

EXPLORING REMORSE BEHAVIORS: VERBAL AND NONVERBAL
INDICATORS OF AUTHENTIC, EXAGGERATED, AND
FEIGNED REMORSE

by

DESIRÉE ADAMS GRIFFIN

STANLEY BRODSKY, PH.D., COMMITTEE CHAIR
JUDGE JOHN ENGLAND
JEFFREY PARKER, PH.D.
STEVEN PRENTICE-DUNN, PH.D.
RANDALL SALEKIN, PH.D.

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ABSTRACT

Judges are tasked with discerning whether a defendant's remorse presentation is sincere or fabricated. However, there is limited research examining specific verbal and nonverbal behavioral cues associated with remorse. Two studies were conducted to identify behaviors predictive of authentic, exaggerated, and feigned remorse and to investigate judges' strategies for assessing defendant remorse. In the first study, 134 college students video-recorded a baseline story in which they were either remorseful or not remorseful for a harm they caused to another individual. They recorded the same story a second time with the instruction of exaggerating or feigning remorse. Coders rated the frequency with which participants engaged in 25 verbal and nonverbal behaviors associated with remorse and deception. Results indicated the majority of the behaviors were displayed infrequently; however individuals who were remorseful were more likely to admit guilt, make a commitment not to recidivate, and express empathy than non-remorseful individuals. Compared to the behavior they exhibited in their baseline stories, participants' expressions of empathy and their commitment not to recidivate increased when they exaggerated or feigned remorse; and their smiling and justification of behavior decreased. Despite the significant differences in behaviors across the varying levels of remorse, it is questionable whether these differences would be observable by judges because the mean differences were small.

In the second study, judges ($n = 56$) were surveyed regarding the specific behavioral cues they use to assess remorse. Results indicated judges were more likely to use context-specific behavioral cues (e.g., prior criminal history, admission of guilt, apologies to the victim) than

general cues for remorse (e.g., crying, bowed head). When assessing for feigned remorse, judges reported most commonly using gaze aversion, which is not empirically related to deception. An overarching strategy that was endorsed by judges for assessing the sincerity of remorse was examining the consistency between the defendant's verbalizations of remorse and their actions prior to the court date.

A general discussion of suggested strategies for evaluating the sincerity of defendant remorse is presented. Strengths and weaknesses of the studies are addressed, along with future areas of research related to assessing remorse.

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LIST OF ABBREVIATIONS AND SYMBOLS

M	Mean: The sum of a set of measurements divided by the number of measurements in a set
$adj\ M$	Adjusted Mean
SD	Standard Deviation: The square root of variance. Variance is the average of the squared differences from the mean
t	Computed value for a t-test, which assesses whether the means of two groups are statistically different from each other
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
n	Sample size
f	Computed effect size for F-ratios in analysis of variance
ICC	Intraclass Correlation Coefficient: A measure of the reliability of measurements or ratings
F	Fisher's F -ratio: A ratio of two variances
MANCOVA	Multivariate Analysis of Covariance
Wilks' λ	Computed multivariate ratio of variances
η_p^2	Partial eta-squared: A measure of effect-size
r	Pearson product-moment correlation

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INTRODUCTION

A defendant's expression of remorse is a key mitigating factor in sentencing. As a result, defendants might feign remorse in an attempt to reduce their sentence. Judges are faced with the difficult task of discerning authentic remorse from exaggerated or feigned remorse. However, there are no accepted or empirically validated behavioral standards that judges or behavioral scientists use to assess the sincerity of defendant remorse. The current study examined verbal and nonverbal behaviors exhibited by individuals when expressing sincere, exaggerated, and feigned remorse with the goal of establishing a standard set of behaviors for the different types of remorse. Judges' strategies for assessing remorse were also evaluated to assess whether the behaviors they believe are associated with sincere and feigned remorse are those that are exhibited.

Remorse Defined

Remorse is commonly considered a component of an apology (Goffman, 1972; Scher & Darley, 1997; Schmitt, Gollwitzer, Förster, and Montada, 2004). Remorse helps shape the effectiveness of an apology and the perception of the transgressor because its expression often includes an acceptance of responsibility, an offer of repair, and a promise to not commit similar behaviors (Scher & Darley, 1997). Scher & Darley's (1997) research indicated that even when not explicitly stated (i.e., I'm sorry, I feel badly for what I did), observers rate actors as remorseful when they accept responsibility, offer compensation, and make promises to not recidivate. Goffman (1972) posited that both remorse and apologies act as remedial exchanges

because they help re-establish the offender's moral character as well as help integrate him or her back into the community.

Weisman (2004) discriminated remorse from an apology in how it is presented. He posited that an apology is a verbal statement *referring* to the harm-doer's regret and anguish felt for a transgression, whereas remorse is the *demonstration* of the harm-doer's emotions and feelings. A crucial aspect of remorse for the current study is not that it is merely a demonstration of feelings, but rather it is experienced involuntarily by the wrongdoer as evidenced by the unwanted feelings (i.e., pain, distress, and anguish) associated with it (Robinson, Smith-Lovin, & Tsoudis, 1994; Weisman, 2004).

Other components of remorse identified by some authors are that one must recognize a harm was committed, know it was a wrongful act, and feel guilty for the act (Gilligan, 1999; Horne, 1999). Brooks and Reddon (2003) further refined the conceptualization of remorse by identifying internal and external dimensions of remorse. The internal dimension is composed of remorseful feelings that result from failing to meet personal standards. The external dimension is defined by remorseful expressions that result from a fear of consequences due to breaking society's rules. The internal dimension was associated with more sincere expressions of remorse due to it being elicited for not meeting one's moral standards (Brooks & Reddon, 2003).

Ward (2006) contended that depending upon the definition of remorse that is used, different expectations and interpretations are applied by an observer to an actor's expression of remorse. Ward identified three definitions of remorse that vary in the methods used to deduce the presence of remorse. For example, one definition of remorse contends that remorse stems from "self-directed guilt," which motivates individuals to seek atonement (Ward, 2006, p. 134). Another definition highlights the internal nature of remorse and does not require any outward actions on

behalf of the individual in order to feel remorseful. A third definition put forth by Ward referred to remorse as the visible pain and suffering an individual feels after a wrongful act.

Due to the subjectivity associated with the definition of remorse, it is important to operationally define remorse for the current study. This study addresses three dimensions of remorse: genuine remorse, exaggerated remorse, and feigned remorse. Drawing from Ward (2006), Tangney (2002), Weisman (2004), and Brooks and Reddon (2003), genuine remorse in the context of the current study is defined as the involuntary affective and behavioral responses to a behavior that is recognized as a wrongful act which might have caused harm and is in conflict with one's moral standards or society's norms. Examples of affective responses include experiences of pain, tension, guilt, and distress. Examples of behavioral responses include apologizing, making reparations to the victim, accepting responsibility, and not committing similar acts. Exaggerated remorse is defined as the attempt to behaviorally augment genuine feelings of remorse. Demaree, Schmeichel, Robinson, and, Everhart (2004) identify affective exaggeration as an emotion regulation tool, in which behaviors are changed or adjusted to enhance an emotion that is already initiated. Feigned remorse is defined as the presentation of remorse when, in actuality, there is an absence of any genuine remorse. Remorse that is only displayed because one feels sorry for getting caught and for receiving punishment will not be considered authentic remorse. In addition, remorse that is contrived (i.e., not experienced involuntarily) for the sole purpose of receiving a reduced sentence is considered feigned remorse.

Emotion Regulation

Emotion regulation is the ability to influence the types of emotions experienced and the expression of these emotions. Individuals frequently modulate their emotions to reflect social norms or to enhance their position in interpersonal relationships (Robinson & Smith-Lovin,

1999). For example, people who receive gifts that they do not like will typically express enthusiasm and gratefulness to avoid hurting others' feelings, despite the insincerity of those emotions. Affect Control Theory (ACT), which is partly based on impression management theory, posits that individuals enhance their interpersonal standing by expressing emotions that are affectively congruent with the situation or their behavior (Robinson & Smith-Lovin, 1999). Results from a study evaluating the tenets of ACT found that observers rated characters from a vignette more highly when the character's emotions matched their behaviors (Robinson & Smith-Lovin, 1999). More specifically, characters that had engaged in harmful behaviors and then expressed remorse were rated more highly than those that did not express remorse.

Affect Control Theory highlights the possibility that expressions of remorse are successful impression management strategies that merely serve as tools to maintain social status. While impression management might be a contributing motivational factor for expressing remorse, it does not appear to be the sole purpose for expressions of genuine remorse. Cimbora and McIntosh (2005) identified guilt and remorse as moral emotions that contribute to one's moral development. Genuine remorse appears to serve as a form of self-punishment (Horne, 1999; Weisman, 1999) and is a natural affective response to morally inappropriate behavior (Cimbora & McIntosh, 2005). Demonstrations of exaggerated and feigned remorse, however, are likely influenced by the need to maintain the status quo in interpersonal relationships. Robinson and Smith-Lovin (1999) identified an expression of remorse as a behavioral strategy to avoid the negative consequences of harmful behaviors. Expressing remorse also serves as a method for preserving one's social identity after engaging in a negative behavior. Robinson and Smith-Lovin contended that observers are more likely to utilize negative information to make attributions about one's identity; therefore, one must engage in behaviors that are socially

acceptable and appropriate (i.e., expressing remorse) after committing a negative behavior (i.e., violating others' rights) to avoid negative attributions (Niedermeir, Horowitz, & Kerr, 2001).

While not discussed in the context of ACT, Salekin, Ogloff, McFarland, and Rogers (1995) also noted that observers are more likely to make attributions about an actor's character if they display inappropriate affective responses to a particular behavior as opposed to appropriate or expected responses. The authors examined participants' attributions about a defendant after they reviewed trial transcripts and videotaped testimony of a defendant with varying levels of emotional expression. Results indicated that participants described the defendant with flat affect as uncaring and "showing no remorse" and the defendant with high affect as "faking remorse" (p. 302). Participants did not attempt to explain defendant's behaviors when the defendant exhibited moderate affect, or the level of affect expected to be observed in the given context. Therefore, the social need to maintain one's identity and social status by exhibiting remorse in response to a harmful behavior might explain, in part, why individuals with inappropriate levels of genuine remorse engage in exaggerated or feigned remorse.

Impression management does not appear to be the only explanatory factor for engaging in exaggerated or feigned remorse for defendants. As will be discussed in the next section, remorse has been shown to be a strong mitigating factor in criminal sentencing. Therefore, defendants' motivations to present exaggerated or feigned remorse likely go beyond the need to maintain social identity and social status. Furthermore, prior studies examining defendants' behaviors and affective responses after criminal acts have warned that such responses might be deceptive in nature (Porter, Doucette, Woodworth, Earle, & MacNeil, 2008; Salekin et al., 1995). Such labeling implies that insincere behavioral and affective responses are skills of deception rather than merely self-presentation.

The Role of Remorse in Sentencing

Some psycho-legal studies support the proposition that the expression of remorse contributes to reduced sentences (Eisenberg, Garvey, & Wells, 1998; Gold & Weiner 2000; Horne, 1999; Weisman, 2004; Ward, 2006; Wood & MacMartin, 2007). Several authors (Eisenberg et al., 1998; Gilligan, 1999; Horne, 1999; Ward, 2006) have posited that remorse is mitigating because it represents the offender's first step toward rehabilitation, which suggests the offender will be less likely to recidivate. Gold and Weiner (2000) found remorseful offenders were perceived as less of a threat to the community in a study examining remorseful versus non-remorseful confessions. Acceptance of responsibility, a precursor to remorse (Wood & MacMartin, 2007), has also been linked to the perception of decreased risk for future dangerousness (Sundby, 1998).

Most research studies examining the impact of remorse on sentencing have involved judgments from jurors or mock-jurors (Bornstein, Rung, & Miller, 2002; Eisenberg, et al., 1998; Pipes & Alessi, 1999; Sundry, 1998). However, jurors only provide sentencing recommendations in civil and capital cases, and judges typically determine a criminal offender's sentence. There is little empirical research addressing how judges utilize defendants' expressions of remorse when making sentencing decisions. Ward (2006) analyzed state trial transcripts and asserted that judges' utilization of remorse in sentencing has proven to be ambiguous and inconsistent. For example, several state courts recognized a verbal apology as evidence of remorse and worthy of mitigating a defendant's sentence; however, other courts indicated an apology by the defendant was "equivocal at best" and not sufficient to receive a reduced sentence (Ward, 2006, p. 144). In contrast to Ward, Slovenko (2006) suggested there is a consensus among judges in their utilization of defendant remorse during sentencing. Slovenko analyzed judges responses to a

survey¹ in which they were asked to what extent remorse should impact the sentencing of offenders. A common response by judges was that repeat offenders' displays of remorse should not be trusted necessarily because the remorse would not provide evidence for capacity for rehabilitation. Another component judges frequently referenced was victims' involvement in the sentencing. As victims' punitive interests increased, their consideration of defendant remorse decreased.

Although the remorse literature generally labels it is a mitigating factor in sentencing, there is limited and controversial research discussing how judges utilize defendant remorse when making sentencing decisions. Therefore, a goal of this project was to further assess judges' opinions about incorporating remorse into sentencing decisions and to clarify whether judges are likely to utilize defendant remorse to mitigate a sentence.

Assessing Remorse

Although Slovenko (2006) identified some consensus among judges in utilizing remorse during sentencing, other researchers indicate that judges are more likely to inconsistently incorporate defendants' expressions of remorse into sentencing decisions because of the subjective nature of remorse. Ward (2006) attributed the unpredictable manner in which remorse is applied by judges to the inherent difficulty of proving an internal feeling. However, there does appear to be objective evidence that is used by society and judges when assessing remorse (Weisman, 2004; Wood & MacMartin, 2007).

Wood and MacMartin (2007) conducted a discourse-analysis of judges' sentencing decisions in 74 child sexual assault cases in Ontario, Canada. Results indicated that judges often derived expressions of remorse, or lack thereof, from multiple behavioral components. A guilty

¹ Slovenko (2006) did not provide a description of the type of judges or their geographic location

plea was cited most frequently as “evidence” of remorse. Judges also referenced offenders’ actions such as apologizing to the victim, statements made in court, behavior in court (i.e., head bowed, observed suffering), and willingness to enter rehabilitation when assessing remorse. The authors suggested these findings support research conducted by Weisman (2004), in which guilty pleas and evidence of defendant suffering played crucial roles in helping judges determine whether remorse was present. Wood and MacMartin analyzed the data at an individual case level, whereas Weisman attempted to construct a remorseful offender profile by creating themes or categories associated with remorse. The former approach revealed more nuances across the individual judges in how they perceived remorse and utilized it when sentencing defendants. As a result, the authors concluded there is “no principled basis” for assessing remorse (Wood & MacMartin, 2007, p. 358).

Similar to Wood and MacMartin’s (2007) claim that judges do not have a basis for assessing remorse, Ward (2006) contended that judges employ bizarre and inconsistent tests to determine whether remorse is present. He concluded that the assessment of defendant remorse is a nebulous task for which cues of remorse identified by previous researchers (i.e., Wood & MacMartin, 2007; Weisman, 2004) cannot be applied in a formulaic manner. For example, the behaviors and verbal statements cited by some judges as evidence for genuine remorse (e.g. an apology to the victim) are indicative of feigned remorse to other judges (Ward, 2006). In another example, the North Carolina Supreme Court ruled that the prosecution cannot use lack of remorse as an aggravating factor simply because the defendant did not show remorse immediately after committing the crime (State v. Parker, 1985). The court further claimed that defendants need a period of reflection before being able to experience genuine remorse. However, the same North Carolina Supreme Court later ruled that evidence a defendant only

begins to experience remorse while awaiting their trial in jail “carries little weight” because “it is relatively easy for one facing life behind bars to be remorseful” (State v. Butler, 1995, p.489).

Although not accepted by all judges, some literature reviews and trial transcripts have identified verbal and nonverbal behaviors that are frequently used by both society and the courts to identify remorse (Scher & Darley, 1997; Ward, 2006; Weisman, 2004; Wood & MacMartin, 2007). To summarize, the verbal behaviors include admissions of guilt, acceptance of responsibility (i.e., guilty plea, statement indicating fault), apologetic statements, reparation to the victim, and expressions not to recidivate. Nonverbal behaviors include a bowed head, crying, and sad and distorted facial expressions (indicating pain, suffering, and worry). These behaviors, however, have not been empirically validated as good predictors or proper indicators of remorse. Goals of the current study were to identify specific verbal and nonverbal behaviors that are associated with remorse, and to assess whether the behaviors typically aligned with remorse are appropriate behavioral cues.

Exaggerated and Feigned Remorse

Given its subjective nature and the array of non-empirically supported behavioral cues used to identify it, remorse is often difficult to accurately assess. It becomes even more difficult to assess a defendant’s expression of remorse when judges must discern whether it is genuine, exaggerated, or feigned (Ward, 2006). Weisman (2004) stated that as the severity of the consequences for a crime increases, so does the likelihood that displays of remorse will be perceived as insincere and strategic. Wood and MacMartin (2007) contended that sorting out the “appearance and reality of remorse” (p. 358) is problematic for judges, as it typically requires one to analyze behaviors and actions even though remorse originates as an internal experience. In a trial transcript analyzed by Wood and MacMartin, one judge claimed that the genuineness of

the remorse did not matter as long as the offender acted in a remorseful manner (i.e., apologized to the victim, pleaded guilty). For other judges, remorse is not even considered in sentencing unless they are able to distinguish between a genuinely remorseful defendant and a deceptive defendant (Ward, 2006).

For some defendants, internal feelings of remorse might be present, but they are unable to outwardly express their feelings in a manner that is recognized by observers (Ward, 2006). As such, it might behoove them to engage in behaviors that augment or supplement their emotions, so judges will believe they are remorseful for their actions. As previously mentioned, behavioral enhancement of emotions is considered exaggeration. There is no literature examining the exaggeration of remorse or defining what behaviors are encompassed under that umbrella. One study evaluating the behavioral and affective outcomes of general emotional exaggeration operationalized exaggeration as the changing of one's "outward, facial reaction...so that if somebody watched the videotape of you, they would know exactly what you were feeling," (Demaree et al., 2004, p. 1085). In another study, Salekin et al. (1995) assessed whether the believability of a defendant was impacted by the amount of affect displayed by the defendant (i.e., flat, moderate, high). The flat affect and high affect conditions represented inappropriate levels of affect for the given situation. Namely, in the high affect condition, the defendant displayed emotions that were in excess of what an average person would be expected to display for the situation (i.e., continual crying). No studies have specifically examined exaggerated remorse; so, no basis exists to outline what behaviors would be considered "inappropriate" or "in excess" of expected displays of remorse. An interesting result from Salekin et al.'s study was that participants considered defendants in the high affect condition to be faking, rather than exaggerating, their remorse, and they rated the defendant in the high affect condition as more

guilty than the defendant in the moderate affect condition. These results indicate that observers can recognize the difference between appropriate and inappropriate levels of expressions of emotion, but can observers distinguish a difference between sincere and feigned expressions of emotion?

Observable behaviors appear to play a central role in determining the sincerity of one's remorse (Adams & Brodsky, 2007; Gilligan, 1999; Palmer, 1999; Weisman, 1999). Although remorse may initiate as an internal experience, judges rely on observable behaviors to validate their decisions of whether the defendant is genuinely remorseful for his or her actions. Ward (2006) and Slovenko (2006) posited that courts are less likely to believe a defendant's expression of remorse if the defendant has a prior criminal history. Other anecdotal examples of behaviors judges utilize in assessing the sincerity of remorse are similar to those used to assess the presence of remorse (i.e., pleading guilty, surrendering after the crime, apologizing to the victim) (Horne, 1999; Slovenko, 2006). It is assumed that if these behaviors are absent then any expressions of remorse presented by the defendant must be disingenuous.

Weisman (1999) noted that discrepancies between verbal expressions of remorse and nonverbal behaviors can call into question the sincerity of an offender's remorse. Adams and Brodsky (2007) examined whether mock-jurors could identify feigned remorse when an expert psychologist's testimony regarding the defendant's remorse was discrepant from the defendant's nonverbal expressions of remorse. Results indicated mock-jurors recommended the fewest number of death sentences to defendants displaying sincere remorse, with the next fewest recommended for defendants feigning remorse, and the most recommended for defendants lacking remorse. The same trend was found in mock-jurors' ratings of the defendant's level of remorse. Although feigned remorse did not lead to more punitive penalties than if the defendant

had not shown remorse, mock-jurors sentenced the defendant more harshly than when the remorse was judged to be sincere. Adams and Brodsky did not assess for the specific verbal and nonverbal behaviors mock-jurors' referenced when determining whether the defendant was sincerely remorseful. Therefore, a need exists to examine the behavioral cues used to determine whether a defendant is exaggerating or feigning remorse.

No studies have examined the behavioral cues that judges use to evaluate the sincerity of defendant remorse. Perhaps this is due to the limited research on feigned remorse. To date, only one study has examined specific behavioral differences between sincere remorse and feigned remorse (ten Brinke, MacDonald, Porter, & O'Connor, 2011). In their study, ten Brinke et al. asked 31 college students to tell two different stories, one of which contained an expression of sincere remorse and the other an expression of feigned remorse. The researchers examined split-second video clips of the stories and found that when individuals feigned remorse they were more likely to exhibit speech hesitations and a greater range of emotions than when they expressed sincere remorse. However, the results from this study are not necessarily useful for judges because the researchers examined microexpressions from split-second video-clips, which is not how judges examine a defendant's behavior.

Cues to Deception

Extensive research exists examining the nonverbal and verbal indicators of deception. A majority of this research, including two meta-analyses, reveals stereotypical cues of deception are not accurate predictors of deception (DePaulo, Lindsay, Malone, Muhlenbruck, Charlton & Cooper, 2003; Frank & Ekman, 2003; Sporer & Schwandt, 2007; Strömwall, Anders Granhag, & Hartwig, 2004; Vrij, Edward, Roberts, & Bull, 2000). Although rated by laypeople as the most utilized cue for deception, gaze aversion has no empirically validated relation with lying

(Global Detection Research Team, 2006). Other behaviors typically associated with lying but that are not empirically supported include: nervous behavior (i.e., fidgeting), increased body movement, increased eye blinking, and the use of more illustrators (i.e., using hand movements to help illustrate a verbal statement) (DePaulo, et al., 2003; Sporer & Schwandt, 2007). In fact, deception research indicates that most people engage in the exact opposite of the preceding stereotypical behaviors when lying. Sporer and Schwandt (2007) conducted a meta-analysis on 54 deception studies and found that hand, leg, and foot movements actually decreased when one was lying. This and other deception meta-analyses indicated the only measured verbal and nonverbal behaviors reliably associated with deception are decreased arm, hand, leg, and foot movements; the use of fewer illustrators; taking longer pauses before answering questions; higher pitch in voice; more speech errors; and providing statements that are shorter and contain less temporal, spatial, and perceptual details (Hirsch & Wolf, 2001; Sporer & Schwandt, 2007; Strömwall et al., 2004; Vrij et al., 2000; Zuckerman, DePaulo, and Rosenthal, 1981).

Given that several “stereotyped” cues for deception are not predictive of lying, it is not surprising that people, including professionals (i.e., police officers, investigators), are not accurate when detecting deception (Ekman & O’Sullivan, 1991). Bond and DePaulo (2006) examined 206 deception studies and found that individuals accurately discriminated between truth and lies approximately 54% of the time. Research studies examining the ability of professionals (e.g., police officers, investigators) to detect deception have indicated their performance is not significantly different from laypersons (Strömwall et al., 2004). Sporer and Schwandt (2007) asserted there are few differences between students and legal professionals, including judges, in their assumptions about deceptive nonverbal behaviors. Not only are individuals inaccurate in perceiving deception, but they do not have good insight into their own

behaviors when lying. In a study examining students' beliefs about changes in their verbal and nonverbal behaviors when lying, Vrij, Edward, and Bull (2001) found that students believed they engaged in more stereotypical deception behaviors (i.e., increased gaze aversion, more fidgeting) when lying than they actually did. However, students' beliefs about their verbal behaviors when lying typically matched their actual verbal behaviors. The authors concluded it is easier to control verbal behaviors and speech content than nonverbal behaviors.

Aside from not being aware of appropriate cues to deception, judges may not be accurate in detecting sincerity of remorse because there is no typical deception behavior (Vrij et al., 2001). Vrij et al. (2001) contended it is better to look at individual differences and contexts when assessing for deception. Some authors (DePaulo et al., 2003; Porter et al., 2008; Vrij et al., 2001) also acknowledge the need to study cues to deception in the context of the specific emotion being experienced or simulated. For example, general deception research has found that the use of illustrators decreases when one is lying, but Porter et al. (2008) found an increase in the use of illustrators when participants were lying about emotional events (versus factual events).

Individual differences and context-dependent variables that might be of interest in the current study include: a high-motivation situation (i.e., avoiding a severe sentence), offender personality characteristics, and deception of emotions (versus deception of facts). Do these individual differences and context-dependent variables make it difficult or impossible to assess standard verbal and nonverbal behavioral cues of feigned remorse? Sporer and Schwandt (2006; 2007) hypothesized motivation to lie might moderate behaviors associated with deception. Results revealed that compared to low-motivated liars, high-motivated liars smiled more, provided a shorter message, and spoke more quickly. However, other researchers (Mann, 2001;

Vrij & Mann, 2001) found no significant differences in deceptive behaviors between offenders charged with serious crimes (i.e., murder, rape, arson) compared to college students in laboratory studies. This finding was challenged by Porter et al.'s (2008) study investigating individual personality differences between an offender sample and a student sample. The authors hypothesized criminals would be better liars because of more practice and less "emotional interference" (i.e., guilt and anxiety) from lying. They suggested criminals would be better liars because previous research studies suggest they are more accurate at detecting lies and identifying stereotypical deceptive behaviors than students and professional lie catchers (Hartwig, Anders Granhag, Strömwall, & Andersson, 2004). Results indicated the only significant behavioral differences between offenders and students when lying were that offenders exhibited more self-manipulators (i.e., touching your face with your hands), and they showed a reduction in smiling when lying about emotional events (Porter et al., 2008). Overall, Porter et al.'s research indicated a significant difference did not exist between prisoners and students for most deceptive behaviors. Sporer and Schwandt's (2007) and Porter et al.'s results suggest a highly-motivating situation and a criminal personality do not create much variability in verbal and nonverbal behaviors associated with deception.

Deceptive behaviors may be contingent upon the content of the lie. Sporer and Schwandt (2006; 2007) hypothesized that when lying about feelings, an individual would show more changes in verbal and nonverbal behaviors. Results suggested that college-student participants made less eye contact with the interviewer, nodded less, displayed fewer illustrators, provided a shorter message, spoke at a higher pitch, and had longer response latencies when lying about feelings and facts compared to lying about facts only. Sporer and Schwandt's studies (2006; 2007) are the only ones to examine the differences between emotional lies and factual lies, but

Porter et al., (2008) also suggested emotional content may introduce variability in typical deception behaviors. Even though variability exists in deceptive behaviors across the content of lies, DePaulo et al. (2003) recommended the need to study deceptive behaviors for specific emotions. The current study examined feigned remorse with the goal of identifying a standard set of deceptive behaviors.

Assessing Exaggerated/Feigned Remorse

Although there is an extant amount of research about general deceptive behavior, only one empirical study has examined specific verbal and nonverbal behaviors associated with feigned remorse; and no studies have assessed behavioral cues for exaggerated remorse. A summary of prior research studies assessing general deceptive behavior and insincere expressions of remorse is presented to provide the reader with a synthesis of the information. Overall, stereotypical deceptive behaviors are not employed when one is lying. Research studies investigating behaviors associated with lying about emotions reveals that individuals tend to make less eye contact, nod less, use fewer illustrators, provide a message of shorter duration, and have longer response latencies. Studies exploring the strategies used by judges to assess feigned remorse do not address any of these deceptive behaviors. Instead, most psycho-legal research evaluating judges' assessment of defendant remorse has indicated judges attempt to validate, or invalidate, verbal expressions of remorse by examining the consistency between defendants' context-specific legal behaviors (i.e., pleading guilty, apologizing to the victim, prior criminal history) and their affective presentations.

Gender Differences in Expressing Remorse

Numerous research studies address the differences in emotional expressions between men and women. Generally, women are expected, and are more likely, to communicate their

emotions than men; and women are more likely to display emotions that facilitate interpersonal relationships (i.e., remorse after a negative behavior) (Niedermeier et al., 2001; Robinson & Smith-Lovin, 1999; Simpson & Stroh, 2004). Women tend to convey true emotions without restraint, whereas men are recognized for their ability to control and feign emotions (Simpson & Stroh, 2004). These gendered emotional display rules appear to apply to expressions of remorse by defendants. In their study examining the impact of inappropriate level of affect (i.e., flat or high) on believability of defendant, Salekin et al. (1995) found that a female defendant who displayed flat affect was rated as most guilty compared to female defendants displaying moderate and high affect and male defendants displaying flat, moderate and high affect. Moreover, a female defendant who displayed moderate affect was rated as least guilty compared to the female defendants displaying flat and high affect and the male defendants displaying flat, moderate, and high affect. The authors concluded that perceptions of guilt increased when participants observed a departure from the expected or appropriate level of emotion. Consistent with the literature discussing gender differences in emotional expression, the results indicated a moderate level of affect was more appropriate for a female to display after a negative behavior than flat affect. An interesting result revealed perceptions of guilt for the male defendant did not differ significantly between the flat, moderate, and high levels of affect (Salekin et al., 1995). It was hypothesized that participants were unaware of what would be considered an appropriate emotional response for a male after engaging in a negative behavior.

Other studies have also supported the gender display rules for remorse. Niedermeier et al. (2001) examined mock-jurors' perceptions of guilt for male and female physicians who either did or did not express remorse after engaging in negligent behavior. Results indicated that participants rated female defendants who expressed remorse as less guilty compared to male

defendants who expressed remorse. In addition, male defendants who did not express remorse were judged as less guilty compared to female defendants who did not express remorse (Niedermeier et al., 2001). In another study analyzing Pennsylvania judges' sentencing decisions between 1985 and 1987, it was found that judges sentenced female defendants to jail less often than male defendants. One overarching justification provided by the judges in explaining their favorable dispositions for female defendants was that women were more likely to exhibit sincere remorse for their actions (Steffensmeier, Kramer, & Streifel, 1993).

Based on the aforementioned findings, it was expected that the type of verbal and nonverbal behaviors of remorse exhibited by defendants would vary by gender. More specifically, women were hypothesized to exhibit more verbal and nonverbal indicators of remorse to a greater degree than men. In addition, women would evince a greater difference in their verbal and nonverbal behaviors than men between the baseline condition of their remorse expression and the exaggerated or feigned condition of their remorse expression.

Statement of Purpose– Study 1

Based on the limited research about the assessment of remorse, there was no consensus for which behaviors are indicative of authentic or feigned remorse. In addition, many empirical studies have examined general deceptive behavior, but there is a lack of research investigating the nonverbal and verbal behaviors associated with feigned remorse. The purpose of Study 1 was to quantitatively assess the verbal and nonverbal behaviors that are utilized by individuals when expressing authentic, exaggerated, and feigned remorse. The secondary goals of this study were to evaluate whether individuals are purposefully employing skills of deception when feigning or exaggerating remorse and to identify the behaviors participants are intentionally trying to alter.

Hypotheses – Study 1

There is general agreement in the remorse literature that individuals who are remorseful display different behaviors than those who are not remorseful. For example, remorseful individuals apologize, offer reparation, and display visible signs of suffering. Individuals who lack remorse generally do not exhibit these behaviors. Based on this information the following hypotheses were made:

1. Participants who describe events in which they feel remorseful (remorse condition) will display significantly more behaviors associated with remorse, as coded by the Remorse Coding Sheet, compared to participants who report events in which they feel no remorse (no remorse condition).
2. Participants in the remorse condition will be significantly more likely to bow their head, apologize in general and to the victim, admit guilt, accept responsibility, and make references to not committing the act again compared to participants in the no remorse condition.

Individuals who are exaggerating or feigning remorse might attempt to engage in behaviors that are similar to those experiencing genuine remorse. However, prior research studies indicate that when individuals are attempting to exaggerate or feign their emotions, the resulting behaviors are considered inappropriately excessive. Behaviors that might not be displayed excessively include admissions of guilt, acknowledgments of responsibility, and promises to not recidivate because judges note that offenders who are not truly remorseful typically do not make such statements. Deception research studies have also shown that individuals who are lying about emotional events are likely to have different verbal and

nonverbal behaviors than individuals who are telling the truth. Based on the aforementioned research findings, the following hypotheses were proposed:

3. Individuals in the exaggerated/feigned story conditions will display to a significantly greater degree behaviors associated with remorse, as coded by the Remorse Coding Sheet, than individuals in the baseline story condition.
4. Exaggerating or feigning remorse will result in significant verbal and nonverbal behavioral changes from the baseline story condition to the exaggerated/feigned story conditions, as coded by the Remorse Coding Sheet. Verbal behavioral changes will include shorter responses, responses with fewer details, and more apologetic statements. Nonverbal behavioral changes will include fewer hand, arm, and leg movements, increased speech errors, and more bowing of the head.

The deception literature generally indicates that individuals are not insightful about the behaviors they engage in when lying; however, because they have more control over what they say, they are more insightful about their verbal behaviors. As such, the following hypothesis was made:

- 5: Participants will be more accurate in identifying the changes in their verbal behaviors than in their nonverbal behaviors when displaying exaggerated or feigned remorse.

Extensive research indicates women are expected and are more likely to communicate their emotions than are men. In addition, women tend to convey true emotions without restraint, whereas men are recognized for their ability to control and feign emotions. Based on this research, the following hypotheses were proposed:

6. Female participants will display more remorse behaviors, as coded by the Remorse Coding Sheet, than male participants in the remorse condition.

7. Male participants' remorse behaviors, as coded by the Remorse Coding sheet (amount and degree), in the exaggerated story and feigned story conditions will not differ significantly from female participants' remorse behaviors (amount and degree) in the baseline story condition of the remorse condition.

Exploratory Research Questions

Given the limited amount of research available about the topic of feigned remorse, this study had several exploratory research questions. First, while educated hypotheses could be made regarding behavioral changes between the baseline story condition and the exaggerated/feigned story conditions, it remains unknown whether a standard set of behaviors would be associated with exaggerated and feigned remorse. Therefore, exploratory goals of this study were to *identify* the behaviors associated with exaggerated and feigned remorse and to evaluate whether there are any significant behavioral differences between the two types of remorse. Another exploratory goal of this study was to assess whether the level of remorse initially experienced by the participant would moderate the type and amount of behavioral cues displayed in both the baseline and exaggerated/feigned conditions.

According to previous literature examining exaggerated emotions, individuals are typically able to distinguish between appropriate and inappropriate levels of emotions. However, exaggerated levels of emotional expressions have been perceived as deceptive expressions of emotions. Another exploratory research goal was to examine whether participants in the exaggerated story condition would display significantly different remorse behaviors compared to individual in the feigned story condition.

Statement of Purpose – Study 2

Judges do not appear to share a consensus regarding the methods they use for assessing defendant remorse. Study 2 was an exploratory study evaluating judges' perceptions of behaviors associated with authentic and feigned remorse and their strategies for assessing remorse. The behaviors associated with authentic and feigned remorse in Study 1 were compared to judges' responses from Study 2 to examine whether judges are identifying and referencing appropriate behavioral cues when making decisions about the sincerity of a defendant's expression of remorse. Given the dearth of research investigating judges' strategies for assessing defendant remorse, a pilot study was conducted with local judges to help refine the hypotheses for the current study. The method and results of this pilot study are discussed in the "Method – Study 2 Pilot" section.

Hypotheses – Study 2

Prior psycho-legal research studies and the data gathered in the pilot study indicate judges' methods for assessing the presence of defendant remorse are more similar than their methods for assessing its sincerity. Therefore, the following hypothesis was made:

1. Participants will show a greater consensus for the behaviors associated with remorse as opposed to the behaviors associated with feigned remorse. Borum and Grisso (1996) operationally defined a consensus as agreement by more than 70% of the sample. Therefore, more behavioral cues for assessing remorse will be endorsed by at least 70% of the sample than behavioral cues for assessing feigned remorse, as indicated by responses to the Judges' Questionnaire.

The literature discussing judges' assessment of remorse indicates it is difficult for judges to discern sincere remorse from feigned remorse. Therefore, the following hypothesis predicted that remorse will be considered infrequently by judges when making sentencing decisions:

2. Participants will report on the Judges' Questionnaire that they consider defendant remorse when making sentencing decisions in less than 25% of their total cases.

According to prior research and data gathered from the pilot study, judges tend to utilize context-specific legal behaviors (i.e., apology to the victim, guilty plea, prior criminal history) related to remorse more than general verbal (i.e., unsteady voice, short answers) and nonverbal (i.e., crying, head bowed) behaviors related to remorse when assessing defendant remorse. Therefore, the following hypothesis predicted that judges' general approach for assessing defendant remorse would entail utilizing context-specific legal behaviors:

3. Participants will endorse using context-specific legal behaviors significantly more than general verbal and nonverbal behaviors when assessing sincere and feigned remorse, as indicated by responses on the Judges' Questionnaire. Context-specific legal behaviors include: accepting responsibility, pleading guilty, apologizing to and expressing empathy for the victim, making reparations to the victim and or society, prior criminal history, expressing remorse for personal consequences, expressing remorse after being found guilty, justifying the offense, and minimizing the harm caused.

Based on prior research and the pilot data for the current study, the following hypotheses were proposed to predict the verbal and nonverbal behavioral cues that judges would use when evaluating defendant remorse:

- 4a: A majority of judges will report utilizing the following verbal behaviors from the Judges' Questionnaire to assess whether a defendant is remorseful: a guilty plea; acceptance of responsibility; an apologetic statement; a commitment not to recidivate; agreement to enter rehabilitation; and expressed empathy for the victim or victim's family. A "majority" was defined as greater than 50% of the sample.
- 4b: A majority of judges will report utilizing the following nonverbal behaviors from the Judges' Questionnaire to make judgments about whether a defendant is remorseful: crying, making reparations to the victim or society and bowing one's head. A "majority" was defined as greater than 50% of the sample.
- 4c: The behavioral cue that is most frequently used for evaluating defendant remorse, as indicated in the Judges' Questionnaire, will be apologizing (in general).

Based on prior research and the preliminary data for the current study, the following hypotheses were proposed to predict the verbal and nonverbal behavioral cues that judges would use when evaluating the sincerity of defendant remorse:

- 5a: A majority of judges will report utilizing the following verbal behaviors from the Judges' Questionnaire to assess the sincerity of defendant remorse: expressing remorse for one's own consequences; expressing remorse after found guilty; providing justification for the offense; and minimizing the harm of the consequences as associated with feigned remorse. A "majority" was defined as greater than 50% of the sample.
- 5b: A majority of judges will report utilizing the following nonverbal behaviors from the Judges' Questionnaire to make judgments about the sincerity of defendant remorse:

prior criminal history; gaze aversion; increased limb movement (i.e., fidgeting); and increased smiling. A “majority” was defined as greater than 50% of the sample.

- 5c: The behavioral cue that is most frequently used for evaluating the sincerity of the defendant’s remorse, as indicated on the Judges’ Questionnaire, will be prior criminal history.

Exploratory Research Questions

Given the limited amount of research available about the topic of judges’ assessments of defendant remorse, this study proposed exploratory research questions. First, it is unclear whether judges are using appropriate defendant behaviors to evaluate the sincerity of a defendant’s remorseful expressions. Therefore, one exploratory goal of this study was to assess whether judges are using behaviors that individuals engage in when expressing sincere or feigned remorse. The behaviors that judges report using to evaluate defendant remorse and feigned remorse were compared to the observed behaviors from Study 1. Second, there is limited research about how much weight judges give different behaviors when assessing remorse. Another exploratory goal of this study was to identify which behaviors are used most frequently by judges to assess sincere and feigned remorse. A final exploratory goal of this study was to identify themes used by judges for assessing remorse. While a hypothesis was made regarding judges’ general approaches for assessing remorse, the results used to analyze this hypothesis were gathered from closed-ended questions. The open-ended fill-in-the-blank questions allowed judges the opportunity to explore themes for assessing remorse and for discriminating it from feigned remorse.

METHOD

Study 1 Pilot

Purpose. Individual characteristics introduce statistical noise into analyses. The primary study entailed participants providing a story of their choosing, so it was important to restrict these stories to one overarching topic to reduce variance attributable to type of story. It was expected that most college students would be able to provide appropriate stories about relationships, but a pilot study was conducted to ensure participants were able to generate appropriate stories given the topic restriction (i.e., relationship-oriented stories). Furthermore, the length of time since the event occurred was a variable to be controlled in the primary study, so participants' ability to generate stories that occurred within one year was also assessed. A second purpose of this study was to pilot stimuli questions assessing participants' perceived culpability, justification, and wrongfulness of the acts they reported, as these items were designed to be entered as covariates in the analyses for the primary study. Finally, the pilot study highlighted procedures and stimuli materials that were confusing or inappropriately presented.

Method. A survey was utilized to assess participants' ability to generate relationship-oriented stories. A follow-up questionnaire evaluated participants' perceived level of remorse, guilt, culpability for the story, as well as their perception about the wrongfulness and justification of the act. This procedure allowed for a descriptive analysis of the elicited stories.

Participants. Forty-seven undergraduate college students were recruited from the Introductory Psychology Research Subject Pool. Participants received course credit in exchange

for their participation. Data were not gathered about age, race, or gender, as this information was irrelevant for the purposes of the current study.

Measures. The pilot questionnaire (Appendix A) consisted of two sections and served as the basis for the Story Questionnaire that was used for the full study (See Method – Study 1 section). Part I of the pilot questionnaire requested the participant to write about a situation that occurred within the past year in which they did something wrong to someone, or caused someone else harm or distress. To comply with *APA Ethical Guidelines* (2002) participants were asked not to provide stories that disclosed accounts involving child or elder abuse. Instructions also encouraged the participants to be as descriptive as possible about their thoughts and feelings related to the situation. Three open-ended questions asked participants how they felt and acted after the situation and what they thought about their behavior. The purpose of these questions was to prompt participants to discuss the cognitive, behavioral, and affective responses associated with the situation.

The next section of Part I consisted of an open-ended question asking how much time had passed since the event occurred followed by five Likert-scale questions. Each question's response format was on a scale of 1 (*Not at all*) to 10 (*Extremely*). The first two questions asked participants how remorseful and how guilty they felt for their behavior. The third question asked how wrong participants thought their behavior was. The fourth and fifth questions asked whether participants felt responsible or justified for their behavior. The last section of Part I consisted of an open-ended question asking participants to list two other events in which they did something wrong or caused someone else harm or distress.

Part II was identical in format to Part I, with one exception. Participants were asked to provide a story in which they were *accused* of doing something wrong or causing someone else

harm or distress, but they did not believe they did anything wrong. Similarly, at the end of the third section of Part II, an open-ended question asked participants to list two other events in which they were *accused* of doing something wrong or causing someone else harm or distress, but they did not believe they did anything wrong.

Procedure. Prior to data collection, an application to conduct research with human subjects was submitted to and approved by the University of Alabama Institution Review Board. A description of the study was posted on the Psychology Subject Pool website (<http://alabama.sona-systems.com/>), where participants signed up for a specified date and time to complete the study. Upon arrival at the study, participants were provided informed consent statements and given the opportunity to withdraw from the study without penalty. Next, participants completed the pilot questionnaire. Each participant completed Part I and Part II of the packet; therefore, each participant provided a story in which they thought they caused someone else harm and a story in which they were accused of causing someone else harm, but they did not believe they did anything wrong. The study took approximately 30 minutes to complete. After completing the study, participants were debriefed about its purpose.

Results.

Manipulation check. To evaluate whether participants' stories in Part I and Part II were significantly different in regard to how remorseful they felt, an independent samples t-test was run on the Likert-scale items of the pilot questionnaire assessing how remorseful they felt for their actions. Ratings of remorse were significantly higher for Part I stories ($M = 8.07$, $SD = 1.63$) compared to Part II stories ($M = 3.00$, $SD = 2.31$), $t(44) = 12.67$, $p < .01$. These results indicate the provided instructions successfully elicited remorse stories and non-remorse stories.

Type of story. All participants were able to generate stories in which they harmed someone or caused them distress, and all but one of the participants were able to generate stories in which they were accused of causing someone harm or distress but did not believe they did anything wrong. Most stories provided in Part I of the questionnaire involved problems with friends (34%), family (23%), or significant others (19%). The remaining participants provided stories involving individuals with whom they had no identified relationship (e.g., “a guy at a bar,” “an old driver”). The same trend was observed in the stories provided in Part II, such that stories were most likely to involve friends (40%), family (17%), or significant others (13%). These results indicate participants were able to generate sufficient stories for the purpose of the primary study despite the topic-restriction that the stories be related to relationships. As the majority of participants were able to provide stories about friends, family members, and significant others, the instructions provided on the Story Questionnaire for the primary study were changed to restrict participants’ stories to include only situations involving friends, family, and romantic partners. Further restriction was included to prevent participants from telling stories about people with whom they had no identified relationship.

Time of story. All reported stories met the requirement that they occurred within the past year. Most stories provided in Part I (75%) occurred within the past 4-12 months, while 11% occurred within the past 1-3 months and 11% occurred within the past month. The timeline was more varied for the stories provided in Part II, such that 30% of the stories occurred within the past 1-3 months, 26% occurred within the past 7-12 months, 17% occurred within the past month, and 15% occurred within the past 4-6 months. These results indicate participants were able to generate sufficient stories that occurred within the restricted timeframe of one year.

Control variables. Two bivariate correlation matrices were computed for the Likert-scale items on the pilot questionnaire. The first matrix examined the items from Part I of the questionnaire, while the second matrix examined the items from Part II of the questionnaire. The first matrix (see Table 1) revealed most of the items were significantly correlated with one another, indicating a good level of internal consistency among the items. The second matrix (see Table 2) indicated two of the four items were significantly correlated with one another. One item not significantly correlated with the others asked participants how wrong they thought their behavior was, and the item had a mean rating of 2.07; however, this result would be expected because participants were asked to recount a story about a situation in which they did not think their behavior was wrong. The other item not significantly correlated with the others asked participants how responsible they felt for their behavior, and it had a mean rating of 5.18. These results suggest that while some participants did not believe they were responsible for their behaviors, others accepted responsibility for their actions despite thinking their behavior was not wrong. Based on this finding, along with the dissertation committee's suggestion that both stories be based on actions the participant actually engaged in as opposed to only being accused of, the instructions for providing a non-remorseful story were changed for the primary study.

Conclusions. Restricting the topic of the stories to relationships and the timeline of the stories to within the past year did not cause participants any difficulty in generating stories. The Likert-scale questions demonstrated adequate internal consistency and were considered good measures for variables needing to be controlled. The instructions were modified to clarify the type of story participants were to provide, such that participants providing a remorseful story

Table 1

Zero-Order Correlations of the Pilot Story Questionnaire Items – Part I

	1	2	3	4	5
1. How remorseful did you feel?	1	.77**	.73**	.54**	-.31*
2. How guilty did you feel?		1	.70**	.63**	-.28
3. How wrong do you think your behavior was?			1	.59**	-.53**
4. How responsible do you think you were for your behavior?				1	-.27
5. How justified was your behavior?					1
** denotes $p < .01$					
* denotes $p < .05$					

Table 2

Zero-Order Correlations of the Pilot Story Questionnaire Items – Part II

	1	2	3	4	5
1. How remorseful did you feel?	1	.79**	.57**	.16	-.38*
2. How guilty did you feel?		1	.70**	.16	-.18
3. How wrong do you think your behavior was?			1	-.11	-.28
4. How responsible do you think you were for your behavior?				1	.12
5. How justified was your behavior?					1
** denotes $p < .01$					
* denotes $p < .05$					

were told explicitly they should feel sorry or remorseful for their actions; and participants providing a story in which they felt no remorse were told explicitly they should not feel remorseful or sorry for their actions.. Another instruction change for the participants recounting a story in which they felt no remorse was the story had to be about an event in which their behavior caused someone else to be hurt or distressed but they believed their actions were justified or they were not at fault.

Study 1

Design. Study 1 was a 2 X 2 mixed-factorial design. The within-subjects independent variable was veracity of the recounted remorse (veracity: baseline versus exaggerated/feigned) and the between-subjects independent variable was the initial level of remorse (story version: remorse versus no remorse). Each participant told a story about an event in which they either felt remorse or no remorse (between-subjects variable). They provided two accounts of the story, one of which reflected a genuine account of their remorse or lack thereof, and the second one reflected an exaggerated or feigned account of their remorse (within-subjects variable). The remorse in the recounted story was considered to be “exaggerated” if the participant told a story in which they felt remorseful, and it was considered “feigned” if the participant told a story in which they felt no remorse. The dependent variables were the remorse and deceptive behaviors outlined on the Remorse Coding Sheet. The participants also completed a questionnaire in which they rated how frequently they believed they engaged in specific behaviors while recounting both stories.

Participants. Participants consisted of 142 undergraduate students recruited from the Introductory Psychology Research Subject Pool, and they were awarded research credit in return for their participation. Some research studies (Porter et al., 2008; Sporer & Schwandt, 2007; Vrij

& Mann, 2004) indicate college students are an acceptable substitute for offenders in studies of this nature. The final sample consisted of 134 participants after data from eight participants was dropped from the database. Participants' data were excluded if their taped stories were longer than 10 minutes ($n = 6$) or if they were unable to provide a story that matched the criteria ($n = 2$). Participants ranged in age from 18 years old to 35 years old ($M = 19.76$, $SD = 1.93$), and 53% of the sample was female. The sample was representative of the university population with 109 Caucasian participants (81.3%), 21 African-American participants (15.7%), and 4 Asian-American participants (3%).

Power analyses were conducted using G*Power (Faul, Erdfelder, Lang & Buchner, 2007). Cohen (1988) defined a medium effect size as one that could be visually detected by an intelligent observer. Therefore, it was theorized that nothing less than a medium effect size ($f = .25$) would have practical significance for the current study. Based on a mixed-model 2 X 2 MANCOVA interaction test, with power set at .80, and alpha set at .05, it was calculated that a total sample size of 128 participants would be needed to find a significant effect. The number of participants recruited for the current study ($n = 134$) met this requirement and was sufficient to find practical effects that were present. The sample was evenly distributed between the two levels of the between-subjects independent variable (Table 3).

Materials and stimuli.

Story Questionnaire (Appendix B). The investigator developed two versions of the Story Questionnaire, and each version consisted of two sections. The two versions of the questionnaire reflected the two levels of the between-subjects variable (remorse vs. no remorse). Part I of one version of the questionnaire requested that participants provide a story in which they did something wrong to someone or caused someone else harm or distress. Part I of the

Table 3

Number of Participants by Between-Subjects Independent Variable (Remorse) and Gender

Remorse Condition	Gender		Total
	Male	Female	
Remorse Story	31	36	67
Non-Remorse Story	32	35	67
Total	63	71	

second version of the questionnaire asked participants to provide a story in which they did something wrong to someone or caused someone else harm or distress, but they did not feel remorseful for their actions. To better control for the types of stories told, participants were instructed to provide stories that involved harm to a friend, family member or significant other (see Study 1 Pilot section) and that occurred within the past year. Also, to comply with *APA Ethical Guidelines* (2002), participants were asked not to provide stories that might disclose accounts involving 1) child or elder abuse, or 2) anything that could lead to a lawsuit or criminal charges. Aside from the difference regarding the type of story provided in Part I, the remainder of the questionnaire was the same for both versions. After participants provided a written account of the requested story, they were asked how they felt and acted after the situation, what they thought about their behavior, the consequences for the behavior if any, and whether they made amends for their behavior. The purpose of these questions was to prompt participants to discuss the cognitive, behavioral, and affective responses associated with the situation.

Part II of the questionnaire consisted of a question asking how much time had passed since the story occurred as well as seven Likert-scale questions. Each response format was on a scale of 1(*Not at all*) to 10 (*Extremely*). The first two questions asked participants how remorseful and how guilty they felt for their behavior. The third question asked how wrong participants thought their behavior was. The fourth and fifth questions asked whether participants felt responsible or justified for engaging in the behavior. The sixth and seventh questions asked how sorry participants felt for engaging in the behavior and for how the behavior affected the individual/s involved. The purpose of the seven Likert-scale questions was to study the effect of participants' initial level of remorse on their expressions of remorse as well as to control for their perceived guilt, attribution of responsibility and justification concerning their behavior. If

individuals engage in a negative or harmful behavior but believe the behavior was justifiable or not solely their fault, they are likely to experience less remorse than if they felt wholly responsible for a behavior that was inexcusable (Niedermeier et al., 2001).

Remorse Coding Sheets (Appendix C). The coding scheme and subsequent coding sheets were based on behaviors associated with remorse and deception. Operational definitions for the verbal and nonverbal behaviors were derived from the remorse and deception literature (DePaulo, et al., 2003; Hirsch & Wolf, 2001; Sporer & Schwandt, 2007). Only behaviors for which differences could practically be recognized by judges were included on the coding sheets. For example, increased vocal pitch is an indicator of deception, but its assessment requires technological equipment. Although most deception literature codes behaviors in discrete increments (i.e., the number of times or length of time the behavior occurs), the current study adopted a more practical method for coding the presence of behaviors. Judges do not count the number of speech errors a defendant makes, but he or she might notice whether it happens a little or a lot. Therefore, coders rated the frequency or duration of behaviors on a scale of 1 (*Never*) to 6 (*Constantly*).

Indicators of Remorse Scale (Appendix D). This scale contained a demographic section requesting information about age, gender, and race. The next section contained two items assessing the participants' level of remorse they think they portrayed in their genuine account of the story as well as in the exaggerated/feigned account (1 – *Not Remorseful*, 10–*Extremely Remorseful*). Another question asked participants to rate how accurately they portrayed their true feelings and emotions during the genuine account of their story (1 – *Not Accurately*, 10 – *Extremely Accurately*). A final question asked participants to rate how successful they were at convincing the observer they were remorseful for their behavior in the exaggerated/feigned

account of their story (1 – *Not Successful*, 10-*Extremely Successful*). Next, a list of 30 verbal and nonverbal behaviors that the research literature has associated with remorse, general deception, and feigned remorse was presented. This list of behaviors was presented two times in side-by-side columns. Participants indicated on a scale of 1 (*Never*) to 6 (*Constantly*), how frequently they engaged in each behavior during the genuine account of their story (column 1) and during the exaggerated/feigned account of their story (column 2). The purpose of presenting the response format in two side-by-side columns was to allow participants the opportunity to record which behaviors changed by letting them utilize the responses in the first column as an anchor for their responses in the second column.

Video-recording. Each story was video-recorded so verbal and nonverbal behaviors could be coded at a later date. The mini-DV video-camera was set up on a tri-pod approximately five feet from the mock-witness stand where participants were seated. It was stationed at eye-level so participants' gaze aversion could be accurately measured. The investigator stood directly behind the camera while participants' stories were being filmed.

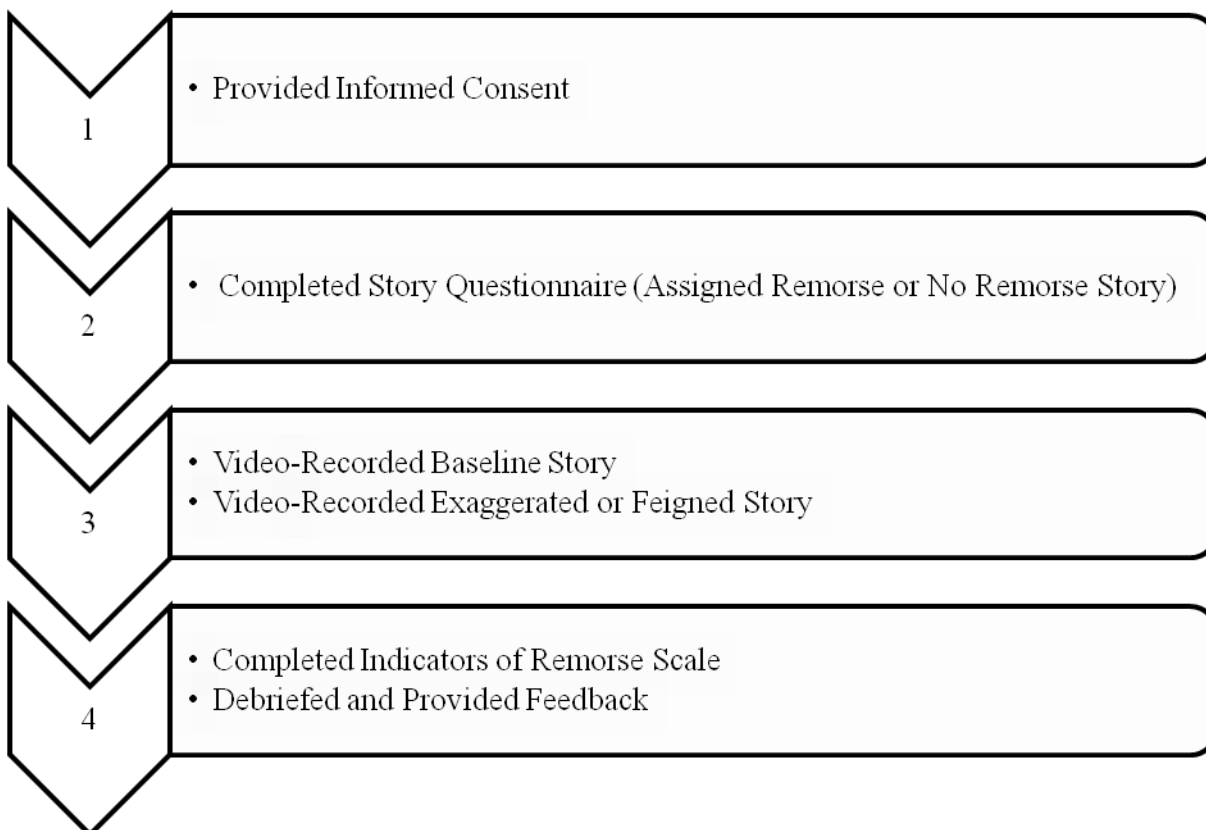
Procedure. Prior to data collection, an application to conduct research with human subjects was submitted to and approved by the University of Alabama Institution Review Board. A description of the study was posted on the Psychology Subject Pool website (<http://alabama.sona-systems.com/>), where participants signed up for a specified date and time to complete the study. After obtaining IRB approval, Study 1 was completed in five steps. Figure 1 demonstrates the procedure for the participants, which consisted of the first four steps. First, participants provided informed consent (Appendix E) after receiving an explanation of the study and an opportunity to withdraw from the study without penalty. Second, participants completed the version of the Story Questionnaire that matched the between-subjects condition assigned to

the specific timeslot they selected. Assignment of whether the participant provided a story in which they either felt remorse or no remorse was predetermined, and it alternated between time slots to ensure equal distribution of participants across the two levels of the between-subjects condition. If two participants signed up for the same time slot (the maximum number of participants allowed per time slot), both participants were assigned to the same between-subjects condition. As previously described, participants in the remorse condition provided a written account of a true event in which they caused others discomfort, harm, or distress *and* they felt remorseful for their behavior. Participants in the no remorse condition provided a written account of a true event in which they caused others discomfort, harm, or distress *but* they did not feel remorseful for their behavior. Per the questionnaire, participants indicated how they felt, what they thought, and how they behaved in response to the event. Next, participants completed Part II of the Story Questionnaire.

The third step entailed participants taking the witness stand and providing two video-recorded verbal statements of the story. They were instructed to give an unstructured narrative of the event that included how they felt and what they thought about the event, as well as how they behaved after the event. They were encouraged to include the details they provided in the written account of the story that addressed the cognitive, affective, and behavioral responses to the situation. After seven participants completed the study, the procedures were modified because the participants' accounts tended to be factual in nature and very short (e.g., less than two minutes). Therefore, a list of questions targeting their emotional and behavioral responses was developed (Appendix F) to maximize the amount of information and details elicited from the participants. After providing the genuine, or baseline, account of their story, participants were instructed to tell the story in a way that would convince an observer they felt remorseful for their

Figure 1

Study 1 Procedure for Participants



behaviors. They were informed they had the freedom to do, or say, whatever they felt was necessary to convince the observer they were sorry for their behavior. The investigator also encouraged them to imagine the observer was a judge whom they had to convince they were sorry for their behavior to receive a reduced sentence. Both statements were video-taped so verbal and nonverbal behaviors could be coded.

After providing both statements, participants completed the Indicators of Remorse Scale. The investigator debriefed the participants and gathered qualitative information from open- and closed-ended questions (Appendix G) regarding what they thought they did differently between the baseline and exaggerated/feigned conditions as well as how convincing they thought they were in the exaggerated/feigned condition.

The final step of Study 1 was to code the videos for the frequency of the verbal and nonverbal behaviors outlined on the Remorse Coding Sheet. The primary investigator served as the coding trainer and one graduate and two honors undergraduate students were trained as coders. The coders were blind to the hypotheses of the study as well as to the experimental manipulations.

Coder training, coding procedure, and interrater reliability. Each coder participated in two three-hour group training sessions to ensure the videos were rated consistently. The focus of the first training session was to discuss the operational definition of each behavioral code on the Nonverbal and Verbal Behavior Coding Sheets (Appendix C) and to practice coding videos. The original coding sheets presented during the proposal phase of this project (Appendix H) were revised to account for procedural changes and practical applications. On the revised coding sheets, the frequency of the behaviors was coded at two separate time points and an overall frequency rating was also provided. This coding change resulted from the addition of the

questions asked during the filming of the stories, as it was hypothesized participants' behaviors in several of the categories would increase when being asked specific questions about those behaviors. Therefore, the coders rated the frequency of the participants' behaviors during their unstructured narrative and again during the question-phase of the filming. An overall frequency rating that combined both sections of the video was also provided. The last revision entailed the addition of two questions for which the raters provided ratings of how remorseful they thought the individual was as well as how much they thought the individual was feigning remorse on a scale of 1 (*Not at all*) to 6 (*Completely*). The coders were not trained on how to rate these items and they rated their personal reactions to the video-clips. Revisions specific to the Nonverbal Behavior Coding Sheet included the silence code being discarded because prolonged silence was not exhibited by any of the participants. Relaxed body posture was also discarded because it was implicitly measured through the rigid body posture behavioral code. The arm and hand movement code was combined with the illustrators/gestures code because the behaviors often occurred together and were difficult to code into discrete categories. On the revised Verbal Behavioral Coding Sheet, the speech fillers and speech errors codes were combined due to difficulty discriminating between the two categories. The apologetic statements code and the apologetic statements to the victim code were also combined to obtain a more accurate global depiction of apologetic behaviors. The admitting guilt code and the accepting responsibility code were also combined into one category because a practical difference between the two codes was not apparent from the videos and it was difficult to code those behaviors into discrete categories. A new code was added to account for general remorse apart from remorse expressed for personal consequences.

During the first training session, one video was coded as a group; and two videos were coded independently by each rater and then reconciled as a group. At the conclusion of the first training session, each coder was provided with the same subset of 30 videos with which to establish interrater reliability. The Intraclass Correlation Coefficient (ICC) was used to evaluate interrater reliability because more than two coders were being used and the coded data were continuous. Initial interrater reliability using a Two-Way Random Effects Model, Type Absolute Agreement, Single-Measures ICC was calculated to be 0.60.

Due to the inadequate reliability established after the first training session, a second training session was conducted. The focus of the second training session was to answer coders' questions and to clarify any confusion about the behavioral codes. One video from the subset of 30 videos used to calculate the initial interrater reliability statistic was examined to address the coders' questions. One new video was rated independently by each coder and then reconciled as a group. At the conclusion of the second training session, each coder was provided with a new subset of 10 videos with which to establish a new interrater reliability. A Two-Way Random Effects Model, Type Absolute Agreement, Single-Measures ICC of 0.77 was obtained, which suggests the coders attained acceptable interrater reliability. Furthermore, a qualitative review of the ratings revealed the coders were generally within one-point of each others' ratings. For example, two coders would rate gaze aversion as "1," while the third coder rated gaze aversion as "2." The adequate ICC of 0.77 coupled with the qualitative review of the ratings was deemed sufficient evidence to proceed with having only one of the three coders rate each of the remaining videos.

The remaining videos ($n = 224$) were subsequently divided among the three coders using a random sequence generator (www.random.org/lists). Each coder had a total of 84 videos, with

70 of the videos being rated by only that particular coder. The remaining 14 videos were systematically interspersed within the 70 videos (e.g., every sixth video clip) and were coded by all three coders. Therefore, 14 of the 224 videos were rated by all three coders, and these ratings were used to assess for coding decay and to establish interrater reliability throughout the study. Interrater reliability was calculated at two times during the coding process. The coders' interrater reliability was checked mid-way through the study after they each coded 42 videos, seven of which were coded by all three coders. The Two-Way Random Effects Model, Type Absolute Agreement, Single-Measures ICC was 0.85. The coders' interrater reliability was calculated again at the end of the study after each coder rated an additional 42 videos. Seven of the video-clips were rated by all three coders; and a Two-Way Random Effects Model, Type Absolute Agreement, Single-Measures ICC of .84 was obtained. Given the adequate interrater reliability established at the beginning of the coding process and the good interrater reliability maintained throughout the coding process, the independent ratings of the videos were used in the subsequent analyses.

RESULTS

Study 1

Descriptive statistics. The means and standard deviations for all dependent variables were obtained as a function of the between-subjects independent variable and gender (Table 4). Dependent variables for which 90% or more of the participants were coded as never exhibiting (i.e., rated “1” on a scale of “1 – 6”) were excluded from all subsequent analyses. The lack of variability within those variables reduced the likelihood of finding significant or meaningful correlations with other variables of interest (Furr & Bacharach, 2008). The following verbal and nonverbal behaviors were excluded from future analyses, and the percentage of participants who exhibited the behavior is noted parenthetically: unsteady voice ($n = 3\%$), response latency ($n = 10\%$), sad facial expressions ($n = 2\%$), crying ($n = 1\%$), trembling body movements ($n = 0\%$), worried facial expressions ($n = 3\%$), and head bowed ($n = 1\%$). The dependent variable, foot movement, was also excluded from analyses because the foot and leg movements of 103 (77%) of 134 participants could not be rated due to their seated positioning behind an enclosed witness stand. The following dependent variables were included in analyses examining verbal behaviors: speech errors, short answers, apology statements, empathy, general remorse, personal remorse, reparation, admitting guilt, commitment not to recidivate, justification of behavior, and detailed statements. The following dependent variables were included in analyses examining nonverbal behaviors: gaze aversion, illustrators, fidgeting, smiling, rigid posture, and postural shifts.

Participants’ ratings of how guilty they felt for their behavior as well as how justified they believed their actions were served as covariates for all of the hypothesis tests. These two

Table 4

Means and Standard Deviations of the Dependant Variables by Between-Subjects Independent Variable and Gender

Dependent Variables	Story Version	Gender	Story #1 (baseline)		Story #2 (exaggerated/feigned)	
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Gaze Aversion	Remorse	Male	2.61	1.33	2.90	1.14
		Female	3.03	1.16	3.39	1.44
	No Remorse	Male	2.75	1.14	3.03	1.23
		Female	2.31	0.93	2.74	0.98
Posture Shifts	Remorse	Male	1.29	0.46	1.19	0.40
		Female	1.14	0.35	1.22	0.42
	No Remorse	Male	1.41	0.56	1.47	0.51
		Female	1.14	0.35	1.26	0.44
Smiling	Remorse	Male	1.65	0.66	1.42	0.56
		Female	1.86	0.72	1.56	0.56
	No Remorse	Male	1.69	0.64	1.44	0.72
		Female	2.03	0.79	1.57	0.78
Illustrators	Remorse	Male	2.87	0.99	2.42	0.96
		Female	2.61	1.18	2.56	1.36
	No Remorse	Male	2.97	1.28	2.66	1.07
		Female	3.09	1.25	2.43	0.92
Fidgeting	Remorse	Male	3.19	1.33	3.45	1.43
		Female	3.19	1.31	3.58	1.42
	No Remorse	Male	2.50	1.32	3.31	1.31
		Female	2.77	1.22	2.97	1.32
Rigid Posture	Remorse	Male	4.03	1.28	4.23	1.18
		Female	3.92	1.29	3.83	1.40
	No Remorse	Male	3.75	1.41	4.00	1.32
		Female	3.69	1.45	3.94	1.45
Speech Errors	Remorse	Male	3.10	1.08	2.90	1.14
		Female	3.00	0.93	2.69	0.98
	No Remorse	Male	2.88	1.13	2.91	1.15
		Female	3.14	1.14	3.06	1.19
Short Answers	Remorse	Male	1.29	0.46	1.23	0.43
		Female	1.31	0.47	1.22	0.42
	No Remorse	Male	1.28	0.46	1.03	0.18
		Female	1.43	0.50	1.20	0.41

Dependent Variables	Story Version	Gender	Story #1 (baseline)		Story #2 (exaggerated/feigned)	
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Apology Statements	Remorse	Male	1.74	0.45	1.84	0.45
		Female	1.50	0.51	1.72	0.66
	No Remorse	Male	1.38	0.49	1.53	0.57
		Female	1.57	0.56	1.63	0.49
Empathy	Remorse	Male	1.97	0.71	2.00	0.52
		Female	2.22	0.68	2.28	0.66
	No Remorse	Male	1.78	0.61	2.13	0.61
		Female	1.91	0.56	2.34	0.73
Remorse for Personal Consequences	Remorse	Male	1.32	0.48	1.19	0.40
		Female	1.53	0.70	1.50	0.66
	No Remorse	Male	1.13	0.34	1.28	0.46
		Female	1.29	0.46	1.43	0.56
General Remorse	Remorse	Male	2.32	0.70	2.58	0.85
		Female	2.61	0.73	2.56	0.81
	No Remorse	Male	1.66	0.60	2.44	0.80
		Female	1.86	0.55	2.53	0.62
Admitting Guilt	Remorse	Male	2.06	0.73	2.16	0.45
		Female	2.08	0.37	2.31	0.58
	No Remorse	Male	1.78	0.42	2.16	0.52
		Female	1.65	0.49	2.09	0.45
Offer of Reparation	Remorse	Male	2.06	0.68	2.06	0.44
		Female	2.19	0.62	2.17	0.45
	No Remorse	Male	1.72	0.46	1.75	0.51
		Female	1.89	0.58	1.97	0.51
Detailed Statements	Remorse	Male	1.39	0.56	1.29	0.53
		Female	1.58	0.97	1.31	0.53
	No Remorse	Male	1.47	0.76	1.28	0.58
		Female	1.40	0.70	1.37	0.69
Justification of Behavior	Remorse	Male	1.81	0.54	1.42	0.56
		Female	1.81	0.71	1.56	0.50
	No Remorse	Male	2.34	0.79	1.81	0.59
		Female	2.66	0.73	1.69	0.68
Commitment Not to Recidivate	Remorse	Male	1.94	0.51	2.19	0.54
		Female	2.17	0.61	2.22	0.54
	No Remorse	Male	1.56	0.50	2.03	0.31
		Female	1.40	0.50	2.11	0.53

covariates were measured using a Likert scale (*1 – Not at all* to *6 – Extremely*). Participants assigned to share a remorseful story had a mean guilt rating of 7.85 ($SD = 1.88$) and a mean justification rating of 5.24 ($SD = 2.88$). Participants assigned to share a non-remorseful story had a mean guilt rating of 2.89 ($SD = 2.21$) and a mean justification rating of 7.39 ($SD = 2.67$). Four bivariate correlation matrices were created to evaluate the relations among the covariates and the dependent variables (Tables 5 thru 8). Two correlation matrices presented the relations between the covariates and the verbal (Table 5) and nonverbal (Table 6) dependent variables measured during the baseline story. The other two correlation matrices presented the relations between the covariates and the verbal (Table 7) and nonverbal (Table 8) dependent variables measured during the exaggerated/feigned story. As would be expected, guilt and justification were inversely related to each other. Overall, both covariates were significantly related to more dependent variables measured during the baseline stories compared to the exaggerated or feigned stories.

Manipulation check: Ratings of stories. Participants rated how remorseful they felt for the behaviors described in their stories on the Story Questionnaire. A one-way ANOVA yielded a main effect of story version, such that participants assigned to tell a remorseful story reported experiencing significantly more remorse ($M = 7.86$, $SD = 1.74$) than participants assigned to tell a story in which they felt no remorse ($M = 2.92$, $SD = 1.74$), $F(1, 130) = 266.74$, $p < .01$. These results indicate the two conditions of the between-subjects condition (story version) were significantly different from one another.

Furthermore, participants who told a remorseful story rated their behavior as significantly more wrong ($M = 6.67$, $SD = 2.84$) and endorsed feeling significantly more sorry for their behavior ($M = 7.23$, $SD = 2.39$) compared to participants who told a story in which they did not

Table 5

Zero-Order Correlations of the Covariates and Dependent Variables (Baseline Story – Verbal Behaviors)

	1	2	3	4	5	6	7	8	9	10	11	12	13
Covariates													
1. Guilt	1	-.42**	.00	-.04	.10	.10	.15	.47**	.28**	.43**	.23**	.05	-.43**
2. Justification		1	.03	-.00	-.13	.10	-.00	-.26**	-.27**	-.25**	-.12	-.05	.30**
Dependent Variables													
3. Speech Errors			1	-.17*	-.07	.03	.13	-.03	-.05	.09	-.01	.15	.17
4. Short answers				1	-.06	-.07	-.15	-.07	.11	-.15	-.10	.01	.08
5. Apologies					1	.10	.13	.20*	.13	.09	.36**	.12	-.06
6. Empathy						1	.20*	.41**	.04	.27**	.22**	.07	.07
7. Remorse for Personal Consequences							1	.23**	.12	.25**	.40**	.34**	.10
8. General Remorse								1	.50**	.37**	.50**	.13	-.14
9. Admitting Guilt									1	.13	.37**	.16	-.05
10. Commitment Not to Recidivate										1	.26**	.02	-.21**
11. Reparation											1	.37**	-.02
12. Detailed Statements												1	.19*
13. Justification													1

** denotes $p < .01$ * denotes $p < .05$

Table 6

Zero-Order Correlations of the Covariates and Dependent Variables (Baseline Story – Nonverbal Behaviors)

	1	2	3	4	5	6	7	8
Covariates								
1. Guilt	1	-.42**	.23**	.13	-.09	-.19*	.19*	.09
2. Justification		1	-.16	-.13	-.08	.18*	-.18*	-.04
Dependent Variables								
3. Gaze Aversion			1	-.05	-.06	.04	.13	.07
4. Bowed Head				1	.14	.08	.07	-.12
5. Smiling					1	.12	-.08	-.22*
6. Illustrators						1	-.06	.49**
7. Fidgeting							1	-.28**
8. Rigid Posture								1

** denotes $p < .01$

* denotes $p < .05$

Table 7

Zero-Order Correlations of the Covariates and Dependent Variables (Exaggerated/Feigned Story – Verbal Behaviors)

	1	2	3	4	5	6	7	8	9	10	11	12	13
Covariates													
1. Guilt	1	-.42**	-.16	.10	.10	-.13	-.08	.04	.08	.03	.19*	-.01	-.22**
2. Justification		1	.05	-.08	-.16	.15	.17	-.00	-.07	.00	-.19*	.00	.09
Dependent Variables													
3. Speech Errors			1	-.12	.03	.15	.13	-.10	-.25**	.07	.07	.27**	.07
4. Short answers				1	-.02	-.14	.03	.08	-.00	.07	.00	.10	-.17*
5. Apologies					1	.09	.11	.14	.10	.03	.34**	.13	-.10
6. Empathy						1	.28**	.28**	.17*	.29**	.12	.06	-.14
7. Remorse for Personal Consequences							1	.25**	.15	.26**	.09	.29**	.05
8. General Remorse								1	.16	.30**	.19*	.13	-.01
9. Admitting Guilt									1	.17	.13	.19*	-.12
10. Commitment to Not Recidivate										1	.25**	.13	-.15
11. Reparation											1	.22*	-.04
12. Detailed Statements												1	.00
13. Justification													1

** denotes $p < .01$

* denotes $p < .05$

Table 8

Zero-Order Correlations of the Covariates and Dependent Variables (Exaggerated/Feigned Story – Nonverbal Behaviors)

	1	2	3	4	5	6	7	8
Covariates								
1. Guilt	1	-.42**	.08	.17	-.02	-.07	.12	.08
2. Justification		1	.08	-.12	.05	.09	-.00	-.03
Dependent Variables								
3. Gaze Aversion			1	.03	.16	.02	.08	-.10
4. Bowed Head				1	.15	.02	.00	.03
5. Smiling					1	-.06	.08	-.27**
6. Illustrators						1	-.04	-.33**
7. Fidgeting							1	-.47**
8. Rigid Posture								1

** denotes $p < .01$

* denotes $p < .05$

feel remorseful ($M = 2.76$, $SD = 2.24$; $M = 3.17$, $SD = 2.19$, respectively), $F(1, 130) = 77.42$, $p < .01$ and $F(1, 130) = 103.91$, $p < .01$, respectively. On the contrary, participants who told a story in which they were not remorseful for their actions were significantly more likely to justify their behaviors ($M = 7.39$, $SD = 2.67$) compared to participants who were remorseful for their behaviors ($M = 5.24$, $SD = 2.88$), $F(1, 130) = 19.86$, $p < .01$. There was not a significant difference between the groups' mean ratings of how responsible they felt for their actions, $F(1, 130) = 2.94$, $p = 0.09$.

Gender differences in expressions of remorse. It was hypothesized that women would exhibit different verbal and nonverbal behaviors than men when expressing authentic, exaggerated, or feigned remorse (Hypotheses 6 and 7). To assess whether gender needed to be accounted for in the subsequent hypothesis tests (Hypotheses 1-4), between-subjects MANCOVAs were calculated with gender entered as the independent variable and guilt and justification entered as covariates. The first MANCOVA examined gender differences in the coded verbal behaviors during the baseline story, and results of the omnibus test indicated women did not display significantly different verbal behaviors than men, Wilks' $\lambda = .90$, $F(11, 117) = 1.14$, $p = 0.34$, $\eta_p^2 = 0.10$. However, individual tests of between-subjects effects revealed women were significantly more likely to express general remorse (*adj* $M = 2.20$, $SD = 0.68$) than men (*adj* $M = 2.00$, $SD = 0.72$), $F(1, 127) = 4.36$, $p = 0.04$. The second MANCOVA examined gender differences in the coded verbal behaviors during the exaggerated/feigned story, and results of the omnibus test suggested women did not display significantly different verbal behaviors than men, Wilks' $\lambda = .88$, $F(11, 117) = 1.49$, $p = 0.15$, $\eta_p^2 = 0.12$. However, individual tests of between-subjects effects revealed women were significantly more likely than men to express or exhibit the following behaviors: empathy (*adj* $M = 2.30$, $SD = 0.69$; *adj* $M =$

2.06, $SD = 0.57$; $F [1, 127] = 3.93, p = 0.05$), remorse for personal consequences ($adj M = 1.48$, $SD = 0.61$; $adj M = 1.24$, $SD = 0.43$; $F [1, 127] = 5.43, p = 0.02$), and reparation ($adj M = 2.16$, $SD = 0.53$; $adj M = 1.90$, $SD = 0.50$; $F [1, 127] = 4.33, p = 0.04$). The results from the two aforementioned MANCOVA omnibus tests indicate gender does not account for a significant degree of variance in verbal behavioral differences; however, individual tests of effects along with previous literature (Niedermeier et al., 2001; Robinson & Smith-Lovin, 1999; Simpson & Stroh, 2004) suggest gender does account for behavioral differences. Therefore, gender was included as an independent variable in analyses examining verbal behaviors as the dependent variables.

To examine gender differences in nonverbal behaviors, two between-subjects MANCOVAs were run with gender entered as the independent variable and guilt and justification entered as covariates. The first MANCOVA examined gender differences in the coded nonverbal behaviors during the baseline story, and results of the omnibus test indicated female participants displayed significantly different nonverbal behaviors than male participants, Wilks' $\lambda = .89$, $F (6, 123) = 2.54, p = 0.02$, $\eta_p^2 = 0.11$. Individual tests of between-subjects effects revealed women were significantly more likely to smile ($adj M = 1.93$, $SD = 0.75$) than men ($adj M = 1.68$, $SD = 0.65$), $F (1, 128) = 5.08, p = 0.03$. Men were significantly more likely to shift posture ($adj M = 1.34$, $SD = 0.51$) than women ($adj M = 1.14$, $SD = 0.35$), $F (1, 128) = 6.48, p = 0.01$. The second MANCOVA examined gender differences in the coded nonverbal behaviors during the exaggerated/feigned story, and the omnibus test results indicated women did not display significantly different nonverbal behaviors than men, Wilks' $\lambda = .95$, $F (6, 123) = 1.20, p = 0.31$, $\eta_p^2 = 0.06$. Overall, these results suggest women exhibited significantly different nonverbal behaviors than men when telling the baseline story; therefore, gender was included as

an independent variable in analyses examining nonverbal behaviors displayed during the baseline story.

Two mixed-model MANCOVAs were run to examine whether gender was a source of any interaction effects between the within-subjects variable of veracity and the between-subjects variable of story version on the verbal and nonverbal behaviors. Guilt and justification were entered as covariates. Results indicated gender did not interact with story version or veracity to produce significant differences in nonverbal behaviors, Wilks' $\lambda = .92$, $F(7, 120) = 1.54$, $p = 0.16$, $\eta_p^2 = 0.08$. Nor did gender interact with story version or veracity to produce significant differences in verbal behaviors, Wilks' $\lambda = .91$, $F(11, 114) = 1.04$, $p = 0.42$, $\eta_p^2 = 0.09$.

Behavioral differences as a function of initial level of remorse. Hypotheses 1 and 2 proposed specific verbal and nonverbal behavioral differences between participants in the remorse condition and the no remorse condition. To evaluate these hypotheses, two between-subjects MANCOVAs were run. In both MANCOVAs, story version was entered as the independent variable; and justification, guilt, and gender were controlled. The first MANCOVA examined the influence of the independent variable on the nonverbal behaviors coded during the baseline story. The MANCOVA omnibus test was not statistically significant (Wilks' $\lambda = .95$, $F[6, 121] = 1.16$, $p = 0.33$, $\eta_p^2 = 0.06$).

The second MANCOVA examined the influence of the independent variable on the verbal behaviors coded during the baseline story. The MANCOVA omnibus test was statistically significant (Wilks' $\lambda = .82$, $F[11, 115] = 2.25$, $p = 0.02$, $\eta_p^2 = 0.18$). Given the significance of the overall test, the univariate main effects were examined. Significant univariate main effects were obtained for empathy, $F(1, 125) = 3.81$, $p = 0.05$, $\eta_p^2 = 0.03$; general remorse, $F(1, 125) = 5.00$, $p = 0.03$, $\eta_p^2 = 0.04$; admitting guilt, $F(1, 125) = 4.39$, $p = 0.04$, $\eta_p^2 = 0.03$; commitment

not to recidivate, $F(1, 125) = 7.86, p < .01, \eta_p^2 = 0.06$; and justification, $F(1, 125) = 5.00, p = 0.03, \eta_p^2 = .04$. Individuals who told a remorseful story were more likely than individuals who told a story in which they did not feel remorseful to exhibit or express empathy ($adj M = 2.09, SD = 0.70$; $adj M = 1.86, SD = 0.58$), general remorse ($adj M = 2.44, SD = 0.66$; $adj M = 1.77, SD = 0.58$), admissions of guilt ($adj M = 2.06, SD = 0.55$; $adj M = 1.71, SD = 0.46$), and a commitment not to recidivate ($adj M = 2.06, SD = 0.58$; $adj M = 1.48, SD = 0.50$). On the contrary, individuals who told a non-remorseful story were more likely to justify their behaviors ($adj M = 2.49, SD = 0.77$) than participants who told remorseful stories ($adj M = 1.80, SD = 0.64$).

Behavioral differences as a function of authenticity of story. Hypotheses 3 and 4 proposed specific verbal and nonverbal behavioral changes among participants between their baseline story and their exaggerated/feigned story. To evaluate these hypotheses, two within-subjects MANCOVAs were run. In both MANCOVAs, veracity was entered as the within-subjects independent variable; and gender, justification, and guilt were controlled. The first MANCOVA examined the influence of the independent variable on the nonverbal behaviors, and the result of the omnibus test was statistically significant (Wilks' $\lambda = .90, F[6, 123] = 2.18, p = 0.05, \eta_p^2 = 0.10$). Given the significance of the overall test, the univariate main effects were examined. A significant univariate main effect was obtained for smiling, $F(1, 128) = 11.46, p < .01, \eta_p^2 = 0.08$. Individuals were more likely to smile when providing the baseline version of their story ($adj M = 1.81, SD = 0.71$) compared to when they exaggerated or feigned remorse ($adj M = 1.50, SD = 0.66$).

The second MANCOVA examined the influence of the independent variable on the verbal behaviors, and the result of the omnibus test was statistically significant (Wilks' $\lambda = .84, F[11, 116] = 2.03, p = 0.03, \eta_p^2 = 0.16$). Given the significance of the overall test, the univariate

main effects were examined. Significant univariate main effects were obtained for empathy, $F(1, 126) = 3.84, p = 0.05, \eta_p^2 = 0.03$; general remorse, $F(1, 126) = 5.01, p = 0.03, \eta_p^2 = 0.04$; commitment not to recidivate, $F(1, 126) = 7.97, p = 0.01, \eta_p^2 = 0.06$; and justification, $F(1, 126) = 4.40, p = 0.04, \eta_p^2 = 0.04$. When individuals exaggerated or feigned remorse, compared to when they provided the baseline version of their story, they were more likely to exhibit or endorse empathy ($adj\ M = 2.18, SD = 0.64$; $adj\ M = 1.98, SD = 0.65$), general remorse ($adj\ M = 2.52, SD = 0.77$; $adj\ M = 2.12, SD = 0.70$), and a commitment not to recidivate ($adj\ M = 2.14, SD = 0.50$; $adj\ M = 1.78, SD = 0.61$). On the contrary, individuals were less likely to justify their behaviors when they exaggerated or feigned remorse ($adj\ M = 1.61, SD = 0.59$) compared to when they provided the baseline version of the story ($adj\ M = 2.14, SD = 0.79$).

Accuracy of predicting behavioral changes. Hypothesis 5 predicted participants would more accurately identify changes in their verbal behaviors than in their nonverbal behaviors when they exaggerated or feigned remorse. Difference scores were obtained between the participants' behavior ratings for their baseline story and for their exaggerated/feigned story. Difference scores were also calculated between the coders' ratings of the participants' behavior during the baseline story and the exaggerated/feigned story. Bivariate correlational analyses examined the relations between the two sets of difference scores (Table 9). Of the 15 verbal and nonverbal behaviors, significant correlational analyses were found for only four behaviors. Three of the four behaviors were verbal behaviors. Participants accurately identified changes in apologizing ($r = 0.25, p < .01$), making a commitment not to recidivate ($r = 0.37, p < .01$), justifying their actions ($r = 0.28, p < .01$), and smiling ($r = 0.31, p < .01$).

Table 9

Zero-Order Correlations of Self-Reported and Observed Mean Difference Scores

Dependent Variables		Mean Difference Score Between Story 1 and Story 2	Correlation of Self-Reported and Observed Mean Difference Scores
Gaze Aversion	Self-reported	0.53	0.12
	Observed	0.34	
Smiling	Self-reported	-0.54	0.31**
	Observed	-0.31	
Illustrators	Self-reported	0.19	0.02
	Observed	-0.37	
Fidgeting	Self-reported	0.43	-0.08
	Observed	0.41	
Rigid Posture	Self-reported	0.83	0.15
	Observed	0.15	
Speech Errors	Self-reported	0.19	0.09
	Observed	-0.14	
Short Answers	Self-reported	0.37	0.15
	Observed	-0.16	
Apology Statements	Self-reported	1.74	0.25**
	Observed	0.13	
Empathy	Self-reported	1.42	0.05
	Observed	0.22	
Remorse for Personal Consequences	Self-reported	1.36	0.04
	Observed	0.04	
Admitting Guilt	Self-reported	1.63	0.05
	Observed	0.29	
Offer of Reparation	Self-reported	1.34	0.02
	Observed	0.02	
Detailed Statements	Self-reported	-0.33	0.08
	Observed	-0.15	
Justification of Behavior	Self-reported	-1.01	0.28**
	Observed	-0.53	
Commitment Not to Recidivate	Self-reported	1.54	0.37**
	Observed	0.37	

** denotes $p < .01$ * denotes $p < .05$

Exploratory hypotheses.

Identifying behaviors associated with authentic remorse. One exploratory goal was to identify specific verbal and nonverbal behaviors exhibited by individuals when they experience genuine remorse. The mean ratings of the coded behaviors were examined, and behaviors for which the mean rating was at least 3.5 or higher were considered to be behaviors participants consistently engaged in more often than not when expressing genuine remorse. The value of 3.5 was selected because it is a numerical value for the descriptive classification “more often than not” that was used to code the behaviors exhibited by the participants. Only rigid body posture ($M = 3.97$, $SD = 1.29$) met the aforementioned criteria; however, speech errors ($M = 3.04$, $SD = 0.99$) was the next most common behavior exhibited by participants when expressing genuine remorse.

Identifying behaviors associated with exaggerated and feigned remorse. To address the exploratory analysis of identifying specific verbal and nonverbal behaviors associated with exaggerated and feigned remorse, the mean ratings of the coded behaviors were examined (Table 10). Behaviors for which the mean rating was at least 3.5 or higher were considered to be behaviors that participants engaged in more often than not when exaggerating or feigning remorse. Only fidgeting and rigid body posture met the aforementioned criteria for participants exaggerating remorse, and only rigid posture met the criteria for participants feigning remorse. Gaze aversion was the next most common behavior exhibited by participants who were exaggerating remorse, but it was not exhibited as frequently by individuals feigning remorse.

Table 10

Means and Standard Deviations of Nonverbal and Verbal Dependent Variables Coded from the Exaggerated and Feigned Stores

Dependent Variables	Story Version	<i>M</i>	<i>SD</i>
Gaze Aversion	Exaggerated	3.16	1.32
	Feigned	2.88	1.11
Postural Shift	Exaggerated	1.21	0.41
	Feigned	1.36	0.48
Smiling	Exaggerated	1.49	0.56
	Feigned	1.51	0.75
Illustrators	Exaggerated	2.49	1.19
	Feigned	2.54	0.99
Fidgeting	Exaggerated	3.52	1.42
	Feigned	3.13	1.31
Rigid Posture	Exaggerated	4.01	1.31
	Feigned	3.97	1.38
Speech Errors	Exaggerated	2.79	1.05
	Feigned	2.94	1.11
Short Answers	Exaggerated	1.22	0.42
	Feigned	1.12	0.33
Apology Statements	Exaggerated	1.78	0.57
	Feigned	1.58	0.53
Empathy	Exaggerated	2.15	0.61
	Feigned	2.23	0.68
Remorse for Personal Consequences	Exaggerated	1.36	0.57
	Feigned	1.36	0.52

Dependent Variables	Story Version	<i>M</i>	<i>SD</i>
General Remorse	Exaggerated	2.57	0.82
	Feigned	2.48	0.71
Admitting Guilt	Exaggerated	2.24	0.53
	Feigned	2.11	0.47
Offer of Reparation	Exaggerated	2.12	0.45
	Feigned	1.86	0.52
Detailed Statements	Exaggerated	1.30	0.52
	Feigned	1.32	0.64
Justification of Behavior	Exaggerated	1.49	0.53
	Feigned	1.73	0.62
Commitment Not to Recidivate	Exaggerated	2.21	0.54
	Feigned	2.08	0.44

In addition to examining behaviors that were present, behaviors that had a mean rating of less than 2.5 were considered to be behaviors exhibited infrequently when exaggerating or feigning remorse. The value of 2.5 was selected because it is the numerical value for the descriptive classification “infrequently” that was used to code the behaviors exhibited by the participants. Participants who exaggerated and feigned remorse never or rarely exhibited several verbal behaviors including providing short answers, expressing apologies, expressing empathy, admitting guilt, accepting responsibility, making a commitment not to recidivate, offering reparation, providing detailed statements, and expressing remorse for personal consequences. Only two nonverbal behaviors were exhibited infrequently, and those were smiling and shifting posture.

Behavioral differences between expressions of exaggerated and feigned remorse.

Independent samples t-tests revealed statistically significant behavioral differences between individuals who exaggerated remorse compared to those who feigned remorse. Results indicated participants exaggerating remorse were more likely than participants feigning remorse to make apology statements ($M = 1.78, SD = .58; M = 1.58, SD = 0.53; t [132] = 2.04, p = 0.04$) and to offer reparations ($M = 2.12, SD = 0.45; M = 1.86, SD = 0.52; t [132] = 3.04, p < .01$). On the other hand, participants who feigned remorse were significantly more likely to justify their behavior ($M = 1.73, SD = 0.62$) than participants who exaggerated remorse ($M = 1.49, SD = 0.53, t [132] = -2.50, p = 0.01$).

The influence of initial level of remorse on verbal and nonverbal behaviors. To examine whether participants’ initial level of remorse for their behaviors influenced the type of verbal and nonverbal behaviors exhibited, one-way MANCOVAs were calculated. The between-subjects variable and gender were entered as independent variables and the Likert-scale

questions assessing participants' ratings of remorse, guilt, and justification were entered as covariates. The dependent variables were the verbal and nonverbal behaviors exhibited during the baseline and exaggerated/feigned stories. Overall, initial level of remorse experienced by the participants did not significantly moderate the nonverbal behaviors they displayed during the baseline stories (Wilks' $\lambda = 0.96$, $F [6, 120] = 0.95$, $p = .46$, $\eta_p^2 = 0.05$) or the exaggerated/feigned stories (Wilks' $\lambda = 0.93$, $F [6, 120] = 1.54$, $p = .17$, $\eta_p^2 = 0.07$).

Participants' initial level of remorse significantly moderated their expression of verbal behaviors during the baseline story (Wilks' $\lambda = 0.82$, $F [11, 114] = 2.35$, $p = 0.01$, $\eta_p^2 = 0.19$) but not the exaggerated/feigned story. During the baseline story, as individuals' ratings of remorse increased, they were more likely to express a commitment not to recidivate ($F [1, 124] = 4.19$, $p = 0.04$, $\eta_p^2 = 0.03$, $r = 0.50$) and less likely to provide short answers ($F [1, 124] = 5.91$, $p = 0.02$, $\eta_p^2 = 0.05$, $r = -0.14$).

Reported behavioral differences by participants. As previously discussed, Hypothesis 5 correctly predicted participants would be more accurate in identifying verbal behavioral changes between their first and second stories. An exploratory goal of this study was to examine those behaviors participants intentionally tried to alter or believed they changed between the baseline version of their story and the exaggerated or feigned version of their story. Difference scores of participants' reported changes in verbal and nonverbal behaviors between their baseline story (story 1) and their exaggerated/feigned story (story 2) were calculated for each behavior on the Story Questionnaire, and a mean was tabulated for each difference score as a function of the between-subjects variable (Table 11). Behaviors for which the mean difference score was greater than 0.75 were considered to be behaviors the participants either thought they changed or

Table 11

Mean Difference Scores of Reported Changes in Verbal and Nonverbal Behaviors Between Baseline Story and Exaggerated/Feigned Story

Dependent Variables	Story Version	Mean Difference Score (Story 2 – Story 1)	
		<i>M</i>	<i>SD</i>
Crying	Remorse	-0.01*	0.27
	No Remorse	0.03	0.24
Relaxed Body Posture	Remorse	-0.57*	1.26
	No Remorse	-1.18*	1.49
Bowed Head	Remorse	0.27	1.08
	No Remorse	0.73	1.31
Gaze Aversion	Remorse	0.51	1.12
	No Remorse	0.57	1.23
Smiling	Remorse	-0.52*	1.11
	No Remorse	-0.57*	1.41
Fidgeting	Remorse	0.30	1.17
	No Remorse	0.55	1.18
Arm/Hand Movement	Remorse	0.15	1.09
	No Remorse	0.24	1.12
Illustrators	Remorse	0.28	1.07
	No Remorse	0.09	0.97
Tense Body Posture	Remorse	0.55	1.18
	No Remorse	1.10	1.26
Postural Shifts	Remorse	0.31	0.99
	No Remorse	0.42	0.99
Accepting Responsibility	Remorse	0.69	0.96
	No Remorse	1.64	1.36

Dependent Variables	Story Version	Mean Difference Score (Story 2 – Story 1)	
		<i>M</i>	<i>SD</i>
Speech Fillers	Remorse	-0.04*	1.27
	No Remorse	0.42	1.28
Apologetic Statements (General)	Remorse	1.19	1.21
	No Remorse	2.29	1.49
Apologetic Statements to the Victim	Remorse	1.12	1.04
	No Remorse	1.93	1.58
Commitment Not to Recidivate	Remorse	0.81	0.91
	No Remorse	2.27	1.74
Short Answers	Remorse	0.27	1.08
	No Remorse	0.48	1.59
Stuttering	Remorse	0.19	0.93
	No Remorse	0.61	1.18
Admitting Guilt	Remorse	0.90	1.18
	No Remorse	2.36	1.43
Remorse for Personal Consequences	Remorse	0.66	1.29
	No Remorse	2.06	1.58
Detailed Statements	Remorse	-0.03*	1.14
	No Remorse	-0.62*	1.21
Empathy	Remorse	0.78	1.18
	No Remorse	2.06	1.35

Dependent Variables	Story Version	Mean Difference Score (Story 2 – Story 1)	
		<i>M</i>	<i>SD</i>
Offer of Reparation	Remorse	0.88	1.01
	No Remorse	1.79	1.59
Response Latency	Remorse	0.21	1.16
	No Remorse	0.45	1.05
Silence	Remorse	0.22	0.79
	No Remorse	0.33	0.94
Justification of Behavior	Remorse	-0.21*	1.25
	No Remorse	-1.82*	1.95

* A negative mean difference score indicates the participants reported engaging in the said behavior more frequently during Story 1.

attempted to intentionally alter between the baseline story and the exaggerated or the feigned story. The cutoff score of 0.75 was selected because it represented the average standard deviation for all of the verbal and nonverbal behaviors. Furthermore, a difference of 0.75 would change the descriptive classification of the observable behavior (i.e., a behavior coded as being observed “infrequently” during the baseline story would be coded as being observed “less often than not” during the exaggerated/feigned story). As illustrated in Table 11, participants telling a remorseful story thought they increased the following behaviors when exaggerating remorse: apologetic statements, commitment not to recidivate, admitting guilt, expressing empathy, and offers of reparation. There were no behaviors they thought they decreased when exaggerating remorse.

Participants telling a story in which they did not feel remorseful thought they increased the following behaviors when feigning remorse: accepting responsibility, apologetic statements, commitment not to recidivate, tense body posture, admitting guilt, expressing remorse for personal consequences, expressing empathy, and offers of reparation. These same participants thought they decreased the following behaviors when feigning remorse: relaxed body posture and justification of behavior.

A series of paired samples t-test compared the self-reported mean difference score for each behavior between the participants who exaggerated remorse and the participants who feigned remorse. As illustrated in Table 12, participants who feigned remorse generally reported a greater change in their behaviors. They endorsed a significantly greater increase in the following behaviors: accepting responsibility, bowed head, speech fillers, apologetic statements, commitment not to recidivate, stuttering, admitting guilt, expressing remorse for personal consequences, expressing empathy, and offers of reparation. They reported a significantly greater

Table 12

Paired Sample T-Tests Comparing the Mean Difference Scores of Reported Changes in Verbal and Nonverbal Behaviors Between Participants Exaggerating Remorse and Participants Feigning Remorse

Dependent Variables	Mean Difference Score between Story 1 and Story 2		<i>t</i>	<i>p</i>
	Story Version			
	Remorse	No Remorse		
Crying	-0.01	0.03	-1.00	0.32
Relaxed Body Posture	-0.57	-1.18	2.57	0.01
Bowed Head	0.27	0.73	-2.23	0.03
Gaze Aversion	0.51	0.57	-0.29	0.77
Smiling	-0.52	-0.57	0.24	0.81
Fidgeting	0.30	0.55	-1.25	0.21
Arm/Hand Movement	0.15	0.24	-0.47	0.64
Illustrators	0.28	0.09	1.10	0.27
Tense Body Posture	0.55	1.10	-2.62	0.01
Postural Shifts	0.31	0.42	-0.61	0.54
Accepting Responsibility	0.69	1.64	-4.71	<.01
Speech Fillers	-0.04	0.42	-2.10	.04
Apologetic Statements (General)	1.19	2.29	-4.66	<.01
Apologetic Statements to the Victim	1.12	1.93	-3.49	<.01
Commitment Not to Recidivate	0.81	2.27	-6.11	<.01
Short Answers	0.27	0.48	-0.89	0.38
Stuttering	0.19	0.61	-2.40	0.02

Dependent Variables	Mean Difference Score between Story 1 and Story 2		<i>t</i>	<i>p</i>
	Story Version			
	Remorse	No Remorse		
Admitting Guilt	0.90	2.36	-6.45	<.01
Remorse for Personal Consequences	0.66	2.06	-5.63	<.01
Detailed Statements	-0.03	-0.62	2.89	0.01
Empathy	0.78	2.06	-5.56	<.01
Offer of Reparation	0.88	1.79	-3.96	<.01
Response Latency	0.21	0.45	-1.25	0.21
Silence	0.22	0.33	-0.69	0.49
Justification of Behavior	-0.21	-1.82	5.71	<.01

decrease in the following behaviors: relaxed body posture, detailed statements, and justification of behavior.

METHOD

Study 2 Pilot

Purpose. Prior to conducting the full study it was important to ascertain more information about the strategies judges use to assess remorse. The reasons for this were twofold. First, the lack of research on the topic area made it difficult to generate specific hypotheses concerning judges' strategies for assessing remorse. Second, the investigator designed measures to evaluate judges' perceptions of defendant remorse and their strategies for assessing it. As such, it was important to ask judges about the verbal and nonverbal behavioral cues they utilize to ensure that the measures were accurately assessing the topic. The pilot study also enabled judges to provide feedback about additional behaviors they observe that help them determine the presence and authenticity of defendant remorse.

Design. A survey method that incorporated face-to-face interviews and pencil and paper questionnaires was used to evaluate judges' opinions about defendant remorse. Face-to-face interviews were unstructured, and responses were analyzed using grounded-theory qualitative analyses.

Participants. The four Circuit Court judges, two Family Court judges, and one Municipal Court judge for Tuscaloosa County were recruited to participate in the pilot study. They were contacted via telephone to request their participation in a face-to-face interview, in the completion of the Pilot Judges' Questionnaire, or in both. Of the seven judges, two agreed to participate in both the face-to-face interview and in the completion of the questionnaire, two agreed to participate in only the face-to-face-interview, and one agreed to complete only the

questionnaire. One judge chose not to participate in the study, and one judge did not respond to any phone calls. The final sample consisted of one Municipal Court judge, three Circuit Court judges, and one Family Court judge. Four of the judges were men and one was a woman.

Stimuli and measures.

Pilot Judges' Questionnaire (Appendix I). Developed by the investigator, the survey examined the verbal and nonverbal behaviors that might be referenced when assessing defendant remorse. The first section consisted of 13 fill-in-the blank questions that asked about the strategies and cues judges use to assess authentic and feigned remorse. The next section asked the participant to recall the most recent case in which defendant remorse impacted sentencing and to indicate whether they utilized certain behavioral observations to determine whether the defendant was remorseful. A set of 13 behaviors was listed and the participant marked "Yes" or "No." The behaviors selected for this section of the questionnaire are associated with remorse in the literature (Robinson & Smith-Lovin, 2004; Ward, 2006; Weisman, 2004). If participants marked "Yes," a follow-up question asked whether that behavior had a strong impact on their evaluation. An open-ended question followed this section and asked whether any other behaviors convinced the judge the defendant was remorseful. The next section of the questionnaire was similar to the previous section, but it asked participants to recall the most recent case in which they decided the defendant was feigning remorse. A different set of 14 behaviors was listed and participants indicated ("Yes" or "No") whether they utilized these behaviors to decide the defendant was feigning remorse. The behaviors selected for this section of the questionnaire are associated with deception (DePaulo, et al., 2003; Porter et al., 2008; Sporer & Schwandt, 2007). If participants marked "Yes," a follow-up question asked whether that behavior had a strong impact on their evaluation. An open-ended question followed this

section and asked whether any other behavior convinced the judge the defendant was feigning remorse.

The final section of the questionnaire asked for basic demographic information (i.e., gender, age) and information about the judge's career (i.e., length of time as a judge, type of cases over which they preside). Participants were also asked to indicate with percentages how often they consider remorse when sentencing, how frequently they believe the defendants are sincerely remorseful or feigning remorse, and how often no remorse is expressed. Two questions addressed judges' perception of feigned remorse, including whether they consider feigned remorse better than no remorse and whether they would consider it a mitigating factor. Finally, participants were asked whether they had any other thoughts or suggestions about evaluating the sincerity of defendant remorse. Given that this was a pilot study, participants were also asked whether the questionnaire was easy to understand and complete. The questionnaire took approximately 10-15 minutes to complete.

Interview protocol. The face-to-face interview was conducted by the investigator. The introduction to the interview was unstructured, but the same information was provided to each participant. Included in the introduction was information about the interviewer and the purpose of the interview. The topics of defendant remorse and the process of evaluating its sincerity were discussed during the introduction and served as the context for the interview. Although the interview was unstructured, all participants discussed their perceptions of the role of remorse and the strategies and behavioral observations used to evaluate remorse. The interviewer interjected follow-up questions for topics that were unclear or could be further developed with specific examples. There were no established prompt questions, but the interviewer generally asked about specific methods for assessing the sincerity of remorse and the most frequent behavioral

observations utilized to assess remorse if these topics did not spontaneously occur during the interview. All the interviews lasted approximately 30 minutes. All of the judges who were interviewed were cooperative and open about their strategies for assessing defendant remorse.

Procedure. The investigator contacted seven judges located in Tuscaloosa County via telephone. If the judge was unavailable to take the call, a message was left with a request to return the call. If no call was received after one week, a second call was made and a message was left if the judge was unavailable to take the call. Contact was made with six of the seven potential participants within two phone calls. One potential participant never responded to the telephone calls. Once contact was made, the investigator told potential participants the purpose of the study and what would be involved if they chose to participate. Participants who agreed to participate in the face-to-face interview scheduled a 30-minute block of time to meet with the investigator. All meetings were held in the participant's office or courtroom. Upon meeting with the participants, the interviewer provided information about the goals of the research project and then encouraged the participant to engage in an unstructured discussion about the topic matter. At the completion of the interview, the investigator introduced the Pilot Judges' Questionnaire to the participants and explained the purpose of it. Participants who agreed to complete the questionnaire were provided a copy of the questionnaire and a pre-addressed stamped envelope. Also included with the questionnaire was a letter sponsored by Judge John England explaining the purpose of the questionnaire and the instructions for completing the questionnaire. Participants were told they could complete the questionnaire at their convenience, and they were then thanked for their time and contribution to the study.

For participants who agreed to only complete the questionnaire, a questionnaire accompanied with the sponsored letter from Judge England and a pre-addressed stamped

envelope were hand-delivered to their offices. At the conclusion of the study, homemade cookies were provided to the judges who agreed to participate as a way to indicate appreciation for their participation.

Results and conclusions. Qualitative analyses of the interviews and responses to the questionnaires revealed that judges do share some strategies for assessing remorse. A defendant's behaviors and actions between the crime and the court date are informative to judges when assessing whether the defendant is sincerely remorseful. For example, two judges commented that defendants who attempt to apologize to the victims or try to repair any damages are likely to be remorseful for their criminal behavior. One judge commented that without appropriate actions after the crime, it would be difficult to believe the defendant was remorseful. Another judge stated that the best "evidence" for assessing the sincerity of a defendant's expression of remorse is to examine whether the defendant attempted to "rectify the problem before coming to court."

Victim input about the defendant was also mentioned by two judges as a method for assessing defendant remorse. Both judges stated that victims who believe the defendant is remorseful will often express this to a prosecutor or judge, which then impacts the judge's perception of the defendant's remorsefulness. When specifically asked in the questionnaire whether apologizing to the victim helped evaluate the remorsefulness of the defendant, two of three judges indicated that it did. However, one judge provided a contrasting opinion and stated that it would be unfair of him to consider victim input because defendants usually are not allowed by the courts, and are discouraged by their lawyers, to contact the victims. Overall, these responses reflect Slovenko's (2006) supposition that victim input influences the amount of emphasis judges place on defendant remorse during sentencing.

Another behavior that two of the judges agreed was indicative of remorse was accepting responsibility for the crime. One of the judges stated that while accepting responsibility does not mean the defendant is remorseful, not accepting responsibility is indicative the defendant is not remorseful. This same judge said he often gleans a defendant's acceptance of responsibility from a guilty plea. Only this one judge alluded to a guilty plea as being "evidence" that the defendant is remorseful. While all of the judges who returned a questionnaire indicated they used a defendant's acceptance of responsibility in evaluating their remorse, only one judge endorsed used a defendant's guilty plea. This set of responses is in contrast to much of the remorse literature, which suggests a guilty plea is considered often the best "evidence" for evaluating remorse (Slovenko, 2006; Wood & MacMartin, 2007).

Judges expressed differing opinions about the usefulness of an apology in assessing defendant remorse. One judge commented she must rely on the defendant's words because she is not good at understanding body language. She added that when a defendant says "I'm sorry," she typically trusts the defendant. One judge responded that when a defendant does not apologize or offer any statements to the court, he usually doubts the sincerity of the defendant's expressed remorse. In contrast, one judge's response on the questionnaire indicated defendants who are remorseful say less than a defendant who is not remorseful. From the questionnaire, two of the three judges indicated a general apology by the defendant helps them evaluate the sincerity of the defendant's remorse. However, another judge responded he could not trust defendants' apologetic verbalizations unless they were accompanied by actions that suggested the defendant was sorry. Overall, the judges in this pilot study agreed that apologies are important for assessing remorse, which reflects prior literature reviewing judges' evaluation of defendant remorse (Wood & MacMartin, 2007).

No judges endorsed crying by the defendant to be evidence the defendant was remorseful. However, when asked specifically in the questionnaire whether they considered crying by the defendant when assessing remorse, all the judges indicated they would consider it, but it would not have a strong impact on their decisions.

Regarding their strategies for identifying lack of remorse (or feigned remorse if the defendant attempts to be remorseful), all the judges noted that a defendant's prior history is key evidence. Slovenko (2006) posited that judges expressed a consensus regarding the use of an offender's criminal history as evidence for disingenuous remorse. The judges in this study also noted that defendants who are not remorseful or who are feigning remorse make comments such as "I've never done this before," "I've changed," or "I'll never do this again." All of these comments allude to aspects of an apology and remorse (Scher & Darley, 1997), but judges might doubt the defendant's expressed remorse because judges are hesitant to believe what defendants tell them. Although not stated explicitly by all the judges, one judge noted he does not believe the defendant is remorseful unless actions that are indicative of remorse accompany the verbalizations of remorse. Furthermore, while the some research studies highlight a commitment not to recidivate (Weisman, 2004; Wood and MacMartin 2007) as evidence of remorse, only one of three judges who returned a questionnaire responded affirmatively when asked specifically whether a defendant's commitment not to recidivate would be considered when assessing remorse.

From the questionnaires, there was a consensus among the judges that defendants who smile or laugh while expressing remorse or who express remorse for personal consequences (i.e., sorry because they got caught) are likely feigning remorse. Although most individuals believe gaze aversion is indicative of lying (Global Detection Research Team, 2006), one judge

commented that defendants who are truly remorseful make less eye contact than defendants who are not remorseful or who are feigning remorse. When asked in a fill-in-the-blank format about the type of body language displayed by defendants who are feigning remorse, two of the judges identified aggressive body posture as indicative of feigned remorse

Overall, the judges expressed more consensus about the strategies and behavioral cues they utilize to assess the presence of remorse as opposed to the methods and behavioral cues they use to assess for feigned remorse. This preliminary data highlights a general approach used by the judges when assessing remorse. Typically, the judges relied upon context-specific legal behaviors to help evaluate whether the defendant was remorseful and whether the presentation of remorse was genuine. For example, the judges were more likely to endorse apologizing to the victim and accepting responsibility as verbal cues of remorse opposed to general verbal cues (i.e., short answers).

In summary, the defendant's actions (i.e., attempting to repair damages, not engaging in similar behaviors), coupled with his or her words, between the crime and court date are useful to judges in assessing the sincerity of defendant remorse. Accepting responsibility and apologizing to the victim were also used by more judges than not in evaluating the defendant's remorse. Judges agreed overwhelmingly that a defendant's prior criminal history was good evidence that the defendant was not remorseful or was feigning remorse if he was attempting to appear remorseful. Other cues agreed upon by multiple judges as indicative of feigned remorse were smiling or laughing by the defendant or a defendant's expression of remorse for personal consequences.

Study 2

Design. Similar to the design of the pilot study, a survey method was used to examine the verbal and nonverbal behaviors judges utilize when evaluating defendant remorse. A survey research design allowed for a descriptive analysis of the characteristics of defendant behavior that judges endorsed as valuable in discerning the authenticity of defendant remorse.

Participants. Judges were recruited to participate in the study via several methods. After consultation with Pam Casey, Ph.D., director of research at the National Center for State Courts, and Judge Steven Leban, editor of Court Review, the best strategy for recruiting judges was considered to be distributing the survey at state judicial conferences. State judges were selected because they have more flexibility in their sentencing decisions and are not required to follow federal sentencing guidelines (O'Hear, 1997). Therefore, one recruitment technique entailed distributing the surveys at the Alabama judicial conference hosted in Point Clear, Alabama in July 2009. Permission was obtained from the Director of Judicial Education and Planning to include the surveys in the conference packets. Due to the conference's limited time and resources, the investigator was not allowed to set up a booth and collect completed questionnaires. Approximately 200 surveys were distributed at the conference, and 16 surveys were completed and returned. Directors from other state judicial conferences were contacted requesting permission to distribute the surveys, but no other conferences granted permission.

Another recruitment method involved having the court liaison of a secure medical facility in Alabama distribute the surveys via fax or email to 86 judges in the state of Alabama. A total of 13 surveys were completed and returned. The last recruitment method involved the investigator hand-delivering the survey along with a pre-addressed stamped envelope to judges' internal mail boxes at their respective courthouses. Included with the survey were baked goods as a token of

appreciation for completing the survey. No judges were contacted face-to-face via this method; however, at some courthouses, the investigator spoke directly with office assistants who were responsible for distributing the surveys and the baked goods to the judges' boxes. A total of 103 surveys were distributed to judges from four counties in North Carolina and four counties in Virginia, and 24 surveys were returned via mail. The judges also had the option of completing the survey online via [surveymonkey.com](https://www.surveymonkey.com), and two surveys were completed electronically. One judge from Peoria, Illinois completed the survey online after hearing about the project from the investigator.

A recruitment method that was proposed but did not materialize was submitting an electronic copy of the survey to Jo Ann Saringer, the administrative assistant for the ABA: Judicial Division, who agreed to post the survey on the respective state judicial conferences' listservs. However, final approval for distribution was not granted because the survey was longer than one page.

Therefore, a total of 56 surveys were returned, although only 53 surveys were fully completed. The three surveys that were not fully completed were able to be included in the quantitative analyses because only the open-ended questions to be used for qualitative analyses were not finished. The average response rate for this study was approximately 16%; however, the responses rate across the different recruitment methods varied. There was a much lower response rate (8%) from judges recruited via the judicial conference where no personal contact was made and no baked goods were provided. The response rate for this study was higher when the judges were contacted directly by someone they knew (15%) or when a token of appreciation was provided (25%). The latter two response rates are consistent with studies recruiting participation

from judges, in which the response rates have ranged from 12% to 50% (Brannen, Salekin, Zapf, Salekin, Kubak, & DeCoster, 2006; Kwartner et al., 2006; Manuto & O'Rourke, 1991).

The final sample consisted of 43 male judges (77%) and 13 female judges (23%). Participants' mean age was 55.14 ($SD = 8.49$), and the average number of years the judges held their position was 13.85 years ($SD = 10.05$). The majority of judges (57%) presided over criminal, civil, and misdemeanor proceedings, while 29% presided over only criminal and civil proceedings, and 10% presided over only criminal proceedings.

Power analyses were conducted using G*Power (Faul, Erdfelder, Lang & Buchner, 2007). It was theorized that nothing less than a medium effect size ($r = .30$) would have practical significance for the current study. Based on a bivariate correlation model, with power set at .80, and alpha set at .05, it was calculated that a total sample size of 67 participants would be needed to find significant effects. Although not quite enough participants were recruited for the current study to have sufficient power to detect medium effect sizes, the total number of participants was sufficient to find practical effects that are present, as only 23 participants were needed to detect large effect sizes.

Stimuli and measures.

Judges' Questionnaire (Appendix J). The survey examined the verbal and nonverbal behaviors that might be referenced by judges when evaluating defendant remorse. The Pilot Judges' Questionnaire served as the basis for the questionnaire used in the primary study, and it was restructured and refined after obtaining feedback during the pilot study and from the committee members for the dissertation project. The finalized questionnaire consisted of three sections. The first section contained 13 fill-in-the blank questions that asked about the strategies and cues judges use to assess authentic and feigned remorse. There were also two open-ended

questions that asked judges to describe their methods for determining whether a defendant is remorseful or feigning remorse. The next section asked participants to rate on a scale of 1 (*Not at all*) to 6 (*Constantly*) how often they utilize 16 legal-specific and general verbal and nonverbal behaviors to assess whether a defendant is remorseful. The behaviors selected for this question are associated with remorse in the literature (Robinson & Smith-Lovin, 2004; Ward, 2006; Weisman, 2004). The next question was similar to the previous question and had the same scale format, but it asked the judges to rate how frequently they use 15 legal-specific and general verbal and nonverbal behaviors to assess whether a defendant is feigning remorse. The behaviors selected for this question are associated with deception and feigned remorse (DePaulo, et al., 2003; Porter et al., 2008; Sporer & Schwandt, 2007).

The final section of the questionnaire asked for basic demographic information (i.e., gender, age) and information about the participants' careers as judges (i.e., length of time as a judge, type of cases over which they preside). In this section, participants were also asked to indicate with percentages how often defendants express remorse (sincere or feigned), how many defendants express sincere or feigned remorse, and how often remorse is considered a mitigating factor in sentencing decisions. Two questions addressed judges' perception of feigned remorse, including whether they consider feigned remorse better than no remorse and whether they would consider it as a mitigating factor. Finally, participants were asked whether they had any other thoughts or suggestions about evaluating the sincerity of defendant remorse. The questionnaire took approximately 10-15 minutes to complete.

A cover letter detailing the purpose of the study, documenting IRB approval, and providing the investigator's contact information was provided with each survey (Appendix K).

Procedure. The investigator, with the support of Judge John England, contacted the Director of Judicial Education and Planning for permission to distribute the surveys at the annual state judicial conference in July 2009. Upon receiving permission, an electronic copy of the survey was sent to the director, who distributed paper copies of the survey in the conference packets and then returned the completed surveys via mail to the investigator. The investigator also contacted the court liaison who agreed to distribute the survey electronically to judges in the state of Alabama. After receiving completed surveys via email or fax, the court liaison mailed them to the investigator. The final recruitment method involved the investigator travelling to four counties in Virginia and four counties in North Carolina to distribute the surveys with pre-addressed stamped envelopes to judges' courthouse mailboxes. Judges returned the survey anonymously and at their own convenience. All judges who participated in the study received a copy of the cover letter with the survey, and return of the survey served as their informed consent.

RESULTS

Study 2

Judges' approaches for assessing defendant remorse. Hypothesis 1 predicted judges would demonstrate a consensus for a greater number of behavioral cues used for assessing the presence of remorse compared to evaluating the sincerity of remorse. Frequency counts were tabulated for all of the Likert-scale questions on the Judges' Questionnaire. Results indicated five separate verbal and nonverbal behaviors were endorsed by at least 70% of judges as being used more often than not or more frequently when assessing for the presence of remorse. The verbal behaviors included: accepting responsibility (85.7%), apologizing in general (71.4%), apologizing to the victim (78.6%), and expressing empathy for the victim (82.1%). The only nonverbal behavior judges expressed a consensus for using when assessing remorse was examining whether the defendant rectified his or her wrong behavior before the court date (91%).

When trying to discern the sincerity of defendant remorse, only one nonverbal behavior was endorsed by at least 70% of judges as being used more often than not. Seventy-three percent of judges indicated they use gaze aversion more often than not or even more frequently when evaluating whether the defendant is sincerely remorseful. Therefore, Hypothesis 1 was supported because judges expressed a consensus for a greater number of behavioral cues used for evaluating the presence of remorse as opposed to the sincerity of remorse. Hypothesis 2 predicted judges would consider defendant remorse as a mitigating factor in less than 25% of their total cases. Results indicated judges (42.9% of the total sample) were most likely to

consider remorse as a mitigating factor in 25% or less of their total cases. Of the remaining judges, 12.5% endorsed considering remorse for 26-50% of their cases, 21.5% rated they would consider remorse for 51-75% of their cases, and 10.7% indicated they would consider remorse as a mitigating factor for 76-100% of their cases.

Behavioral cues for assessing defendant remorse. Hypothesis 3 predicted judges would be more likely to endorse using context-specific legal behaviors (e.g., accepting responsibility for the crime, pleading guilty, prior criminal history) when assessing for the presence of remorse compared to using general verbal and nonverbal behaviors (e.g., crying, general apologies, bowed head, sad facial expressions). Paired samples t-tests were conducted to compare judges' mean ratings for each of the 16 behaviors associated with assessing remorse on the Judges' Questionnaire. Results of the t-tests are presented in Table 13 and indicated this hypothesis was generally supported with some exceptions. Judges reported being significantly more likely to use a defendant's acceptance of responsibility, apologetic statements to the victim, behaviors to rectify his or her wrong behavior prior to the court date, and expressions of empathy toward the victim more than the general verbal and nonverbal behaviors associated with remorse. An exception to above finding was that judges were not as likely and sometimes significantly less likely to use a defendant's commitment not to recidivate compared to general verbal and nonverbal behaviors. Another exception was judges were not more likely to use a defendant's guilty plea more than general apologies, a bowed head, an unsteady voice, and sad facial expressions. Also, a defendant's agreement to enter rehabilitation was only used more often than increased limb movement, tense body posture, and postural shifts when assessing for the presence of remorse. Hypothesis 4a predicted certain verbal behaviors would be used by a majority of judges when assessing defendant remorse. Frequency counts were tabulated for each

Table 13

Paired-Sample T-Tests Comparing Judges' Mean Ratings (1 – Never to 6 – Constantly) of Their Use of General Verbal and Nonverbal Behaviors to Their Use of Context-Specific Legal Behaviors When Assessing Remorse

General Verbal/Nonverbal Behavior (<i>M</i>)	Context-Specific Legal Behavior (<i>M</i>)	<i>t</i>	<i>p</i>
Crying (3.35)	Accepting Responsibility (4.90)	-7.49	<.01
	Pleading Guilty (3.96)	-2.78	0.01
	Apologizing to the Victim (4.69)	-5.80	<.01
	Commitment Not to Recidivate (3.10)	0.83	0.41
	Agreement to Enter Rehabilitation (3.69)	-1.35	0.19
	Rectifying the Wrong Behavior Before the Court Date (5.04)	-8.00	<.01
	Expressing Empathy for the Victim (4.55)	-5.60	<.01
Apologizing (in general) (4.17)	Accepting Responsibility	-4.56	<.01
	Pleading Guilty	1.13	0.26
	Apologizing to the Victim	-5.40	<.01
	Commitment Not to Recidivate	4.18	<.01
	Agreement to Enter Rehabilitation	2.04	0.05
	Rectifying the Wrong Behavior Before the Court Date	-5.45	<.01
	Expressing Empathy for the Victim	-2.66	0.01
Head Bowed (3.96)	Accepting Responsibility	-5.09	<.01
	Pleading Guilty	0.00	1.00
	Apologizing to the Victim	-3.43	<.01
	Commitment Not to Recidivate	3.84	<.01
	Agreement to Enter Rehabilitation	1.26	0.21
	Rectifying the Wrong Behavior Before the Court Date	-5.30	<.01
	Expressing Empathy for the Victim	-3.44	<.01
Unsteady Voice (3.69)	Accepting Responsibility	-7.20	<.01
	Pleading Guilty	-1.12	0.27
	Apologizing to the Victim	-5.24	<.01
	Commitment Not to Recidivate	2.49	0.02
	Agreement to Enter Rehabilitation	0.09	0.93
	Rectifying the Wrong Behavior Before the Court Date	-7.88	<.01
	Expressing Empathy for the Victim	-5.66	<.01

General Verbal/Nonverbal Behavior (<i>M</i>)	Context-Specific Legal Behavior (<i>M</i>)	<i>t</i>	<i>p</i>
Increased Limb Movement (2.96)	Accepting Responsibility	-9.48	<.01
	Pleading Guilty	-4.08	<.01
	Apologizing to the Victim	-8.97	<.01
	Commitment Not to Recidivate	-0.84	0.41
	Agreement to Enter Rehabilitation	-3.44	<.01
	Rectifying the Wrong Behavior Before the Court Date	-11.26	<.01
	Expressing Empathy for the Victim	-9.06	<.01
Sad Facial Expression (3.55)	Accepting Responsibility	-6.71	<.01
	Pleading Guilty	-1.63	0.11
	Apologizing to the Victim	-5.77	<.01
	Commitment Not to Recidivate	1.73	0.09
	Agreement to Enter Rehabilitation	-0.82	0.42
	Rectifying the Wrong Behavior Before the Court Date	-7.55	<.01
	Expressing Empathy for the Victim	-5.91	<.01
Trembling Body Movements (3.27)	Accepting Responsibility	-8.96	<.01
	Pleading Guilty	-2.96	0.01
	Apologizing to the Victim	-6.59	<.01
	Commitment Not to Recidivate	0.81	0.42
	Agreement to Enter Rehabilitation	-1.61	0.11
	Rectifying the Wrong Behavior Before the Court Date	-9.45	<.01
	Expressing Empathy for the Victim	-6.40	<.01
Tense Body Posture (3.08)	Accepting Responsibility	-8.62	<.01
	Pleading Guilty	-3.76	<.01
	Apologizing to the Victim	-6.77	<.01
	Commitment Not to Recidivate	0.00	1.00
	Agreement to Enter Rehabilitation	-2.56	0.01
	Rectifying the Wrong Behavior Before the Court Date	-8.36	<.01
	Expressing Empathy for the Victim	-7.26	<.01
Shifting Posture (3.08)	Accepting Responsibility	-7.97	<.01
	Pleading Guilty	-3.98	<.01
	Apologizing to the Victim	-7.42	<.01
	Commitment Not to Recidivate	-0.34	0.74
	Agreement to Enter Rehabilitation	-2.55	0.01
	Rectifying the Wrong Behavior Before the Court Date	-9.38	<.01
	Expressing Empathy for the Victim	-7.98	<.01

verbal behavior, and those behaviors endorsed by a majority (at least 50%) of judges as being used “more often than not” or more frequently were included in the evaluation of the hypothesis. Although there is always an element of arbitrariness in assigning a cutoff value, 50% was selected as the cutoff for the current study because a “majority” is commonly defined as more than half of a group or greater than 50% of a sample. Results indicated this hypothesis was generally supported, as all but one of the predicted verbal behaviors were endorsed by a majority of the judges as being used to help them assess remorse. Specifically, 64.3% reported using a guilty plea, 85.7% reported using an acceptance of responsibility, 71.4% reported using an apologetic statement, 78.6% reported using an apology to the victim, 57.1% reported using an agreement to enter rehabilitation, and 82.1% reported using an expression of empathy for the victim or the victim’s family. Only 32.1% endorsed using a commitment not to recidivate more often than not when assessing defendant remorse.

Hypothesis 4b predicted certain nonverbal behaviors would be used by a majority of judges when assessing defendant remorse. Frequency counts were tabulated for each nonverbal behavior, and those behaviors endorsed by at least 50% of judges as being used “more often than not” or more frequently were included in the evaluation of the hypothesis. Results indicated this hypothesis was generally supported, as two of the three predicted nonverbal behaviors were endorsed by a majority of the judges as being used to help them assess remorse. Specifically, 64.3% reported using a bowed head and 91% reported using the defendant’s reparations to rectify the wrong behavior. Only 44% of the judges endorsed using crying more often than not when assessing defendant remorse.

Hypothesis 4c predicted judges would most likely use defendants' apologies when assessing for the presence of remorse. This hypothesis was not supported. Judges were most likely (91%) to use defendants' attempts to rectify their wrong behavior prior to their court date.

Behavioral cues for assessing the sincerity of defendant remorse. Hypothesis 3 predicted judges would be more likely to endorse using context-specific legal behaviors (e.g., expressions of remorse for personal consequences, expressions of remorse after being found guilty, prior criminal history) when assessing for the sincerity of remorse compared to using general verbal and nonverbal behaviors (e.g., gaze aversion, smiling, fidgeting). Paired samples t-tests were conducted to compare judges' mean ratings for each of the 15 behaviors associated with feigned remorse on the Judges' Questionnaire. Results of the t-tests are documented in Table 14 and indicated this hypothesis was supported only partially. When assessing feigned remorse, judges reported being significantly more likely to use a defendant's prior criminal history than all of the general verbal and nonverbal behaviors associated with feigned remorse except for gaze aversion and smiling. Judges only used a defendant's expression of remorse for personal consequences more than short answers, silence, fidgeting, stuttering, hand gestures, and speech fillers. They endorsed using expressions of remorse after being found guilty more than stuttering and hand gestures. Expressions of remorse after being found guilty and for personal consequences were significantly less likely to be used than gaze aversion and smiling.

Hypothesis 5a predicted certain verbal behaviors would be used by a majority of judges when assessing the sincerity of defendant remorse. Frequency counts were tabulated for each verbal behavior, and those behaviors endorsed by at least 50% of judges as being used "more often than not" or more frequently were included in the evaluation of the hypothesis. Results

Table 14

Paired-Sample T-Tests Comparing Judges' Mean Ratings (1 – Never to 6 – Constantly) of Their Use of General Verbal and Nonverbal Behaviors to Their Use of Context-Specific Legal Behaviors When Assessing the Sincerity of Remorse

General Verbal/Nonverbal Behavior (<i>M</i>)	Context-Specific Legal Behavior (<i>M</i>)	<i>t</i>	<i>p</i>
Gaze Aversion (4.41)	Expressing Remorse for Personal Consequences (3.61)	3.19	<.01
	Expressing Remorse After Found Guilty (3.27)	4.59	<.01
	Prior Criminal History (4.16)	0.84	0.40
Limb Movement (3.33)	Expressing Remorse for Personal Consequences	-1.00	0.32
	Expressing Remorse After Found Guilty	0.50	0.62
	Prior Criminal History	-2.80	0.01
Crying (3.25)	Expressing Remorse for Personal Consequences	-1.87	0.07
	Expressing Remorse After Found Guilty	-0.08	0.93
	Prior Criminal History	-3.61	<.01
Short Answers (3.02)	Expressing Remorse for Personal Consequences	-2.58	0.01
	Expressing Remorse After Found Guilty	-0.98	0.33
	Prior Criminal History	-4.24	<.01
Silence (3.07)	Expressing Remorse for Personal Consequences	-2.26	0.03
	Expressing Remorse After Found Guilty	-0.86	0.39
	Prior Criminal History	-4.23	<.01
Relaxed Body Posture (3.37)	Expressing Remorse for Personal Consequences	-0.79	0.43

General Verbal/Nonverbal Behavior (<i>M</i>)	Context-Specific Legal Behavior (<i>M</i>)	<i>t</i>	<i>p</i>
Relaxed Body Posture (3.37)	Expressing Remorse After Found Guilty	0.49	0.62
	Prior Criminal History	-3.40	<.01
Smiling or Laughing (4.34)	Expressing Remorse for Personal Consequences	2.86	0.01
	Expressing Remorse After Found Guilty	3.79	<.01
	Prior Criminal History	0.61	0.55
Long Response Latencies (3.29)	Expressing Remorse for Personal Consequences	-0.86	0.39
	Expressing Remorse After Found Guilty	0.08	0.94
	Prior Criminal History	-3.11	<.01
Fidgeting (2.90)	Expressing Remorse for Personal Consequences	-2.49	0.02
	Expressing Remorse After Found Guilty	-1.87	0.07
	Prior Criminal History	-4.88	<.01
Stuttering (2.18)	Expressing Remorse for Personal Consequences	-6.75	<.01
	Expressing Remorse After Found Guilty	-4.46	<.01
	Prior Criminal History	-9.42	<.01
Hand Gestures While Speaking (2.62)	Expressing Remorse for Personal Consequences	-3.86	<.01
	Expressing Remorse After Found Guilty	-2.48	0.02
	Prior Criminal History	-6.90	<.01
Speech Fillers	Expressing Remorse for Personal Consequences	-3.13	<.01
	Expressing Remorse After Found Guilty	-1.30	0.20
	Prior Criminal History	-4.73	<.01

indicated this hypothesis was not supported, as none of the predicted verbal behaviors were endorsed by a majority of the judges as being used to help them assess the sincerity of defendant remorse. Only 46.4% of judges reported using the defendant's expression of remorse for personal consequences, and only 34% of judges reported using a defendant's expression of remorse after pleading guilty as behavioral cues for evaluating the sincerity of defendant remorse. Although not presented in a Likert-scale format on the Judge's Questionnaire, and, therefore, not quantitatively analyzed, a common theme noted by judges when assessing the sincerity of defendant remorse was using the defendant's tendency to blame others for his actions or to rationalize his behavior.

Hypothesis 5b predicted certain nonverbal behaviors would be used by a majority of judges when assessing the sincerity of defendant remorse. Frequency counts were tabulated for each nonverbal behavior, and those behaviors endorsed by at least 50% of judges as being used "more often than not" or more frequently were included in the evaluation of the hypothesis. Results indicated this hypothesis was generally supported, as three of the four predicted nonverbal behaviors were endorsed by a majority of the judges as being used to help them assess the sincerity of a defendant's remorse. Specifically, 66% reported using the defendant's prior criminal history, 73.2% reported using gaze aversion, and 67.9% reported using smiling. Only 37.6% reported using increased limb movement and only 28.6% of judges reported using fidgeting.

Hypothesis 5c predicted judges would most likely use defendants' prior criminal histories when assessing for the sincerity of defendant remorse. This hypothesis was not supported. Judges were most likely (73.2%) to use gaze aversion as a behavioral cue when assessing for the sincerity of defendant remorse.

Exploratory analyses. Prior to completing the closed-ended Likert-scale questions regarding the specific behavioral cues they may use to assess remorse, judges answered open-ended questions about their methods for assessing remorse and its authenticity. Using a grounded-theory approach to analyzing the qualitative data, these responses were grouped into broader concepts based on their similarity to one another. Sometimes a single response matched multiple concepts, and, based on how the response was written, it may have been divided into multiple responses to fit the appropriate concepts. For example, the response, “their actions; their words; acceptance of responsibility” was divided into three separate responses, a) actions, b) words, and c) acceptance of responsibility. Whereas the response, “In each situation, I undertake a holistic review of the case, the defendant’ background, the defendant’s words and actions, the defendant’s future plans and the defendants’ acceptance or responsibility and willingness to be accountable for actions,” was kept intact, as it appeared to represent one broad idea due to the punctuation and phrasing.

The first four questions were geared toward identifying methods and cues that judges use to assess sincere remorse. When asked what they look for most when deciding whether the defendant is sincerely remorse, the most common theme to emerge was the use of body language and/or the defendant’s demeanor. Several judges provided general responses and merely replied, “body language” or “demeanor,” but some specific responses within this theme included an “engaged demeanor,” maintaining eye contact, “body language of shame,” and a concerned/caring facial expression. The next most common themes included speech content (e.g., apologizing to the victim, saying they are remorseful), remedial actions prior to trial/sentencing, and accepting full responsibility. Although not a common theme, another

concept that emerged was the spontaneity of the defendant's statements as well as their attitude in court.

Most of the responses to the first question were broad, but the answers to the following questions shed light on the aforementioned themes. When asked what they think remorseful defendants say (i.e., speech content), judges most commonly replied defendants say they are sorry and/or apologize to the victim. The next most common response was that remorseful defendants say they accept full responsibility for their actions. One judge noted the acceptance of responsibility will be "non-conditional" and another judge indicated the remorseful defendant says "No one else is to blame." While not as common as the themes of apologizing and accepting responsibility, the concepts of expressing regret/shame and saying nothing also emerged. Regarding the latter concept, three judges noted a remorseful defendant will often say nothing if they have an attorney.

The judges' responses to the questions regarding a remorseful defendant's body language and facial expressions clarified the broader theme of body language/demeanor. The most common theme for body language was "defeated" (e.g., "beaten down," "submissive," "weak") while the most common theme for facial expressions was "sad" (e.g., "tearful," "sorrowful," "sad and humble"). The next two common themes for body language were "open/relaxed" and "anxious/restrained" (e.g., "guarded," "timid"), while another concept that emerged was "assured." The two remaining themes for facial expressions were "scared," and "serious."

Four of the questions were geared toward identifying methods and cues judges use to assess the sincerity of remorse. When asked how they can tell whether defendants are feigning remorse, one prevalent theme that was more endorsed than others did not emerge. Instead, several smaller concepts emerged and included flippant emotions (e.g., "crying – and looking to

others to make sure they see them crying” “overly dramatic”), blaming others for their behavior, providing prepared statements, and excessive movement (e.g., “flipping hands,” shifting around). In fact, the largest proportion of responses was idiosyncratic and did not fit into concepts. For example, one judge responded the defendant is inattentive, whereas another judge stated the defendant appears unimpressed by the authority of the court, while another judge said it is when a defendant speaks.

When asked what defendants say when they are feigning remorse, the most common theme to emerge was empty apologies. Several judges indicated that defendants who feign remorse often say they are sorry but they add a caveat to their apology (e.g., “I’m sorry, but...”). The next most common theme was not accepting full responsibility by placing blame on others or justifying their behavior. Less common themes to emerge were saying nothing, bargaining (e.g., “I’ll do anything...,” “If you’ll just let me out...”), and self-promotion (e.g., “Go on and on about themselves and how they have discovered religion and are saved”).

In response to the facial expressions and body language exhibited by defendants who are feigning remorse, one common theme did not emerge. Instead, several smaller concepts were identified. Judges indicated defendants who are feigning remorse often have facial expressions that are “expressionless,” “erratic,” (e.g., “inappropriately [yet temporarily] emotional,” “one minute he/she cries and when he/she doesn’t get sentence hoped for he/she gets angry”), “insincere,” and “angry.” Their body language tends to be “closed/guarded,” “tense,” “excessive” (e.g., “fidgety,” “jittery”) and “flippant.” Other responses that did not fit into a concept included “disinterested,” “mad,” and “slouchy.”

Judges provided their most valuable “evidence” for evaluating whether a defendant is sincerely remorseful or is feigning remorse. Four main themes emerged for assessing whether the

defendant is remorseful and they reflected themes that have been previously described.

According to the judges surveyed, the most valuable evidence for determining whether the defendant is sincerely remorseful is: a) remedial action is taken prior to the court date, b) their body language/demeanor (e.g., low tone, eye contact, anguished expression), c) acceptance of responsibility, and/or d) their statements/apologies made in court. The most valuable “evidence” for determining whether a defendant is feigning remorse is the presence of negative actions prior to the court date or sentencing (e.g., “lack of cooperation with law enforcement”, prior criminal history, “lack of outward acts of contrition prior to sentencing”). Less common themes included prepared statements, statements made after arrest, behavior that is inconsistent with their statements, concern for personal consequences, and body language (e.g., lack of eye contact, lack of emotion).

Finally, the judges were asked to provide any other methods they use for assessing the sincerity of defendant remorse. The most common method identified by the judges for evaluating the presence *and* sincerity of defendant remorse was the integration of behaviors and statements. For example, one judge stated, “I observe his appearance and evaluate his responses to counsel and the court,” while another judge responded, “I maintain eye contact with the defendant while taking a guilty plea and listen to what is said, the tone of voice, and demeanor.” Other, less common, themes that emerged were simply observing the behaviors or attending to the statements but not necessarily integrating the two. A few judges commented they rely on their intuition and/or years of experience to determine whether a defendant is lying to them. Finally, a minority of judges indicated they have no techniques for assessing the sincerity of remorse or they are unable to tell when a defendant is feigning remorse.

DISCUSSION

Study 1

Behavioral cues for authentic remorse. Various articles (Scher & Darley, 1997; Ward, 2006; Weisman, 2004; Wood & MacMartin, 2007) have cited a bowed head, crying, apologetic statements, an admission of guilt, a commitment not to recidivate, reparation to the victim, and an acceptance of guilt/responsibility as behavioral cues for authentic remorse. These behaviors, however, have not been empirically validated as reliable indicators of remorse. In the results of the current study, none of the aforementioned behaviors were exhibited frequently by participants when telling stories in which they felt remorseful. One explanation for this discrepant finding is that participants did not feel comfortable expressing remorse in a staged laboratory setting. This explanation is supported by the frequent observation of rigid posture (the only behavior coded as being exhibited more often than not). The investigator also detected that participants did not frequently become affectively engaged in their stories. However, one might expect to observe verbal statements (e.g., apologies, admissions of guilt, offers of reparation) even if no affect is exhibited. No such observations were made in the current study, which suggests that some of the behaviors thought to be associated with remorse are not exhibited consistently or frequently by individuals who are remorseful.

Another consideration for participants' minimal display of remorse is the context of their stories. In a majority of the stories, the seriousness of the harm caused to the victim was minimal in comparison to criminal acts. Therefore, observers' expectations for remorseful expressions may need to be flexible depending on the context of the transgression. Furthermore, a standard

set of behaviors may not be diagnostic of a remorseful individual if presentations of remorse vary with the seriousness of the transgression. On the other hand, it is possible that the same set of behaviors are displayed by all individuals who are remorseful, but the frequency and intensity of those behaviors fluctuate depending on the severity of the harm caused.

Behavioral cues for exaggerated remorse. No research studies exist evaluating behavioral cues for exaggerated remorse, so identifying verbal and nonverbal behaviors that are empirically associated with exaggerated remorse was an exploratory goal of this study. Based on a study examining exaggerated affect (Salekin et al., 1995), it was expected that participants who felt remorseful for their behaviors would exhibit an excessive display of remorse. However, results from the current study did not support that supposition. The only behavior participants engaged in more frequently when exaggerating remorse versus expressing genuine remorse was fidgeting. Despite receiving specific instructions to convince the observer they were remorseful for their behaviors, participants did not augment their verbal and nonverbal behaviors to accomplish that task. This lack of exaggerated remorse might also be explained by discomfort felt by the participants. Another explanation is that the participants' motivation for exaggerating remorse was minimal. During the debriefing session, many participants revealed they would have "played up" their remorse had they been in front of a judge or facing legal consequences.

Behavioral cues for feigned remorse. An extant amount of research documents verbal and nonverbal behavioral changes exhibited by individuals who are being deceptive. However, only one study has examined behaviors associated with feigned remorse (ten Brinke et al., 2011). The deception literature cites shorter responses with fewer details, decreased limb movement, and increased speech errors as behavioral cues of lying (Strömwall et al., 2004; Vrij et al., 2000; Zuckerman et al., 1981), whereas ten Brinke et al. only identified speech hesitations and a rapid

transition between positive and negative emotions as being empirically related to feigned remorse.

The results of the current study do not support the general deception literature but are somewhat consistent with ten Brinke et al.'s research. Unlike the deception literature, only one nonverbal behavior (rigid posture) was frequently observed among participants who were being deceptive. Similar to ten Brinke and her colleagues' work, individuals in the current study did not display stereotypical deceptive behaviors when feigning remorse. However, ten Brinke et al.'s study found that individuals had more speech hesitations and they transitioned rapidly from extreme positive and negative emotions when feigning remorse; and these behaviors were not observed in this study. The current results, along with ten Brinke et al.'s research, support the notion that variability exists in deceptive behaviors across the content of lies and that deceptive behavior needs to be examined within the context of a specific emotion (DePaulo, 2003; Porter et al., 2008).

As mentioned previously, it is questionable whether these results accurately reflect behaviors typically associated with feigned remorse because it is possible the participants did not feel comfortable expressing remorse in a controlled laboratory setting. Sporer and Schwandt's (2006; 2007) studies examining college students' deception about feelings and facts found they were less likely to engage in certain nonverbal behaviors (e.g., illustrators, nodding, eye contact) when lying about feelings and facts as opposed to just facts. Therefore, one explanation for participants' infrequent display of the verbal and nonverbal behaviors is because they were telling stories that involved feelings. However, it is also possible other variables explain the limited behaviors, including the participants' overall comfort level in sharing and displaying feelings; inherent differences between college students and defendants; or motivation for lying.

Despite studies that have found no significant differences in deceptive behaviors between students and offenders (Porter et al., 2008; Sporer & Schwandt, 2006), the feedback provided by the participants coupled with muted affective displays observed by the investigator suggests individuals are more motivated to express remorse when confronted by a judge who has the ability to reduce their punishment for legal charges. Therefore, it is questionable whether students are an adequate representation for a criminal population in studies investigating defendant behavior, particularly expressions of remorse.

Gender differences in expressing remorse. The results of the current study suggest women and men express remorse differently for a subset of verbal and nonverbal behaviors. When expressing genuine remorse, women were more likely to smile and men were more likely to shift posture. When expressing exaggerated or feigned remorse, women were more likely to exhibit empathy, express remorse for personal consequences, and offer reparation to the victim. These results suggest women are more likely to increase their verbal behaviors when exaggerating or feigning remorse than men. However, it should be noted that none of these behaviors were frequently exhibited by men or women when expressing authentic, exaggerated, or feigned remorse. Therefore, the aforementioned differences in their behaviors may not be observable by laypersons.

Behavioral differences as a function of initial level of remorse. The literature suggests individuals who are remorseful for their actions behave differently than those who are not remorseful for their behaviors (Gold & Weiner, 2000; Sundby, 1998; Wood & MacMartin, 2007). This study's hypotheses regarding behavioral differences between remorseful and non-remorseful individuals were partially supported. As predicted, individuals who felt remorseful were more likely to express an admission of guilt and a commitment not to recidivate compared

to individuals who did not feel remorseful. Although not hypothesized, remorseful individuals were also more likely to express empathy for the victim whereas non-remorseful individuals were more likely to justify their behaviors. Not supported were the hypotheses that remorseful participants would be significantly more likely than non-remorseful participants to bow their heads and apologize.

Although these behavioral differences between remorseful and non-remorseful participants are statistically significant, they may be too minor to be detected by laypersons. Most of the behaviors were exhibited infrequently by both remorseful and non-remorseful participants, so judges may have difficulty observing differences in those behaviors. However, these behavioral differences might represent the behaviors most likely to be noticeably different in a courtroom setting. An overarching theme identified during debriefing sessions was that participants who felt remorseful would have been motivated to be more verbally and affectively expressive in a courtroom setting, but this same sentiment was not expressed by individuals who felt no remorse. Noteworthy is that all of the significant behavioral differences detected between remorseful and non-remorseful individuals consisted of changes in verbal behaviors. There were no nonverbal behavioral differences between remorseful and non-remorseful individuals.

Behavioral differences as a function of authenticity of story. As mentioned in the above paragraph, there were some behavioral differences between remorseful and non-remorseful participants when providing their baseline stories. It was also hypothesized that individuals would exhibit or endorse different behaviors when exaggerating or feigning their remorse compared to their baseline presentation. This hypothesis was partially supported. As predicted, when exaggerating or feigning remorse, participants exhibited behaviors associated with remorse more frequently compared to when they provided the baseline version of their

stories. However, none of the specific predicted behavioral changes were supported by the current study. Instead, individuals expressed empathy and a commitment not to recidivate to a greater degree when exaggerating or feigning remorse; and they were less likely to smile or justify their behaviors. These findings are not consistent with the deception literature (Strömwall et al., 2004; Vrij et al., 2000; Zuckerman et al., 1981) that suggests individuals exhibit more speech errors and less limb movement when lying. However, as previously suggested, it is likely that deceptive behavior varies across the content of lies. These results add to ten Brinke et al.'s study examining behavioral changes between authentic and feigned remorse, as it examined common legal behaviors (e.g., justifying behavior, empathy for victim) that defendants are likely to engage in when facing a judge.

Despite these behavioral differences being statistically significant, they may not be easily observed by laypersons. Although many participants expressed having difficulty “faking” or exaggerating remorse, most of them also confessed they would have been more motivated to exaggerate or fake remorse in a courtroom setting. Therefore, the behavioral differences observed in the current study are potentially the behaviors individuals feel most comfortable manipulating or exaggerating; thus, they serve as a basis for directing judges to the behaviors that are more likely to be exaggerated or feigned. However, these behavioral differences are probably not exhaustive. During debriefing sessions, a majority of the female participants and some male participants indicated they would try to cry in front a judge to demonstrate they were remorseful for their behavior.

Accuracy of predicting behavioral changes. Based on the literature (Vrij et al., 2001), it was hypothesized that participants would be more aware of their verbal behaviors and, therefore, more accurate in identifying verbal behavioral changes between their baseline story

and their exaggerated/feigned story. As predicted, participants accurately identified more verbal behavioral changes than nonverbal behavioral changes. They correctly recognized changes in apologizing, making a commitment not to recidivate, and justifying their actions. The nonverbal behavioral change they accurately noted was smiling. Despite being more aware of their verbal behavioral changes, participants' overall insight into how their behavior was similar or different between their two stories was limited. Furthermore, exploratory analyses revealed they tended to overestimate how frequently they portrayed both verbal and nonverbal behaviors associated with remorse. Such discrepancies suggest it may be difficult to compile a standard set of behaviors associated with exaggerated or feigned remorse because individuals may not even be aware of what they are doing differently when attempting to exaggerate or feign remorse.

Behavioral differences between expressions of exaggerated and feigned remorse. An exploratory goal of the current study was to identify behavioral differences between individuals who are truly remorseful but are exaggerating their remorse and individuals who are not remorseful and are feigning remorse. Results indicated there are some verbal behavioral differences between these two types of individuals. Participants who exaggerated remorse were more likely to apologize and offer reparations but less likely to justify their behaviors compared to participants who feigned remorse. Prior research (Salekin et al., 1995) has suggested observers are likely to think an individual is “faking remorse” when they portray an inappropriately high level of affect; and ten Brinke et al. (2011) posited the main difference between someone's expression of fabricated remorse compared to their expression of genuine remorse is the portrayal of extreme emotions. However, these results indicate individuals who express the most remorse are genuinely remorseful but are exaggerating their feelings.

Strengths and weaknesses. The methodology implemented to identify specific behavioral cues of authentic, exaggerated, and feigned remorse is one of the strengths of this study. Previous studies have attempted to identify behaviors with anecdotal evidence (Ward, 2006) and/or through judges' statements in trial transcripts (Wood & MacMartin, 2007) and in surveys (Slovenko, 2006); however, such methodology does not account for the individual's initial and actual feelings of remorse. The current design allowed investigators to know whether the individuals were remorseful for an event and to what degree they felt remorseful. Another methodological strength was having participants tell a personally-relevant story. Research examining deception often entails participants falsely recounting a fictional and simplistic story which decreases the evocation and salience of emotional responses. By having participants provide stories about personal experiences, these limitations were addressed because it increased the external validity as well as the potential for eliciting emotionally-provocative responses. ten Brinke et al's (2011) methodology was similar in that individuals told personally relevant stories and rated their initial level of remorse; however, participants told one story in which genuine remorse was expressed and a different story in which remorse was fabricated. The current methodology required the individual to recount the same story, which increased the validity of measuring the behavioral changes between genuine remorse, exaggerated remorse, and feigned remorse. Variability attributed to different stories was also reduced.

Coding the video-taped behaviors and obtaining ratings from observers is another methodological strength of the study. Had participants merely been asked to recount the behaviors they believed they displayed, a wealth of information would have been overlooked. As discussed previously, participants significantly overestimated how frequently they exhibited certain verbal and nonverbal behaviors. Using a methodology of coding verbal and nonverbal

behaviors also sets this study apart. It is one of only two studies to analyze remorse and feigned remorse at the idiosyncratic behavioral level.

A coding methodology is only as good as its coding scheme and its raters. Another strength of the current study was the well-defined coding scheme that was thoroughly developed through iterations of literature reviews and multiple training sessions with the coders. On that same note, the coders' good interrater reliability was arrived at through detail-oriented training sessions and continual monitoring. Having good interrater reliability reduces doubt that the results are due to variance among the raters.

Although the study was methodologically strong, some limitations were present. First, participants told their story two times and they were specifically asked questions aimed at evoking an emotional response. This created some artificiality and reduces external validity because by telling the story two times participants had the opportunity to practice and "improve" their exaggerated or feigned remorse presentation. Also, by eliciting emotional statements through directed questioning, one can doubt whether the participant would have spontaneously exhibited the same remorseful behaviors. Although these design issues initially appear to be limitations of the study, they are mitigated by the natural course of legal procedure. Attorneys will often "coach" their clients regarding how to act and what to say when in court, so defendants' emotional reactions have been tainted by specific verbal and nonverbal behavioral suggestions. In fact, one judge noted, "a defendant's behavior and body language in court simply are not an accurate 'measuring stick' to determine whether or not he or she is remorseful" because they have likely modified their demeanor after speaking to their attorney. Such coaching is similar to this study's decision to ask pointed questions regarding how sorry and remorseful they felt for their behavior. Attorneys will also have their client repeat their story

multiple times to ensure it is credible; therefore, having the participant repeat their story a second time does not necessarily diminish external validity.

The laboratory setting in which the data were obtained decreased the ecological and external validity of the study, which presented a significant limitation. Although prior research suggested no significant differences existed between college students and criminals when having a high versus low motivation to lie (Mann, 2001; Porter et al., 2008; Vrij & Mann, 2001), the current results suggest otherwise. Responses obtained from participants during the debriefing sessions indicated they would have behaved differently and attempted to be more visibly remorseful had the consequences been direr (e.g., telling their story to a judge and facing potential legal consequences). Therefore, a significant limitation likely affecting the baseline frequency of verbal and nonverbal behaviors observed appears to be the decision to obtain the stories in a laboratory setting.

Study 2

A consensus among judges? As predicted, a consensus existed among the judges for a greater number of behavioral cues used for assessing the *presence* of remorse as opposed to the *sincerity* of the remorse. These results suggest judges have similar ideas for what comprises remorse or what remorse “looks like,” which supports prior research and the data gathered during the pilot study. Judges’ responses to the open-ended questions regarding how they recognize remorse were also more consistent than their responses to questions asking how they recognize feigned remorse. Despite expressing agreement for a select number of behavioral cues that can be used to assess remorse, judges did not present a unified front regarding their approach for assessing remorse and the specific behaviors they use to help guide their decisions. There were more behaviors than not for which the judges did not share a consensus, and qualitative

data suggested judges might obtain opposite meanings for the same behavior. For example, a common theme among the judges for assessing remorse was to examine their body language/demeanor; however, some judges perceived anxious body language to be an indicator of remorse whereas other judges perceived anxious body language to be an indicator of feigned remorse.

One potential explanation for judges' idiosyncratic approaches to assessing remorse is the varying degrees of importance they place on the role of remorse in making verdict and sentencing decisions. As predicted, most judges in the study endorsed considering remorse in less than 25% of their cases. However, approximately 22% of the judges reported considering remorse in 51-75% of their cases and approximately 10% of the judges reported considering remorse in 76-100% of their cases. Perhaps judges who are more likely to incorporate remorse into their decisions are more attuned and attentive to displays of remorse. A review of the questionnaires indicated those judges who consider remorse in 76-100% of their cases had fully completed the questionnaire and had provided lengthy responses to the open-ended questions. Therefore, they might have a better-defined and more thoroughly thought-out plan for assessing remorse than a judge who is not inclined to consider remorse as a factor in his or her decision.

Behavioral cues for assessing remorse. Qualitative data from the pilot study and previous research suggested judges are more prone to rely on context-specific legal behaviors (e.g., accepting responsibility for the crime, pleading guilty, prior criminal history, apologies to the victims) when assessing for the presence of remorse as opposed to relying on general verbal and nonverbal behavioral cues for remorse (e.g., crying, general apologies, bowed head, sad facial expressions). As predicted, the results from the current study were consistent with prior research and indicated that judges were more likely to rely on context-specific legal behaviors

when making decisions about defendant remorse. Judges were significantly more likely to use a defendant's acceptance of responsibility, apologetic statements to the victim, attempts to rectify his or her wrong behavior prior to the court date, and expressions of empathy toward the victim more than the general verbal and nonverbal behaviors associated with remorse. These context-specific legal behaviors were also the same behaviors endorsed by greater than 50% of the sample as being used for assessing remorse. An interesting result was that even though a guilty plea was endorsed by at least 50% of the judges as evidence a defendant is remorseful, it was not used significantly more frequently than general verbal and nonverbal behaviors for assessing remorse. The literature (Ward, 2006; Weisman, 2004; Wood & MacMartin, 2007) generally cites a guilty plea as a primary behavioral indicator of remorse.

It is not surprising the context-specific legal behaviors were used by a majority of the judges and were significantly more likely to be used than general verbal and nonverbal behaviors. Such behaviors are the context-specific equivalent to behaviors that are typically associated with apologies and, subsequently, with remorse (e.g., offer of reparation, apologetic statement, acceptance of responsibility) (Scher & Darley, 1997). A surprising finding was that a majority of judges did not endorse using a defendant's commitment not to recidivate as evidence for the presence of remorse. Previous research (Scher & Darley, 1997; Ward, 2006; Wood & MacMartin, 2007) examining the evaluation of remorse in both general and legal contexts has suggested an individual/defendant's promise to not commit an act again has been associated with sincere remorse. Perhaps the judges are hesitant to accept a defendant's promise not to commit the act again without evidence to suggest their behaviors are likely to change. This explanation is further supported by the finding that the behavior most likely to be used by judges when evaluating one's remorse is the defendant's attempts to rectify his wrong behavior prior to his

court date. This behavior provides judges with an objective measure on which to base their evaluation of remorse.

Overall, the majority of judges endorsed using more verbal behaviors than nonverbal behaviors when evaluating defendant remorse. In fact, a bowed head and a defendant's attempts to rectify his wrong behavior prior to the court date were the only nonverbal behavioral cues used by a majority of the judges. Despite crying being a nonverbal behavioral cue identified by several previous studies as indicative of remorse, less than half of the judges endorsed using it more often than not to evaluate defendant remorse. This finding is consistent with the results of the pilot study in which none of the judges considered crying by defendants to be evidence of their remorse. The lack of emphasis judges placed on the use of nonverbal behavioral cues is consistent with one judge's approach from the pilot study in which she refrains from using body language as a cue because she is not trained to understand the nuances of body language. She explained a verbal statement (e.g., I'm sorry) is usually more direct and clear than nonverbal behaviors. However, it appears most judges' approach to evaluating remorse is through identifying verbal behavioral cues and looking for nonverbal behaviors to support their verbal statements. For example, the behavioral cue most frequently used by judges for assessing remorse is a defendant's attempt to rectify wrong behavior before the court date. Therefore, judges appear most interested in hearing defendants accept responsibility and apologize to the victim, but they also want to see a behavioral change to support their statements.

Behavioral cues for assessing the sincerity of remorse. Although judges endorsed using more context-specific legal behaviors for assessing the presence of remorse, they were less inclined to do so for evaluating the sincerity of defendant remorse. It was predicted a defendant's prior criminal history would be the most compelling and most frequently used behavioral cue for

discerning the genuineness of remorse. In fact, the most frequently used cues were gaze aversion and smiling. This finding is consistent with research that suggests gaze aversion is the indicator most utilized by laypeople for detecting deception despite it not having any empirically-validated relation to deception (Global Detection Team, 2006; DePaulo et al., 2003, Vrij et al., 2000). Smiling is another behavior mistakenly associated with lying. Therefore, judges' decisions regarding the authenticity of defendant remorse might be misguided and based on inaccurate information. Although not the most frequently used cue, a majority of judges did endorse using a defendant's prior criminal history in evaluating the veracity of defendant remorse. Their use of defendants' criminal histories likely mirrors their approach of obtaining objective evidence to confirm or disprove a defendant's level of remorse when assessing for its presence.

No overall consensus existed among judges for evaluating the sincerity of defendant remorse. Furthermore, no one prevalent theme for assessing feigned remorse emerged from the qualitative data. Most of the verbal and nonverbal behaviors identified by the remorse literature as potential indicators of feigned remorse or deception were not used by a majority of the judges in assessing the veracity of a defendant's remorse. Such findings are consistent with Wood and MacMartin's (2007) supposition that there is "no principled basis" for assessing remorse (p. 358). A potential explanation for the lack of consensus is that many judges in the pilot and some judges in the primary study referred to using their "gut" for discerning whether a defendant is sincerely remorseful. Perhaps it is difficult for the judges to describe or report any tangible behaviors used when evaluating the genuineness of defendant remorse.

Strengths and weaknesses. A strength of the current study was the development of the Judges' Questionnaire. Judges' input was gathered via in-person interviews and through the completion of preliminary versions of the questionnaire to ensure the measure was balancing and

addressing the study's questions as well as the judges' concerns. Furthermore, judges' recommendations were used to make the measure more user-friendly and time-sensitive. The inclusion of open-ended sentences in the design of the questionnaire also encouraged a wealth of qualitative responses that provided information above and beyond that included in the closed-ended questions. For example, several judges referred to having a "gut" feeling when evaluating the sincerity of defendant remorse. Such information would not have been obtained through closed-ended questions.

Another strength of the current study was that data was gathered from judges in four different states, from both male and female judges, as well as from judges who have jurisdiction over criminal, civil, and misdemeanor charges. Therefore, the diversified sample helps generalize the results of the current study.

Although a diverse sample was obtained, the sample was limited to judges from two general geographical locations. A more geographically-diverse sample would increase the external validity of the study and could have potentially introduced new approaches for assessing defendant remorse. Another limitation regarding the sample was the risk of self-selection bias. No incentive other than baked-goods was provided to the judges, so it is possible that only judges who are inherently interested in the topic of defendant remorse responded to the questionnaire. Therefore, the methods used for assessing remorse may be skewed by participants who have generally put more thought into how they assess remorse.

General Discussion

Results from Study 1 suggest the task of developing an empirically validated set of specific verbal and nonverbal behaviors that is predictive of authentic, exaggerated, and feigned remorse is a difficult, but not impossible, task to undertake. First, individuals' displays of

remorse behaviors were minimal. Although statistically significant results suggested remorseful individuals are more likely to admit guilt, express empathy toward the victim, and make a commitment not to recidivate compared to non-remorseful individuals, these behavioral differences were likely not large enough to be observed by laypersons. Furthermore, participants' likelihood of increasing their expressions of empathy for the victim and commitment not to recidivate when they were feigning remorse was statistically significant but perhaps unnoticeable. Such small behavioral changes make it difficult to develop a standard set of behaviors for judges to use when assessing for the presence and authenticity of defendant remorse. However, the identification of such behavioral differences serves as the initial groundwork for better describing what authentic, exaggerated, and feigned remorse "looks like." Perhaps it is these behavioral differences between individuals who are sincerely remorseful and those who are feigning remorse that are more pronounced in an actual courtroom setting.

Although surprising that several stereotypical behaviors associated with remorse were displayed minimally by participants, such information can be useful for judges. Results from Study 2 indicated a majority of judges are looking for defendants to apologize, accept responsibility, bow their heads, agree to rehabilitation, and express empathy to the victim. These results are consistent with the literature (Eisenberg et al., 1998; Salekin et al., 1995; Sundby, 1998) that suggests observers expect an external display of remorse and will judge offenders as not remorseful if there is a lack of appropriate affect or stereotypical remorse behaviors. However, results from Study 1 indicate that even individuals who were sincerely remorseful displayed stereotypical remorse behaviors infrequently. These findings, considered within the context of the limitations described previously, suggest remorse is not always overt; and observers should not assume an individual is not remorseful simply because they do not exhibit

certain behaviors. During the debriefing sessions, many participants commented that it was not natural to express or exhibit feelings of remorse in a staged environment to a stranger for an event that had not occurred recently. In examining these results within the context of a sentencing hearing, defendants typically see a judge only briefly on a date occurring several months after the incident; and they generally present a scripted statement. Therefore, a defendant's lack of overt expression of remorse is understandable and would be consistent with the current results.

Another barrier to identifying a standard set of behaviors predictive of authentic, exaggerated and feigned remorse is individuals' inability to accurately recognize their own behaviors. Participants were not insightful regarding how frequently they engaged in or expressed verbal and nonverbal behaviors associated with remorse and deception. Their ratings of their behaviors suggest they intended to exhibit certain behaviors (e.g., commitment not to recidivate, apologies, expressing empathy) or assumed they did (e.g., speech errors, fidgeting); however, these behaviors were rated by observers as being displayed infrequently. Such a discrepancy makes it difficult to recognize and classify behavioral differences between authentic, exaggerated, and feigned remorse because there does not appear to be a relation between how individuals intend to behave and how they actually behave. Such a barrier might be removed if accounts of remorse are obtained relatively quickly after the event occurs because individuals' behaviors may more accurately reflect their true feelings.

Although one behavior may not be more reliable than another behavior in discriminating sincere remorse from exaggerated or feigned remorse, the more encompassing guideline of attending more to verbal behaviors instead of nonverbal behaviors appears to be a useful resource. The results from the current study revealed individuals exhibited more differences in

their verbal behaviors than nonverbal behaviors across the varying displays of remorse. The only nonverbal behavior to change was smiling, which decreased in frequency when individuals were exaggerating or feigning remorse. Greater differences and variability were observed among participants' verbal behaviors, especially between the groups' baseline levels of remorse. Such variability in behavior increases the likelihood of accurately discerning the nature of one's remorse because it is easier to recognize differences in behavior. Therefore, judges' tendency to use verbal behaviors more than nonverbal behaviors in assessing for the presence of remorse appears to be a good strategy.

By narrowing the behavioral differences between remorseful and non-remorseful individuals down to verbal behaviors and by identifying a consensus among judges for using verbal behaviors to detect the presence of remorse, the results from Study 1 and Study 2 contradict the literature that proposed remorse is idiosyncratic and cannot be assessed systematically (Ward, 2006; Wood & MacMartin, 2007). The current results are encouraging because judges' task for assessing remorse may not be as nebulous as initially presented by Ward (2006). Although broad, having a defined category of behavioral cues can help judges be more formulaic in their assessment of defendant remorse.

Despite verbal behavioral differences being a good cue for assessing whether an individual is remorseful or not, it might not be as helpful in identifying whether one is exaggerating or feigning remorse. The verbal behavioral changes exhibited by the participants between their baseline and exaggerated/feigned stories reflected an increase in behaviors that were significantly more likely to be displayed by sincerely remorseful offenders (e.g., empathy for the victim, commitment not to recidivate) compared to non-remorseful offenders. Without understanding an individual's baseline level of remorse, it may be impossible to know whether

that individual is exhibiting sincere, exaggerated, or feigned remorse. One verbal behavior that did not significantly change between participants' baseline remorse presentations and their exaggerated or feigned remorse presentations was admission of guilt. Therefore, judges can attend to whether individuals admit guilt and accept responsibility for their actions above and beyond a guilty plea. The presence of such behavior may be indicative of whether the individual is sincerely remorseful for their actions.

Perhaps judges are aware that attending to an individual's verbal behaviors is not sufficient for discriminating between sincere remorse and feigned remorse. Results indicate judges are less inclined to rely on verbal behaviors to help them assess whether the remorse is authentic compared to when they are assessing for the presence of remorse. Instead, a majority of judges reported using stereotypical cues of deception (e.g., gaze aversion and smiling) to help them make judgments about the veracity of an individual's remorse presentation. As previously mentioned, and as noted by one of the judges interviewed during the pilot study, judges may recognize the ease with which one can manipulate words; and, therefore, they are less likely to rely on verbal behaviors as cues for sincere remorse.

Although the judges' strategy of not relying singly on verbal behaviors is insightful, and supported by the results from Study 1, their inclination toward using gaze aversion and smiling to help them detect feigned remorse is not supported by the deception literature or the results from Study 1. Gaze aversion and smiling are often considered by laypeople to be good behavioral predictors of lying (Global Detection Research Team, 2006); however, those behaviors have no relation to lying (Sporer & Schwandt, 2007; Vrij et al., 2000). The results from Study 1 reinforce the deception literature because participants exhibited no difference in their gaze aversion between their baseline presentation of remorse and their exaggerated/feigned

presentation of remorse. Furthermore, gaze aversion was observed infrequently in both conditions. Although there was a significant difference in participants' frequency of smiling between their baseline story and their exaggerated/feigned story, participants actually smiled less when portraying exaggerated/feigned remorse. Therefore, in considering previous literature and the results from Study 1, judges may want to reevaluate their strategy for assessing the authenticity of an individual's remorse.

One strategy gleaned from the judges' open-ended responses and likely already being implemented by judges is examining defendants' past and current behaviors and deciding whether they are consistent with their verbal statements. A majority of judges endorsed using a defendant's prior criminal history in evaluating the sincerity of their remorse, and this objective data can be compared to verbal commitments not to recidivate. As described in the literature (Ward, 2006; Slovenko, 2006) and supported by the results from Study 1, individuals who are remorseful for their actions are more likely to make a commitment not to recidivate compared to those who are not remorseful for their actions. However, the objective evidence of a prior criminal history can help judges assess the veracity of the defendant's statement. Furthermore, most judges (91%) reported using defendants' reparative behaviors prior to their court date as evidence the defendant is remorseful for his or her behavior. Similar to how judges might use defendants' prior criminal history to confirm or discredit their verbal statements, judges can compare defendants' attempts to rectify their behavior to their verbal statements to evaluate the sincerity of their remorse.

Another strategy judges might consider employing when attempting to detect whether remorse is authentic is attending to defendants' nonverbal behaviors. Although nonverbal behaviors typically associated with remorse (e.g., head bowed, sad and pained facial expressions)

were not exhibited frequently by participants during either the baseline or exaggerated/feigned stories, these behaviors were also not increased in an effort to appear more remorseful. Based on the results from Study 1 and participants' comments during the debriefing sessions, affective states may be difficult to manipulate. Therefore, if a defendant's affective state is consistent with a stereotypical depiction of remorse, it is quite possible it is an authentic presentation. Furthermore, a common theme among judges' open-ended responses for assessing the authenticity of remorse was to observe body language.

Study 1 and Study 2 established the groundwork for evaluating specific verbal and nonverbal behavioral cues associated with remorse to better define strategies for assessing remorse. Although both studies had several strengths that increase the validity and generalizability of the results and legal applications, these findings need to be considered within the context of the studies' limitations that were discussed previously. Primarily, participants' overt presentations of remorse were likely minimized by the contrived nature of the study. Despite the measures taken to increase the ecological validity of the study (e.g., presenting the story in a witness stand, choosing a personally-relevant story), participants claimed the lack of incentive to exaggerate or feign remorse reduced their motivation and effort to change their behaviors. Given that most defendants have some incentive to be remorseful for their actions, it is expected exaggerated or feigned remorse might look somewhat different in the courtroom than it did in the current study. However, small behavioral differences were detected between individuals who were truly remorseful and individuals who were feigning remorse; and it is these differences that provide a direction for developing strategies for assessing remorse.

To address the limitations of the current study, future research should examine offenders' remorse presentations within the legal setting. Courtrooms are a public arena, so an investigator

can observe and dictate offenders' statements from the gallery of the courtroom. Attending a probation docket would enable the researcher to observe a large caseload. Qualitative analyses might reveal a pattern of statements or nonverbal behaviors exhibited by offenders. Of course, the limitation to such a design is not knowing whether the individual is sincerely remorseful. Therefore, the researcher could approach the defendants after they leave and ask them to rate the sincerity of their remorse and then compare their rating to the remorse they exhibited in the courtroom. Another approach is to create an arrangement with attorneys in which an investigator is able to observe the attorney's clients' initial statements of remorse and obtain a measure of the degree to which they feel remorseful. The investigator can then observe the defendants' statements at court to evaluate the verbal and nonverbal behavioral differences between their initial statements and the ones presented to the judge.

To evaluate the effectiveness of the suggested strategies for assessing remorse, individuals can be informed of the behavioral differences between the participants who were sincerely remorse and the participants who feigned remorse. Those individuals can then be shown the videos from the current study and tasked to discern which stories represent authentic, exaggerated, or feigned remorse by using the proposed strategies. If observers are aware of what to look for, is there a noticeable improvement in detecting who is feigning remorse? Using the same videos, while simpler, poses a threat to the validity of the study because the investigator is informing the observer to look for differences that are *known* to exist in that sample. Employing the method discussed previously of working with attorneys' clients, one can videotape a defendant's initial statement of remorse and then the statement he intends to present to the judge. Observers can then watch those videos to evaluate whether the strategies proposed in this study are accurate and applicable to a legal population.

Remorse can be an influential factor in sentencing, so it is important that judges are able to accurately assess remorse. There is minimal research about specific behaviors that are indicative of exaggerated or feigned remorse. The current studies provide a foundation on which to better understand and assess the behavioral differences between presentations of authentic, exaggerated, and feigned remorse. Understanding these differences can provide judges with better attuned strategies for discerning the nature of a defendant's remorse.

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APPENDICES

APPENDIX A

PART I

Please write about a situation that occurred ***within the past year (less than one year ago)*** in which you did something wrong, hurt someone, or caused someone else to be distressed or harmed. It is expected that these situations stirred up a lot of thoughts and emotions for you. Please try to be as descriptive as possible about your thoughts and emotions related to this situation. Do not write about stories that involve child or elder abuse.

Write about how you felt after the situation.

What did you think about your behavior?

What did you do after the situation?

How much time has passed since the story you described occurred? _____

How remorseful did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not remorseful Extremely remorseful

How guilty did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not guilty Extremely guilty

How wrong do you think your behavior was? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not wrong at all Extremely wrong

How responsible do you think you were for your behavior (i.e., was it your fault you engaged in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not responsible at all Extremely responsible

How justified was your behavior (i.e., did you have good reasons for engaging in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not justified at all Extremely justified

Write a short sentence that describes two more situations in which you did something wrong and felt remorseful about your behavior. Please include what the behavior was and whether it affected anyone else. Do not write about stories that involve child or elder abuse.

1)

2)

PART II

Please write about a situation that occurred *within the past year (less than one year ago)* in which something bad happened, someone was hurt, or someone was distressed, and you were the one *accused* of causing this harm, **BUT** you don't believe you did anything wrong. It is expected that these situations stirred up a lot of thoughts and emotions for you. Please try to be as descriptive as possible about your thoughts and emotions related to this situation. Do not write about stories that involve child or elder abuse.

Write about how you felt after the situation.

What did you think about your behavior?

What did you do after the situation?

How much time has passed since the story you described occurred? _____

How remorseful did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not remorseful Extremely remorseful

How guilty did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not guilty Extremely guilty

How wrong do you think your behavior was? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not wrong at all Extremely wrong

How responsible do you think you were for your behavior (i.e., was it your fault you engaged in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not responsible at all Extremely responsible

How justified was your behavior (i.e., did you have good reasons for engaging in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not justified at all Extremely justified

Write a short sentence that describes two more situations in which you were accused of doing something wrong, BUT you do not think you did anything bad. Please include what the behavior was and whether it affected anyone else (do not include specific names). Do not write about stories that involve child or elder abuse. Do not write about stories that might result in criminal charges being brought against you or someone else.

1)

2)

APPENDIX B

Version I

Please write about a situation in which your actions or behaviors caused someone else to be hurt, to feel distressed, or to be harmed. In addition, you feel sorry and remorseful about the behaviors or actions that occurred. These situations should involve family members, friends, or romantic partners. Write only about situations that have occurred within the last year. Do not write about situations that involved illegal activities, and do not include any names in your description.

How did you feel after the situation? How did this situation affect you emotionally?

What did you think about your behavior?

What did you do after the situation?

Were there any consequences for your behavior?

Did you attempt to make amends/repair damages/apologize with the individuals involved? If so, did you only engage in these behaviors because you were “caught?”

1) When did the situation occur? _____

2) How remorseful did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not remorseful Extremely remorseful

3) How guilty did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not guilty Extremely guilty

4) How wrong do you think your behavior was? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not wrong at all Extremely wrong

5) How responsible do you think you were for your behavior (i.e., was it your fault you engaged in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not responsible at all Extremely responsible

6) How justified was your behavior (i.e., did you have good reasons for engaging in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not justified at all Extremely justified

7) How sorry were you for engaging in the behavior? (do not consider how this behavior affected the other individuals)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not sorry at all Extremely sorry

8) How sorry were you for how your behavior affected the other individual/s involved?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not sorry at all Extremely sorry

9) Describe any actions you took to make amends for your behavior (i.e., apologize, repair damages, offer compensation).

Version II

Please write about a situation in which your behavior or actions caused someone else to be hurt, feel distressed, or be harmed, **BUT** you do **NOT** believe you are at fault or you believe your actions were justified. In addition, you do not feel sorry or remorseful about the behaviors or actions that occurred. These situations should involve family members, friends, or romantic partners. Write only about situations that have occurred within the last year. Do not write about situations that involved illegal activities, and do not include any names in your description.

How did you feel after the situation? How did this situation affect you emotionally?

What did you think about your behavior?

What did you do after the situation?

Were there any consequences for your behavior?

Did you attempt to make amends/repair damages/apologize with the individuals involved? If so, did you only engage in these behaviors because you were “caught?”

1) When did the situation occur? _____

2) How remorseful did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not remorseful Extremely remorseful

3) How guilty did you feel about the situation? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not guilty Extremely guilty

4) How wrong do you think your behavior was? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not wrong at all Extremely wrong

5) How responsible do you think you were for your behavior (i.e., was it your fault you engaged in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not responsible at all Extremely responsible

6) How justified was your behavior (i.e., did you have good reasons for engaging in the behavior)? (circle a number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not justified at all Extremely justified

7) How sorry were you for engaging in the behavior? (do not consider how this behavior affected other individuals)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not sorry at all Extremely sorry

8) How sorry were you for how your behavior affected the other individual/s involved?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not sorry at all Extremely sorry

9) Describe any actions you took to make amends for your behavior (i.e., apologize, repair damages, offer compensation).

APPENDIX C

Subject #: _____

NONVERBAL BEHAVIOR CODING SHEET

Rater: _____

1	2	3	4	5		6			
Never	Infrequently	Less often than not	More often than not	Frequently		Constantly			
1. Gaze Aversion – Eye contact is not directed toward the general direction of the camera; Looking to the left, right, up, or down				1	2	3	4	5	6
2. Head Bowed – Entire head is turned down, pointed toward the floor				1	2	3	4	5	6
3. Smiling – Corner of lips are turned upwards; lips can be open or closed Note: Lips pulled to one side are not considered smiles				1	2	3	4	5	6
4. Sad facial expressions – eyes are downturned and/or frowning and/or watery eyes Note: Flat expressions (no noticeable frowns, downturned eyes etc) are not considered sad expressions				1	2	3	4	5	6
5. Crying – Visible tears are produced				1	2	3	4	5	6
6. Trembling body movements – Body movements appear shaky (“nervous-like”) and not steady Example: While talking, the individual reaches for his or her hair and the hand is visibly shaking or trembling				1	2	3	4	5	6
7. Illustrators/gestures /Arm and hand movements – The moving of the arms and/or hands. The arm and hand movement may accompany speech to emphasize or visualize what is being said. Note: Shifts of the arms and/or hands are not considered arm/hand movements. For example if someone has their hands clasped and they unclasp their hands, or reposition their arm on a chair				1	2	3	4	5	6
8. Foot and leg movements – The moving of the feet and legs Examples: Crossing/uncrossing legs, rapid foot tapping, pulling legs up to sit on them				1	2	3	4	5	6
9. Fidgeting – Small movements that involve touching something Examples: playing with hair, grabbing/tapping pens, playing with hands (i.e. cracking knuckles, clasping/unclasping, tapping hands on table)				1	2	3	4	5	6
10. Rigid body posture - Overall body movement is limited and rigid Note: Do not try to interpret whether they were tense or relaxed. Rate this based only on the rigidity of the posture.				1	2	3	4	5	6
11. Postural shift – Movement made to change positions, leaning from one side to another				1	2	3	4	5	6
12. Worried facial expressions – Look of concern (as evidenced by a wrinkled forehead and/or a crinkled nose and/or a puckered mouth				1	2	3	4	5	6

1	2	3	4	5	6
Never	Infrequently	Less often than not	More often than not	Frequently	Constantly

	With Questions						Overall Impression					
1. Gaze Aversion	1	2	3	4	5	6	1	2	3	4	5	6
2. Head Bowed	1	2	3	4	5	6	1	2	3	4	5	6
3. Smiling	1	2	3	4	5	6	1	2	3	4	5	6
4. Sad facial expressions	1	2	3	4	5	6	1	2	3	4	5	6
5. Crying	1	2	3	4	5	6	1	2	3	4	5	6
6. Trembling body movements	1	2	3	4	5	6	1	2	3	4	5	6
7. Arm & hand movements/Illustrators/Gestures	1	2	3	4	5	6	1	2	3	4	5	6
8. Foot and leg movements	1	2	3	4	5	6	1	2	3	4	5	6
9. Fidgeting	1	2	3	4	5	6	1	2	3	4	5	6
10. Rigid body posture	1	2	3	4	5	6	1	2	3	4	5	6
11. Postural shift	1	2	3	4	5	6	1	2	3	4	5	6
12. Worried expressions	1	2	3	4	5	6	1	2	3	4	5	6

Subject #: _____ **VERBAL BEHAVIOR CODING SHEET** Rater: _____

1	2	3	4	5	6				
Never	Infrequently	Less often than not	More often than not	Frequently	Constantly				
1. Speech errors/fillers – Grammar errors, stuttering, restarting sentences, false starts, sentence fragments, fillers (i.e., ah, um, uh, you know, like) Examples: Person starts a sentence, stops, and then begins again but is talking about something else				1	2	3	4	5	6
2. Short answers – Answers are cursory, simple, usually not connected with conjunctions Examples: I did something wrong; I feel bad; I'm sorry				1	2	3	4	5	6
3. Apologetic statements – Statements that contain "sorry" and/or "apologize." These can be general apologies and/or apologies directed to the victim. NOTE: Do not include statements about one's feelings (i.e., I feel really sorry for what happened). Record such statements on 5b)				1	2	3	4	5	6
4. Expressions of empathy for victim – Statements that indicate the person understands/recognizes how the victim feels Example: "I know I hurt the person;" "I can only imagine how bad I hurt their feelings"				1	2	3	4	5	6
5a. Remorse for personal consequences – Expressing remorse and/or regret for the consequences suffered/being caught/how it affected the person's (not the victim's) life or family Examples: I feel bad that she found out I was spreading rumors; I'm upset that I lost my best friend				1	2	3	4	5	6
5b. General remorse – Expressions of remorse/regret for engaging in the hurtful behavior. Expressions of how the individual feels badly for what happened. Examples: I feel really bad for what happened; I regret doing what I did				1	2	3	4	5	6
6. Admitting guilt/accepting responsibility: Statements that indicate the person committed a wrongful act; the individual acknowledges his/her role in the wrong behavior; the person indicates they are responsible for the wrongful behavior Note: Rate how frequently they accept responsibility for their actions. Do not base the rating on the degree to which they take responsibility.				1	2	3	4	5	6
7. Commitment to not recidivate – Statements that contain a promise or an intention to not engage in similar harmful/wrong behavior				1	2	3	4	5	6
8. Promise to make reparations – Statements that indicate the person tried or will try to rectify the wrong behavior (i.e., providing compensation, make amends with friends, attempt to improve a situation)				1	2	3	4	5	6
9. Unsteady voice – Voice is shaky, "nervous-like," wavering, weak				1	2	3	4	5	6
10. Detailed statements – Statements are filled with context-specific details (i.e., roles of people involved, time-frame, location, concurrent events) Example: About 3 years ago, I was a freshman in college, and my pot-luck roommate decided to cheat on a chemistry test. Since I was her best-friend, she decided to tell me this, but she made me promise I wouldn't tell anyone				1	2	3	4	5	6
11. Long response latencies – Longer than normal (uncomfortably long) pauses between statements				1	2	3	4	5	6
12. Justifying the behavior – Statements that indicate the person did not think they did anything wrong even though they committed a harmful or wrong behavior Example: I told her secret because I didn't think it would hurt anyone				1	2	3	4	5	6

1	2	3	4	5	6
Never	Infrequently	Less often than not	More often than not	Frequently	Constantly

	With Questions							Overall Impression					
1. Speech errors/fillers	1	2	3	4	5	6		1	2	3	4	5	6
2. Short answers	1	2	3	4	5	6		1	2	3	4	5	6
3. Apologetic Statements	1	2	3	4	5	6		1	2	3	4	5	6
4. Expressions of Empathy for Victim	1	2	3	4	5	6		1	2	3	4	5	6
5a. Remorse for personal consequences	1	2	3	4	5	6		1	2	3	4	5	6
5b. General Remorse	1	2	3	4	5	6		1	2	3	4	5	6
6. Admitting guilt/accepting responsibility	1	2	3	4	5	6		1	2	3	4	5	6
7. Commitment to not recidivate	1	2	3	4	5	6		1	2	3	4	5	6
8. Promise to make reparation	1	2	3	4	5	6		1	2	3	4	5	6
9. Unsteady Voice	1	2	3	4	5	6		1	2	3	4	5	6
10. Detailed statements	1	2	3	4	5	6		1	2	3	4	5	6
11. Long response latencies	1	2	3	4	5	6		1	2	3	4	5	6
12. Justifying behavior	1	2	3	4	5	6		1	2	3	4	5	6

Remorseful	1 Not at all	2	3	4	5	6 Completely
Feigned Remorse	1 Not at all	2	3	4	5	6 Completely

APPENDIX D

Demographic Questionnaire

Age: _____

Gender: _____

Race: _____

STORY #1

Please indicate the level of remorse you think you portrayed in the first story you told (circle a number).

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not Remorseful Extremely Remorseful

How accurately did you portray your true feelings and emotions?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not Accurately Extremely Accurately

STORY #2

Please indicate the level of remorse you think you portrayed in the second story you told.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not Remorseful Extremely Remorseful

How successful were you at convincing the observer you were truly remorseful for your behavior in the second story?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Not Successful Extremely Successful

Using the following scale, how much did you engage in the behaviors listed below?
Please indicate how much you engaged in each of the behaviors during STORY 1 before you do so for STORY 2 (i.e., provide a response for ALL the behaviors listed in the STORY 1 column before responding to the behaviors listed in the STORY 2 column)

STORY 1	STORY 2
<input type="text"/> Crying	<input type="text"/> Crying
<input type="text"/> Accepting Responsibility	<input type="text"/> Accepting Responsibility
<input type="text"/> Relaxed body posture	<input type="text"/> Relaxed body posture
<input type="text"/> Head bowed	<input type="text"/> Head bowed
<input type="text"/> Unsteady voice	<input type="text"/> Unsteady voice
<input type="text"/> Speech fillers (i.e., ah, um, you know, like)	<input type="text"/> Speech fillers (i.e., ah, um, you know, like)
<input type="text"/> Worried/concerned facial expressions	<input type="text"/> Worried/concerned facial expressions
<input type="text"/> Gaze aversion	<input type="text"/> Gaze aversion
<input type="text"/> Smiling/Laughing	<input type="text"/> Smiling/Laughing
<input type="text"/> Fidgeting	<input type="text"/> Fidgeting
<input type="text"/> Hand/Arm movements	<input type="text"/> Hand/Arm movements
<input type="text"/> Hand gestures while talking	<input type="text"/> Hand gestures while talking
<input type="text"/> Trembling/nervous-like body movements	<input type="text"/> Trembling body/ nervous-like movements
<input type="text"/> Sad facial expression	<input type="text"/> Sad facial expression
<input type="text"/> Apologizing (in general)	<input type="text"/> Apologizing (in general)
<input type="text"/> Apologizing to the victim	<input type="text"/> Apologizing to the victim
<input type="text"/> Commitment to not do act again	<input type="text"/> Commitment to not do act again
<input type="text"/> Tense body posture	<input type="text"/> Tense body posture
<input type="text"/> Short answers	<input type="text"/> Short answers
<input type="text"/> Stuttering	<input type="text"/> Stuttering
<input type="text"/> Admitting guilt	<input type="text"/> Admitting guilt
<input type="text"/> Expressing remorse for personal consequences	<input type="text"/> Expression remorse for personal consequences
<input type="text"/> Providing specific details about story	<input type="text"/> Providing specific details about story
<input type="text"/> Foot/Leg movements	<input type="text"/> Foot/Leg movements
<input type="text"/> Shifting posture	<input type="text"/> Shifting posture
<input type="text"/> Expressing empathy for victim	<input type="text"/> Expressing empathy for victim
<input type="text"/> Promise to make amends/compensation	<input type="text"/> Promise to make amends/compensation
<input type="text"/> Long pauses between sentences	<input type="text"/> Long pauses between sentences
<input type="text"/> Silence	<input type="text"/> Silence
<input type="text"/> Justifying the behavior	<input type="text"/> Justifying the behavior

APPENDIX E

UNIVERSITY OF ALABAMA

You are being asked to take part in a research study entitled *Exploring Remorse Behaviors*. The study is being conducted by Desiree Adams, M.A. and is being supervised by Stanley Brodsky, Ph.D. who is a professor and a licensed clinical psychologist.

What is this study about and why is it important?

This study is examining the way individuals think about and react to situations in which harm was caused to another individual. A better understanding of how individuals portray their reactions to incidents will help judges, jurors, parole boards and probation officers more accurately understand defendants' behaviors.

Why have I been asked to take part in this study?

Participants for this study are being recruited from the Psychology Subject Pool. You are enrolled in an Introductory Psychology course and elected to participate in the Psychology Subject Pool to earn your research credits; therefore, you have been recruited to participate in this study. Although the results of this study will be applied to the legal system and defendants, prior research has indicated that college students display similar emotions and reactions compared to a defendant population.

How many people besides me will be in this study?

Approximately 150 other people will be in this study.

What will I be asked to do in this study?

If you decide to be in this study, you will be asked to do these things:

- 1.) After reading the research information sheet, you will provide a written description of an incident of your own choosing in which your actions caused someone else to be harmed or feel distressed. You will also answer questions regarding how you felt about this situation.
- 2.) Provide a video-recorded verbal description of this situation and how you subsequently reacted to the situation. You might be asked follow-up questions to elicit more details about your reactions.
- 3.) Provide a second video-recorded verbal description of the same situation, but for this recording you will be asked to convey as much remorse as possible for the situation. You might be asked follow-up questions to elicit more details about your reactions.
- 4.) Complete a follow-up questionnaire about your experience providing a verbal account of the situation.
- 5.) Participate in a debriefing session with the primary investigator to learn about the hypotheses of the current study as well as to provide feedback about your participation in the study and to ask any remaining questions.

If you are unable to complete the study for any reason, including not being able to discuss an incident in which your actions caused someone else harm, you will not be penalized and will still receive full research credit.

How much time will I spend being in this study?

Being in this study will take about forty-five (45) minutes.

Will I be paid for being in this study?

You will not be paid for being in this study.

Will being in this study cost me anything?

There will be no cost to you except for your time in completing the study.

What are the benefits (good things) that may happen to me if I am in this study?

Although benefits cannot be promised in research, it is possible that you will gain insight into how you have emotionally, cognitively, and behaviorally processed prior situations as well as how you present yourself to others when recounting your version of events. You will also receive course credit.

What are the benefits to scientists or society?

This study is the first step toward developing a standard of behaviors that defendants display when presenting their case at trial. Therefore, this study will help judges, jurors, parole boards and probation officers more accurately understand defendants' behaviors which will, in turn, enable them to provide more just verdicts and sentences. Although one research study will not change trial procedure, your participation in this study contributes to a culmination of studies on this topic. Any patterns across these studies can be referenced to make policy and procedure recommendations to legal organizations.

What are the risks (dangers or harm) to me if I am in this study?

There are minimal foreseeable risks or discomforts involved with participating in this study. It is possible that your recollection of stories in which your behavior or actions caused someone else to be harmed or feel distressed might cause you to experience emotional discomfort. If at any point you feel uncomfortable, you may stop participating without any penalty.

How will my confidentiality (privacy) be protected? What will happen to the information the study keeps on me?

Your name will only be recorded to ensure you receive credit in your course for your participation and will be kept separate from the other study materials. The documents containing the names of participants will be destroyed once all credit has been given for participation. There will be no identifying information of any kind on the written materials or the video tapes that would allow the researcher, or anyone else, to determine which person completed the materials. All collected data will be stored in a locked office in Gordon Palmer Hall, and only the primary investigator and research assistants will review the data. Raw data will be entered into a password-protected database.

What else should I know about being video-recorded during this study?

By agreeing to participate in this study, you are agreeing to be video-recorded. However, you have the option of withdrawing from the study at any time (including during the video-recording) without penalty if you do not feel comfortable. The videotape will not have your name on it and a code number will be used to identify the tape and to protect your

confidentiality. After your participation in the study, the videotapes will be stored in a locked office in Room 404 of Gordon Palmer Hall and will be used solely for obtaining data for this research study. Only the primary investigator, the research supervisor, and the two research assistants will have access to the video for data analysis, and the research assistants will not have access to identifying information. After the data of interest have been obtained from the video, the video will be discarded.

What are the alternatives to being in this study? Do I have other choices?

The alternative is not to participate. An alternative to earning research credit for your Introductory Psychology class is to complete a written assignment. However, you must discuss this option with your instructor before the outlined deadline to be eligible to complete a paper.

What are my rights as a participant?

Taking part in this study is voluntary—it is your free choice. You may choose not to take part at all. If you start the study, you can stop at any time. Leaving the study will not result in any penalty or loss of any benefits you would otherwise receive.

The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?

If you have questions about the study right now, please ask them. If you have questions about the study later on, please contact the investigator, Desiree Adams, at adams063@crimson.ua.edu or 348-5083, or Dr. Stanley Brodsky (faculty advisor for the current study) at sbrodsky@bama.ua.edu or 348-5083. Dr. Brodsky is a licensed clinical psychologist and is available if any aspect of participation is emotionally difficult or upsetting. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-8461.

I have read this participant information sheet. The study has been explained to me. I understand what I will be asked to do. I freely agree to take part in it.

Printed Name of Research Participant

Date

Signature of Research Participant

Date

Investigator

Date

APPENDIX F

Follow-up Questions

- 1) How has (situation) touched you emotionally?
- 2) How did you feel about yourself after (situation)?
- 3) How did (hurting an individual) make you feel?
- 4) What have you done to make (situation) better?
- 5) How has (situation) changed you?
- 6) Would you do anything differently?
- 7) How do you think (situation) affected (said individual)?
- 8) How responsible do you feel for (situation)?

APPENDIX G

Debriefing

Thank you for your participation in this study. As mentioned at the beginning, the purpose of this study is to assess the thoughts, emotions, and behaviors that individuals experience in reaction to causing harm or distress to someone else. Specifically, we are interested in the presence of remorse. The ultimate goal of this study is to examine the verbal and nonverbal behaviors that people utilize when trying to honestly express remorse, as well as those behaviors that are used when individuals try to feign remorse.

This study consisted of two conditions. In one condition we asked participants to tell us about an incident for which they felt remorse, and in the other condition we asked participants to tell about an incident for which they felt no remorse. The purpose of us asking you to tell the story a second time was to see what behaviors people *think* are associated with remorse and are likely to use when they are trying to feign remorse.

We hope to establish a standard of behaviors that can be associated with sincere and feigned remorse to help judges more accurately assess this emotion when it is portrayed by defendants.

As a reminder, the videos that were filmed for this study will be used for research purposes only, and will be viewed by only the primary investigator, the research supervisor, and the research assistants. The videos will be deidentified using a research code, so no personal information will be associated with your video. The videos will be destroyed after the data has been collected and analyzed.

Do you have any questions about your participation in this study?

Feedback Questions

How did you feel participating in this study?

Did you feel natural giving your statement, or did it feel contrived?

Do you think your statement/behaviors accurately reflected how you feel?

Was it hard for you to exaggerate/fake your emotions/behaviors?

What behaviors did you try to change or engage in to convince me you were remorseful?

Would you have done anything differently if you were in front of a real judge and facing legal consequences for your act?

APPENDIX H

NONVERBAL BEHAVIOR CODING SHEET

1	2	3	4	5	6
Never	Infrequently	Less often than not	More often than not	Frequently	Constantly

1. Gaze Aversion – Eye contact is not directed toward the general direction of the camera; Looking to the left, right, up, or down	1	2	3	4	5	6
2. Head Bowed – Entire head is turned down, pointed toward the floor	1	2	3	4	5	6
3. Smiling – Corner of lips are turned upwards; lips can be open or closed Note: Lips pulled to one side are not considered smiles	1	2	3	4	5	6
4. Sad facial expressions – eyes are downturned and/or frowning and/or watery eyes Note: Flat expressions (no noticeable frowns, downturned eyes etc) are not considered sad expressions	1	2	3	4	5	6
5. Crying – Visible tears are produced	1	2	3	4	5	6
6. Trembling body movements – Body movements appear shaky (“nervous-like”) and not steady Example: While talking, the individual reaches for his or her hair and the hand is visibly shaking or trembling	1	2	3	4	5	6
7. Arm and hand movements – The moving of the arms and/or hands Note: Shifts of the arms and/or hands are not considered arm/hand movements. For example if someone has their hands clasped and they unclasp their hands, or reposition their arm on a chair	1	2	3	4	5	6
8. Illustrators/gestures: Hand movements that accompany speech, emphasize speech, or help visualize speech	1	2	3	4	5	6
9. Foot and leg movements – The moving of the feet and legs Examples: Crossing/uncrossing legs, rapid foot tapping, pulling legs up to sit on them	1	2	3	4	5	6
10. Fidgeting – Small movements that involve touching something Examples: playing with hair, grabbing/tapping pens, playing with hands (i.e. cracking knuckles, clasping/unclasping, tapping hands on table)	1	2	3	4	5	6
11. Tense body posture – Overall body movement is limited and rigid	1	2	3	4	5	6
12. Postural shift – Movement made to change positions, leaning from one side to another	1	2	3	4	5	6
13. Silence – No talking, utterances	1	2	3	4	5	6

Note: nonverbal responses (head nodding/shaking) are not considered silence						
14. Worried facial expressions – Look of concern (as evidenced by a wrinkled forehead and/or a crinkled nose and/or a puckered mouth)	1	2	3	4	5	6
15. Relaxed body posture – Overall body movement is fluid	1	2	3	4	5	6

VERBAL BEHAVIOR CODING SHEET

	1	2	3	4	5	6
	Never	Infrequently	Less often than not	More often than not	Frequently	Constantly
1. Speech errors – Grammar errors, stuttering, restarting sentences, false starts, sentence fragments Examples: Person starts a sentence, stops, and then begins again but is talking about something else	1	2	3	4	5	6
2. Speech fillers – ah, um, uh, you know, like, etc	1	2	3	4	5	6
3. Short answers – Answers are cursory, simple, usually not connected with conjunctions Examples: I did something wrong; I feel bad; I'm sorry	1	2	3	4	5	6
4. Apologetic statements – Statements that contain “sorry” and/or “apologize” Note: Do not count apologies directed toward the victim/person who was wronged	1	2	3	4	5	6
5. Apologetic statements to the victim – Statements that are directed to the person who was wronged that contain “sorry” and or “apologize”	1	2	3	4	5	6
6. Expressions of empathy for victim – Statements that indicate the person understands/recognizes how the victim feels Example: “I know I hurt the person;” “I can only imagine how bad I hurt their feelings”	1	2	3	4	5	6
7. Remorse for personal consequences – Expressing remorse and/or regret for the consequences suffered/being caught/how it affected the person's (not the victim's) life or family Examples: I feel bad that she found out I was spreading rumors; I'm upset that I lost my best friend	1	2	3	4	5	6
8. Admitting guilt: Statements that indicate the person committed a wrongful act	1	2	3	4	5	6
9. Accepting responsibility: Statements that indicate the person made a purposeful decision to act in a certain way; acknowledgement of the person's role in wrong/harmful behavior	1	2	3	4	5	6
10. Commitment to not recidivate – Statements that contain a promise or an intention to not engage in similar harmful/wrong behavior	1	2	3	4	5	6
11. Promise to make reparations – Statements that indicate the person tried or will try to rectify the wrong behavior (i.e., providing compensation, make amends with friends, attempt to improve a situation)	1	2	3	4	5	6
12. Unsteady voice – Voice is shaky, “nervous-like,” wavering, weak	1	2	3	4	5	6
13. Detailed statements – Statements are filled with context-specific details (i.e., roles of people involved, time-frame,	1	2	3	4	5	6

location, concurrent events” Example: About 3 years ago, I was a freshman in college, and my pot-luck roommate decided to cheat on a chemistry test. Since I was her best-friend, she decided to tell me this, but she made me promise I wouldn’t tell anyone						
14. Long response latencies – Longer than normal (uncomfortably long) pauses between statements	1	2	3	4	5	6
15. Justifying the behavior – Statements that indicate the person did not think they did anything wrong even though they committed a harmful or wrong behavior Example: I told her secret because I didn’t think it would hurt anyone	1	2	3	4	5	6

APPENDIX I

Judges' Perception of Defendant Remorse

Thank you for participating in the current study. The purpose of this survey is to gather information from judges regarding how they perceive defendant remorse and how they discern authentic remorse from feigned remorse. The survey will also examine specific defendant behaviors that may or may not help judges evaluate remorse. Your responses are a great contribution to the field of law and psychology.

Please fill in the blank with your personal strategies for assessing authentic and feigned defendant remorse.

1. The thing I look for most when deciding whether the defendant is sincerely remorseful is _____.
2. Remorseful defendants often say _____.
3. Defendants who appear remorseful often have _____ facial expressions.
4. Defendants who appear truly remorseful typically have body language that is _____.
5. Defendants are likely remorseful for their offense when they _____.
6. _____ usually indicates defendants are *NOT* remorseful for their offense.
7. I can tell defendants are feigning remorse when they _____.
8. Defendants who do *NOT* appear remorseful often have _____ facial expressions.
9. Defendants who appear to be feigning remorse typically have body language that is _____.
10. Defendants who are likely feigning remorse often say _____.
11. The behavior that separates a remorseful defendant from someone who is feigning remorse is the remorseful defendant _____.
12. The most valuable “evidence” for assessing whether a defendant is sincerely remorseful is _____.

13. The most valuable “evidence” for assessing whether a defendant is *NOT* sincerely remorseful is _____.

PLEASE RETURN ANY COMPLETED QUESTIONS, EVEN IF YOU DO NOT FINISH THE SURVEY

1.) Recall the most recent case in which defendant remorse impacted sentencing. Did you use the following behaviors to determine remorse? If so, did the behavior have a strong impact on your assessment of remorse?

	YES	NO	YES	NO
Crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepting responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pleading guilty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apologizing (in general)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apologizing to the victim/victim's family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head bowed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsteady voice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased limb movement (i.e., hands, legs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sad facial expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trembling body movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commitment to not recidivate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tense body posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agreement to enter rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did anything else convince you the defendant was remorseful?

2.) Recall the most recent case in which you determined the defendant was FEIGNING remorse. Did you use the following behaviors to evaluate his/her FEIGNED remorse? If so, did the behavior have a strong impact on your assessment of FEIGNED remorse?

	YES	NO	YES	NO
Gaze aversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased limb movement (i.e., hands, legs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressing remorse for personal consequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Factual (vs. emotional) statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxed body posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smiling or laughing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long response latencies after questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressing remorse after guilt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stuttering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fidgeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Justifying the offense

☐
☐☐
☐☐
☐☐
☐

Minimizing the harm caused

Did anything else convince you the defendant was FEIGNING remorse?

Demographic Questions

Gender: _____

Age: _____

Official professional title: _____

Number of years as a judge: _____

Please circle the type of cases over which you currently preside (circle all that apply)

Criminal

Civil

Misdemeanor

Other _____

General Practice

From your experience....

In what percentage of cases do you consider defendant remorse when sentencing? _____

In what percentage of cases do you believe defendants are sincerely remorseful? _____

In what percentage of cases do you believe defendants are feigning remorse? _____

In what percentage of cases is no remorse expressed? _____

Would you prefer to see feigned remorse over no remorse at all? YES NO

Please explain

Would you consider feigned remorse as a mitigating factor in sentencing? YES NO

Please explain

Please provide any further thoughts or suggestions you have about evaluating the sincerity of defendant remorse

Was this survey easy to understand and complete?

YES NO

IF NO, please explain

PLEASE RETURN ANY COMPLETED QUESTIONS, EVEN IF YOU DO NOT FINISH THE SURVEY

THANK YOU FOR YOUR PARTICIPATION.

APPENDIX J

Judges' Perceptions of Defendant Remorse

Thank you for participating in the current study. The purpose of this survey is to gather information from judges regarding how they perceive defendant remorse and how they discern authentic remorse from feigned remorse. The survey will also examine specific defendant behaviors that may or may not help judges evaluate remorse. Your responses are a great contribution to the field of law and psychology.

Please fill in the blank with your personal strategies for assessing authentic and feigned defendant remorse.

1. The thing I look for most when deciding whether the defendant is sincerely remorseful is _____.
2. Remorseful defendants often say _____.
3. Defendants who appear remorseful often have facial expressions that are _____.
4. Defendants who appear truly remorseful typically have body language that is _____.
5. Defendants are likely remorseful for their offense when they _____.
6. Defendants are *NOT* remorseful for their offense when they _____.
7. I can tell defendants are feigning remorse when they _____.
8. Defendants who are feigning remorse often have facial expressions that are _____.
9. Defendants who appear to be feigning remorse typically have body language that is _____.
10. Defendants who are feigning remorse often say _____.
11. The behavior that separates a remorseful defendant from someone who is feigning remorse is the remorseful defendant _____.
12. The most valuable "evidence" for determining whether a defendant is sincerely remorseful is _____.
13. The most valuable "evidence" for determining whether a defendant is *feigning* remorse is _____.

14. Please describe how you determine if a defendant is remorseful.

15. Please describe how you determine if a defendant is feigning remorse.

**PLEASE RETURN ANY COMPLETED QUESTIONS, EVEN IF YOU DO NOT FINISH
THE SURVEY**

1.) How often do you use the following behaviors to determine whether the defendant is REMORSEFUL?

	Not at all	Infrequently	Less often than so	More often than not	Frequently	Constantly
Crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepting responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pleading guilty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apologizing (in general)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apologizing to the victim/victim's family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head bowed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsteady voice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased limb movement (i.e., hands, legs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sad facial expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trembling body movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commitment to not recidivate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tense body posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agreement to enter rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behaviors that attempt to rectify the wrong behavior before a court date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shifting posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressing empathy for the victim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.) How often do you use the following behaviors to determine whether the defendant is FEIGNING remorse?

	Not at all	Infrequently	Less often than so	More often than not	Frequently	Constantly
Gaze aversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased limb movement (i.e., hands, legs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressing remorse for personal consequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Silence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxed body posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smiling or laughing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long response latencies after questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressing remorse after found guilty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fidgeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stuttering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prior Criminal History	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hand gestures while speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech fillers (i.e., like, um, ah, you know)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demographic Questions

Gender: _____

Age: _____

Official professional title: _____

Number of years as a judge: _____

Please circle the type of cases over which you currently preside (circle all that apply)

Criminal

Civil

Misdemeanor

Other _____

General Practice

From your experience....

In what percentage of cases do defendants express remorse (sincere or feigned)? _____

a) Of those cases, in what percentage do defendants express *sincere* remorse? _____

b) Of those cases, in what percentage do defendant express *feigned* remorse? _____

In what percentage of cases do you consider remorse a mitigating factor in your sentencing decision? _____

Would you prefer to see feigned remorse over no remorse at all? YES NO

Please explain

Would you consider feigned remorse as a mitigating factor in sentencing? YES NO

Please explain

Please provide any further thoughts or suggestions you have about evaluating the sincerity of defendant remorse

**PLEASE RETURN ANY COMPLETED QUESTIONS, EVEN IF YOU DO NOT FINISH
THE SURVEY**

THANK YOU FOR YOUR PARTICIPATION.

APPENDIX K



Dear Judge,

Thank you for taking the time to read about this survey. My name is Desirée Adams and I am a doctoral student at the University of Alabama. I am conducting research for my dissertation, and Judge John England, a judge with the 6th Judicial Circuit Court of Alabama is a member on my dissertation committee. We are requesting your participation in a research project examining judges' opinions about defendant remorse. Specifically, the project is aiming to identify defendant behaviors that judges use to determine whether the defendant is sincerely remorseful or feigning remorse. You have been identified for inclusion in this study as you are a judge in the state of (Alabama).

This survey includes questions about your use of defendants' verbal and nonverbal behaviors when assessing for remorse. **This survey takes approximately 10 minutes to complete. If you agree to participate, please complete the survey and return it in the provided self-addressed and pre-stamped envelope. You may also complete the survey online at** <http://www.surveymonkey.com/s/judgessurvey>. Please return the survey if you have answered *any* questions, even if you are unable to complete the entire survey. The information you provide will be of substantial help in conducting future projects about the accurate assessment of defendant remorse.

Your participation in this study is completely voluntary. This survey is being distributed without any tracking mechanism and consequently we will not be aware of your choice to participate or not to participate. If you choose to participate, your data will be entered directly into a confidential database and no identifying information will be attached.

There are no anticipated risks to your participation. Potential benefits include exposure to defendant behaviors that are indicative of sincere and feigned remorse. Additionally, participation can result in the indirect benefit to the fields of law and psychology by your provision of important information related to judges' evaluation of defendant remorse, for which limited data is currently available.

If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at 205-348-8461

Your time is greatly appreciated and we remain hopeful that you will be able to participate in our survey. If you have any questions about this survey or are interested in the results, please feel free to contact me at adams063@crimson.ua.edu or my research advisor, Stanley Brodsky, Ph.D., at 205-348-5083.

Sincerely,

Desirée Adams, M.A.
Doctoral Candidate

Judge John H. England
Tuscaloosa Circuit Court Judge
Dissertation Committee Member