often result in physical arousal in response to the threat, arousal which is not alleviated by passive coping strategies such as avoidance that do not address the perceived threat. However, as an active coping strategy, self-compassion is theorized to activate a biological self-soothing system that improves emotional control, effective coping, and the ability to experience feelings of intimacy (Gilbert & Procter, 2006). As this oxytocin-opiate pathway triggers, the individual experiences feelings of safety and security that resemble reported feelings of calmness and safety reported in studies of self-compassion (Gilbert, 1989; Gilbert & Irons, 2005; Gilbert & Procter, 2006; Zeller, Yuval, Nitzan-Assayag, & Bernstein, 2015).

Based on the growing body of evidence in both psychological and biological realms, it appears self-compassion is likely a viable process for individuals to effectively manage stress and other negative experiences such as shame. Research suggested feelings of safety, soothing, and comfort often created via receiving comfort from others could also be reliably reproduced at will through self-compassion instead of requiring another individual to provide comfort at the necessary time to experience benefit. Therefore, “self-compassion may be particularly useful in circumstances involving social evaluative threat, i.e., situations in which an aspect of one’s self is at risk of being judged negatively” (Finlay-Jones, Rees, & Kane, 2015, p. 2). Since a defining characteristic of shame experiences is judgment or rejection from others, self-compassion would offer an

effective coping tool precisely at the time when comfort from others is least likely to be offered. Individuals experiencing shame could offer themselves comfort and soothing, reaping the same benefits but from a reliable, self-based source. In this way, self-compassion could potentially function as an effective coping skill for shame and other negative emotions usable at any time and during any situation.

Study Rationale and Purpose

Shame is a universal human experience that, in Western societies, often leads to rejection, isolation, and maladaptive shame coping (Nathanson, 1992; Tangney & Dearing, 2002; Tangney & Tracy, 2012; Velotti et al., 2014). Prior research has tied the experience of shame to a host of negative psychological sequelae including depression and anxiety (Kim et al., 2011; Orth et al., 2006) as well as more general psychopathology (Dearing & Tangney, 2011; Tangney & Dearing, 2002; Tangney et al., 1992). An extensive body of research also supported a link between shame experiences and aggressive behavior but the mechanisms of that link were not clear (Stuewig et al., 2010). However, a clear understanding of those mechanisms is essential to identify potential targets for effective intervention with violent offenders and others who regularly use violence as a coping tool for shame (Velotti et al., 2014). Current research on the link between shame and aggression appears to focus on externalization of blame along with narcissism (Thomaes, Bushman, Stegge, & Olthof, 2008; Thomaes et al., 2011) and social status (Aslund, Starrin, Leppert, & Nilsson, 2009). However, the investigation of the role of these concepts in aggressive behavior is in its early stages and research published thus far has been by no means conclusive. Additionally, these avenues of exploration focused on mechanisms that likely fueled the expression of aggression rather

than concepts that might decrease or eliminate the use of aggression as a response to shame. This second approach might prove to be more useful in the development of effective interventions for individuals such as juvenile offenders who commonly use aggression as a response to shame experiences (Velotti et al., 2014).

Using this more positive framework, the current study focused on the possible utility of the previously unexplored concept of self-compassion, which might offer an alternative emotion regulation approach for individuals who more typically use aggression as a shame-coping strategy. Given its many positive psychological and biological associations for a wide variety of populations, self-compassion appears to be an important component of individual resilience and overall well-being. Specifically, high self-compassion might function as a buffer against the effects of shame, trauma, and other adverse experiences and might be “particularly useful in circumstances involving social evaluative threat, i.e., situations in which an aspect of one’s self is at risk of being judged negatively” (Finlay-Jones et al., 2015, p. 2). Prior research suggested self-compassion skills could be increased in a wide range of clients through intervention, setting up an ideal opportunity for clinicians and other service providers to incorporate self-compassion as an effective treatment component for a variety of psychopathologies. The improvement of self-compassion skills would likely be an important target for intervention in programs designed to address emotional distress, maladaptive or harmful coping strategies, and other psychological maladjustments (Boellinghaus, Jones, & Hutton, 2013; Finlay-Jones et al., 2015; Newsome, Waldo, & Gruszka, 2012; Satici, Uysal, & Akin, 2015; Stafford-Brown & Pakenham, 2012).

In addition, self-compassion is likely to be a particularly salient topic for adolescents. During this period, typically developing adolescents become increasingly self-conscious about their successes and failures and integrate those perceptions into emerging self-appraisal schemas (Barry et al., 2015). Therefore, the extent to which an adolescent holds self-compassionate views likely affects both intrapersonal coping and interpersonal relationships in this stage and across the lifespan.

Theoretically, several authors (Elison et al., 2006; Nathanson, 1992; Velotti et al., 2014) have argued that in many cases, aggressive behavior might be better understood as a reaction to shame but empirical support for this hypothesis within actual aggressive samples (i.e. incarcerated populations) has been sorely lacking. Additionally, no previous empirical work has been published that investigates the relationship among shame, self-compassion, and aggression in offenders of any age. Juvenile offenders presented an ideal population for study in this area because of their status as offenders as well as their age. As a group, adolescents have reported the highest levels of negative self-evaluation across the lifespan (Muris & Meesters, 2014) as well as the lowest levels of self-compassion so effects of low self-compassion are likely to be more pronounced at this stage of life than others (Bluth & Blanton, 2014, 2015; Neff & McGehee, 2010; Neff & Vonk, 2009).

Prior research also suggested offenders are more likely to use maladaptive aggressive coping mechanisms for shame than nonoffender populations (Robinson et al., 2007; Wright et al., 2008) and, within young offender populations specifically, are less likely to possess effective emotional coping skills than nonoffender peers (Howell, Cater, Miller-Graff, Schwartz, & Graham-Bermann, 2017). As a result, juvenile offenders are

likely to report more extreme scores in shame and self-compassion as well as aggressive behavior, making these young people a logical group within which to study these concepts and the relationship between them.

Research Questions

The following research questions were designed to examine differences in shame, self-compassion, and aggression by subtypes (i.e., violent, non-violent) of juvenile offenders as well as by gender:

- Q1 Are there significant differences in self-compassion scores between nonoffenders, violent offenders, and nonviolent offenders?
- Q2 Are there significant differences in shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort) between nonoffenders, violent offenders, and nonviolent offenders?
- Q3 Are there significant differences in aggression scores between nonoffenders, violent offenders, and nonviolent offenders?
- Q4 Are there significant differences in self-compassion scores between adolescent males and adolescent females?
- Q5 Are there significant differences in shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort) between adolescent males and adolescent females?
- Q6 Are there significant differences in aggression scores between adolescent males and adolescent females?
- Q7 Is there a significant effect of the interaction of offender status and gender on self-compassion scores?
- Q8 Is there a significant effect of the interaction of offender status and gender on shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort)?
- Q9 Is there a significant effect of the interaction of offender status and gender on aggression scores?

Limitations

The generalization of future results of this study was limited by several important factors. The first limitation was the sample of the study included only juvenile offenders and a comparison sample of at-risk youth not involved in the juvenile justice system; therefore, generalizing the findings to populations outside of this type of sample should be done cautiously if at all. Second, all data were gathered via self-report including criminal history information. Self-report of delinquency is generally valid and reliable for research purposes (Thornberry & Krohn, 2001) and has also been shown to be reliable and valid for criminal respondents struggling with mental health and substance abuse problems (Nieves, Draine, & Solomon, 2000). However, the overall project was still subject to the possible effect of social desirability, a response phenomenon wherein participants portrayed themselves in what they perceived to be a socially appropriate way. This effect then potentially decreases the validity of results as they might be skewed or inaccurate (Remler & Van Ryzin, 2011). Northrup (1997) offered a series of recommendations to address factors related to social desirability and diminish its effect. Relevant recommendations included in this study consisted of using a number instead of the respondent's name to identify individual response packets; providing privacy for respondents via individual clipboards, separate seating areas, and extra paper to cover answers if desired; emphasizing the acceptability of all answers; "creating dynamics for truth-telling" by explicitly talking with respondents about the consequence of sharing their honest perspective (i.e., your answers will be a part of helping kids feel better in the future); and clearly explaining any benefits or other effects of participation, or lack

thereof (i.e., making it very clear that participation in the study will have no effect on placement or sentencing).

Third, the makeup of the respondent group was likely influenced by volunteer bias. Remler and Van Ryzin (2011) defined volunteer bias as an effect of participants who respond and participate in a study based on interest. In the on-campus sample, interested participants completed all measures during flexible program time. In other data collection settings, however, completion of the measures did not occur as part of a common activity and therefore denoted a clear choice to participate. This presented a possible limitation to the study in that data collected in one setting might have exhibited a bias not present in data collected in other settings. Collected data might have also varied by setting in other ways due to the aims and atmospheres of each setting. As a mentoring program, Campus Connections focuses on relationship building and positive growth and therefore aspires to create an accepting and supportive environment. On the other hand, legal and quasi-legal settings exist for the purpose of assessing responsibility and meting out consequences and are much more likely to engender feelings of shame than less punitive environments. These differences in respondent perception and experience might have added another dimension of difference to data collection at the three different sites.

Another limitation of the study was related to measurement. Since only one scale was used to represent each construct within this study, this might have led to potential measurement error and bias in fully capturing the constructs being explored. Although research measurement of self-compassion was almost uniformly conducted using the Self-Compassion Scale (SCS; Neff, 2003a), the measurement of shame and aggression was more varied; therefore, the choice of a specific measure also narrowed the definition

of the construct in a way that might have lessened its generalization to researchers working within alternate definitions.

Finally, all measures were completed on paper and then entered into SPSS for analysis, a process that introduced the possibility of error in data entry. However, data could not be collected directly via a computer-based system such as Qualtrics because of restrictions in permissible electronics within some sampling environments. Therefore, data were entered manually. Accuracy of entry was assessed by periodic random checks of entered cases against raw data and cross-checked between data entry staff.

Definition of Terms

Aggression. Any behavior enacted with the intention to harm another person who is motivated to avoid that harm (Anderson & Bushman, 2002; Bushman & Huesmann, 2010). Aggression can be further subdivided into reactive aggression (uncontrolled, emotionally charged aggression as an immediate response to a perceived threat) and instrumental aggression (controlled, emotionally detached aggression used to achieve a desired goal including a goal of domination and control of others; Liu, 2004). In this study, aggression was measured by the Reactive-Proactive Aggression Questionnaire (Raine et al., 2006).

Juvenile offender. An individual under 18 years of age who has committed a violation that would have been a crime if committed by an adult (U.S. Department of Justice, 2016). Court findings of criminal responsibility for juveniles are frequently termed an “adjudication” or “disposition” rather than a “conviction” to further establish the status of the accused as a non-adult offender (Sickmund & Puzzanchera, 2014).

Self-compassion. The ability to be kind toward oneself in times of suffering. Self-compassion includes three dimensions: self-kindness versus self-judgment, mindfulness versus over-identification, and common humanity versus isolation. Self-compassion is conceptualized as a single skill that incorporates the ability to provide kindness to oneself regardless of other events, cognitions, emotions, or behaviors; the ability to identify with a sense of common humanity and understand mistakes as part of the human experience; and the ability to be mindful of unpleasant emotions instead of over-identifying with them (Neff, 2003b). In this study, self-compassion was measured by the SCS (Neff, 2003a).

Shame. Defined as a person-based self-conscious negative emotion. Feelings of shame arise when an individual violates a personal or social behavioral standard held to be important (Dearing & Tangney, 2011) and this realization is combined with a cognitive evaluation of the self as fundamentally flawed (Tangney & Tracy, 2012). Shame experiences often lead to feelings of worthlessness, powerlessness, inferiority, and feeling small and exposed (Kim et al., 2011; Tangney et al., 1992). In this study, shame was measured by the Adolescent Shame-Proneness Scale (ASPS; Simonds et al., 2015).

Social mentality theory. A theory that encompasses aspects of evolutionary biology, neurobiology, social psychology, and attachment theory to explain affective, behavioral, and neurological responses to situations eliciting perceptions of threat or safety in both social and physical spheres (Gilbert, 1989). Each of five identified mentalities, defined as “organizing systems that choreograph motive, emotions, thoughts, and behaviors” (Gilbert & Irons, 2005, p. 325), provide

motivation to follow specific social roles or norms and affect both intrapersonal and interpersonal functioning (Gilbert, 1989; Gilbert & Irons, 2005).

Violence. A subcategory of aggressive behavior intended to cause severe physical harm (requiring medical attention) or death (Warburton & Anderson, 2015).

Summary

The relationship between shame and self-compassion appeared to be a promising area of study to potentially improve emotional regulation, decrease aggression, and lower recidivism rates in juvenile offenders. Using the frameworks of social mentality theory and Nathanson's (1992) categorizations of maladaptive behavioral responses to shame, the current study sought to understand the roles of shame and self-compassion in aggressive behavior in juvenile offenders and explored the relationship of self-compassion to shame in two subgroups of juvenile offenders, violent and nonviolent, a sample of nonoffender at-risk youth, as well as the relationship of both concepts to the rate of aggressive behavior in these groups. As the relationship among these constructs has not yet been examined in the literature for this population, this study contributed to the field of psychology in a number of ways. The findings of this study help clients and practitioners to not only better understand the relationship between shame and aggressive behavior in juveniles but also provide foundational information on the potential impact of self-compassion on curbing aggressive behavior. The results of this study also informed future research in this area and contributed to the development of more effective interventions to increase adaptive emotional regulation and decrease aggressive behavior in juvenile offenders and other at-risk youth. The inclusion of offender subtype and gender as categorization variables, creating groups that appeared to have many

contrasting characteristics in these areas based on prior research findings, elucidated the relationship between these concepts for specific offenders and provided the opportunity for even more tailored intervention.

CHAPTER II

REVIEW OF LITERATURE

A theoretical and empirical basis for the current study was established through a literature review of each of the major concepts: shame, shame-related aggressive behavior, and self-compassion. First, the theoretical framework for the study is reviewed. Second, research on shame and its relationship to aggressive behavior is presented. Third, research on self-compassion is presented along with an explanation of its hypothesized role in emotional regulation. The following review of literature closes with a summary including a rationale for the project and potential implications of the current study.

Theoretical Framework

Shame is a universal emotion that appears in all known cultures (Kim et al., 2011; Tomkins, 1963). Early evolutionary theorists in this area of study proposed the major function of shame is to manage social relationships, a goal directly related to appeasement behaviors seen in humans, non-human primates, and groups made up of social animals (Fessler, 2007). From a human-specific perspective, Scheff (1994) proposed shame serves as a warning that an individual's social bonds and group membership are under threat and theorized that avoidance of shame helped maintain the moral conduct and group conformity needed for a functional human society.

Pulling from both perspectives, the more integrative social mentality theory (Gilbert, 1989; Gilbert & Irons, 2005) posited that over time, human beings have evolved many social behaviors, drives, and roles to develop socially complex and interdependent societies. Through functioning as a part of a social group, individuals create strong social bonds and, as a result, increase their chances of maintaining physical and psychological safety and gaining access to resources. As group members, individuals continue to strive for the acceptance of others and maintain a shared sense of belonging to avoid conditions such as rejection, isolation, and shame that might result in weakening of social bonds or, in extreme cases, being expelled from the group and losing access to all resources (Gilbert, 1989; Wolfe et al., 1986).

In light of this possible consequence, following group norms becomes an integral component of membership as well as a specific behavior that maintains safety. In this theory, motivations to follow specific roles or norms are labeled as mentalities and defined as “organizing systems that choreograph motive, emotions, thoughts, and behaviors” (Gilbert & Irons, 2005, p. 325). The five social mentalities are *care eliciting* (forming and maintaining relationships that meet intimacy needs and provide protection); *caregiving* (forming and maintaining relationships in which the individual contributes time and energy to ensure future survival); *formation of alliances* (forming and maintaining interpersonal relationships based in cooperation, friendship, and support); *social ranking* (forming and maintaining relationships that influence social rank and access to resources); and *sexuality* (forming and maintaining sexual relationships that involve attraction and courting behaviors).

For the purpose of this study, subsequent discussion of this theory focuses on the social ranking mentality because it is most relevant to shame. This mentality focuses on maintaining and improving social rank, which requires approval or even admiration from others (Gilbert & Irons, 2005). Using this framework, shame can be conceptualized as a major element of social rank mentality; it is an emotional response to beliefs about social acceptance, social ranking, reputation, and attractiveness, and serves as an early warning that the desired states of acceptance and satisfactory social rank are under threat (Gilbert, 2007; Velotti et al., 2014). Initially, shame experiences begin with a social threat. Through actual or perceived personal devaluation, an individual recognizes his or her relational value or rank is in danger of declining or has already declined (DeWall & Bushman, 2011; Elison, 2005; Gilbert, 2007). Subsequently, the individual acknowledges this state of events threatens the basic human need to belong (Baumeister & Leary, 1995; DeWall & Bushman, 2011; Velotti et al., 2014).

Individuals respond to this actual or perceived threat in multiple ways using specific shame-regulation strategies. Nathanson (1992) organized various well-studied methods of shame coping into four families of scripts used to manage shame: withdrawal, avoidance, attack self, and/or attack others. In each category, the purpose of the regulation strategy was to change the experience of shame into a more manageable form (Elison et al., 2006). People using the *withdrawal* method temporarily retreat from the social spotlight for a swift relief of negative affect and a chance to allow others in the social environment to focus on a different person or event before the shamed individual rejoins the group, decreasing scrutiny of the individual experiencing shame. On the other hand, people using the *avoidance* method “find the experience of shame so toxic that they

must prevent it at all costs...they engage a number of strategies to reduce, minimize, shake off, or limit shame affect” (Nathanson, 1992, p. 313). Instead of acknowledging shame and withdrawing to mitigate the social effects of shame, people using avoidance reject thinking or talking about shame and minimize the emotional impact of the shame experience.

Individuals with effective shame coping skills tend to use small doses of withdrawal and avoidance to manage shame, utilizing the passage of time and their own social skills to repair bonds, reduce social threat, and address any damage to social ranking. However, extreme use of both types of shame regulation can have significant negative effects. Temporary withdrawal can, over time and without further reparative efforts, become exclusion from the group and its resources. Withdrawn people would then also lose the acceptance and social relationships crucial to meet their basic human need to belong. On the other hand, individuals using avoidance might begin to use substances, compulsively shop or gamble, or engage in other avoidant behaviors to prevent experiencing the emotional components of shame (McGaffin, Lyons, & Deane, 2013). If utilized within the context of making space for future effective processing of shame, both of these more passive methods could be adaptive in regulating shame and maintaining social bonds and ranking; at the extremes, however, it appears they are no longer adaptive and might result in disengagement from individual relationships and the larger social group environment.

The other two groups of regulation styles outlined by Nathanson (1992) are more active. People using the *attack self* style of coping are likely to feel helpless and isolated by shame and modify the shame experience to place it under their control and regain

feelings of power. Individuals using this method are “willing to experience shame, as long as we understand that they have done so voluntarily and with the intention of fostering their relationship with us” (Nathanson, 1992, p. 327). Used sparingly, this regulation strategy is a valued social response to shame, denoting humility and a willingness to take responsibility for errors. In its more intense forms though (i.e., self-denigration or groveling), this method suggests a lack of self-respect and decreases respect from others, reducing social rank and threatening social bonds. Extremes of this strategy might also extend to physical attacking of self, such as self-harming behaviors (Gilbert, McEwan, Bellew, Mills, & Gale, 2009).

On the other hand, in the fourth shame regulation group, shame’s potential threat to social rank is the impetus for aggressive behavior toward others instead of self. Nathanson (1992) first theorized that people using the *attack others* method responded most strongly to the devaluation component of the shame experience. These individuals were least able to tolerate cognitive perceptions of inferiority and feelings of shame and attempted to manage those feelings and perceptions through silencing the source of feelings of inferiority (the perceived judger) and/or counteracting the distressing cognitions and feelings by asserting dominance over others. This proposal has been supported by other research groups over time and continues to be an active area of empirical study within the field of aggressive behavior (Elison et al., 2006; Nathanson, 1992; Stuewig et al., 2010). This study focused primarily on this fourth group and explored components of the relationship between shame and aggression.

Shame and Culture

Although there is a significant body of research on shame, efforts of prior researchers have not been able to create an entirely coherent literature base because both the conceptualization and manifestation of shame vary significantly by culture. The literature described above was restricted by a Western (meaning North American and Western European) conceptualization of guilt and shame and empirical support was largely provided for this view by studies using Western participants. The studies and theories discussed above also rested on three major cultural assumptions more typical to Western societies: (a) there exists some type of individual self not merged with the collective society, (b) values and structure of the independent self are not necessarily reflected in the individual's actions, and (c) being negatively evaluated by self or others is in itself a negative event (Wong & Tsai, 2007). However, a large body of non-Western theoretical and empirical literature in this area suggested these assumptions did not hold true in all or even most global societies as there exists a wide variety of opinions on the experience and function of shame.

As early as 1946, academic observers noted cultural differences in shame; for example, one wrote that the United States seemed to be a "guilt culture," whereas Japan seemed to be a "shame culture" (Benedict, as cited in Wong & Tsai, 2007). Beliefs specific to a culture, or *ethnotheories*, provide context and directions for reaction in response to specific actions of members of the culture (Lutz & White, 1986). Variations in ethnotheories across cultures could help explain the wide cultural differences in reactions to events that might engender shame and/or guilt in the West but present a very different opportunity or consequence in another society. In cultures such as the United

States that see shame as a devalued, negative experience, the experience appears to be particularly detrimental for shamed individuals with strong correlations to psychological distress of many types (MacBeth & Gumley, 2012; Muris & Meesters, 2014; Tangney et al., 1992; Wolf, Cohen, Panter, & Insko, 2010). If a person does experience shame, perceived rejection from others would likely increase the individual's feeling of isolation and rejection, which then in turn often engenders reactionary behaviors such as blaming, externalizing behavior, and aggression (Leary, Twenge, & Quinlivan, 2006).

In cultures that value the shame experience, the prevailing ethnotheory allows for different perspectives and consequences. In more collectivist cultures, shame, while a negative and uncomfortable experience, is typically highly valued. Generally, these cultures tend to see shame as “a positive, moral force that promotes restorative behaviors such as self-improvement and prosocial actions”--in short, the reactions more typically seen in response to guilt in Western cultures (Sheikh, 2014, p. 387). In most cultures in Asia, Africa, and South and Central America, cultural narratives about shame do not generally include strong negative themes such as externalization of blame, anger, or aggression. Instead, they are likely to focus more on interpersonal opportunities created by shame. These cultural narratives are also more interpersonal, typically including not only the individual experiencing shame but other affected third parties such as a “shamed other,” a loved one who would also be shamed by the individual's offense, and a “disapproving other” who judges and rejects, similar to the perceived judges of external shame in Western shame literature (Sheikh, 2014). These other involved individuals and the larger society are seen as deserving of respect and of the offender's attempts at repairing social bonds. Using this conceptualization, the offender's reparative actions

then show commitment to individuals in the environment as well as to the morés of the general society in which the offender lives regardless of whether the inspiration for those attempts is shame or guilt.

Shame is also perceived in many collectivist cultures as a mechanism through which individuals develop coping skills for failure, strengthen their sense of morality and duty, and learn first-hand about the interconnected nature of the culture (Fung, 1999). Studies in Asian countries such as Japan, China, and Korea found that while shame-subsequent themes of anger and externalization of blame did exist, the ethnotheory supporting the themes did not support the actual expression of those emotions and behaviors (Furukawa et al., 2012). Instead, young people were encouraged to channel those feelings into more prosocial and productive coping strategies. Studies in Southeast Asia and South America offered similar findings with one notable difference: in these societies, identification as a higher-class and higher-status individual was correlated with higher anger-proneness and externalization of blame and higher expression of both blame and anger (Breugelmans & Poortinga, 2006; Brown et al., 2008; Cole, Bruschi, & Tamang, 2002).

In short, for most members of collectivist cultures, shame is an uncomfortable but necessary part of a life lived with others and has many potential positive benefits. Within this perspective, the experience of shame creates subsequent motivation to make positive changes in self, restore relationships, and move closer to others. Higher-status individuals might be more likely to endorse minority shame narratives more similar to those found in Western cultures but overall, collectivist cultures appear to exhibit much lower rates of anger and aggression in relationship to shame than their Western

counterparts (Furukawa et al., 2012; Wong & Tsai, 2007). Members of the culture are also able to use shame in a prosocial way to increase connection with others and society at large. In contrast, members of Western cultures tend to move further away from others when experiencing shame, weakening social bonds, and prefer to deny shame rather than accept it. Because of the cultural focus on self, a sense of obligation and responsibility toward others shamed by the transgression was notably lacking in shame research with Western participants and reparative behaviors were a relatively uncommon response to the experience of shame (Sheikh, 2014). Instead of devoting time and energy to positive reparative efforts, members of more individualistic cultures instead made an effort to avoid the experience of shame, thought about shame, or even used the word (Simon, 2005).

Shame and Aggressive Behavior

Lewis (1971) was the first to note in print the existence of shame-rage or humiliated fury. One major study in this area of research summed up the relationship among shame, anger, and aggression this way:

When experiencing shame, people evaluate the self as worthless, defective, and inferior. Feeling powerless and in pain, shamed individuals may become angry, blame others, and aggressively lash out in an attempt to regain a sense of agency and control. (Stuewig et al., 2010, p. 92)

While this relationship between shame and anger has become generally theoretically accepted in the literature (Dearing & Tangney, 2011; Hartling & Lindner, 2017; Scheff, 1987; Tangney & Dearing, 2002; Velotti et al., 2014), the actual mechanisms of the relationship between shame and aggression are not as clear (Stuewig et al., 2010).

Additionally, many of the available studies in this area did not separate overt verbal and physical aggression from other related but distinct concepts such as anger or hostility (Stuewig et al., 2010). Studies using more general measures of anger, hostility, externalizing behaviors, and/or aggression have shown mixed results for the relationship between shame and those broader definitions of aggression (Bennett, Sullivan, & Lewis, 2005; Ferguson et al., 1999; Spruit, Schalkwijk, van Vugt, & Stams, 2016; Tangney et al., 1992). However, studies using specific measures of verbal and physical aggression offered a more consistent set of results. In an early influential study, Tangney et al. (1996) found positive correlations between shame-proneness and physical aggression in samples of adults, adolescents, and children (but not college students) and positive correlations between shame-proneness and verbal aggression for all four participant groups. More recently, Robinson et al. (2007) found the specific experience of shame, as opposed to general antisocial attitudes, was explicitly related to verbal and physical aggression. This relationship also seemed to exist for very extreme cases of violence and aggression; an extensive qualitative study of 211 intrafamilial murder cases also found evidence for a strong presence of shame in almost all of the cases reviewed (Websdale, 2011).

Studies on the mechanisms by which shame was related to aggression found possible mediators of anger, hostility, and externalization of blame, all factors that likely contributed to aggression (Bennett et al., 2005; Hoglund & Nicholas, 1995; Spruit et al., 2016; Tangney et al., 1992; Tangney, Miller, Flicker, & Barlow, 1996). In one of the few published studies to empirically investigate possible mediators, Harper, Austin, Cercone, & Arias (2005) found male college students' anger fully mediated the relationship

between shame and psychological abuse of a romantic partner. Bennett et al. (2005) found a support for a similar mediator model with children using anger as a mediator between shame and externalizing behaviors including aggression. A small number of studies suggested other possible mediators such as social status (Aslund et al., 2009), overall response to criticism (Hejdenberg & Andrews, 2011), and narcissism (Thomaes et al., 2008, 2011) but research support has been limited for these proposals thus far.

Current research indicates externalizing blame is likely the most promising area of study as a possible mediator between shame and aggression. To investigate further, Stuewig et al. (2010) conducted a landmark series of studies to better understand the relationship between shame and aggression. Stuewig and his coauthors hypothesized the cognitive process of externalization of blame functioned as a mediator between shame and aggression; specifically, “negative feelings of shame should lead to externalization of blame, which in turn should lead to higher levels of verbal and physical aggression” (p. 93). In their series of studies, they drew participants from four groups: early adolescents (fifth through eighth grades), at-risk adolescents (9th through 12 grades), college students, and adult correctional inmates awaiting trial. In addition to the variables used to assign sample membership, samples differed significantly in gender and ethnic makeup as well as life circumstances.

To measure shame in adult samples, Stuewig et al. (2010) administered the Test of Self-Conscious Affect (TOSCA; Tangney et al., 1992); college students completed the standard version and inmates completed the TOSCA-SD for socially deviant populations. Both adolescent samples completed the Adolescent Shame Measure (Reimer, 1995). To measure aggression, the authors administered a range of measures including aggression

subscales of the Personality Assessment Inventory (PAI; Morey, 1991), the Youth Child Behavior Checklist (CBCL; Achenbach, 1991), and actual and projective measures of aggression. All studies also included third-party written assessments of aggressive behavior collected from teachers, parents, correctional staff, and/or disciplinary records. Path analysis indicated “the relationship between shame and aggression was only indirect through externalization of blame; individuals high in shame-proneness were more likely to blame others, leading to a greater propensity for verbal and physical aggression” (Stuewig et al., 2010, p. 97). This indirect path from shame to verbal aggression was statistically significant for all four samples as was the indirect path from shame to physical aggression.

Empirically supported mediators, such as the one investigated in this series of studies, pointed the way to possible useful areas of intervention for programs that aimed to reduce aggressive behavior. Overall, this series of studies provided strong support for the theory that shame-proneness was indeed related to aggression but not directly. Instead, shame-prone individuals reported higher levels of externalization of blame and those scores were in turn related to self-reported verbal and physical aggression for all four samples. In their conclusion, Stuewig et al. (2010) advised, “These results suggest different points of intervention for people with aggressive problems resulting from maladaptive shame, as opposed to an impaired capacity for guilt” (p. 101); they recommended further research into other possible mediators of the relationship between shame and guilt as well as potential elements that might interrupt cognitive cascades leading from shame to aggression.

Shame and Aggressive Behavior in Adult Incarcerated Populations

As part of a larger review of literature related to shame and aggression, Tangney et al. (2011) noted shame appeared to serve a similar function among offender and community samples, i.e., as a warning of social threat, but engendered significantly different patterns of response to feelings of shame. In a related review, Tangney et al. (2011) found strong empirical support for a link between shame and a wide range of criminal behaviors, noting shame-proneness was often positively related to constructs known as risk factors for aggression, e.g., a diagnosis of antisocial personality disorder. However, this review of literature encompassed studies that included both criminally involved and non-criminally involved adults; therefore, it was not specific to documented criminal behavior.

In a more targeted review of the limited literature related to shame and aggression in adult known criminal offenders, Schoenleber and Berenbaum (2012) characterized aggression toward others as a maladaptive shame regulation strategy commonly seen in samples of adult inmates. Empirically, the small group of available published studies conducted with criminally involved individuals seemed to support this conclusion. First, Shanahan et al. (2011) reported high levels of both nonviolent and violent maladaptive shame coping in a sample of adults incarcerated for violent offenses. Another study using both inmate and community adolescent samples found shame-proneness was positively related to anger and aggression in both samples but the relationship was stronger for the inmate sample (Robinson et al., 2007). Additionally, Wright et al. (2008) found that for adult inmates, offense-related shame feelings were positively correlated with increased difficulty in the regulation of negative emotion, especially anger.

Other research suggested feelings of shame were likely related to type of offense as well as continued criminality. One seminal longitudinal study (Hosser et al., 2008) asked 1,243 male offenders aged 14-24 to complete measures of guilt and shame at the beginning of their term of incarceration. Results indicated higher shame ratings predicted higher post-release recidivism rates for offenders over a period of six years. These results maintained statistical significance even after the authors controlled for a wide variety of other factors known to affect recidivism rates: age, intelligence, offender substance use, parental criminal records, type of offense, number of past offenses, and length of sentence.

Shame and Aggression in Juvenile Offender Populations

Juvenile offenders are a very specialized population for research and treatment. First, they are adolescents with growing brains and bodies so developmental concerns come into play. However, they are also criminal offenders. While Tangney and Dearing (2002) asserted functions and consequences of shame are generally similar in child, adult, community, and inmate samples, little empirical evidence has supported that claim as related to juvenile offenders.

Whereas the literature base on shame and aggression in adult offenders was limited, it was almost non-existent for juvenile offenders. Therefore, it might be more helpful to begin with a review of the more general literature on shame and aggression in children and adolescents. Ferguson et al. (1999) was one of the first to investigate shame proneness with children; results from a sample of 86 children ages 5-12 found shame proneness was associated with higher levels of externalizing behavior. Tangney et al. (1996) then conducted the first large-scale study on the relationship among shame-

prone to anger, and aggression in a non-clinical children and adolescent population of over 700. Their results suggested a significant positive correlation between shame and aggression with r values ranging from .21 to .32 in the child sample and from .18 to .33 for the adolescent sample. That link has been replicated in subsequent studies that used a mix of child, adolescent, and adult samples (Paulhus et al., 2004; Stuewig et al., 2010; Tangney et al., 1996), lending support to the proposed analogous nature of the findings of the adult literature with child and adolescent samples as well. Studies on gender differences in shame in young people also indicated slightly but significantly higher levels of shame in females versus males at roughly the same effect size as adult studies--approximately 0.3 (Else-Quest et al., 2012).

Specific to juvenile offenders, Stuewig and McCloskey (2005) found a significant relationship between adolescent shame-prone and delinquent (though not necessarily aggressive) behavior. A 2007 study by Robinson et al. using both inmate and community adolescent samples also found shame-prone was positively related to anger and aggression in both samples but the relationship was stronger for the inmate sample. Similarly, a 2009 study by Aslund et al. found a significant correlation of 0.28 between scores of shame and aggression in a sample of 5,396 adolescents ages 15-18. This study also noted a pronounced effect of gender; specifically, “girls who reported a higher rate of shaming experiences were four times more likely to have perpetrated physical aggression than girls who reported fewer shaming experiences” (Aslund et al., 2009, p. 9). Using a different measurement but a similar concept, a 2011 study by Kennedy et al. found the scores on the Sense of Inadequacy scale of the Behavior Assessment Scale for Children (Reynolds & Kamphaus, 1998) made a significant contribution to a model

predicting offender type in a sample of 95 male and female juvenile offenders. More recently, a longitudinal study by Stuewig et al. (2015) provided strong support for a link between childhood shame-proneness and later illegal behavior including aggressive criminality.

Based on this research and more general literature on shame and aggression, it would appear the concepts of shame and aggression are also closely linked in juvenile offender populations. However, not all research findings supported this conclusion. For example, Ferguson et al. (1999) found support for this pattern for boys but not girls and Stuewig and McCloskey (2005) did not find a significant relationship between the two concepts at all. In another example, a 2004 study by Van Tijen et al. found the relationship between shame and externalizing problems in their nonclinical sample of Dutch children was not significant. Next, in a sample of 250 at-risk youth ages 11-18, Stuewig et al. (2010) found a significant positive correlation of 0.25 between shame and verbal aggression but a significant *negative* correlation of -0.21 between shame and physical aggression, which contradicted virtually all other available published studies at the time using the same concepts and age groups (Muris & Meesters, 2014). In the same vein, Schalkwijk et al. (2016) found violent offenders reported being *less* prone to experience shame than their nonoffender counterparts. While these studies were a minority, they suggested the relationship between shame and aggression was likely not direct and, as with the relationship in adult samples and other populations, might be moderated by other factors (Muris & Meesters, 2014).

Measurement of Shame

While a wide range of shame measures exists for use with adult respondents, only three shame inventories have been validated to date for use with adolescents: Test of Self-Conscious Affect, Adolescent Version (TOSCA-A; Tangney, Wagner, Gavlas, & Gramzow, cited in Simonds et al., 2015), the Adolescent Shame Measure (ASM; Reimer, 1995), and the Adolescent Shame-Proneness Scale (ASPS; Simonds et al., 2015). Of the three, the TOSCA-A is the most well-established and is widely used in shame research with adolescents 12-20 years of age. After reading each of 15 scenarios, respondents were asked to rate shame- and guilt-based statements on a 5-point Likert-type scale and indicated the likelihood they would react in the manner stated. The measure was normed with 563 adolescents and internal consistency for the shame and guilt scales was reported at 0.77 to .82 and 0.81 to .85, respectively. As theoretically expected, the shame scale of the TOSCA-A was negatively associated with measures of depression for both younger and older adolescents (Watson, Gomez, & Gullone, 2017).

The ASM (Reimer, 1995) was modeled after the TOSCA-A and designed specifically for use with adolescents. Previous studies showed shame and guilt from the ASM had adequate internal consistency (Cronbach's $\alpha = .77$ and $.72$, respectively) and showed construct validity--it was associated in theoretically consistent ways with the TOSCA-A: self-esteem, self-consciousness, and depressed mood among adolescents (Reimer, 1995). Like the TOSCA-A, the ASM was composed of brief scenarios. Respondents read 13 standard scenarios and each scenario response was coded as a shame, guilt, or externalization of blame response. For example, for the scenario "You do your homework carelessly and you get a bad grade," the shame response was "I

would feel like I can't do anything right," the guilt response was "I would feel bad that I didn't work harder," and the externalization of blame response was "I would feel angry that my teacher is such a hard marker." The advantage of the ASM over the TOSCA-A was the addition of the externalization of blame response, a concept supported by research as a likely mediator between shame and aggression.

The ASPS (Simonds et al., 2015) as a new measure of shame was also designed specifically for use with adolescent respondents. As opposed to the fixed scenarios described in the TOSCA-A, the ASPS asked respondents to think of three specific shame-eliciting situations they had recently experienced and then asked respondents to answer a series of standard items and indicate the intensity of different aspects of shame during the chosen self-generated shame events. This measure was designed and validated for adolescents 11-18 years old, an age range selected based on prior research that indicated children as young as 10 held similar opinions to adults on the difference between shame and guilt and could reliably distinguish between the two concepts (Ferguson, Stegge, & Damhuis, 1991). The ASPS is comprised of three factors created through factor analysis: negative self-evaluation, externalization, and emotional discomfort. Internal consistency for each factor was reported as follows: negative self-evaluation (.90), externalization (.82), and emotional discomfort (.82). Correlations of these three factors with the TOSCA-A shame and guilt scales indicated the ASPS was measuring something related to the TOSCA-A shame and guilt items but also measured other distinct characteristics of shame (see Table 1).

Table 1

Pearson's Correlations Between Adolescent Shame-Proneness Scale and Test of Self-Conscious Affect, Adolescent Scales

ASPS Scale	TOSCA-A Shame (α .85)	TOSCA-A Guilt (α .83)
ASPS Negative Self-Evaluation	.52, $p < .001^{**}$	.27, $p < .001^{**}$
ASPS Externalization	.23, $p < .001^{**}$	-.01, $p = .867$
ASPS Emotional Discomfort	.43, $p < .001^{**}$	.36, $p < .001^{**}$

** denotes a significant correlation at $p < 0.01$

The ASPS (Simonds et al., 2015) was also related to other concepts in theoretically expected directions. Anger, as measured by the Anger Expression Scale for Children (AESC; Steele, Legerski, Nelson, & Phipps, 2009) was positively related to all three ASPS factors and control of anger was negatively related to the negative self-evaluation and externalization factors. All three factors were positively associated with negative affect as measured by the Positive and Negative Affect Scale for Children (PANAS; Laurent et al., 1999) and positive affect was negatively associated with both negative self-evaluation and externalization (see Table 2).

Table 2

Pearson's Correlations Between Adolescent Shame-Proneness Scales and Measures of Affect and Self-Esteem

Scale	Negative Self Evaluation	Externalization	Emotional Discomfort
Rosenberg Self-Esteem	-.55, $p < .001^{**}$	-.35, $p = .001^{**}$	-.28, p
AESC trait anger	.32, $p = .003^{**}$	.52, $p < .001^{**}$	.31, $p = .004^{**}$
AESC anger expression	.22, $p = .040^{*}$	.49, $p < .001^{**}$	.10, $p = .342$
AESC anger control	-.08, $p = .461$	-.27, $p = .013^{*}$	.18, $p = .103$
AESC anger suppression	.26, $p = .015^{*}$	.03, $p = .792$	.27, $p = .011^{*}$
PANAS negative affect	.47, $p < .001^{**}$	.44, $p < .001^{**}$	.41, $p < .001^{**}$
PANAS positive affect	-.20, $p = .063$	-.15, $p = .152$	.12, $p = .249$

Note. AESC = Anger Expression Scale for Children

PANAS = Positive and Negative Affect Scale for Children

* denotes a significant correlation at $p < .05$

** denotes a significant correlation at $p < .01$

Although the TOSCA-A (Tangney et al., cited in Simonds et al., 2015) has extensive empirical support, its scenarios are fixed and only cover common shame-inducing occurrences for teens (i.e., dropping an item at school), which prevents respondents from referring to more atypical shame experiences that might be more salient to individual respondents at the time of completion. While the ASM (Reimer, 1995) offers more information about respondent experiences via the addition of the externalization of blame response option, the ASM also uses fixed scenarios and prevents respondents from referring to personalized shame experiences when responding to the measure. Therefore, a semi-idiographic measure such as the ASPS (Simonds et al., 2015) would likely allow for more flexibility in the stimuli for response and would be more

appropriate for use with juvenile offender respondents whose daily lives in many ways do not resemble those of more typical adolescents. Additionally, the scenarios outlined in the TOSCA-A and ASM focus mainly on shame related to specific actions of the respondent and do not include more self-based shame triggers, such as appearance, or shame related to events outside of the respondent's control such as maltreatment by others.

Juvenile offenders are significantly more likely to have experienced victimization by others than community samples (Jativa & Cerezo, 2014; Stuewig & McCloskey, 2005); as a result, the flexibility of the ASPS (Simonds et al., 2015) would allow for multiples types of shame experiences that might be more relevant for young offenders. Overall, due to the lack of prior research in this area, it is unknown what types of scenarios juvenile offenders might choose to use as the basis for their responses; thus, the more relaxed structure of a semi-idiographic measure is likely to be a better fit for more exploratory research.

Self-Compassion

Empirical studies in psychology suggest individuals are often much harsher and unkind toward themselves than they would ever be to a loved one or even a stranger (Neff, 2003a). Most people are well-versed in the experience of compassion toward others, which has been defined as being moved by the suffering of others, opening awareness to the pain of others, and not avoiding or detaching from that pain (Wispe, 1991). However, the practice of using that same compassion toward oneself when one is suffering is not nearly as widespread (Neff, 2009a).

The concept of self-compassion has a rich history in Eastern philosophy but with the exception of some authors in the humanistic tradition, it has been overlooked by Western psychology until very recently. Self-compassion is defined as follows by the leading voice in the field, Kristin Neff (2003a):

Self-compassion involves being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering nonjudgmental understanding to one's pain, inadequacies, and failures, so that one's experience is seen as part of the larger human experience. (p. 87)

Neff's (2003a, 2003b) conceptualization of self-compassion involves three components, each with two contrasting poles that overlap and mutually interact: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification. The first component, self-kindness, refers to the manner in which individuals interact with themselves. Instead of using a critical or judgmental approach, self-kindness involves a gentle, compassionate manner and soft, supportive tone. Self-kindness gives individuals permission to accept themselves as they are without judgment and offers comfort to themselves in times of pain or suffering (Neff, 2003b; Neff & McGehee, 2010). The second component, feelings of common humanity, asserts imperfection is an unavoidable part of the human condition. All people fail sometime, everyone makes mistakes, and all individuals feel inadequate at some point. Using this lens, perceived individual failings could then be characterized as part of a broader experience shared by each person on the planet. Suffering becomes a universal experience and instead of producing feelings of isolation or disconnection, individuals

can use suffering to feel more connected to others (Neff, 2003b, 2009b). The third component of self-compassion, mindfulness, involves balanced awareness and a focus on the present experience, neither ignoring nor ruminating on negative aspects of oneself or one's life (Brown & Ryan, 2003; Neff, 2003b, 2015). Mindfulness involves using detachment to take a step back from immersive emotional experiences and consider those experiences from a non-evaluative standpoint. The opposite of this experience is what Neff (2011) has termed "over-identification- being swept up and carried away by the story line of one's own pain" (p. 4).

Self-compassion is generally theorized to develop through internalization of empathic responses to suffering experienced as a child. Children who received warm and empathic responses from parents or caregivers are likely to have more self-compassion as adults than children who experienced critical and/or abusive parents (Brown, 1999). While this is a difficult concept to test empirically, its inverse is unfortunately much easier to investigate. Survivors of childhood abuse and neglect who did not generally receive empathic responses from parents or caregivers reported significantly lower levels of self-compassion than individuals who did not experience maltreatment in childhood (Jativa & Cerezo, 2014; Tanaka, Wekerle, Schmuck, Paglia-Boak, & the MAP Research Team, 2011; Vettese, Dyer, Li, & Wekerle, 2011; Zeller et al., 2015). Overall, these findings provided empirical support for the hypothesis of internalization of empathy.

Misconceptions About Self-Compassion

Two common misconceptions about self-compassion are addressed in this section: self-compassion is analogous to self-esteem and self-compassion is a passive and unstructured coping skill.

Self-compassion is conceptually distinct from self-esteem. Self-esteem, a concept that has been highly valued in recent years, is based on evaluation of self-performance in domains important to a particular individual (Neff, 2011). Parents, educators, and psychologists trumpeted the evils of negative self-esteem in the 1980s and 1990s; by 2000, over 15,000 journal articles were published on the topic with the vast majority concluding self-esteem was associated with positive outcomes (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). However, low self-esteem proved highly resistant to change and most programs designed to improve self-esteem failed (Neff, 2011). It also appeared self-esteem was largely created through the outcome of doing well and was not the cause of improved functioning (Baumeister, Campbell, Krueger, & Vohs, 2003).

Like self-esteem, self-compassion is a source of positive self-regard and the two concepts tended to be correlated in the .57 to .59 range (Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, 2003a, 2009b, 2016). However, several clear and important differences exist between the processes and functions of the two concepts. First, unlike self-esteem, self-compassion does not involve evaluation of the self against social, performance, or internalized standards (Donald et al., 2017). Therefore, self-compassion does not require the individual to inflate his or her self-image, distort facts, or derive comfort from denigrating others to reap the benefits. Another important difference is self-compassion is available as an effective coping precisely when self-esteem fails. Because self-esteem is largely based on successful competition, experiences of personal weakness or failure do not provide emotional resilience through self-esteem. In contrast,

when a person feels ashamed, embarrassed, or inadequate, self-compassion is still a viable strategy for self-soothing and emotion regulation.

Third, the sense of self-worth derived from self-compassion is much more stable than that derived from self-esteem; self-worth associated with self-compassion is not tied to external circumstances and does not depend on personal success so it is much more likely to persist at a high level regardless of social feedback or external events (Neff, 2011). Fourth, while the evaluative components of self-esteem activate a biological threat cascade via the limbic system, it appears self-compassion deactivates that cascade and instead triggers a self-soothing system (Gilbert et al., 2008; Longe et al., 2009; Rockcliff, Gilbert, McEwan, Lightman, & Glover, 2008). Empirical evidence for these more biological claims is discussed in more detail later in this chapter.

Self-compassion is an active strategy for coping with negative emotion. A second common misconception is self-compassion is a passive and unstructured coping strategy in which the individual gives him or herself permission to do absolutely anything that feels good in the moment with no boundaries. However, self-compassion actually involves the exact opposite; it is an active, engaged strategy for understanding suffering and coping with it effectively. As opposed to avoidant strategies like distraction, self-compassion involves “being *more* willing to experience difficult feelings and to acknowledge them as valid and important” (Neff, 2015, p. 59). The aim of self-compassion is to actively alleviate suffering by using mindfulness strategies to detach from the emotionally immersive experience of suffering, fight feelings of isolation by reconnecting with a sense of common humanity, and finally manage negative feelings effectively by offering kindness and comfort to oneself.

Origins of Self-Compassion

Self-compassion has been a key component of Eastern philosophy for centuries, originating in Buddhist texts and meditation practices (Neff, 2003b). However, its introduction into Western secular psychological literature came through the humanistic school of psychology. The concept of self-compassion is present in the work of many humanistic psychologists, albeit under different names. Rogers' (1961) concept of unconditional positive regard is similar to self-compassion--self-compassion asks the individual to take an unconditionally positive, caring approach toward oneself. In 1968, Maslow's *Toward A Psychology of Being* focused on helping people accept and acknowledge their own suffering as a necessary part of growth and change; acceptance and openness to suffering are also foundational components of mindfulness. In 1973, Ellis introduced the concept of *unconditional self-acceptance*--a close analogue of self-compassion that asks individuals to eschew ratings or evaluations of self in favor of recognizing and then forgiving one's faults. Additionally, in 1994, Snyder posited a primary goal of therapy is to help client develop an "internal empathizer...an attitude of curiosity and compassion toward one's own responses to experience" (p. 90). This definition, like that of self-compassion, eliminates the process of self-evaluation and replaces it with self-compassion and acceptance.

The closest concept to self-compassion, however, is likely found in the work of the feminist psychologist, Judith Jordan. Jordan (1989, 1991) wrote on the topic of self-empathy, which she defined as a process in which an individual uses an open and nonjudgmental attitude toward the self. Like self-compassion, self-empathy emphasizes connection to the suffering of all humans (including oneself) and nonjudgmental

acceptance of self. While theoretically similar, Jordan's work did not lead to empirical investigation of these concepts; therefore, the contribution of her work to this topic is purely academic.

Self-Compassion and Mindfulness

The current widespread interest in self-compassion likely arose from the extensive body of empirical and theoretical work in a parent concept--mindfulness. Like self-compassion, mindfulness is rooted in Eastern philosophy and Buddhist meditation practices. Mindfulness can be defined as a balanced state of awareness that avoids disassociation and over-identification with experiences through conscious attending to one's present experiences moment by moment (Brown & Ryan, 2003; Shapiro, Carlson, Astin, & Freedman, 2006). Instead, mindful individuals simply accept cognitive and emotional phenomena as they arise. This permits a "nonjudgmental, receptive mind state in which one's thoughts and feelings are observed for what they are, not in terms of how they impact one's self-concept" (Neff, 2003b, p. 88). Mindfulness has been empirically established as an effective treatment for many different physical and psychological difficulties (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Jankowski & Holas, 2014; Keng, Smoski, & Robins, 2011) and remains a focus for extensive study in the fields of psychology and medicine.

Recent research findings suggest that although they are separate concepts, self-compassion and mindfulness are intertwined (Bluth & Blanton, 2014, 2015).

Mindfulness includes acceptance and self-compassion benefits from the more detached and balanced awareness of mindfulness. The balanced-mind component of mindfulness helps the individual disengage from intense emotional states and the more detached

stance of mindfulness decreases self-criticism and increases self-understanding, which invites self-kindness. Theoretically, this seems logical; a certain degree of mindfulness is required to step back far enough from one's emotions to offer self-kindness and see links to common humanity (Jopling, 2000). Mindfulness texts also emphasize that specific individuals are not the only ones suffering and instead ask people to offer kindness and understanding to all those in pain (including themselves), increasing the connectedness integral to self-compassion.

In the other direction, self-kindness and feelings of connection to humanity can increase mindfulness. If people can use self-kindness and common humanity to experience self-acceptance and soothing, then the negative impact of emotional states decrease and over-identification is less likely to occur. This reprieve in emotional turmoil in turn allows the individual to maintain a more balanced awareness of thought and emotion--a key component of mindfulness (Fredrickson, 2001).

Despite these overlaps, the concepts of mindfulness and self-compassion are also clearly different in many ways. Mindfulness focuses on more passive, detached awareness; whereas self-compassion is an active strategy for self-soothing (Germer, 2009; Greco, Baer, & Smith, 2011; Neff & Pommier, 2013). Mindfulness is intended as a general strategy to be used in all parts of daily life; self-compassion is a practice specifically for use in times of pain and suffering (Bluth & Blanton, 2014). Mindfulness encourages practitioners to experience emotion but observe that experience with detachment; self-compassion asks individuals to actively soothe one's own pain and connect it to the larger suffering of humanity (Neff, 2003a). Finally, mindfulness focuses on the individual's relationships with thoughts, emotions, and the present moments;

whereas self-compassion focuses on the individual's relationship with oneself (Baer, Lykins, & Peters, 2012).

Benefits of Self-Compassion

The literature base in self-compassion has expanded exponentially since Neff introduced the academic concept in 2003. A 2017 meta-analysis of compassion interventions found “a number of benefits and positive associations for compassion” and highlighted it as a factor closely related to many positive mental health outcomes (Kirby et al., 2017, p. 778). Prior studies have found self-compassion is positively associated with higher levels of happiness, optimism, general positive affect, contentedness, wisdom, adaptive coping (Allen & Leary, 2010; Hollis-Walker & Colosimo, 2011; Neff et al., 2005, 2007), self-determination, emotional intelligence (Neff, 2003b), effective emotional regulation (Dundas et al., 2017; Jazaieri et al., 2018), and greater life satisfaction (Allen & Leary, 2010). Self-compassion also appears to have a positive effect on those in the larger social world; individuals higher in self-compassion report more empathy toward others, forgiveness, and altruism (Neff & Pommier, 2013) and appear to have better functioning in interpersonal relationships (Neff & Beretvas, 2012; Yarnell & Neff, 2013). Self-compassion is also negatively associated with a wide range of mental health concerns such as loneliness (Akin, 2010), interpersonal cognitive distortions (Akin, 2011), self-criticism (Neff, 2003b), rumination, and thought suppression (Barnard & Curry, 2011; Neff, 2009b; Neff et al., 2007). Of particular note, self-compassion is consistently associated with lower levels of depression and anxiety. Two recent meta-analyses reported large effect sizes for the negative relationship among self-compassion and depression, anxiety, and stress (MacBeth & Gumley, 2012; Marsh et

al., 2017). Taken together, these results suggested self-compassion might act as a type of buffer against the effects of negative events and possibly function as an effective coping skill for negative emotion.

Demographics of Self-Compassion

The correlates of self-compassion seem to vary consistently by some specific demographic variables. Prior research suggested self-compassion tends to be slightly (but significantly) lower in women than men (Neff, 2003b; Neff et al., 2005; Neff & McGehee, 2010), a finding which has also held in studies of adolescent populations (Bluth & Blanton, 2014). This finding matched other empirical evidence that suggested as a group, women are more often self-critical and tend to ruminate on negative aspects of self more than men (Nolen-Hoeksema, Larson, & Grayson, 1999). Additionally, one recent study by Bluth, Roberson, and Girdler (2017) suggested male and female adolescents might evidence different patterns of use of self-compassion and other mindfulness skills post-intervention. Research on age differences indicated adolescents reported the lowest levels of self-compassion, followed by young adult college students, and that community (but not clinical) individuals tended to report more self-compassion later in life (Bluth & Blanton, 2014, 2015; Neff & McGehee, 2010; Neff & Vonk, 2009). The influence of age on self-compassion might also be impacted by gender; the very limited available studies with adolescents (Bluth & Blanton, 2014, 2015; Neff & McGehee, 2010) found older adolescent girls reported the lowest levels of self-compassion.

To date, this researcher could find no published studies that addressed variations in self-compassion based on racial or ethnic factors. Previous study samples have

included some ethnic/racial variation in participants but the majority of the samples have been White and race/ethnicity was not considered as a separate variable of study. Finally, limited research on differences in self-compassion across cultures found self-compassion was not necessarily higher in collectivistic versus individualistic cultures (Akin, 2011; Neff, Pisitsungkagarn, & Hsieh, 2008). Across cultures, however, self-compassion predicted significantly lower scores on measures of depression and greater life satisfaction (Neff et al., 2008).

Self-Compassion as an Emotion Regulation Strategy

Recently, some theorists have conceptualized self-compassion as an emotion regulation strategy (Bluth & Blanton, 2014; Marshall et al., 2015; Neff, 2011). Essentially, these authors proposed the mindfulness component of self-compassion allows for emotional detachment from the experience of suffering, offering the individual the ability to climb out of over-identification and instead use more active coping strategies such as self-kindness. In turn, self-kindness increases self-acceptance and decreases emotional reactivity, giving the individual more control over his or her emotional and behavioral reactions.

Social mentality theory also supports the conceptualization of self-compassion as an effective tool for emotional self-regulation. Gilbert and Irons (2005) wrote that social threats often result in physical arousal in response to the threat, a process not mitigated by passive coping strategies such as avoidance that do not address the perceived threat. However, as an active coping strategy, self-compassion likely activates a self-soothing system in the brain that improves emotional control, effective coping, and the ability to experience feelings of intimacy. As this pathway triggers through activation of the

oxytocin-opiate system, the individual experiences feelings of safety and security that closely resemble the feelings of calmness and safety reported in studies of self-compassion (Gilbert, 1989; Gilbert & Irons, 2005; Gilbert & Procter, 2006; Zeller et al., 2015).

Using this framework, other authors have noted, “Self-compassion may be particularly useful in circumstances involving social evaluative threat- that is, situations in which an aspect of one’s self is at risk of being judged negatively” (Finlay-Jones et al., 2015, p. 2). Feelings of safety, soothing, and comfort are often created via receiving comfort from others but those feelings could also be reliably reproduced through self-compassion with very similar effects. A 2006 pilot intervention study by Gilbert and Procter used a therapeutic group curriculum, compassionate mind training, to increase self-compassion in a group of six chronically distressed day treatment patients. Initially, these participants reported high levels of shame and self-criticism and found self-warmth and self-acceptance difficult and/or frightening. Following a 12-week intervention, participants reported significant decreases in depression, anxiety, self-criticism, and shame and significant increases in self-soothing. Similarly, a 2017 randomized controlled trial with adults found a significant decrease in depression, anxiety, and negative affect following a compassion-focused group intervention (Sommers-Spijkerman, Trompetter, Schreurs, & Bohlmeijer). A 2017 study by Bluth and Eisenlohr-Moul found a self-compassion intervention with adolescents decreased reported stress and anxiety and increased perceived resilience.

A series of empirical studies by Leary et al. (2007) found when individuals were asked to recall past failures or to imagine specific failure experiences, both trait and

induced self-compassion were associated with decreased emotional reactivity, decreased negative affect, increased acceptance, and an increased ability for detached perspective-taking. Additionally, a 2015 structural equation modeling study by Finlay-Jones et al. found self-compassion reduced stress symptoms in nonclinical adults via a reduction in problems of emotional regulation. Overall, these findings suggested individuals reporting higher levels of self-compassion were more accepting of unpleasant emotional states and were more likely to access effective emotional regulation strategies in times of pain or stress, resulting in fewer difficulties in controlling reactive behaviors and promoting adaptive responses to stress or emotional pain (Finlay-Jones et al., 2015; Raes, 2010; Roemer et al., 2009; Vettese et al., 2011). This same pattern has also been found in small samples of adult inmates with self-compassion and meditation practices linked to improved impulse control and self-regulation in a correctional setting (Morley, 2017).

Laboratory studies have also found biological evidence for these proposed differences in both cross-sectional and intervention studies. A 2014 intervention study by Arch et al. (2014) found women who completed a brief self-compassion training displayed affective and biopsychosocial responses to social threat consistent with lower stress response. Similarly, a 2014 study by Breines et al. documented a significant decrease in hormone response to an acute induced stress condition for young adult participants with higher scores in self-compassion. A 2015 study by Breines et al. found college students who reported higher levels of compassion registered a lower hormonal stress response in response to repeated stress as measured through salivary content. Finally, Matos et al. (2017) found significantly lower heart rate variability in young adults who completed a brief compassion training.

Collectively, these findings indicated the association of self-compassion with reported feelings of soothing and calmness could be biologically tracked as well as investigated through self-report, offering additional support for the purported correlates of self-compassion.

Self-Compassion as a Possible Protective Factor

Based on available studies, it would appear self-compassion might moderate both psychological and physiological responses to stress (including social stress) for individuals across the lifespan. With all of these benefits, some authors proposed self-compassion could function as a protective factor against the effects of adverse experiences, meeting both the reliability and validity requirements of rigorous research in this area (Cording & Christofferson, 2017). Preliminary research in this area is sparse but the evidence available thus far suggests self-compassion is a promising mechanism for promoting individual well-being and resilience (Finlay-Jones et al., 2015; Neff, 2016).

A 2007 study by Neff et al. offered the first empirical look at self-compassion as a buffer factor against negative affect such as shame and anxiety. In this study, the authors induced ego threat using a standardized laboratory-based induction procedure and found that unlike self-esteem, self-compassion functioned protectively against feelings of anxiety. Next, a 2010 study by Neff and McGehee found self-compassion was strongly associated with emotional well-being in both adolescents and adults, counteracting the effects of negative self-views. In the same vein, a 2015 longitudinal study by Marshall et al. found high self-compassion provided protection against the effects of low self-esteem in a large sample of adolescents.

Where this process might be most salient, though, is with populations that have already or are likely to encounter adverse experiences. In a 2015 study, Zeller et al. tested the possible protective role of self-compassion with respect to trauma-related psychopathology. Their sample of 64 at-risk Israeli high school students was gathered from a residential school community that survived a forest fire and was displaced. Each adolescent was assessed at three points in time: within 30 days of the event and at three and six months post-event. A multi-level mediation model documented potential prospective protective functions of self-compassion in posttraumatic, panic, and depressive symptoms over and above dispositional mindfulness. These results provided support for the possibility that self-compassion might have potential as a malleable protective factor for youth exposed to trauma.

Self-compassion might also be particularly relevant for another trauma-exposed population--youth who have survived childhood neglect and/or maltreatment. Throughout the lifespan, individuals who have experienced neglect and/or maltreatment reported especially low levels of self-compassion compared to the general population but the already-low self-compassion scores of adolescents combined with a history of victimization left these young people at particular risk for harm and impairment (Bennett et al., 2005; Stuewig & McCloskey, 2005; Tanaka et al., 2011; Vettese et al., 2011). This hypothesis has been supported by several recent studies on self-compassion in adolescence.

In a landmark 2011 study, Vettese et al. tested a protective model for self-compassion with 81 transition-age foster youth struggling with problem substance use. In this study, level of self-compassion predicted emotional dysregulation above and

beyond maltreatment history, current severity of psychological distress, and level of problem substance use. In this sample, self-compassion also mediated the relationship between childhood maltreatment severity and later emotional dysregulation. In another study, Tanaka et al. (2011), using a sample of 117 maltreated youths, found higher childhood emotional abuse, emotional neglect, and physical abuse were associated with lower self-compassion and noted this effect was especially pronounced in adolescents who had experienced emotional abuse. Self-compassion was also negatively related with a host of other maltreatment-related impairments such as suicidality, substance use, and general psychological distress.

Finally, in a 2014 study, Jativa and Cerezo tested a mediation model using self-compassion as a mediator between victimization history and psychological maladjustment. They found self-compassion partially mediated that relationship and reduced negative consequences in adolescents who reported one or more victimizations. Considered together, these results suggested self-compassion could be an effective and important component of treatment for trauma-exposed adolescents and those struggling to regulate emotion effectively.

Measurement of Self-Compassion

In prior research, self-compassion has virtually always been measured via the SCS (Neff, 2003a), a 26-item self-report scale developed using factor analysis; items loaded onto six factors representing the six poles of the three major factors of self-compassion: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification. For this measure, respondents described the frequency of their own experience of each item using a 5-point Likert-type

scale ranging from 1 (*Almost never*) to 5 (*Almost always*). Items on the self-judgment, isolation, and over-identification factors were reverse-coded to yield a total score as well as a score for each subscale.

The SCS (Neff, 2003a) was originally normed on 391 undergraduate students and had an overall internal consistency reliability of .92. The internal consistency reliability of each subscale was initially reported as follows: .78 (self-kindness), .77 (self-judgment), .80 (common humanity), .79 (isolation), .75 (mindfulness), and .81 (over-identification; Neff, 2003a). Convergent validity analyses demonstrated the correlation of the SCS with other scales in theoretically expected directions. Specifically, the SCS had a positive correlation with life satisfaction (.45), self-esteem (.59), and effective emotion coping (.39) and a negative correlation with depression (-.55), anxiety (-.66), rumination (-.50), and self-criticism (-.65). In subsequent research, results indicated at least 90% of the reliable variance in SCS scores could be explained by an overall self-compassion factor in five different populations and support was also found for the six-factor structure. These results have been replicated with adolescent, college student, and adult populations; meditators and non-meditators; and American and international samples (Neff, 2016). Overall, the validity and reliability of the SCS makes it a strong measure of self-compassion based in a well-defined and well-researched theoretical framework.

To increase the research utility of the SCS (Neff, 2003a), Raes, Pommier, Neff, and Van Gucht (2011) created a shortened version of the measure. The SCS-Short Form (SCS-SF) contains 12 items selected from the original SCS that represent the three poles of self-compassion. The internal reliability coefficient for the SCS-SF in a sample of 415

college students was reported as follows: total scale (.86), self-kindness (.54), self-judgment (.63), common humanity (.62), isolation (.68), mindfulness (.69), and over-identification (.75). The total scale score of the SCS-SF had a nearly perfect correlation (.98) with the total scale score of the original SCS, suggesting it was an adequate measure of self-compassion as defined and measured in the original SCS. However, due to the poorer internal reliability coefficients for each subscale on the SCS-SF, interpretation of individual subscales is not recommended, which was a major limitation of this measure (Raes et al., 2011). Therefore, the present study used the full SCS to assess respondents' level of self-compassion.

Summary and Rationale for Study

Social mentality theory asserts that self-conscious emotions like shame help individuals create and maintain social bonds, comprehend social threat, and make reparative efforts for social missteps (Gilbert, 1989). Individual shame responses typically fall into one of four categories (avoid, withdraw, attack self, or attack others; Nathanson, 1992). In each category, the purpose of the regulation strategy is to change the experience of shame into a more manageable form (Elison et al., 2006). Most shame-induced behaviors support the social goals of shame, opening the possibility of the mending of bonds and reestablishment of social rank. However, any of Nathanson's (1992) four identified categories of shame coping, if used ineffectively, could also lead to maladaptive behavioral responses detrimental to individual and group functioning (Gilbert & Irons, 2005; Wolfe et al., 1986). One such maladaptive coping style, aggressive behavior, is generally theoretically accepted as being reliably related to shame (Dearing & Tangney, 2011; Scheff, 1987; Tangney & Dearing, 2002; Velotti et al., 2014)

but the actual mechanisms of the relationship between shame and aggression are not as clear (Stuewig et al., 2010). Prior studies have investigated possible mediators of anger, hostility, and externalization of blame--all factors that contribute to aggression (Bennett et al., 2005; Hoglund & Nicholas, 1995; Tangney et al., 1992, 1996), with externalization of blame emerging as the most promising possible mediator between shame and aggression.

Tangney et al. (2011) noted shame appeared to serve a similar function among offender and community samples but engendered significantly different patterns of response to feelings of shame. In a targeted review of the limited literature related to shame and aggression in known criminal offenders, Schoenleber and Berenbaum (2012) characterized aggression toward others as a maladaptive shame regulation strategy commonly seen in samples of adult inmates. Aggressive behavior also appeared to be associated with recidivism rates among adult offenders; one seminal longitudinal study (Hosser et al., 2008) found higher shame ratings at initial incarceration predicted higher post-release recidivism rates for offenders over a period of six years. These results maintained statistical significance even after the authors controlled for a wide variety of other factors known to affect recidivism rates: age, intelligence, offender substance use, parental criminal records, type of offense, number of past offenses, and length of sentence.

Overall, aggression is a much more commonly used shame-coping strategy in criminally convicted respondents including criminally convicted juveniles. A 2007 study by Robinson et al. using both inmate and community adolescent samples found shame-proneness was positively related to anger and aggression in both samples, but the

relationship was stronger for the inmate sample. Similarly, a 2009 study by Aslund et al. found a significant correlation of 0.28 between scores of shame and aggression in a sample of 5,396 adolescents and theorized gender might also be an important factor in the relationship between shame and aggression. As a starting point, these authors noted in their sample, “Girls who reported a higher rate of shaming experiences were four times more likely to have perpetrated physical aggression than girls who reported fewer shaming experiences” (Aslund et al., 2009, p. 9). Other studies also supported a potential gender effect in the relationship between these variables, especially in violent offenders (Hornsveld et al., 2018).

Researchers working with criminally involved samples have not thus far focused as strongly on the possible role of factors that might interrupt the cognitive cascades leading from shame experiences to aggressive behavior. However, many researchers have recently published calls to move the field of correctional research in a more strengths-based and preventative direction (Kewley, 2017; Polaschek, 2017) and the concept of self-compassion emerged as a natural fit for this adjustment in perspective. Self-compassion is rooted in Eastern philosophy and mindfulness traditions and is generally defined in the literature as consisting of three components, each with two contrasting poles that overlap and mutually interact: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification (Neff, 2003b). Prior research found self-compassion was positively associated with higher levels of happiness, optimism, general positive affect, contentedness, wisdom, adaptive coping (Allen & Leary, 2010; Hollis-Walker & Colosimo, 2011; Neff et al., 2005, 2007), self-determination, emotional intelligence

(Neff, 2003b), effective emotional regulation (Dundas et al., 2017; Jazaieri et al., 2018), and greater life satisfaction (Allen & Leary, 2010). Self-compassion also appeared to have a positive effect on those in the larger social world: individuals higher in self-compassion report more empathy toward others, forgiveness, and altruism (Neff & Pommier, 2013) and appeared to have better relationship functioning than those lower in self-compassion (Neff & Beretvas, 2012; Yarnell & Neff, 2013). Self-compassion has been negatively correlated with a wide range of mental health concerns and is consistently associated with lower levels of depression and anxiety. A 2012 meta-analysis by Macbeth and Gumley reported a large effect size of -0.54 for the relationship between self-compassion and depression, anxiety, and stress. Taken together, these results suggested self-compassion might act as a type of buffer against the effects of negative events and possibly functions as an effective coping skill for negative emotion.

Using this conceptual framework and social mentality theory's support for aggression as a reaction to social threat, it became clear "self-compassion may be particularly useful in circumstances involving social evaluative threat- that is, situations in which an aspect of one's self is at risk of being judged negatively" (Finlay-Jones et al., 2015, p. 2). Given this possibility, the relationship between shame and self-compassion appeared to be a promising area of study to potentially improve emotional regulation, decrease aggression, and lower recidivism rates for juvenile offenders. One group of authors even argued,

Many instances of aggression would be better understood as reactions to shame.

Therefore, we advocate for more research on the shame-aggression link and for

implementation of interventions with violent offenders that target shame regulation. (Velotti et al., 2014, p. 455)

This study served as one contribution toward this aim. Given its many positive associations for a wide variety of samples, self-compassion also appeared to be an important component of individual resilience and overall well-being. Specifically, high self-compassion might function as a buffer against the effects of shame, trauma, and other adverse experiences.

Research reviewed throughout this chapter empirically demonstrated self-compassion skills could be increased through intervention with many resultant positive effects. These benefits could also be activated in a wide range of clients, setting up an ideal opportunity for clinicians and other service providers to incorporate self-compassion as an effective treatment component for a variety of psychopathologies. Improvement of self-compassion skills would likely be an important target for intervention in programs designed to address emotional distress, maladaptive or harmful coping strategies, and other psychological maladjustments (Boellinghaus et al., 2013; Finlay-Jones et al., 2015; Newsome et al., 2012; Stafford-Brown & Pakenham, 2012). However, as this is a relatively new area of research, many questions are unanswered about the effects of self-compassion in relation to other relevant concepts and within different populations. These open questions create an exciting and active research area and set up self-compassion as an ideal candidate for continuing investigation with an eye toward building more effective interventions in the future.

While some empirical work has already been conducted with these goals in mind, the population of juvenile offenders has not previously been studied with regard to the

relationship among shame, self-compassion, and aggression. To bring the potential benefits of self-compassion to young offenders (and society at large, which would benefit in myriad ways from decreased rates of juvenile crime), this study helped to develop a better understanding of the relationship among shame, self-compassion, and aggression in a sample of nonviolent and violent juvenile offenders. Using the frameworks of social mentality theory and Nathanson's (1992) categorizations of common shame responses, this study sought to understand the role of shame in aggressive behavior in juvenile offenders and explore the relationship of self-compassion to shame in this population as well as the relationship of both concepts to aggressive behavior. As the relationship among these constructs has not yet been examined in the literature for this population, results of this study might help clients and practitioners better understand the relationship between shame and aggressive behavior in juveniles and provide foundational information on the potential impact of self-compassion on curbing aggressive behavior. The results of this study inform future research in this area, which will eventually contribute to the development of more effective interventions for at-risk and offender youth, potentially increasing effective emotional regulation in at-risk youth and decreasing aggressive behavior.

In the next chapter, the methodology for this study is presented along with specific research questions and proposed statistical analyses.

CHAPTER III

METHOD

This chapter provides an overview of the research methodology for the current study. It describes participant characteristics, recruitment processes, measures, and research questions, as well as data analysis procedures.

The current study used a cross-sectional design to examine the relationships between adolescent respondent scores on measures of shame, self-compassion, and aggressive behavior. The results of the study illustrated the way(s) in which two types of group membership (male and female; nonoffender, nonviolent offender, and violent offender), and the interaction of those group memberships, affected participant scores on measures of the three constructs identified above.

The current study sought to contribute initial findings to the growing body of research in possible contributors to aggressive behavior as well as possible interrupters in cognitive, emotional, and behavioral cascades that often lead to aggressive behavior. Following a review of literature, shame was identified as a likely contributor to aggressive behavior (Robinson et al., 2007; Scheff, 1987; Stuewig et al., 2010; Tangney & Dearing, 2002), an effect that appears to be particularly pronounced in adult and juvenile offender populations (Dearing & Tangney, 2011; Tangney et al., 2011; Velotti et al., 2014; Wright et al., 2008). Self-compassion was then identified as a possible

interrupter of aggressive behavior based on its relationship to general psychological well-being (Allen & Leary, 2010; Hollis-Walker & Colosimo, 2011; Neff et al., 2005, 2007), its potential to provide empathy and self-soothing to oneself and others (Bluth & Blanton, 2014; Neff, 2003b; Neff & McGehee, 2010; Neff & Pommier, 2013), and its calming effect on biological threat arousal systems that likely contribute to aggressive behavior (Breines et al., 2014, 2015). However, the constructs of shame and self-compassion cannot be directly observed or measured so for research purposes they must be operationally defined and linked to something observable such as self-report scales (Byrne, 2008). Aggression can technically be defined behaviorally through longitudinal observation but as this study used a cross-sectional design, aggressive behavior was also defined using a self-report scale.

A multivariate analysis of variance (MANOVA) procedure was used to identify and evaluate any main effect group differences and any interaction effects. Follow-up analyses were then conducted to identify specific differences when appropriate.

Participants

Male and female adolescent participants ages 11-18 were recruited for the study via the Campus Connections mentoring program at the University of Northern Colorado, several offices of the Community Reach Center mental health agency, and the Youth and Family Connections agency in Greeley, Colorado.

Prior to participation, parents or guardians of interested youth signed an informed consent form and youth signed an assent form (see Appendix A). Participating youth completed a survey packet comprised of the measures described below at the time of participation agreement. After participants completed the survey packet, the collected

data were stored in a locked area at the University of Northern Colorado. Data were then entered into a statistical software package and stored on a password-protected computer.

To improve response rate, participants were offered a choice of snack item in exchange for survey completion. The use of snack items as an incentive was supported by both ethical guidelines related to research incentives (Grant & Sugarman, 2004; Singer & Bossarte, 2006) as well as prior studies on efficient use of incentives that documented increased response rates for studies using incentives and those studies using small personal incentives as opposed to lotteries (Couper, 2008). Because data were collected in person at the time of consent/assent and the packet required a fairly short time commitment of 10-20 minutes, study attrition was limited to one participant.

To calculate a required sample size to conduct a MANOVA, the G*Power program was utilized. Using Cohen's (1992) effect size guidelines, a desired power level of .80 was used in the calculation with the goal of detecting a small effect size of 0.15. The desired alpha was set to .05 as per the convention of the field. Two independent variables were entered into the program (gender and offender status) and five dependent variables were entered (scores on the SCS [Neff, 2003a], the three scales of the ASPS [Simonds et al., 2015], and the Reactive-Proactive Aggression Questionnaire [Raine et al., 2006]). Using these parameters, the G*Power program estimated a sample size of 114 would be adequate to conduct the intended analyses.

Instrumentation

Demographics

Participants completed a demographic questionnaire (see Appendix B) that asked adolescent participants to disclose their age, gender, ethnicity, primary language, current

grade level, present and historical juvenile criminal charges (if applicable), and age at first arrest (if applicable). Gender and presence/absence of criminal charges as well of type of charges if present were used as independent variables in the present study. All other demographics items not used in the current study were collected for future analyses to explore other potential variations in results across membership categories and generate possible directions for future research.

Self-Compassion

Self-compassion was measured using the SCS (Neff, 2003a), a 26-item self-report instrument developed using factor analysis. Confirmatory factor analysis yielded a single higher-order factor of self-compassion with six subscales (non-normed fit index = .90, comparative fit index [CFI] = .92). The six subscales represented the six poles of the three major factors of self-compassion: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification. On this measure, respondents described the frequency of their own experience of each item using a 5-point Likert-type scale ranging from 1 (*Almost never*) to 5 (*Almost always*). Items on the self-judgment, isolation, and over-identification factors were reverse-coded. Scoring yielded an overall self-compassion score as well as a score for each of the six subscales. The self-kindness and self-judgment subscales both contained five items while the remaining four subscales each contained four items. Sample items included “I’m tolerant of my own flaws and inadequacies,” “I try to see my failings as part of the human condition,” and “When I fail at something important to me I try to keep things in perspective” (see Appendix C).

The SCS has demonstrated good psychometric properties and a stable structure of one higher-order self-compassion factor and six subscales in Neff's (2003a) work as well as several independent samples (Finlay-Jones et al., 2015; Jativa & Cerezo, 2014; Marshall et al., 2015; Neff, 2003a, 2016; Neff & McGehee, 2010; Tanaka et al., 2011; Vettese et al., 2011). Studies using the SCS have regularly demonstrated adequate internal consistency estimates with an overall internal consistency reliability of .92. The internal consistency reliability of each SCS subscale was initially reported as follows: .78 (self-kindness), .77 (self-judgment), .80 (common humanity), .79 (isolation), .75 (mindfulness), and .81 (over-identification; Neff, 2003a) and subsequent studies have reported Cronbach's α estimates at or higher than the originally reported statistic for the scale as a whole and each subscale (Neff, 2016). These results have been replicated with adolescent, college student, and adult populations; meditators and non-meditators; and American and international samples (Neff, 2016). Of specific relevance to this study, recent work supported the construct related validity of the scale when used with a sample of adolescent male and female students aged 11 and older (Bluth & Blanton, 2014; Marshall et al., 2015; Neff & McGehee, 2010; Tanaka et al., 2011; Vettese et al., 2011; Zeller et al., 2015).

Convergent validity analyses demonstrated the correlation of the SCS (Neff, 2003a) with other scales in theoretically expected directions. Specifically, the SCS had a positive correlation with life satisfaction (.45), self-esteem (.59), and effective emotion coping (.39) and had a negative correlation with depression (-.55), anxiety (-.66), rumination (-.50), and self-criticism (-.65; Jativa & Cerezo, 2014; Marshall et al., 2015; Neff, 2003a, 2016; Neff & McGehee, 2010; Tanaka et al., 2011; Vettese et al., 2011).

Participants received a total composite score for self-compassion, ranging from 26 to 130, with high scores indicating higher perceived levels of self-compassion. They also received a separate score for each of the six subscales with higher scores indicating higher perceived levels of self-kindness (scores ranged from 5 to 25), self-judgment (scores ranged from 5 to 25), feelings of common humanity (scores ranged from 4 to 20), isolation (scores ranged from 4 to 20), mindfulness (scores ranged from 4 to 20), or over-identification (scores ranged from 4 to 20). Because the reliability alpha scores for the six subscales ranged from 0.73-0.91 across studies and did not appear to be as strong as the reliability statistic for the scale as a whole, especially with younger respondents, in this study, only the overall score on the measure was used for analysis. Overall, the validity and reliability statistics of the SCS (Neff, 2003a) supported the characterization of the SCS as a strong measure of self-compassion based in a well-defined and well-researched theoretical framework. Permission to use this measure was granted by Dr. Kristin Neff (see Appendix D).

Shame

Shame was measured using the ASPS (Simonds et al., 2015). The ASPS is a recently published 19-item self-report measure of shame designed specifically for use with adolescent respondents (see Appendix E). The ASPS asked participants to think of three specific shame-eliciting situations they had recently experienced and then indicate their level of agreement with a series of 19 prompts based on experiences during the chosen shame events. Participants indicated agreement on a scale of 0 (*Not at all*) to 3 (*Quite a lot*). Sample items included “I felt worthless and small,” “I wanted to punch walls or break things,” and “I thought ‘I am stupid’” (Simonds et al., 2015).

The ASPS (Simonds et al., 2015) is composed of three factors identified through factor analysis: negative self-evaluation, externalization, and emotional discomfort (Root Mean Square Error of Approximation [RMSEA] < .06, CFI > .95). No overall or total score was generated--only scores for each factor of the shame experience. Scores for the Negative Self Evaluation subscale ranged from 0-30; scores for the Externalization subscale ranged from 0-12; and scores for the Emotional Discomfort subscale ranged from 0-15. Internal consistency reliability for each factor was reported as follows: negative self-evaluation (.90), externalization (.82), and emotional discomfort (.82) in a sample of suburban adolescent students. In the initial series of development and validation studies, higher scores on the ASPS subscales were associated with low reported self-esteem, vulnerability to social criticism and rejection, aggression, other externalizing behaviors, and negative emotions such as guilt and anger; lower scores were associated with indicators of psychological well-being (Simonds et al., 2015).

The ASPS (Simonds et al., 2015) was designed and validated for adolescents 11- to 18-years-old, an age range selected based on prior research that indicated children as young as 10 hold similar opinions to adults on the difference between shame and guilt and can reliably distinguish between the two concepts (Ferguson et al., 1991). In the 2015 sample, younger adolescents were indeed able to distinguish shame-related concepts of this instrument from the more guilt-focused items contained in other administered measures such as the TOSCA (Tangney et al., 1992), which offered both shame and guilt items. This ability to separate the two concepts was evidenced by both qualitative data gathered during participant interviews as well as quantitative data

indicating distinct score patterns and correlations for shame and guilt items (Simonds et al., 2015).

Concurrent validity for the ASPS (Simonds et al., 2015) was established using TOSCA-A (Tangney et al., 1992), which offered both shame and guilt items. All three factors correlated with the TOSCA-A shame and guilt scales in the expected direction. Further, the correlations of these three factors with the TOSCA-A shame and guilt scales indicated the ASPS items were measuring concepts related to the TOSCA-A items but also measured other distinct characteristics of shame.

Convergent validity was established with the Positive and Negative Affect Schedule for Children (PANAS-C; Laurent et al., 1999) and the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). Again, the ASPS scales (Simonds et al., 2015) were related to the other concepts in theoretically expected directions (see Table 2 for more detailed information). Anger, as measured by the AESC (Steele et al., 2009) was positively related to all three ASPS factors and control of anger was negatively related to the negative self-evaluation and externalization factors. All three factors were positively associated with negative affect as measured by the PANAS and positive affect was negatively associated with both negative self-evaluation and externalization.

Permission to use this measure was granted by Dr. Laura Simonds (see Appendix F). While Dr. Simonds indicated she had received several other requests to use the measure for research purposes, no other published studies available have used this instrument to measure shame-proneness.

Aggression

Aggression was measured using the RPAQ (Raine et al., 2006). The RPAQ is a 23-item self-report measure of aggressive behavior designed for use with child and adolescent samples (see Appendix G). The RPAQ is made up of two factors identified through factor analysis, proactive aggression and reactive aggression, which could be combined to provide a total aggression score ($RMSEA < .037$, $CFI < .91$). The proactive aggression subscale contained 12 items and the reactive aggression subscale contained 11 items. Internal consistency for each factor was reported as follows: reactive aggression (.84), proactive aggression (.86), and total score (.90). Convergent validity measures showed correlations in the expected direction with other measures of aggression, anger, and hostility, and measures of discriminant validity measures showed correlations in the expected direction with measures of internalizing symptoms such as withdrawal, isolation, and somatic complaints. Criterion validity was also assessed by comparing current scores to retrospective self-report and parental report of aggressive behavior at age seven; participants whose behavior was classified as violent at age seven (i.e., initiating physical fights with peers) also reported significantly higher levels of aggressive behavior at age 16.

The RPAQ (Raine et. al., 2006) was designed and validated for use with adolescents 10-18 with items written at a third-grade reading level. The RPAQ used the common stem of “How often have you...” and asked respondents to rate how often they had engaged in specific thoughts and behaviors when angry on a scale of 0 (*Never*), 1 (*Sometimes*), or 2 (*Often*). Sample items included “Taken things from other students,” “Gotten angry when frustrated,” and “Hit others to defend yourself” (Raine et. al., 2006).

Scores on the RPAQ ranged from 0 to 46 with higher scores indicating higher reported aggressive behavior. Scores on the proactive aggression subscale ranged from 0 to 24 and scores on the reactive aggression subscales ranged from 0 to 22, again with higher scores indicating higher reported aggressive behavior in that category. Permission to use this measure was granted by Dr. Adrian Raine (see Appendix H).

Procedures

Participant Recruitment

Before collecting data, an application for approval to conduct the study was obtained from the university's Institutional Research Board in the Office of Sponsored Programs. Permission was obtained for each of the three recruitment sites (see Appendix I). Adolescent participants in services through UNC's Campus Connections mentoring program attended a short presentation on the study provided by the researcher. Interested youth completed the study measures during scheduled program time. For adolescent participants recruited via Community Reach Center or Youth and Family Connections, their service providers reviewed study information during a regularly scheduled appointment using a standardized script provided by the researcher. Interested youth completed study measures during a scheduled appointment at the respective agency's office.

Informed Consent Process

All respondents had a parent or guardian review and sign the informed consent document describing the details of the study, requirements of participation, compensation, and any risks involved prior to participation; each youth also signed an assent form reviewing the same content (see Appendix B). The informed consent and

informed assent processes were completed in the same session as the measures. Once written consent and assent were both obtained, the youth completed the survey packet containing Appendices A, B, C, E, G, and J.

After the survey packet was completed, the parent/guardian and/or the minor participant was able to add their email address to a mailing list to be sent a summary of study results when it became available. Finally, parents/guardians and/or minor participants were also provided with a debriefing document describing the purpose of the study and providing resources and contact information for organizations that provide counseling and emergency services should the participant experience any adverse effects as a result of participating in the study (see Appendix J).

Study Measures

The study's measures were provided in a single packet that was completed in person in one continuous session. Individual questionnaires were presented in their entirety and in random order for each participant. For example, one participant initially received the SCS (Neff, 2003a) while another participant initially received the ASPS (Simonds et al., 2015). Prior authors have noted evidence that the order in which questions were presented "may be critical in determining which options are likely to be chosen" (Couper, Tourangeau, Conrad, & Crawford, 2004, p. 125; Krosnick & Alwin, 1987). Therefore, varying the order of measure completion was an important precaution intended to lessen the potential of response order effects.

The exception to this randomization process was the demographics questionnaire. A recent study by Teclaw, Price, and Osatuke (2012) found placing demographic questions at the beginning of a survey resulted in a 10% higher response rate than placing

the same set of demographic items at the end of the survey. However, questions asking about factors that could potentially activate stereotype threat (Steele, 1998), such as race or gender, might influence responses on subsequent measures and affect results. On the other hand, placing demographic questions at the end of a survey likely helped avoid fatigue effects for instruments used to represent the dependent variable. A third option was to lead with nonthreatening questions and end the survey with more sensitive questions after the respondent was more comfortable with the researcher and the survey process (Babbie, 2008; Colton & Covert, 2007; Stoutenborough, 2008). With those arguments in mind, this study began each response packet with demographic questions that were projected to be nonthreatening (i.e., name, age, grade level) and ended each packet with potentially more sensitive demographics questions (i.e., gender, race, ethnicity, arrest history, and conviction history) in order to minimize the potential impact of more sensitive topics on study measures.

After the survey packet was completed, participants chose a snack, received a debriefing handout, and were provided with the opportunity to add an email address to the results distribution list if they chose to do so.

Study Sample Size

At minimum, Tabachnick and Fidell (2007) recommended that every cell of a research design contain more cases than the number of dependent variables in order to use a MANOVA. The current study identified two independent variables, gender and offender status, and five dependent variables: total score on the SCS (Neff, 2003a), scores on the three subscales of the ASPS (Simonds et al., 2015), and total score on the RPAQ (Raine et al., 2006). Given these parameters, the above standard required at least six

cases in each of 10 cells so the minimum sample size would be 60. However, using the smallest possible cell counts did not maximize power and analysis of variance-covariance matrices with small sample sizes was likely to result in a rejection of the null hypothesis for homogeneity due largely to sample size, violating an assumption of MANOVA. To better estimate sample size, a power analysis was conducted using the statistical program G*Power. Using Cohen's (1992) effect size guidelines, a desired power level of .80 was used in the calculation with the goal of detecting a small effect size of 0.15. The desired alpha was set to .05 as per the convention of the field. Two independent variables were entered into the program (gender and offender status) and five dependent variables were entered (scores on the SCS, the three scales of the ASCS, and the RPAQ). With an effect size of 0.15, $\alpha = 0.05$, and power = 0.80, the estimated minimum sample size for this MANOVA was 114. Based on the above findings and recommendations, the targeted sample size was 120 with a goal of equal cell counts as per the intentions of the model (Tabachnick & Fidell, 2007).

Research Questions

The following research questions were formulated to investigate group differences in shame, self-compassion, and aggression among offender type and gender categorizations as well as interactions among group membership categories:

- Q1 Are there significant differences in self-compassion scores between nonoffenders, violent offenders, and nonviolent offenders?
- Q2 Are there significant differences in shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort) between nonoffenders, violent offenders, and nonviolent offenders?
- Q3 Are there significant differences in aggression scores between nonoffenders, violent offenders, and nonviolent offenders?

- Q4 Are there significant differences in self-compassion scores between adolescent males and adolescent females?
- Q5 Are there significant differences in shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort) between adolescent males and adolescent females?
- Q6 Are there significant differences in aggression scores between adolescent males and adolescent females?
- Q7 Is there a significant effect of the interaction of offender status and gender on self-compassion scores?
- Q8 Is there a significant effect of the interaction of offender status and gender on shame-proneness subscale scores (negative self-evaluation, externalizing behavior, emotional discomfort)?
- Q9 Is there a significant effect of the interaction of offender status and gender on aggression scores?

Data Analysis

Although an extensive body of research exists on the link between shame and aggressive behavior (Stuewig et al., 2010), many fewer research studies have addressed possible contributors to that link, especially in adolescent and/or offender populations. While self-compassion remains a promising avenue of research (Neff, 2004, 2009a, 2009b), to date, little research exists on adolescent self-compassion, and no published research has examined self-compassion in adolescent offenders (Morley, 2015). Also, no existing published data are available on the relationship of shame and self-compassion to aggressive behavior in any population adolescent or otherwise. Therefore, this study served to illustrate differences in this sample and establish one set of baseline data to support further research in this important area. Psychometrically robust measurement scales for each construct were selected for this study; these scales have strong support for

both validity and internal consistency for data collected in samples similar to the intended respondent sample in the current study.

After collection, the researcher and an assistant inputted data into the SPSS Statistics 23 software package for analysis. A MANOVA was then conducted to address the research questions of the current study. While many of the research questions were answered via a series of one-way and two-way ANOVAs, starting with a MANOVA analysis was an important first step because the multivariate F value (Wilks' λ) provided by a MANOVA was based on a comparison of error variance/covariance matrices. Due to the multiple measures included as dependent variables, it was important to analyze covariance in case two or more measures were correlated; if so, the multivariate F statistic would take this correlation into account when performing the significance test, providing a more accurate result for multivariate analyses (Tabachnick & Fidell, 2007).

As an initial step in addressing the dearth of research, the MANOVA procedure was used to identify and evaluate any group differences in the three identified concepts of interest by both gender and offense type. A MANOVA was the most appropriate analysis to answer the research questions of this study because its results indicated if any of the hypothesized differences in mean vectors existed for main effects of both group memberships as well as interactions of group memberships for multiple dependent variables (Tabachnick & Fidell, 2007). Due to the presence of two independent variables, a two-way MANOVA procedure was required.

The MANOVA procedure, like other statistical analyses, required that a standard set of assumptions be met (Tabachnick & Fidell, 2007). First, all dependent variables

must be continuous. Second, each independent variable must consist of categorical independent groups. Third, all observations must be independent. Fourth, there must be at minimum more cases in each group than the number of dependent variables. All of these assumptions were met prior to data collection via conscientious research design. The remaining assumptions reflected sample properties and were addressed after all data were collected. First, there must be no significant outliers; this assumption was checked using a Mahalanobis distance statistic for the MANOVA and a boxplot for any subsequent ANOVAs. Second, the procedure assumes multivariate normality; to check this assumption, data from each independent variable were subjected to a Shapiro-Wilk normality test. As each independent variable's statistic met requirements, multivariate normality was assumed. Third, there must be a linear relationship between the dependent variables; this assumption was checked using a scatterplot of data. Fourth, MANOVA assumes homogeneity of variance within each cell; this assumption was checked using a Levene's test for homogeneity of variance. Fifth, there must be no significant multicollinearity, which would impact the ability of the analyses to accurately portray the relative importance of the independent variables in explaining the variation in scores in each dependent variable. This assumption was checked using correlation matrices and variance inflation factor (VIF) statistics.

All independent and dependent variables were entered into the initial MANOVA procedure. If a significant Wilks lambda statistic was produced, indicating a significant multivariate effect, a series of other procedures would then be run to identify the areas in which significant differences existed (Tabachnick & Fidell, 2007). Questions of gender effect would be answered in the initial MANOVA so no further testing would be required

to assess significance in those results. To compare offender status groups, an ANOVA was first conducted for each dependent variable to identify any significant differences in mean scores by offender status. For any significant results, a Tukey's honest significant difference (HSD) test was conducted to identify significant differences between the three groups. This analysis corrected for experiment-wise error and reduced the possibility of a Type I error (Tabachnick & Fidell, 2007).

As a follow-up procedure, offender status group membership was also modified by collapsing nonviolent and violent offenders into a single "offender" category and comparing that group mean score to nonoffender mean score across dependent variables. This analysis was conducted through the use of contrasts, which allowed for the combination of two groups for a single comparison since this comparison between non-assessed groups is not permitted under other post-hoc analyses such as Tukey's HSD. Because many or all of these contrasts might be of interest, Scheffe's more conservative method was used to conduct these comparisons; Scheffe's method is a stepwise multiple comparisons procedure used after ANOVA to identify sample means that are significantly different from each other. It was appropriate for this analysis because it is designed to evaluate significant differences between three or more sample means and uses corrections to account for the higher number of sample means used in analysis, reducing the probability of a Type I error (Tabachnick & Fidell, 2007). In the next chapter, analyses of the data are presented.

CHAPTER IV

RESULTS

This chapter reports the results of this study. First, the demographic characteristics of the sample are described. Next, the assumptions for the MANOVA statistical analysis are tested, followed by a set of analyses to address the research questions posed in this study. Finally, post-hoc analyses are described along with the effect size estimations for any significant results of analyses.

Of the 107 participants who completed the study informed consent process, one participant marked all items with the same response for two out of the three measures and was thus excluded due to validity concerns, leaving a final sample size of 106. While the target sample size was 114, the final sample of 106 met criteria for MANOVA analysis (Tabachnick & Fidell, 2007); therefore, recruitment was considered complete for this phase of the study. Based on this final sample, 56 identified as female (52.8%) and 50 identified as male (47.2%). The mean age of the sample was 15.32 ($SD = 1.45$; range of 11-18). For the ethnic composition of the sample, 58.5% of respondents identified as Hispanic, 23.6% Caucasian, 14.2% multiple races/ethnicities, 2.8% African American, and 0.9% Asian American. Seventy-eight respondents reported speaking English as their primary language (74.6%), 27 reported Spanish (24.5%), and one reported an African language (0.9%).

With regard to sampling, two respondents (1.9%) were recruited from a university-based mentoring program for at-risk youth, 50 respondents (47.2%) were recruited from a community mental health agency serving low-income and homeless families, and 54 respondents (54.9%) were recruited from a community social services agency serving at-risk youth and families. Thirty-two respondents (30.2%) reported at least one prior arrest; 2.3 was the mean number of arrests. The average age of first arrest was 13.6 years old. Total number of arrests ranged from 1-12. Of those reporting at least one arrest, 20 (62.5%) reported only nonviolent charges such as theft, driving without a license, or possession of alcohol; 12 (37.5%) reported at least one violent charge such as assault, felony menacing, or armed robbery. The remaining 75 respondents (69.8%) reported no prior arrests.

Multivariate Analyses

To begin, a series of Pearson correlations was performed between all of the dependent variables to test the MANOVA assumption that the dependent variables would be correlated with each other in the range of 0.20 to 0.90 (Meyers, Gamst, & Guarino, 2016), which suggested the dependent variables were correlated but not to the point of multicollinearity. Extreme multicollinearity, defined as a value greater than 0.9 (Kline, 2015), would indicate a violation of assumption. As can be seen in Table 3, a meaningful pattern of correlations was observed amongst the dependent variables within the desired range, suggesting the appropriateness of a MANOVA.

Table 3

Pearson Correlation Statistics Between Dependent Variables

Scale	RPAQ	SCS	NSE	ED	EXT
Reactive-Proactive Aggression Questionnaire (RPAQ)		-0.343**	0.262**	0.309**	0.653**
Self-Compassion Scale (SCS)			-0.575**	-0.501**	-0.458**
Negative Self-Evaluation (NSE)				0.866**	0.582**
Emotional Distress (ED)					0.634**
Externalizing (EXT)					

** denotes a significant correlation at $p < .01$

Additionally, VIF scores were also calculated as a second method to check for multicollinearity. The VIF scores for each of the five dependent variables ranged from 1.014 to 1.016, well below the recommended cut-off score of $VIF = 10$ for extreme multicollinearity (Kline, 2015).

A Box's M test was then conducted and the resulting statistic of 89.366 ($p = .001$) was interpreted as significant based on Huberty and Petoskey's (2000) guideline (i.e., $p < .005$). Thus, the covariance matrices between the groups could not be assumed to be equal for the purposes of the MANOVA. To address this issue, a more conservative Pillai's trace statistic was used in the interpretation of the significance of the MANOVA results. This analysis and resulting statistic were considered to be more powerful and robust than a Wilks lambda, particularly in samples with uneven cell sizes or small sample sizes (Seber, 1984); therefore, it was a suitable choice for use with the current data set. Due to the violation of the assumption of equality of covariance matrices, the Pillai's trace statistic was the only appropriate statistic for interpretation (Tabachnick &

Fidell, 2007). Finally, to address potential concerns about differences in results between primary language groups, a *t*-test was conducted for each dependent variable between primarily English-speaking participants and those who identified their first language as one other than English. The results were nonsignificant with *p* values ranging from 0.17 to 0.68.

A MANOVA was then conducted to address the many research questions of this study with the added protection against Type I error inflation inherent in the MANOVA analysis. To investigate Research Questions 7, 8, and 9 addressing the potential for a significant interaction effect on the dependent variables, the MANOVA analysis compared differences in mean scores on the RPAQ, SCS, and the negative self-evaluation, emotional distress, and externalizing subscales of the ASPS using classifications of participants via the independent variables of gender (male/female) and offense category (nonoffender/nonviolent offender/violent offender). Using Pillai's trace statistic, the multivariate effect was not significant, $F(192) = 0.948$, $p = .491$. This result suggested the interaction of gender and offense category did not have a significant effect on mean scores for these measures.

While the result of the overall MANOVA analysis did not indicate a significant result, suggesting no interaction effect of the independent variables, the Wilks lambda and Pillai's trace statistics were significant at $p < .001$ for both independent variables and, therefore, a series of follow-up ANOVAs was conducted. This procedure is appropriate in multivariate analysis studies when the outcome variables are conceptually independent and the researcher is interested in how each independent variable affects each of the outcome variables (Huberty & Petoskey, 2000). Given the specific research questions of

the main effects of gender and offense category on each of the five dependent variables in this study and the conceptually discrete measures used, this procedure was suitable for the current study. Prior to conducting any further analyses, the homogeneity of variance assumption was tested for all dependent variables. Based on a series of Levene's F tests, the homogeneity of variance assumption was considered satisfied with none of the five Levene's F test statistics at or below the statistically significant range ($p < .05$; obtained p values ranged from 0.118 to 0.889).

A series of ANOVA analyses related to gender, addressing Research Questions 4, 5, and 6, was conducted using a Bonferroni correction to the p -value statistical significance threshold to reduce Type I error. For the dependent variable of gender, the ANOVA revealed a significant main effect of gender on the negative self-evaluation ($F(1,104)=17.83, p < .0001$) and emotional distress ($F(1,104)=26.78, p < .0001$) subscales of the ASPS with female respondents reporting significantly more negative self-evaluation ($M = 18.93, SD = 8.89$) than male respondents ($M = 11.36, SD = 9.56$) and significantly more emotional distress ($M = 10.81, SD = 4.24$) than male respondents ($M = 6.28, SD = 4.76$). The effect size of gender was calculated and interpreted using the partial n^2 statistic and interpretation guidelines from Cohen (1992). For negative self-evaluation, $n^2 = 0.110$ (medium effect size) and for emotional distress, $n^2 = 0.162$ (large effect size). The effect of gender was nonsignificant for the other dependent variables.

A second ANOVA revealed a significant main effect for offense type on all dependent variables, addressing Research Questions 1, 2, and 3. Table 4 provides results of this analysis.

Table 4

Analysis of Variance Results Using Offense Category as the Independent Variable

Scale	<i>F</i> (2,102)	<i>p</i> -value
Reactive-Proactive Aggression Questionnaire	45.866	<0.001**
Self-Compassion Scale	6.886	0.002**
Negative Self-Evaluation	4.041	0.020**
Emotional Distress	5.403	0.006**
Externalizing	11.819	<0.001**

* denotes a significant result at $p < .05$

** denotes a significant result at $p < .01$

A series of post-hoc analyses (Tukey's HSD) was then performed to examine individual mean difference comparisons across all three categories of offending. The results revealed significant differences in scores across the levels of every dependent variable based on offense category. The results of these analyses are provided in Table 5 and represented graphically in Figures 1, 2, and 3.

Table 5

Mean Scores and Standard Deviations for Post-Hoc Analyses by Offense Category

Scale	Nonoffender	Nonviolent offender	Violent offender
Reactive-Proactive Aggression Questionnaire	$M=8.78^*, SD=4.64$	$M=19.15^*, SD=15.31$	$M=19.42^*, SD=6.23$
Self-Compassion Scale	$M=77.58^*, SD=15.31$	$M=71.20, SD=12.57$	$M=61.17^*, SD=11.91$
Negative Self-Evaluation	$M=13.87^*, SD=9.96$	$M=16.85, SD=8.55$	$M=22.08^*, SD=9.32$
Emotional Distress	$M=7.76^*, SD=5.07$	$M=9.85, SD=4.18$	$M=12.33^*, SD=4.03$
Externalizing	$M=4.46^*, SD=3.09$	$M=7.05^*, SD=3.20$	$M=8.58^*, SD=3.83$

*denotes a significant difference between mean scores at $p<0.05$.

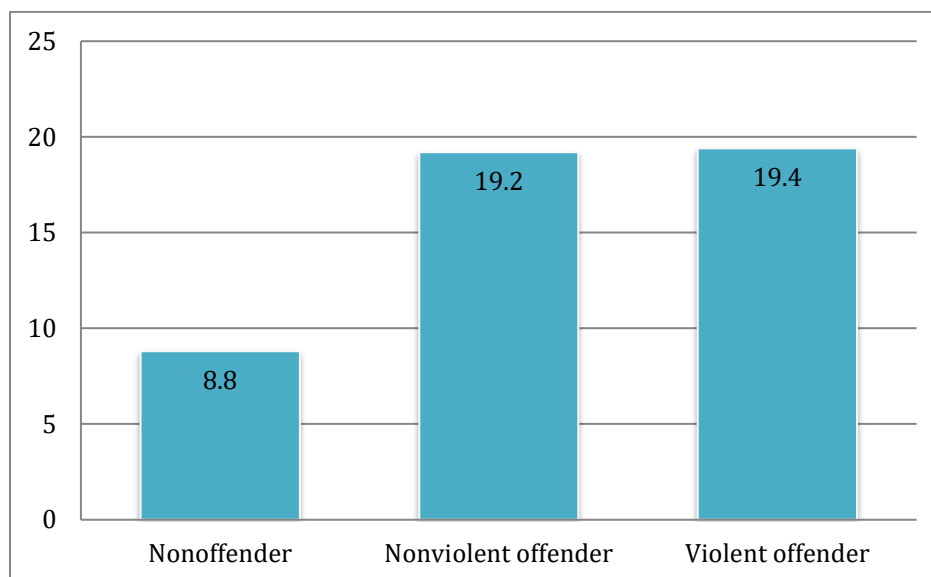


Figure 1. Group means by offense category for Reactive-Proactive Aggression Questionnaire.

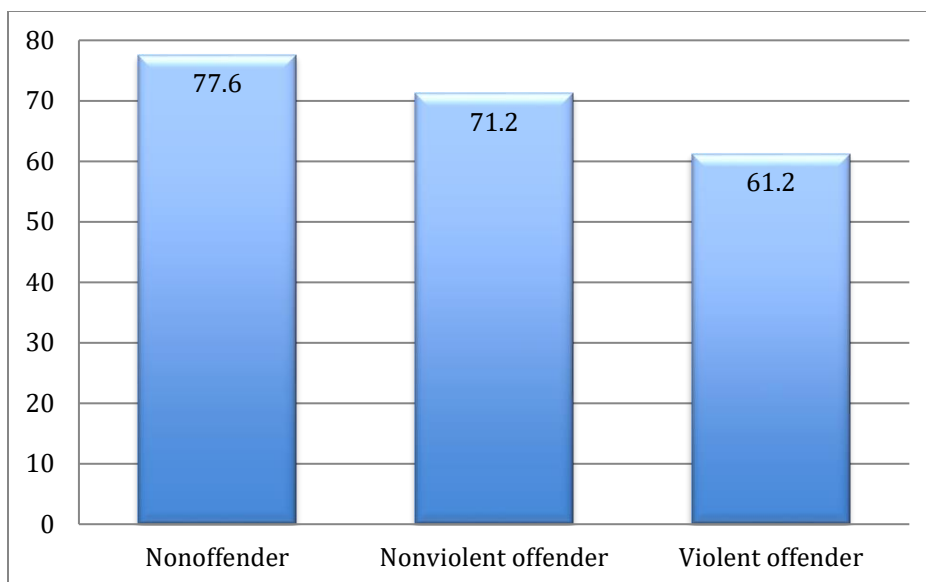


Figure 2. Group means by offense category for Self-Compassion Scale.

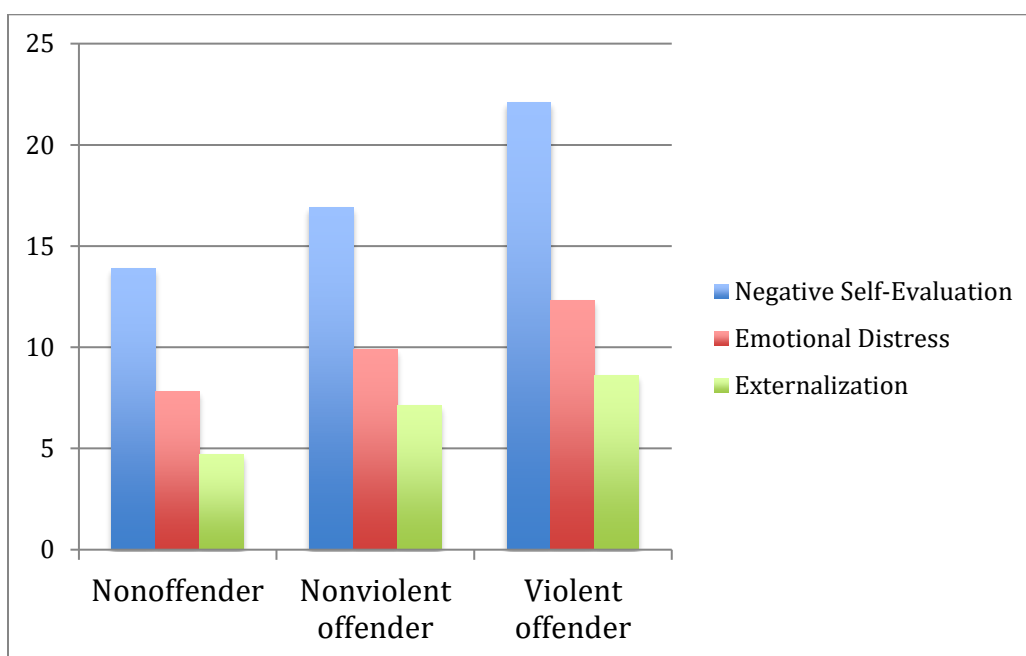


Figure 3. Group means by offense category for Adolescent Shame-Proneness Scale.

Table 6 shows the effect size of offense category associated with differences in scores on each scale, calculated and interpreted using the partial η^2 statistic.

Table 6

Effect of Offense Type on Dependent Variable Scores

Scale	Effect size η^2	Classification of effect size
Reactive-Proactive Aggression Questionnaire	0.466	Large
Self-Compassion Scale	0.129	Large
Negative Self-Evaluation	0.116	Medium
Emotional Distress	0.163	Large
Externalizing	0.199	Large

Summary

While there was no significant interaction effect of gender and offense category on the dependent variables, separately each independent variable did have a significant effect on mean scores for some or all dependent variables. The variable of gender had a significant effect on scores on the negative self-evaluation and emotional distress subscales of the ASPS with female respondents reporting more negative self-evaluation and emotional distress than male respondents. Additionally, the variable of offense category had a significant effect on mean scores for all five independent variables. Violent offenders reported significantly higher negative self-evaluation, emotional distress, externalizing behavior, and shame-proneness than nonoffender youth and significantly lower self-compassion compared to nonoffenders. Scores for nonviolent offenders placed between the other two groups on all five dependent variables, significantly differing from the other two groups on measures of aggression and externalizing behavior. In the next chapter, these results are discussed further along with some limitations of the current study and directions for future research.

CHAPTER V

DISCUSSION

The relationship between shame and self-compassion appears to be a promising area of study to potentially improve emotional regulation, decrease aggression, and lower recidivism rates in juvenile offenders. Self-compassion skills that address many of these concerns could be increased through intervention with individuals across the lifespan. These benefits could also be activated in a wide range of clients, setting up an ideal opportunity for clinicians and other service providers to incorporate self-compassion as an effective treatment component for a variety of psychopathologies. However, as this is a relatively new area of research, many questions go unanswered about the effects of self-compassion in relation to other psychological variables and diverse populations. While some empirical work has already been conducted with these goals in mind, the population of juvenile offenders has not previously been studied with regard to the relationship among shame, self-compassion, and aggression. To bring the potential benefits of self-compassion to young offenders (and society at large, which would benefit in myriad ways from decreased rates of juvenile crime), more information is needed on the specific experience and needs of young offenders. This study sought to bridge this gap in our knowledge.

Using the frameworks of social mentality theory and Nathanson's (1992) categorizations of maladaptive behavioral responses to shame, the current study sought to understand the roles of shame and self-compassion in aggressive behavior among juvenile offenders. The study investigated the relationship of self-compassion, aggressive behavior, and shame in three subgroups of youth: juveniles with at least one arrest for a violent crime, youth with at least one arrest for nonviolent crimes only, and a third group of at-risk youth without criminal arrest records.

Study Rationale and Purpose

The goal of this study was to investigate specific differences in these subsamples on scores of shame-proneness, aggression, and self-compassion. Building on previous work (Bennett et al., 2005; Neff, 2009a, 2009b; Stuewig et al., 2010), this investigation included both offender category and gender as independent variables. Thus far, no research has been conducted with a juvenile offender population in the area of self-compassion and the interrelationship of offender type and gender has not been investigated for any of the three concepts or the interrelationship between them.

Shame-Proneness

Prior studies reported small but significant differences in shame-proneness in adolescent populations with female respondents reporting higher levels of shame than male respondents (Else-Quest et al., 2012). Consistent with prior research, the current study found significant differences by gender in two subcategories of shame-proneness, negative self-evaluation and emotional distress, but not in the third category--externalizing. Specifically, female respondents reported significantly higher levels of negative self-evaluation and emotional distress than male respondents. Gender

differences in the externalizing subscale of shame-proneness were nonsignificant. As the externalizing subscale covered engagement in anger-based behaviors, this finding might be another example of the recent uptick in female violence documented in other recent studies (Caprara et al, 2017; de Vogel, Stam, Bouman, Ter Horst, & Lancel, 2016) and was consistent with those results.

Results from this study also found significant differences by offense type across all three subscales of shame-proneness (negative self-evaluation, emotional distress, and externalizing). Specifically, nonoffenders reported the lowest score in all three categories, followed by nonviolent offender youth. Youth with at least one violent offense reported the highest scores in each of the three subscales. Post-hoc analysis suggested that on the negative self-evaluation subscale, the mean score for nonoffender youth differed significantly from youth with at least one violent offense but the score for nonviolent offender youth did not differ significantly from either. Scores on the emotional distress subscale showed the mean score for nonoffender youth differed significantly from youth with at least one violent offense but again the score for nonviolent offender youth did not vary significantly from either group. Finally, post-hoc analysis of scores on the externalizing subscale, the mean score for each of the three offender categories differed significantly from the others, with nonoffenders having the lowest scores and violent offenders having the highest score.

These results were consistent with prior research that compared offender vs. nonoffender youth (Howell et al., 2017); however, the distinction between nonviolent and violent offender youth was an aspect prior research did not include. These results were theoretically consistent with the interpersonal nature of shame proposed by social

mentality theory (Gilbert, 1989; Gilbert & Irons, 2005). As interpersonally based violent crime would be more socially reprehensible and, therefore, more isolating and shameful, offenders should experience more shame than nonoffenders and violent (typically interpersonal) offenders should experience the highest level of shame of all three groups. Results in this study were consistent with those theoretical tenets.

Contrary to expectations, the interaction of gender and offense type was nonsignificant in the area of shame-proneness. While female respondents ($n = 56$) reported significantly higher internalizing symptoms of shame-proneness such as negative self-evaluation and emotional distress, externalizing symptoms were not significantly different between genders. Offense type categorization also produced significant differences between groups but the pattern of score difference did not vary by gender.

Self-Compassion

Data in the current study did not support prior findings of significant gender differences in reported self-compassion (Bluth & Blanton, 2014, 2015; Neff & McGehee, 2010). While female respondents evidenced a lower mean reported level of self-compassion, this difference was not of sufficient magnitude to reach statistical significance. These results were surprising given prior research but they might also speak to a generally low level of self-compassion found in previous studies with populations of at-risk youth regardless of gender (Edwards, Adams, Waldo, Hadfield, & Biegel, 2014; Jativa & Cerezo, 2014; Tanaka et al., 2011).

Results from this study indicated significant differences in levels of self-compassion by offense type. Specifically, nonoffenders reported the highest level of self-

compassion, followed by nonviolent offender youth. Youth with at least one violent offense reported the lowest level of self-compassion. Post-hoc analysis suggested the mean score for nonoffender youth differed significantly from youth with at least one violent offense but the score for nonviolent offender youth did not differ significantly from either of the other two groups. This finding was theoretically consistent with the interpersonal nature of shame proposed by social mentality theory (Gilbert, 1989; Gilbert & Irons, 2005) in that violent offenses are most shameful in nature and would engender the most intense feelings of shame, leading to the greatest deficit in finding compassion for oneself. In other words, the more serious the offense, the less likely forgiveness is to emerge from any source including the self. The interaction of gender and offense type was nonsignificant for self-compassion.

Aggression

The results from this study did not support findings of prior research that indicated significant differences in reported aggression between male and female respondents (Aslund et al., 2009). While female respondents endorsed a lower overall level of aggression, this difference was not statistically significant. As with the externalizing subscale of the ASPS, this finding might be reflective of the recent increase in adolescent female violence and aggression (Caprara et al., 2017; de Vogel et al., 2016) and was consistent with those results. Additionally, the operationalized definition of aggression used for the RPAQ might have affected the results as the measure included items for both reactive and proactive subtypes of aggression and also included items for physical violence/intimidation such as hitting others as well as nonphysical

aggression/intimidation such as yelling at others. If aggression was defined in a purely physical way, significant gender differences might have emerged.

Results from this study also indicated significant differences in aggression by offense type. Specifically, nonoffender youth reported engaging in aggression at less than half the rate of offender youth (violent and nonviolent). Post-hoc analysis showed the mean score for each of the three offense categories differed significantly from the others. These results were consistent with prior studies on adolescent aggression in at-risk youth (Muris & Meesters, 2014) and aggression in incarcerated samples (Robinson et al., 2007). Contrary to findings of relevant earlier studies with court-involved youth (Aslund et al., 2009), the interaction of gender and offense category was nonsignificant for aggression in the current study.

Study Implications

Research Implications

This study highlighted the need for further instrumentation development in several areas. Given current measurement instruments available for assessing shame in adolescents, further research is needed to develop and refine new measures to assess this construct with strong validity evidence and psychometrics. The ASPS (Simonds et. al, 2015) is a strong step forward in this area of research due to its semi-idiographic style, which allows young people to respond based on shame experiences that have happened in their own lives and therefore might be more salient. The internal reliability of the measure was excellent in this study for the negative self-evaluation subscale ($\alpha = 0.952$) and the emotional distress subscale ($\alpha = 0.923$) but less so for the externalizing subscale ($\alpha = 0.77$). While the reliability of this subscale was not low enough to render its scores

unusable for research, the lower statistic stood out in an otherwise psychometrically strong measure. As the externalizing subscale had the smallest number of items, its lower reliability might be remedied by adding additional items to the subscale in future versions of the ASPS. Further, this scale did not produce an overall shame-proneness score, which prevented more holistic comparison between respondents or groups. The more limited number of items on each subscale as opposed to a full measure potentially also presented a challenge to reliability. A scale with an idiographic response section and high respondent saliency, which also has an overall score to be used for comparisons, would be a welcome addition to the literature in this area.

While the SCS has been used in several previous studies with adolescents (Bluth & Blanton, 2014, 2015; Neff, 2015), some adolescent respondents in this study were unfamiliar with language used in the scale and would have benefited from items couched in simpler and more familiar language. Respondents commented that the language of some items sounded somewhat stilted to adolescents and also required elucidation of terms such as “fixate” and “intolerant.” This effect might be particularly pronounced in samples such as this one that included a high number of adolescents who did not speak English as a first language. This lack of clarity in item terms introduced unnecessary confusion and merits improvement in future research.

Measures used in the current study have primarily been developed and validated using Caucasian, English-speaking samples. However, youth identifying with one or more racial and ethnic minorities are disproportionately represented in groups of juvenile offenders (Sickmund & Puzzanchera, 2014) and these individuals might not understand and respond to these measures in the same way. In the present study, which included a

large group of Latina(o) respondents, primary speakers of English and Spanish did not differ significantly in mean scores on any of the five measures. This finding suggested participants responded to the measures in relatively equivalent ways despite differences in language and further suggested these measures would likely be appropriate for future use with juvenile offenders and other populations with a strong representation of minority respondents. However, further research is needed to validate the use of these measures with specific demographic categories frequently represented in offender samples. In essence, these investigations would seek to understand whether the individual items, overall structure of items and factors, and even the rating scales used operated equivalently for different groups of people. This might help to refine study design and analyses and make results more generalizable.

Although the present study's results suggested parts of shame-proneness varied by gender, and shame-proneness, aggression, and self-compassion were significantly different in nonoffender, nonviolent offender, and violent offender populations, the sample ($N = 106$) was relatively small. This highlighted a major research implication of this study: sampling of at-risk youth was typically incredibly difficult. At-risk youth are not only minors but are often involved in confidential societal systems such as juvenile justice and child welfare tasked with protecting the privacy and safety of these youth. Getting the requisite IRB approval, agency consents, and participant consents was a massive task that necessitated several changes to the original research design. Future researchers must replicate these results with larger, similar populations of participants but investigators would likely benefit challenges in their own research designs from considering these challenges and planning accordingly.

In addition, future research could examine whether this finding is supported in other subtypes of at-risk adolescent populations such as gang-involved youth or youth exposed to community violence. By examining different individual and specific characteristics of offender populations and comparing results to non-adjudicated populations, researchers might reach a better understanding of factors that might play a significant role in a developmental path of engagement in illegal behavior and earmark promising areas for further study and intervention.

Theoretical Implications

Viewed through a theoretical lens, these results provided support for the interpersonal nature of shame as proposed in social mentality theory (Gilbert, 1989; Gilbert & Irons, 2005). As youth criminal behavior becomes more interpersonal in nature, including charges such as assault and robbery that include a direct confrontation with another person, the likelihood of shame-based rejection also increases. Using this conceptualization, offenders might experience more shame than nonoffenders and violent (typically interpersonal) offenders might experience the highest level of shame of all three groups. Tying this theory to that of self-compassion (Neff, 2003a), more severe violations of social expectations would thus more powerfully ostracize the violent offender and move him or her toward the non-compassionate poles of self-compassion theory: self-judgment, isolation, and over-identification with the immersive experience of their own emotion, cutting off pathways toward empathy for self and others. Using Neff's (2003a) conceptualization, offender youth should have significantly lower levels of self-compassion than nonoffender youth and scores in this area should decrease with each move further away from socially forgivable acts--from nonoffender to nonviolent

offenders (those who break the law, but do not hurt others) to violent offenders (those who break the law and hurt others). Although much research is needed in this area to clarify the specific relationship between self-compassion and aggression, results based on these data strongly supported the potential links suggested by Neff's self-compassion framework and Gilbert's (1989) social mentality theory. Future research could investigate the relationship between self-compassion and aggression using a longitudinal design to study this potential predictor of youth who might benefit from a self-compassion intervention to reduce the risk of engagement in aggressive or violent behavior.

In the area of aggression, it was previously hypothesized that high levels of aggressive behavior seen in court-involved and incarcerated populations were merely the continued use of a commonly used survival tactic for at-risk youth to maintain physical and emotional safety in families, schools, and neighborhoods often unsafe in multiple ways (Valdez, Kaplan, & Curtis, 2007). In this study, however, the comparison sample of at-risk nonoffender youth reported engaging in aggression at less than half the rate of offender youth (violent and nonviolent), a staggeringly large disparity. It was beyond the scope of the current study to determine whether this finding was a function of actual higher engagement in aggression by offender youth as opposed to an increased willingness to report aggression; future research would be able to clarify this question with access to behavior records, observation, and other techniques for behavior monitoring and coding. Regardless, this finding provided a clear counterargument to earlier hypotheses of generalized violence among at-risk youth.

Overall, the results related to gender and aggression on some levels presented a contrasting view to trends in prior studies. While male youth have historically been more physically aggressive than female youth (Archer, 2004), females were more likely to use relational and other non-physical aggression to achieve desired means (Aslund et al., 2009) and offender youth appeared to exhibit more overall aggressive behavior than nonoffender youth (Morley, 2015; Robinson et al., 2007). Gender was previously theorized to be an important factor in the relationship between shame and aggression (Aslund et al., 2009). In this study as in others (Else-Quest et al., 2012), female adolescents reported slightly but significantly higher levels of shame in cognitive and emotional domains such as negative self-evaluation and emotional distress. However, while a 2009 study found “girls who reported a higher rate of shaming experiences were four times more likely to have perpetrated physical aggression than girls who reported fewer shaming experiences” (Aslund et al., 2009, p. 9), in this study sample, male and female respondents endorsed an equal level of externalizing behavior related to shame and gender and offender status did not significantly interact with gender in the area of shame. Furthermore, both subtypes of aggression (reactive and proactive) were represented in participant responses via type-specific questions on the RPAQ and both contributed to a total score. However, the current sample was not large enough to further investigate subtypes of aggression by gender or other variables. Therefore, this finding might be representative of the documented rise in female-perpetrated juvenile violent crime and the narrowing of the gap between stereotypical male and female anger responses (Sickmund & Puzzanchera, 2014) or it might be a function of instrumentation or small sample size.

The lack of gender differences in self-compassion scores presented a challenge to previous findings since as a group, females of all ages are more often self-critical and tend to ruminate on negative aspects of self more than males (Bluth & Blanton, 2014, 2015; Neff & McGehee, 2010; Nolen-Hoeksema et al., 1999). It might be self-compassion is but one of a constellation of emotion regulation skills at-risk youth are less likely to learn and gender only becomes a consideration in self-compassion once youth reach a certain basic level of self-regulation. It might also be the general stress of daily life as an at-risk young person confers unique challenges to some or all of the pieces of self-compassion theory, challenges not fully explored in the literature thus far due to the relatively recent popularity of this concept in the psychological literature.

Practice Implications

A number of practice implications emerged for counseling psychologists in light of the present study's results. First, while shame and aggression are frequently linked, adolescent clients (like adult clients) are apt to be unaware of the fundamental cognitive and emotional processes underlying the cascade from shame to aggression and would benefit immensely from a clear identification of these processes. Clinical work could focus on learning replacement cognitions and emotional regulation skills to interrupt the cascade and decrease the likelihood the young person would use aggression as a way to manage shame. Subsequently, he or she would then also avoid the legal, educational, and social consequences of using aggression against others, making space for more successful outcomes as an adolescent and an adult. In the current study, violent offenders endorsed the highest levels of shame-proneness and the highest levels of aggression and might be positioned to benefit most from this type of intervention. Additionally, the teaching and

practice of self-compassion skills might serve as a helpful tool to ameliorate some of the emotional distress, feelings of isolation, and poor emotional regulation frequently experienced as part of a shame reaction. As this study suggested, a shame reaction often led to aggression in individuals with low socioemotional skills to manage negative cognitions and affect. Self-compassion is one such skill that could be effectively taught in a group setting in a relatively short period of time (Bluth & Blanton, 2015). Therefore, this addition might be an important adjunctive area of treatment to reduce adolescent aggression in correctional, educational, and social settings and requires further study using a pre- and post-intervention design to test its usefulness.

Female respondents more strongly endorsed negative cognitions and higher levels of emotional distress than male respondents. Clinically, this suggested female clients might experience higher levels of negative self-talk and emotional distress and be more motivated to learn new skills to challenge negative thoughts and manage distress; whereas male clients might not experience distress in these areas or label them as an appropriate topic for treatment and, therefore, be less motivated for treatment. If this was the case, treatment engagement might become a primary treatment goal with male clients. On the other hand, male clients might instead be lacking the emotional awareness and vocabulary to recognize these experiences relative to female clients and would benefit from labeling both self-focused and other-focused negative self-talk and practicing accurate identification of emotional states and overall emotional distress.

Offender youth (both violent and nonviolent) endorsed aggression items at more than twice the rate of nonoffender youth, confirming court-involved youth were more likely to employ aggressive means in dealing with others than nonoffender youth.

However, all aggression is not created equal; while some aggression is strictly reactive and generally a result of poor self-regulation, other youth employ aggression proactively to achieve goals such as intimidation of others, obtaining goods or services, and gaining and maintaining social status (Raine et al., 2006). If the use of aggression achieves some or all of the adolescent's desired results (albeit with some aversive consequences such as arrest and/or incarceration attached), then it is likely the youth will continue to use that strategy. With that conceptualization in mind, clinicians might be able to better determine when and why young clients use aggression and tailor intervention to the specific needs and aims of the particular offender. Once the purpose and impetus of aggression is understood, clinicians would then be able to assist the young person in positively modifying his or her behavior by collaborating to create specific behavior plans that reward the use of nonviolent actions to achieve goals previously accomplished with aggression and hold adolescents accountable for choosing to use aggression when other options are available. Clinicians should be mindful this approach might be a tougher sell for youth who have been arrested for one or more violent offenses and have become accustomed to using aggression to achieve a variety of goals.

Finally, clear differences in shame-proneness, aggression, and self-compassion among the three offense categories suggested there was likely some value in treating violent and nonviolent offenders differently in community and correctional settings. For a variety of reasons, many juvenile facilities house violent and nonviolent offenders in the same units and do not tailor treatment programs and events per offense type. However, the results of the current study indicated separation of these populations might be more effective from both clinical and correctional points of view. For example, in the

current study, offender youth reported themselves as radically more aggressive than nonoffender youth but there was also a significant difference in the level of aggression reported by nonviolent offender youth versus their violent offender counterparts. Given this finding, it would likely be beneficial to separate the less aggressive nonviolent offenders from more violent offenders and focus on successfully modeling nonaggressive behavior and problem-solving in the context of a lower initial level of aggression rather than expose the nonviolent youth to the more extreme behaviors of violent offenders and correspondingly more extreme responses from correctional staff. This change would have the additional benefit of preventing deviancy training of those nonoffender youth who have not progressed to the same level of behavioral intensity as violent offender youth. Moreover, as the emotion regulation and self-compassion skills deficits in nonviolent offenders appeared to be less severe in that group versus violent offenders, clinical intervention could be better tailored to the needs of this group if they were classified appropriately for the purposes of group treatment. In this model, violent offenders would also benefit by being able to access treatment at an optimum level of effectiveness for their specific requirements and treatment interventions would not be diluted by the clinician's attempts to meet the needs of a wildly heterogeneous group of clients. As an additional incentive, violent offenders could earn entry into a less-restrictive setting by participating in targeted treatment, demonstrating effective use of their new cognitive and emotional skills, and reducing aggression to an agreed-upon level for a predetermined period of time.

Limitations

Given the difficulty of accessing juvenile offender respondent populations for research purposes, there was a dearth of research with this population on any topic compared to nonoffender at-risk adolescent groups. Many practical and legal barriers exist to conducting research with young offenders, an experience that contributes cyclically to the lack of available research to serve as a foundation for new studies. Therefore, while the literature review for this study was exhaustive, the study still suffered from a sparse research base and underdeveloped theoretical foundation.

Generalization of study findings was limited to the unique demographic characteristics of the sample used and might only apply to at-risk and/or adjudicated youth. The population of juvenile offenders represents approximately 70,000 youth in a typical year (OJJDP, 2013), a small but significant percentage of the total number of adolescents in the United States. The present study did not purport to draw conclusions about the majority of adolescents not involved with the juvenile justice system but offered valuable insight into the internal and external processes of those 70,000 young offenders (accounting for approximately two million annual arrests) and of nonoffender at-risk adolescents who face similar challenges but have not been arrested for criminal activity. Indeed, using that framework, the findings related to nonoffending youth might be just as valuable as information related to young offenders. Further research from the perspective of both offender and nonoffender youth is needed to better understand psychological constructs such as self-compassion that might interrupt cognitive, emotional, and behavioral cascades that often lead to aggressive behavior and help to divert youth from criminal activity. However, future research must replicate the results

of the current study with a similar population of participants to lend weight to the accuracy of the current findings.

Another limitation related to sampling issues. As juvenile offenders are typically a twice-protected population (they are both minors and potentially incarcerated), gaining access to potential respondents was a lengthy and delicate process. To circumvent this concern, the sample of at-risk and offender youth for this study was obtained via community-based sampling locations including a mentoring program for at-risk youth, a community mental health clinic for low-income families, and a community family support agency that frequently served court-involved youth. Due to this methodology, data were collected from a nonrandom, lower socioeconomic sample and potential participants voluntarily chose to participate in this research. Given this inclusion method, traits or characteristics associated with participation might also have influenced the results by biasing the way participants responded to the study survey. Additionally, the difficulty in recruiting eligible respondents and the relative dearth of female offender participants yielded unequal cell sizes, resulted in a violation of the covariance assumption for the intended analysis of MANOVA, and required the use of the more conservative Pillai's trace statistic as a replacement. Future research would benefit from a longer-term study design that allowed for a typical wait time of one to two years to gain more reliable access to protected respondent populations as well as time allotted to gather equal numbers of respondents for each cell in order to conduct the intended analysis with all assumptions met. Additionally, the final sample in the current study was fairly small ($N = 106$) so further research would be required to replicate obtained results and add to the investigator's confidence in the results.

Instrumentation decisions also provided some challenges. Only one measure was selected for each variable to reduce the time and effort required of participants but the use of a single measure also inevitably limited the scope of investigation and the operational definition of the concept used in the study. Future research could utilize multiple measures to operationalize each variable to protect against measurement error and any potential bias inherent in using only one type of measure to capture the constructs under consideration.

Instrumentation and measurement was also an issue in the areas of aggression and offense type. As a concept, aggression covers a wide range of behavior but the specific examples used in the RPAG provided relatively few samples of aggressive behavior, which were necessarily vague. Incidents specific to each young person might not have been considered in his or her response as they were not listed in the instrument. Additionally, the instrument used to measure aggression in this study was based solely on self-report and remembered events; thus, it was subject to the same biases as any other self-report measure with the added social pressure against aggression. To address this concern, the current study included a number of relevant safeguards including using a number instead of the respondent's name to identify individual response packets; providing privacy for respondents via individual clipboards, separate seating areas, and extra paper to cover answers if desired; emphasizing the acceptability of all answers; "creating dynamics for truth-telling" by explicitly talking with respondents about the consequence of sharing their honest perspective (e.g., your answers will be a part of helping kids feel better in the future); and clearly explaining any benefits or other effects

of participation or lack thereof (i.e., making it very clear participation in the study would have no effect on placement or sentencing).

While the anonymity of survey responses was intended to increase perceived participant openness to endorsing potentially unpopular views and actions, it was patently unlikely these considerations eliminated all instances of self-censorship; thus, reported scores for this measure were almost certainly skewed and likely reflected a more positive view of participants' functioning. It might also be possible some respondents made artificially high reports of delinquent or violent behavior to engender a specific reaction from a reader or present themselves in an impressive light. While longitudinal observation, behavioral records, parent/teacher reports, or discipline files might have provided a more accurate view of each respondent's typical behavior in the area of aggression, these methods were not feasible for this study.

To determine offense type, data on past infractions and arrests were also collected via self-report. Although self-report of delinquency is generally valid and reliable for research purposes (Thornberry & Krohn, 2001), the overall project was still subject to the possible effect of social desirability--a response phenomenon that potentially decreases endorsement of delinquent behaviors. Despite taking the measures described above to increase anonymity and increase participant comfort, it was likely many respondents still felt some degree of social pressure and might not have accurately reported past arrests or contact with police. If available, future research could review juvenile court and police records to ensure the accuracy of respondent report of prior offenses and arrests.

Finally, the present study attempted to incorporate some contextual variables such as gender thought to influence experiences of shame, aggression, and self-compassion.

However, the study design and/or sample size made it impossible to account for other demographic variables such as race/ethnicity that might have affected the perception and experience of these concepts and other factors research in this area has yet to identify as important factors to control for in similar investigations. Further research with larger samples should include race/ethnicity and other potentially relevant demographic and contextual variables. In essence, these investigations would seek to understand whether the individual items, overall structure of items and factors, and even the rating scales used operated equivalently for different groups of people with the goal of isolating specific contributors to criminal behavior in adolescents that could be targeted in preventative interventions.

Despite some limitations, the present study established clear and significant gender differences in cognitive and emotional experiences related to shame. Specifically, female respondents reported higher levels of negative self-evaluation and emotional distress than male respondents. Additionally, scores varied significantly by offense type in the areas of shame-proneness, aggression, and self-compassion. As hypothesized, nonoffender youth reported the lowest scores in all subscales of the shame-proneness measure (negative self-evaluation, emotional distress, and externalizing) and aggression and the highest scores in self-compassion. Nonviolent offender scores were in the middle of the three groups on all measures; violent offender youth reported the highest scores in all three areas of shame-proneness and aggression and the lowest level of self-compassion. Interestingly, the hypothesized multivariate relationship between gender and offense type was not significant.

Conclusion

This study highlighted the importance of tailored study and intervention with adolescent populations in working to reduce juvenile crime and implement preventative interventions for at-risk youth to keep young people from entering the criminal system. Consistent with social mentality theory (Gilbert, 1989; Gilbert & Irons, 2005) and the framework of self-compassion theory (Neff, 2003a), these results suggested individuals who had committed a violent crime against another person were most likely to feel shamed and rejected and were least likely to be able to offer themselves self-compassion as a mechanism to soothe biological threat activation, effectively manage affect, and reduce aggressive behavior. These results would be especially relevant for criminally involved youth and other at-risk adolescents who might struggle with emotion regulation, hyperarousal, and other symptoms of personal and community trauma. Future research might investigate whether these results held true for this and other subsets of at-risk adolescents.

REFERENCES

- Achenbach, T. (1991). *Manual for the child behavior checklist and 1991 profile*.
Burlington: University of Vermont, Department of Psychiatry.
- Akın, A. (2010). Self-compassion and loneliness. *International Online Journal of Educational Sciences*, 2, 702–718.
- Akın, A. (2011). Self-compassion and interpersonal cognitive distortions. *Hacettepe University Journal of Educational Psychology*, 39, 1–9.
- Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass*, 4, 107–18.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27–51.
- Arch, J. J., Brown, K. W., Jay, D. D., Landy, L. N., Brown, K. D., & Laudenslager, M. L. (2014). Self-compassion training modulates alpha-amylase, heart rate variability, and subjective responses to social evaluative threat in women. *Psychoneuroendocrinology*, 42, 49–58.
- Archer, J. (2004). Sex differences in aggression in real-world settings: A meta-analytic review. *Review of General Psychology*, 8(4), 291-322.
- Aslund, C., Starrin, B., Leppert, J., & Nilsson, K. W. (2009). Social status and shaming experiences related to adolescent overt aggression at school. *Aggressive Behavior*, 35, 1–13.

- Babbie, E. A. (2008). *The basics of social research*. Belmont, CA: Wadsworth, Inc.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10, 125–143.
- Baer, R. A., Lykins, E. L. B., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and nonmeditators. *The Journal of Positive Psychology*, 7, 230–238.
- Baglivio, M. T., Wolff, K. T., Jackowski, K., & Greenwald, M. A. (2017). A multilevel examination of risk/need change scores, community context, and successful reentry of committed juvenile offenders. *Youth Violence and Juvenile Justice*, 15(1), 38-61.
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15, 289–303.
- Barry, C. T., Loflin, D. C., & Doucette, H. (2015). Adolescent self-compassion: Associations with narcissism, self-esteem, aggression, and internalizing symptoms in at-risk males. *Personality and Individual Differences*, 77, 118-123.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4, 1–44.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.

- Beaver, K. M. (2008). The interaction between genetic risk and childhood sexual abuse in the prediction of adolescent violent behavior. *Sexual Abuse: Journal of Research and Treatment*, 20(4), 426-443.
- Bennett, D. S., Sullivan, M. W., & Lewis, M. (2005). Young children's adjustment as a function of maltreatment, shame, and anger. *Child Maltreatment*, 10, 311–323.
- Bluth, K., & Blanton, P. W. (2014). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child And Family Studies*, 23(7), 1298-1309.
- Bluth, K., & Blanton, P. W. (2015). The influence of self-compassion on emotional well-being among early and older adolescent males and females. *The Journal of Positive Psychology*, 10(3), 219-230. doi:10.1080/17439760.2014.936967
- Bluth, K., & Eisenlohr-Moul, T.A. (2017). Response to a mindful self-compassion intervention in teens: A within-person association of mindfulness, self-compassion, and emotional well-being outcomes. *Journal of Adolescence*, 57, 108-118.
- Bluth, K., Roberson, P. N. E., & Girdler, S. S. (2017). Adolescent sex differences in response to a mindfulness intervention: A call for research. *Journal of Child and Family Studies*, 26, 1900-1914.
- Boellinghaus, I., Jones, F. W., & Hutton, J. (2013). Cultivating self-care and compassion in psychological therapists in training: The experience of practicing loving-kindness meditation. *Training and Education in Professional Psychology*, 7, 267–77. [L]
[SEP]

- Breines, J. G., McInnis, C. M., Kuras, Y. I., Thoma, M. V., Gianferante, D., Hanlin, L., ...Rohlender, N. (2015). Self-compassionate young adults show lower salivary alpha-amylase responses to repeated psychosocial stress. *Self and Identity*, 14, 390–402.
- Breines, J. G., Thoma, M. V., Gianferante, D., Hanlin, L., & Chen, X. (2014). Self-compassion as a predictor of interleukin-6 response to acute psychosocial stress. *Brain, Behavior, and Immunity*, 37, 109–114.
- Breugelmans, S. M., & Poortinga, Y. H. (2006). Emotion without a word: Shame and guilt among Rarámuri Indians and rural Javanese. *Journal of Personality and Social Psychology*, 91, 1111-1122.
- Brown, B. (1999). *Soul without shame: A guide to liberating yourself from the judge within*. Boston: Shambala.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Brown, R., González, R., Zagefka, H., Manzi, J., & Cehajic, S. (2008). Nuestra culpa: Collective guilt and shame as predictors of reparation for historical wrongdoing. *Journal of Personality and Social Psychology*, 94, 75-90.
- Bruce, E., & Waelde, L. C. (2008). Relationships of ethnicity, ethnic identity, and trauma symptoms to delinquency. *Journal of Loss and Trauma*, 13(5), 395-405.
- Burt, S. A., Barnes, A. R., McGue, M., & Iacono, W. G. (2008). Parental divorce and adolescent delinquency: Ruling out the impact of common genes. *Developmental Psychology*, 44(6), 1668-1677.

- Bushman, B. J., & Huesmann, L. R. (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey, (Eds.), *Handbook of social psychology* (5th ed., Vol. 2., pp. 833–863). Hoboken, NJ: John Wiley & Sons.
- Byrne, B. M. (2008). *Structural equation modeling with EQS*. Mahwah, NJ: Psychology Press.
- Caprara, G. V., Gerbino, M., Perinelli, E., Alessandri, G., Lenti, C., Walder, M., ...Nobile, M. (2017). Individual differences in personality associated with aggressive behavior among adolescents referred for externalizing behavior problems. *Journal of Psychopathology and Behavioral Assessment*, 39(4), 680-692.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Cole, P. M., Bruschi, C. J., & Tamang, B. L. (2002). Cultural differences in children's emotional reactions to difficult situations. *Child Development*, 73, 983-996.
- Colton, D., & Covert, R. W. (2007). *Designing and constructing instruments for social research and evaluation*. Hoboken, NJ: John Wiley & Sons.
- Cording, J. R., & Christofferson, S. M. B. (2017). Theoretical and practical issues for the measurement of protective factors. *Aggression and Violent Behavior*, 32, 45-54.
- Couper, M. P. (2008). *Designing effective web surveys*. Cambridge, UK: Cambridge University Press.
- Couper, M. P., Tourangeau, R., Conrad, F. G., & Crawford, S. D. (2004). What they see is what we get: response options for web surveys. *Social Science Computer Review*, 22(1), 111-127.

- Dearing, R. L., & Tangney, J. P. (2011). *Shame in the therapy hour*. Washington, DC: American Psychological Association.
- de Vogel, V., Stam, J., Bouman, Y. H. A., Ter Horst, P., & Lancel, M. (2016). Violent women: A multicentre study into gender differences in forensic psychiatric patients. *Journal of Forensic Psychiatry & Psychology*, 27(2), 145-168.
- DeWall, C. N., & Bushman, B. J. (2011). Social acceptance and rejection: The sweet and the bitter. *Current Directions in Psychological Science*, 20, 256–260.
- Donald, J. N., Ciarrochi, J., Parker, P. D., Sahdra, B. K., Marshall, S. L., & Guo, J. (2017). A worthy self is a caring self: Examining the developmental relations between self-esteem and self-compassion in adolescents. *Journal of Personality*, 1-12.
- Donnellan, M. B., Ge, X., & Wenk, E. (2000). Cognitive abilities in adolescent-limited and life-course-persistent criminal offenders. *Journal of Abnormal Psychology*, 109(3), 396-402.
- Dundas, I., Binder, P., Hansen, T. G. B., & Stige, S. H. (2017). Does a short self-compassion intervention for students increase healthy self-regulation? A randomized controlled trial. *Scandinavian Journal of Psychology*, 58, 443-450.
- Edwards, M., Adams, E. M., Waldo, M., Hadfield, O. D., & Biegel, G. M. (2014). Effects of a mindfulness group on Latino adolescent students: Examining levels of perceived stress, mindfulness, self-compassion, and psychological symptoms. *Journal for Specialists in Group Work*, 39(2), 145-163.
- Elison, J. (2005). Shame and guilt: A hundred years of apples and oranges. *New Ideas in Psychology*, 23, 5–32.

- Elison, J., Pulos, S., & Lennon, R. (2006). Shame-focused coping: An empirical study of the compass of shame. *Social Behavior and Personality*, 34, 161–168.
- Ellis, A. (1973). *Humanistic psychotherapy: The rational-emotive approach*. New York: Julian Press.
- 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, 947-981.
- Ferguson, T. J., Stegge, H., & Damhuis, I. (1991). Children's understanding of guilt and shame. *Child Development*, 62, 827-839.
- Ferguson, T. J., Stegge, H., Miller, E. R., & Olsen, M. E. (1999). Guilt, shame, and symptoms in children. *Developmental Psychology*, 35, 347–357.
- Fessler, D. M. T. (2007). From appeasement to conformity: Evolutionary and cultural perspectives on shame, competition, and cooperation. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 174-193). New York, NY: Guilford Press.
- Finlay-Jones, A. L., Rees, C. S., & Kane, R. T. (2015). Self-compassion, emotion regulation and stress among Australian psychologists: Testing an emotion regulation model of self-compassion using structural equation modeling. *PLoS ONE*, 10, 1-19.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology. *American Psychologist*, 56, 218–226.
- Fung, H. (1999). Becoming a moral child: The socialization of shame among young Chinese children. *Ethos*, 27, 180-209.

- Furukawa, E., Tangney, J., & Higashibara, F. (2012). Cross-cultural continuities and discontinuities in shame, guilt, and pride: A study of children residing in Japan, Korea and the U.S.A. *Self and Identity*, 11, 90-113.
- Germer, C. (2009). *The mindful path to self-compassion: Freeing yourself from destructive thoughts and emotions*. New York, NY: Guilford Press.
- Gilbert, P. (1989). *Human nature and suffering*. Hove: Lawrence Erlbaum.
- Gilbert, P. (2007). The evolution of shame as a marker for relationship security: A biopsychosocial approach. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283–309). New York: Guilford Press.
- Gilbert, P., & Irons, C. (2005). Therapies for shame and self-attacking, using cognitive, behavioral, emotional imagery and compassionate mind training. In P. Gilbert (Ed.), *Compassion: Conceptualizations, research and use in psychotherapy* (pp. 263–325). London: Routledge.
- Gilbert, P., McEwan, K., Bellew, R., Mills, A., & Gale, C. (2009). The dark side of competition: How competitive behavior and striving to avoid inferiority are linked to depression, anxiety, stress and self-harm. *Psychology and Psychotherapy: Theory, Research and Practice*, 82, 123–136
- Gilbert, P., McEwan, K., Mitra, R., Franks, L., Richter, A., & Rockliff, H. (2008). Feeling safe and content: A specific affect regulation system? Relationship to depression, anxiety, stress, and self-criticism. *The Journal of Positive Psychology*, 3, 182–191.

- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy*, 13, 353-379.
- Grant, R. W., & Sugarman, J. (2004). Ethics in human subjects research: Do incentives matter? *Journal of Medicine and Philosophy*, 29, 717-738.
- Greco, L., Baer, R. A., & Smith, G. T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the child and adolescent mindfulness measure (CAMP). *Psychological Assessment*, 23, 606-614.
- 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(4), 323-342.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57, 35-43.
- Harper, F. W. K., Austin, A. G., Cercone, J. J., & Arias, I. (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence*, 20, 1648-1662.
- Hartling, L. M., & Lindner, E. G. (2017). Toward a globally informed psychology of humiliation: Comment on McCauley (2017). *American Psychologist*, 72, 705-706.
- Hejdenberg, J., & Andrews, B. (2011). The relationship between shame and different types of anger: A theory-based investigation. *Personality and Individual Differences*, 50, 1278-1282.

- Hoglund, C., & Nicholas, K. (1995). Shame, guilt, and anger in college students exposed to abusive family environments. *Journal of Family Violence, 10*, 141–157.
- Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual Differences, 50*, 222–227.
- Hornsveld, R. H. J., Zwets, A. J., Leenaars, P. E. M., Kraiimaat, F. W., Bout, R., Lagro-Janssen, T. A. L., & Kanters, T. (2018). Violent female offenders compared with violent male offenders on psychological determinants of aggressive behavior. *International Journal of Offender Therapy and Comparative Criminology, 62*, 450-467.
- Hosser, D., Windzio, M., & Greve, W. (2008). Guilt and shame as predictors of recidivism. *Criminal Justice and Behavior, 35*, 138–152.
- Howell, K. H., Cater, A. K., Miller-Graff, L. E., Schwartz, L. E., & Graham-Bermann, S. A. (2018). The relationship between types of childhood victimization and young adult criminality. *Criminal Behaviour and Mental Health, 27*, 341-353.
- Huberty, C. J., & Petoskey, M. D. (2000). *Handbook of applied multivariate statistics and mathematical modeling*. New York: Elsevier.
- Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition, 28*, 64-80.
- Jativa, R., & Cerezo, M. A. (2014). The mediating role of self-compassion in the relationship between victimization and psychological maladjustment in a sample of adolescents. *Child Abuse and Neglect, 38*, 1180-1190.

- Jazaieri, H., McGonigal, K., Lee, I. A., Jinpa, T., Doty, J. R., Gross, J. J., & Goldin, P. R. (2018). Altering the trajectory of affect and affect regulation: The impact of compassion training. *Mindfulness*, 9, 283-293.
- Jones, S., & Lynam, D. R. (2009). In the eye of the impulsive beholder: The interaction between impulsivity and perceived informal social control on offending. *Criminal Justice and Behavior*, 36(3), 307-321.
- Jopling, D. A. (2000). *Self-knowledge and the self*. New York: Routledge.
- Jordan, J. V. (1989). *Relational development: Therapeutic implications of empathy and shame*. Wellesley, MA: Stone Center Working Paper Series.
- Jordan, J. V. (1991). Empathy and self-boundaries. In J. V. Jordan, A. G. Kaplan, J. B. Miller, I. P. Stiver, & J. L. Surrey (Eds.), *Women's growth in connection: Writings from the Stone Center* (pp. 67–80). New York: Guilford.
- Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31, 1041–1056.
- Kennedy, T. D., Burnett, K. F., & Edmonds, W. A. (2011). Intellectual, behavioral, and personality correlates of violent vs. non-violent juvenile offenders. *Aggressive Behavior*, 37, 315-325.
- Kewley, S. (2017). Strength based approaches and protective factors from a criminological perspective. *Aggression and Violent Behavior*, 32, 11-18.
- Kim, H.-S., & Kim, H.-S. (2008). The impact of family violence, family functioning, and parental partner dynamics on Korean juvenile delinquency. *Child Psychiatry and Human Development*, 39(4), 439-453.

- Kim, S., Thibodeau, R., & Jorgensen, R.S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, 137, 68-96.
- Kirby, J. N., Tellegen, C.L., & Steindl, S.R. (2017). A meta-analysis of compassion-based interventions: Current state of knowledge and future directions. *Behavior Therapy*, 48, 778-792.
- Kline, R. (2015). *Principles and practices of structural equation modeling* (4th ed.). New York: Guilford Press
- Krosnick, J. A., & Alwin, D. F. (1987). An evaluation of a cognitive theory of response-order effects in survey measurement. *Public Opinion Quarterly*, 51, 201-219.
- Lai, V., Zeng, G., & Chu, C.M. (2015). Violent and nonviolent youth offenders: Preliminary evidence of group subtypes. *Youth Violence and Juvenile Justice*, 7, 1-17.
- Laurent, J., Catanzaro, S. J., Joiner, T. E., Jr., Rudolph, K. D., Potter, K. I., Lambert, S., ...Gathright, T. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment*, 11, 326-338.
- Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, 10, 111-132.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92, 887–904.

- Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.
- Liu, J. (2004). Concept analysis: Aggression. *Issues in Mental Health Nursing*, 25, 693–714.
- Longe, O., Maratos, F. A., Gilbert, P., Evans, G., Volker, F., Rockcliff, H., & Rippon, G. (2009). Having a word with yourself: Neural correlates of self-criticism and self-reassurance. *Neuroimage*, 49, 1849–1856.
- Lutz, C., & White, G. (1986). The anthropology of emotions. *Annual Review of Anthropology*, 15, 405-436.
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32, 545–52.
- Marsh, I. C., Chan, S. W. Y., & MacBeth, A. (2017). Self-compassion and psychological distress in adolescents: A meta-analysis. *Mindfulness*. Advance online publication. doi:<http://dx.doi.org/10.1007/s12671-017-0850-7>
- Marshall, S. L., Parker, P. D., Ciarrochi, J., Sahdra, B., Jackson, C. J., & Heaven, P. C. L. (2015). Self-compassion protects against the negative effects of low self-esteem: A longitudinal study in a large adolescent sample. *Personality and Individual Differences*, 74, 116-121.
- Maslow, A. H. (1968). *Toward a psychology of being*. New York: Van Nostrand.
- Matos, M., Duarte, C., Duarte, J., Pinto-Gouveia, J., Petrocchi, N., Basran, J., & Gilbert, P. (2017). Psychological and physiological effects of compassionate mind training: A pilot randomized controlled study. *Mindfulness*, 8, 1699-1712.

- McCollister, K. E., French, M. T., & Fang, H. (2010). The cost of crime to society: New crime-specific estimates for policy and program evaluation. *Drug Alcohol Dependence, 108*, 98-109.
- McGaffin, B. J., Lyons, G. C. B., & Deane, F. P. (2013). Self-forgiveness, shame, and guilt in recovery from drug and alcohol problems. *Substance Abuse, 34*, 396-404.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research*. London: Sage Publishing.
- Morey, L. C. (1991). *The personality assessment inventory professional manual*. Odessa, FL: Psychological Assessment Resources.
- Morley, R. H. (2015). Violent criminality and self-compassion. *Aggression and Violent Behavior, 24*, 226-240.
- Morley, R. H. (2017). The impact of mindfulness meditation and self-compassion on criminal impulsivity in a prisoner sample. *Journal of Police and Criminal Psychology, 33*(2), 112-122.
- Mulder, E., Vermunt, J., Brand, E., Bullens, R., & Marle, H. (2012). Recidivism in subgroups of serious juvenile offenders: Different profiles, different risks? *Criminal Behaviour and Mental Health, 22*(2), 122-135.
- Muris, P., & Meesters, C. (2014). Small or big in the eyes of the other: On the developmental psychopathology of self-conscious emotions such as shame, guilt, and pride. *Clinical Child and Family Psychology Review, 17*, 19-40.
- Nathanson, D. L. (1992). *Shame and pride: Affect, sex, and the birth of the self*. New York, NY: Norton.

- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223–250.
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85–102.
- Neff, K. D. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences*, 9, 27–37.
- Neff, K. D. (2009a). Self-compassion. In M. R. Leary (Ed.), *Handbook of individual differences in social behavior* (pp. 561-573). New York, NY: Guilford Press.
- Neff, K. D. (2009b). The role of self-compassion in development: A healthier way to relate to oneself. *Human Development*, 52, 211-214.
- Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. *Social and Personality Psychology Compass*, 5, 1-12.
- Neff, K. D. (2015). The five myths of self-compassion. *Psychotherapy Networker*, 39(5), 30-35.
- Neff, K. D. (2016). The self-compassion scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness*, 7, 264-274.
- Neff, K. D., & Beretvas, S. N. (2012). The role of self-compassion in romantic relationships. *Self and Identity*, 12, 78–98.
- Neff, K. D., Hsieh, Y., & Dejithirath, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4, 263–287.
- Neff, K. D., Kirkpatrick, L. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154.

- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9, 225–240.
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, 39, 267–285.
- Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, 12, 160–176.
- Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, 77, 23–50.
- Newsome, S., Waldo, M., & Gruszka, C. (2012). Mindfulness group work: Preventing stress and increasing self-compassion among helping professionals in training. *The Journal for Specialists in Group Work*, 37, 297–311.
- Nieves, K., Draine, J., & Solomon, P. (2000). The validity of self-reported criminal arrest history among clients of a psychiatric probation and parole service. *Journal of Offender Rehabilitation*, 30(3-4), 133-151.
- Nolen-Hoeksema, S., Larson, J., & Grayson, C. (1999). Explaining the gender difference in depressive symptoms. *Journal of Personality and Social Psychology*, 77, 1061–1072.
- Northrup, D. A. (1997). *The problem of the self-report in survey research*. Toronto: York University Press.

- Office of Juvenile Justice and Delinquency Prevention. (2013). *OJJDP statistical briefing book*. Retrieved from http://www.ojjdp.gov/ojstatbb/crime/JAR_Display.asp?ID=qa05200.
- Orth, U., Berking, M., & Burkhardt, S. (2006). Self-conscious emotions and depression: Rumination explains why shame but not guilt is maladaptive. *Personality and Social Psychology Bulletin*, 32, 1608–1619.
- Paulhus, D., Robins, R., Trzesniewski, K., & Tracy, J. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research*, 39, 303–328.
- Piquero, A. R., MacDonald, J., Dobrin, A., Daigle, L. E., & Cullen, F. T. (2005). Self-control, violent offending, and homicide victimization: Assessing the general theory of crime. *Journal of Quantitative Criminology*, 21(1), 55-71.
- Polaschek, D. L. L. (2017). Protective factors, correctional treatment and desistance. *Aggression and Violent Behavior*, 32, 64-70.
- Pratt, T. C., & Cullen, F. T. (2006). The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. *Criminology*, 38, 931-964.
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem? A theoretical and empirical review. *Psychological Bulletin*, 130, 435–468.
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality and Individual Differences*, 48, 757–761.

- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical Psychology & Psychotherapy*, 18, 250-255.
- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., ...Liu, J. (2006). The reactive-proactive aggression questionnaire: Differential correlates of reactive and proactive aggression in adolescent boys. *Aggressive Behavior*, 32, 159-171.
- Reimer, M. (1995). *The adolescent shame measure (ASM)*. Philadelphia: Temple University.
- Remler, D. K., & Van Ryzin, G. G. (2011). *Research methods in practice: Strategies for description and causation*. Thousand Oaks, CA: Sage Publications, Inc.
- Reynolds, C.R., & Kamphaus, R.W. (1998). *BASC: Behavior assessment scale for children: Manual*. Circle Pines, MN: American Guidance Service.
- Robinson, R., Roberts, W. L., Strayer, J., & Koopman, R. (2007). Empathy and emotional responsiveness in delinquent and non-delinquent adolescents. *Social Development*, 16, 555–579.
- Rockcliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry*, 5, 132–139.
- Roemer, L., Lee, J. K., Salters-Pedneault, K., Erisman, S. M., Orsillo, S. M., & Mennin, D. S. (2009). Mindfulness and emotion regulation difficulties in generalized anxiety disorder: Preliminary evidence for independent and overlapping contributions. *Behavior Therapy*, 40, 142–154.

- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ruchkin, V., Koposov, R., Vermeiren, R., & Schwab-Stone, M. (2003). Psychopathology and age at onset of conduct problems in juvenile delinquents. *The Journal of Clinical Psychiatry*, 64(8), 913-920.
- Sampson, R. J., & Laub, J. H. (1992). Crime and deviance in the life course. *Annual Review of Sociology*, 18, 63-84.
- Satici, S. A., Uysal, R., & Akin, A. (2015). Early life experiences and self-compassion: A structural equation modelling. *Studies in Psychology*, 36, 343-365.
- 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 and Comparative Criminology*, 60, 675-693.
- Scheff, T. (1987). *The shame-rage spiral: A case study of an interminable quarrel: The role of shame in symptom formation*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Scheff, T. J. (1994). *Bloody revenge: Emotions, nationalism, and war*. Boulder, CO: Westview Press.
- Schoenleber, M., & Berenbaum, H. (2012). Shame regulation in personality pathology. *Journal of Abnormal Psychology*, 121, 433-446.
- Seber, G. A. F. (1984). *Multivariate observations*. New York: Wiley and Sons.

- Shanahan, S., Jones, J., & Thomas-Peter, B. (2011). Are you looking at me, or am I? Anger, aggression, shame and self-worth in violent individuals. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 29, 77–91.
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. F. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62, 373-386.
- Sheikh, S. (2014). Cultural variations in shame’s responses: A dynamic perspective. *Personality and Social Psychology Review*, 18, 387-403.
- Sickmund, M., & Puzzanchera, C. (2014). *Juvenile offenders and victims: 2014 national report*. Washington, DC: National Center for Juvenile Justice.
- Simon, G. (2005). Shame, knowing, and anthropology: On Robert I. Levy and the study of emotion. *Ethos*, 33, 493-498.
- Simonds, L. M., John, M., Fife-Shaw, C., Willis, S., Taylor, H., Hand, H., ... Winton, H. (2015). Development and validation of the Adolescent Shame-Proneness Scale. *Psychological Assessment*, 28, 549-562.
- Singer, E., & Bossarte, R. M. (2006). Incentives for survey participation: When are they “coercive?” *American Journal of Preventive Medicine*, 31(5), 411-418.
- Snyder, M. (1994). The development of social intelligence in psychotherapy. *Journal of Humanistic Psychology*, 34, 84–108.
- Sommers-Spijkerman, M. P. J., Trompetter, H. R., Schreuers, K. M. G., & Bohlmeijer, E. T. (2017). Compassion-focused therapy as guided self-help for enhancing public mental health: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*. Advance online publication.

- 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.
- Stafford-Brown, J., & Pakenham, K. I. (2012). The effectiveness of an ACT informed intervention for managing stress and improving therapist qualities in clinical psychology trainees. *Journal of Clinical Psychology, 68*, 592–613.
- Steele, C. M. (1998). Stereotyping and its threat are real. *American Psychologist, 53*, 680-681.
- Steele, R. G., Legerski, J.-P., Nelson, T. D., & Phipps, S. (2009). The Anger Expression Scale for Children: Initial validation among healthy children and children with cancer. *Journal of Pediatric Psychology, 34*, 51-62.
- Stoutenbourgh, J. W. (2008). Demographic measures. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (Vol. 1, pp. 185–186). Thousand Oaks, CA: Sage Publications, Inc.
- Stuewig, J., & McCloskey, L. A. (2005). The relation of child maltreatment to shame and guilt among adolescents: Psychological routes to depression and delinquency. *Child Maltreatment, 10*, 324–336.
- Stuewig, J., Tangney, J.P., Heigel, C., Harty, L., & McCloskey, L. (2010). Shaming, blaming, and maiming: Functional links among the moral emotions, externalization of blame, and aggression. *Journal of Research in Personality, 44*, 91-102.

- Stuewig, J., Tangney, J. P., Kendall, S., Folk, J. B., Meyer, C. R., & Dearing, R. L. (2015). Children's proneness to shame and guilt predict risky and illegal behavior in young adulthood. *Child Psychiatry and Human Development*, 46, 217-227.
- 't Hart-Kerkhoffs, L. A., Boonmann, C., Doreleijers, T. A. H., Jansen, L. M. C., van Wijk, A. P., & Vermeiren, R. R. J. M. (2015). Mental disorders and criminal re-referrals in juveniles who sexually offended. *Child and Adolescent Psychiatry and Mental Health*, 9, Article ID 4.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson/Allyn & Bacon.
- Tanaka, M., Wekerle, C., Schmuck, M. L., Paglia-Boak, A., & the MAP Research Team. (2011). The linkages among childhood maltreatment, adolescent mental health, and self-compassion in child welfare adolescents. *Child Abuse and Neglect*, 35, 887-898.
- Tangney, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research & Therapy*, 34, 741-754.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. 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*, 70, 1256-1269.
- Tangney, J. P., Stuewig, J., & Hafez, L. (2011). Shame, guilt and remorse: Implications for offender populations. *Journal of Forensic Psychiatry & Psychology*, 22, 706-723.

- Tangney, J. P., Stuewig, J., Mashek, D., & Hastings, M. (2011). Assessing jail inmates' proneness to shame and guilt: Feeling bad about the behavior or the self? *Criminal Justice and Behavior*, 38, 710–734.
- Tangney, J. P., & Tracy, J. L. (2012). Self-conscious emotions. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 446–478). New York: Guilford Press.
- Tangney, J. P., Wagner, P. E., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, 101, 469–478.
- Tangney, J. P., Wagner, P. E., Hill-Barlow, D., Marschall, D. E., & Gramzow, R. (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, 70, 797–809.
- Taylor, J., Loney, B. R., Bobadilla, L., Iacono, W. G., & McGue, M. (2003). Genetic and environmental influences on psychopathy trait dimensions in a community sample of male twins. *Journal of Abnormal Child Psychology*, 31(6), 633–645.
- Teclaw, R., Price, M., & Osatuke, K. (2012). Demographic question placement: Effect on item response rates and means of a Veterans Health Administration survey. *Journal of Business and Psychology*, 27, 281–294.
- Thomaes, S., Bushman, B. J., Stegge, H., & Olthof, T. (2008). Trumping shame with blasts of noise: Narcissism, self-esteem, shame, and aggression in young adolescents. *Child Development*, 79, 1792–1801.
- Thomaes, S., Stegge, H., Olthof, T., Bushman, B. J., & Nezlek, J. B. (2011). Turning shame inside-out: “Humiliated fury” in young adolescents. *Emotion*, 11, 786–793.

- Thornberry, T. P., & Krohn, M. D. (2001). The development of delinquency: An interactional perspective. In S. O. White (Ed.), *Handbook of youth and justice* (pp. 289-305). Netherlands: Kluwer Academic Publishers.
- Tomkins, S. S. (1963). *Affect imagery consciousness: Volume 2: The negative affects*. New York, NY: Tavistock.
- U.S. Department of Justice. (2016). *U.S. attorney's manual*. Retrieved from <https://www.justice.gov/usam/criminal-resource-manual-38-juvenile-defined>
- Valdez, A., Kaplan, C. D., & Curtis, R. L., Jr. (2007). Aggressive crime, alcohol and drug use, and concentrated poverty in 24 U.S. urban areas. *The American Journal of Drug and Alcohol Abuse*, 33(4), 595-603.
- Van Tijen, N., Stegge, H., Meerum Terwogt, M., & Van Panhuis, N. (2004). Anger, shame and guilt in children with externalizing problems: An imbalance of affects. *European Journal of Developmental Psychology*, 1, 271–279.
- Vaughn, M. G., DeLisi, M., Beaver, K. M., Wright, J. P., & Howard, M. O. (2007). Toward a psychopathology of self-control theory: The importance of narcissistic traits. *Behavioral Sciences & the Law*, 25(6), 803-821.
- Vaughn, M. G., Salas-Wright, C. P., DeLisi, M., & Maynard, B. R. (2014). Violence and externalizing behavior among youth in the United States: Is there a severe 5%? *Youth Violence and Juvenile Justice*, 12(1), 3-21.
- Velotti, P., Elison, J., & Garofalo, C. (2014). Shame and aggression: Different trajectories and implications. *Aggression and Violent Behavior*, 19, 454-461.

- Vermeiren, R., De Clippele, A., Schwab-Stone, M., Ruchkin, V., & Deboutte, D. (2002). Neuropsychological characteristics of three subgroups of Flemish delinquent adolescents. *Neuropsychology*, 16(1), 49-55.
- Vetteese, L. C., Dyer, C. E., Li, W. L., & Wekerle, C. (2011). Does self-compassion mitigate the association between childhood maltreatment and later emotional regulation difficulties? A preliminary investigation. *International Journal of Mental Health Addiction*, 9, 480-491.
- Warburton, W. A., & Anderson, C. A. (2015). Social psychology of aggression. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (2nd edition, Vol. 1, pp. 373-380). New York: Elsevier.
- Wasserman, G. A., McReynolds, L. S., Lucas, C. P., Fisher, P., & Santos, L. (2002). The voice DISC-IV with incarcerated male youths: Prevalence of disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(3), 314-321.
- Watson, S., Gomez, R., & Gullone, E. (2017). The shame and guilt scales of the Test of Self-Conscious Affect–Adolescent (TOSCA-A): Factor structure, concurrent and discriminant validity, and measurement and structural invariance across ratings of males and females. *Assessment*, 24(4), 517-527.
- Websdale, N. (2011). *Familicidal hearts: The emotional style of 211 killers*. Oxford, UK: Oxford University Press.
- Wispe, L. (1991). *The psychology of sympathy*. New York: Plenum.
- Wolf, S. T., Cohen, T. R., Panter, A. T., & Insko, C. A. (2010). Shame proneness and guilt proneness: Toward the further understanding of reactions to public and private transgressions. *Self and Identity*, 9, 337-362.

- Wolfe, R. N., Lennox, R. D., & Cutler, B. L. (1986). Getting along and getting ahead: Empirical support for a theory of protective and acquisitive self-presentation. *Journal of Social and Personality Psychology, 50*, 356-361.
- Wong, Y., & Tsai, J. (2007). Cultural models of shame and guilt. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 209-293). New York, NY: Guilford Press.
- Wright, K., Gudjonsson, G. H., & Young, S. (2008). An investigation of the relationship between anger and offence-related shame and guilt. *Psychology, Crime & Law, 14*, 415-423.
- Yang, Y., & Raine, A. (2009). Prefrontal structural and functional brain imaging findings in antisocial, violent, and psychopathic individuals: A meta-analysis. *Psychiatry Research: Neuroimaging, 174*(2), 81-88.
- Yarnell, L. M., & Neff, K. D. (2013). Self-compassion, interpersonal conflict resolutions, and well-being. *Self and Identity, 12*, 146-159.
- Zeller, M., Yuval, K., Nitzan-Assayag, N., & Bernstein, A. (2015). Self-compassion in recovery following potentially traumatic stress: Longitudinal study of at-risk youth. *Abnormal Child Psychology, 43*, 645-653.

APPENDIX A

**CONSENT AND ASSENT FORMS FOR
PARTICIPATION IN RESEARCH**

UNIVERSITY of
NORTHERN COLORADO



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Shame, Self-Compassion, and Aggressive Behavior in Adolescents
 Researcher: Sara A. Hofmann, M.A., Counseling Psychology Department
 Phone: (970) 351-1645
 E-mail: hofm5949@bears.unco.edu or
shofmann@communityreachcenter.org
 Faculty Sponsor: Brian Johnson, PhD, (970) 351-2209; brian.johnson@unco.edu

Purpose and Description: The researcher is interested in the relationship of experiences of shame, self-compassion, and aggressive behavior in adolescents ages 11-18. If you grant permission and if your child indicates to us a willingness to participate, your child will complete one survey on each of these topics as well as a demographic questionnaire that collects information about their age, gender, race/ethnicity, and any history of juvenile arrest, probation, detention, or commitment. The questionnaires will likely take your child 10-20 minutes to complete and they will receive their choice of snack item upon completion to thank them for their participation.

Your child will not put their name on the surveys and the information they provide will not be traced back to them in any way. Each child's responses will be identified by a number only and the names of subjects will not appear in any professional report of this research. Choosing to participate or not participate in this survey will have no effect on your child's services at Community Reach Center, any court or legal proceeding, or any other area of daily life. While your child may complete a survey for this study during a visit to the Brighton office of CRC, CRC is not sponsoring this research study. Results will be stored in a locked office in McKee Hall at the University of Northern Colorado and entered into a statistical software package for analysis, protected by a password. Potential risks in this project are minimal. In fact, there are no foreseeable risks outside the time it takes to complete the survey. However, as with any questionnaire, mild discomfort may be experienced in responding to questions. If participants do experience discomfort, the researcher is an experienced mental health clinician and can meet with participants as needed. Other CRC and community referrals will also be provided if participants or families would like to access services at another time. There are no direct benefits to your child as a participant. However, the field of psychology is likely to benefit from this study, as it will assist us in better understanding aggression in adolescents and interventions that may benefit adolescents and those in their environment. Therefore, the benefits of this study are expected to far outweigh the risks. Please feel free to contact me if you have any questions or concerns about this research and please retain one copy of this letter for your records.

Thank you for assisting me with my research!

Sincerely, Sara Hofmann

Participation is voluntary. You may decide not to allow your child to participate in this study and if (s)he begins participation you or your child may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled, such as participation in therapeutic services at Community Reach Center. Having read the above and having had an opportunity to ask any questions, please sign below if you permit your child to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Child's Full Name (please print)

Child's Birth Date (month/day/year)

Parent/Guardian's Signature

Date

Researcher's Signature

Date



**ASSENT FORM FOR PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO**

Hi! My name is Sara Hofmann and I'm a graduate student at the University of Northern Colorado. I do research with teenagers about feelings that can sometimes be hard to handle, like anger or fear, and use that information to come up with new ways to help teens learn new skills to manage those feelings that might work better. In this study, I'm asking teens 11-18 to help me better understand experiences of shame and self-compassion and get a picture of how teens might typically deal with those experiences. If you decide to participate, I will ask you to provide some basic information about yourself like your age and gender, then you'll fill out three questionnaires on different topics. For most teens, this takes between 10 and 20 minutes. You won't put your name on any of your responses and you'll be able to mark your answers privately, so you don't need to worry about anyone seeing your answers or connecting them to you. You can be totally honest. This also isn't a test, so there are no right or wrong answers- I just want to know more about what you think and experience. When you're done, you can choose a snack to thank you for sharing your perspective.

Answering these questions probably won't hurt or help you, and it has no effect on the services you receive at Community Reach Center. Even if your parent or guardian said it's okay for you to participate, you or your parent/guardian can change your mind at any time. It's up to you. If you have any questions for me about my research, please make sure to ask them- you can email me at s.hofmann@communityreachcenter.org or talk to me in person at the Brighton office on a Tuesday or Thursday.

If you want to be in the study and provide more information about your thoughts and experiences, please sign your name below and write today's date next to it. Thank you!

Participant's Full Name (please print)	Participant Signature	Date
--	-----------------------	------

Researcher's Signature	Date
------------------------	------

APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

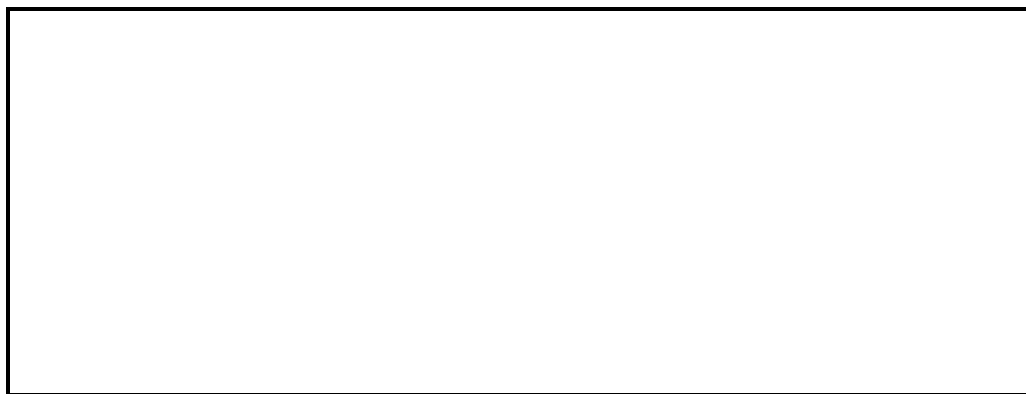
“About Me”

1. What is your age? _____
2. What is your current grade? _____
3. Please specify your ethnicity (or race):
 - ☐ White
 - ☐ Hispanic or Latino
 - ☐ Black or African American
 - ☐ Native American or American Indian
 - ☐ Asian/Pacific Islander
 - ☐ Other
4. What is your gender?
 - ☐ Male
 - ☐ Female
 - ☐ Other (please specify): _____
5. What is your primary language?
 - ☐ English
 - ☐ Spanish
 - ☐ Another language (please write which language)

6. Have you ever been arrested by the police?
 - ☐ Yes
 - ☐ No

If the answer is Yes, please turn to the back of this page. If the answer is No, please turn to the questionnaire.

7. How old were you at the time of your first arrest? _____
8. How many times total have you been arrested? _____
9. If you have been convicted of a crime, pleaded no lo contendre, or taken a plea deal in the past related to an arrest, please list your charges below. If you have been arrested more than once, please list all of your charges from each arrest.



APPENDIX C
SELF-COMPASSION SCALE

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

**Almost
never**
1

2

3

4

**Almost
always**
5

- _____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.
- _____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
- _____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
- _____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
- _____ 5. I try to be loving towards myself when I'm feeling emotional pain.
- _____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.
- _____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
- _____ 8. When times are really difficult, I tend to be tough on myself.
- _____ 9. When something upsets me I try to keep my emotions in balance.
- _____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
- _____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.
- _____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
- _____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
- _____ 14. When something painful happens I try to take a balanced view of the situation.
- _____ 15. I try to see my failings as part of the human condition.
- _____ 16. When I see aspects of myself that I don't like, I get down on myself.
- _____ 17. When I fail at something important to me I try to keep things in perspective.

- _____ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
- _____ 19. I'm kind to myself when I'm experiencing suffering.
- _____ 20. When something upsets me I get carried away with my feelings.
- _____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
- _____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.
- _____ 23. I'm tolerant of my own flaws and inadequacies.
- _____ 24. When something painful happens I tend to blow the incident out of proportion.
- _____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.
- _____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

APPENDIX D**AUTHOR PERMISSION TO USE THE
SELF-COMPASSION SCALE**

Neff, Kristin <kneff@austin.utexas.edu>

Reply all

Mon 5/16/2016, 4:50 PM

Hofmann, Sara

You have my permission.

KRISTIN NEFF, Ph.D., Associate Professor | The University of Texas at Austin | Department of Educational Psychology

Audio Training (Sounds True): [Self-Compassion Step by Step](#)

Book (William Morrow): [Self-Compassion: The proven power of being kind to yourself](#)

www.self-compassion.org

www.CenterforMSC.org

On May 16, 2016, at 1:43 PM, Hofmann, Sara <hofm5949@bears.unco.edu> wrote:
Hello Dr. Neff,

My name is Sara Hofmann and I am a Counseling Psychology doctoral student at the University of Northern Colorado. I am currently in the process of developing my dissertation study on shame and self-compassion in adolescent offenders and I am writing you to ask your permission to use the SCS with my participants. Please let me know if you have any questions or concerns or need more information about my dissertation.

Thank you for your time and I look forward to hearing from you!

Sara A. Hofmann, M.A.

APPENDIX E
ADOLESCENT SHAME-PRONENESS SCALE

It is common for young people to experience feelings of shame. Shame can occur when you have done something or when someone has done something to you. Here are some examples of situations that might make young people feel shame:

1. You are being bullied
2. You make a mistake in front of your whole class and everyone laughs
3. You do badly on a test or examination
4. Your family cannot afford to buy you the newest gadgets or most fashionable clothes
5. You are horrible about your best friend behind his or her back

Important!

Can you think of some situations that have happened recently where you have felt shame? Please write some down in the space below. If you do not want to write them down, that's ok.

- 1.
- 2.
- 3.

Following are some things people might think, feel, or do when they feel shame. Please read each one and circle the number next to how you would ***generally*** think, feel, or act in situations like the ones you have written down. If you have not written them down, try to hold them in mind when thinking about the statements below.

Example: Thinking back to times that you have felt shame, if you very often think "I am no good" then you would circle the number 3, as shown below.

	Not at all	A little bit	Quite a bit	A lot
I thought, "I am no good"	0	1	2	3
Circle the number next to each statement below, thinking about the situations that you have written down.	Not at all	A little bit	Quite a bit	A lot
I thought, "I have let people down"	0	1	2	3
I felt worthless and small	0	1	2	3
I thought, "Other people must think I am no good"	0	1	2	3
I thought, "I am a nasty or mean person"	0	1	2	3
I wanted to shout and scream	0	1	2	3
I felt angry at other people	0	1	2	3
I wanted to seek revenge	0	1	2	3
I thought, "No one likes me"	0	1	2	3
I felt disappointed	0	1	2	3
I thought, "Other people must think I am stupid"	0	1	2	3
I wanted to punch walls or break things	0	1	2	3
I felt sad	0	1	2	3
I had a horrible feeling inside	0	1	2	3
I thought, "I am no good"	0	1	2	3
I felt embarrassed	0	1	2	3
I thought, "Other people must think I am nasty or mean"	0	1	2	3
I thought, "I am stupid"	0	1	2	3
I felt frustrated	0	1	2	3
I thought, "It is better if I was not around"	0	1	2	3

Permission to use this measure was granted by Dr. Laura Simonds.

APPENDIX F

**AUTHOR PERMISSION TO USE THE ADOLESCENT
SHAME-PRONENESS SCALE**

I.simonds@surrey.ac.uk

Reply all

Wed 5/18/2016, 3:30 PM

Hofmann, Sara

Hi Sara

I'm really pleased to hear you are interested in using the measure. Absolutely no problem at all with using it but I would be interested to learn about your findings in due course and any information on how the measure worked out in practice.

All the best with your research,

Laura

Laura Simonds PhD, CPsychol, AFBPsS

Lecturer

School of Psychology

University of Surrey

01483 686936

From: Hofmann, Sara <hofm5949@bears.unco.edu>

Sent: 16 May 2016 19:35:26

To: Simonds LM Dr (Psychology)

Subject: Permission to use Adolescent Shame-Proneness Scale

Hi Dr. Simonds,

My name is Sara Hofmann and I'm a doctoral student in counseling psychology at the University of Northern Colorado. I'm doing my dissertation study on shame and self-compassion in adolescent offenders and I'm hoping to use your measure as part of the assessments. Would that be alright with you?

Thank you, Sara A. Hofmann, M.A.

APPENDIX G
REACTIVE-PROACTIVE AGGRESSION
QUESTIONNAIRE

There are times when most of us feel angry, or have done things we should not have done. Rate each of the items below by putting a circle around 0 (never), 1 (sometimes), or 2 (often or always). Don't spend a lot of time thinking about the items—just give your first response. Make sure you answer all the items.

How often have you....	Never	Sometimes	Often/ Always
1. Yelled at others when they have annoyed you	0	1	2
2. Had fights with others to show who was on top	0	1	2
3. Reacted angrily when provoked by others	0	1	2
4. Taken things from other students	0	1	2
5. Gotten angry when frustrated ^[SEP]	0	1	2
6. Vandalized something for fun ^[SEP]	0	1	2
7. Had temper tantrums	0	1	2
8. Damaged things because you felt mad	0	1	2
9. Had a gang fight	0	1	2
10. Hurt others to win a game ^[SEP]	0	1	2
11. Become angry/mad if you don't get your way	0	1	2
12. Used physical force to get what you want	0	1	2
13. Gotten angry or mad when you lost a game ^[SEP]	0	1	2
14. Gotten angry when others threatened you	0	1	2
15. Used force to obtain money/things from others	0	1	2
16. Felt better after hitting or yelling at someone	0	1	2
17. Threatened and bullied someone	0	1	2
18. Made obscene phone calls for fun	0	1	2
19. Hit others to defend yourself ^[SEP]	0	1	2
20. Gotten others to gang up on someone else	0	1	2
21. Carried a weapon to use in a fight	0	1	2
22. Gotten angry or mad or hit others when teased	0	1	2
23. Yelled at others so they would do things for you	0	1	2

APPENDIX H

**AUTHOR PERMISSION TO USE THE REACTIVE-
PROACTIVE AGGRESSION QUESTIONNAIRE**

Raine PhD, Adrian <araine@sas.upenn.edu>

Reply all

Sat 8/20/2016, 3:39 AM

Hofmann, Sara

Sure,

Adrian

From: Hofmann, Sara [mailto:hofm5949@bears.unco.edu]

Sent: Friday, August 19, 2016 6:34 PM

To: Raine PhD, Adrian <araine@sas.upenn.edu>

Subject: Permission to use Reactive-Proactive Aggression Questionnaire

Hi Dr. Raine,

My name is Sara Hofmann and I'm a doctoral student in counseling psychology at the University of Northern Colorado. I'm doing my dissertation study on shame and self-compassion in adolescent offenders and I'm hoping to use your measure as part of the assessments. Would that be alright with you?

Thank you,

Sara A. Hofmann, M.A.

APPENDIX I
INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board

DATE: February 6, 2017

TO: Sara Hofmann, M.A.

FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [980206-4] Shame, Self-Compassion, and Aggressive Behavior in Adolescents

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVED

APPROVAL DATE: February 6, 2017

EXPIRATION DATE: February 6, 2021

REVIEW TYPE: Expedited Review

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB has APPROVED your submission. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of February 6, 2021.

APPENDIX J
PARTICIPANT DEBRIEFING FORM



**DEBRIEFING FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO**

Project Title: Shame, Self-Compassion, and Aggressive Behavior in Adolescents
 Researcher: Sara A. Hofmann, M.A., Doctoral Candidate, Counseling
 Psychology
 Phone: (970) 351-1645
 E-mail: hofm5949@bears.unco.edu or s.hofmann@communityreachcenter.org
 Faculty Sponsor: Brian Johnson, PhD, (970) 351-2209; brian.johnson@unco.edu

Purpose and Description: The researcher is interested in the relationship of experiences of shame, self-compassion, and aggressive behavior in adolescents ages 11-18. The study aims to understand differences in these areas between youth with no arrests or legal involvement, youth with arrests or legal involvement for nonviolent charges such as theft or truancy, and youth with arrests or legal involvement for violent charges such as assault or battery. Results of this study will be used to create more helpful and effective interventions for adolescents to improve self-compassion and reduce aggressive behavior. If you would like to receive a copy of the study results by mail or electronically via email, please list your contact information below and return that section of the document to your counselor or case manager. If you feel upset during or after participating in this study, several local resources are available to assist you. Information for these resources is provided below.

Community Reach Center	Colorado Crisis Services
1-303-853-3500	1-844-493-TALK

University of Northern Colorado Psychological Services Clinic
 1-970-351-1645

Thank you for your participation! Sara Hofmann
