

THE FIRST EMPIRICAL STUDY OF REMORSE: A FOUR-FACTOR MODEL

Ethan M. Abercrombie, Ph.D., Adrianna Shoji, Ph.D.
Jwa Kim, Ph.D.
Middle Tennessee State University
Gloria Hamilton, Ph.D.
Middle Tennessee State University
Paige Johnson
University of Pittsburgh

Dedication of Presentation

The following presentation is dedicated to Dr. Robert Hare for introducing the construct of remorse in the Hare Psychopathy Checklist Revised (PCL-R). Our research team owes Dr. Hare gratitude for this entire line of research. Our research team continues to refer to Dr. Hare's work for cutting-edge ideas. He has raised our awareness of a construct worthy of further exploration. We welcome his feedback regarding our findings, as well as feedback from other psychologists, scholars, and researchers from myriad disciplines.

The Many Faces of Remorse



Opening Caveat

1. Before we begin the presentation, we challenge each of you to consider the following situation:
You have wronged someone somehow. In response to this wrong, you have a reaction that convinces you that you will never repeat the action again. Subsequently, you go to the individual you have wronged to state how and why you will never engage in the behavior again. Unfortunately, the individual disbelieves your assertion that you have changed. No matter how many times you go before this person to present factual information of your internal shift or change, the individual refuses to accept or believe that you have changed.

2. How would this experience impact you emotionally, cognitively, affectively, and behaviorally?

3. When it comes to evaluating one's ability to/not to experience remorse, we would like to offer that, currently, there is no objective data to evaluate and confirm or disconfirm the existence or nonexistence of remorse. Therefore, one is free to go by her/his "feeling" alone. As psychologists, and other legal professionals, we must rely on fact to guide our appraisal of complicated and often misunderstood human phenomena.

4. Without normative data germane to remorse, we assert that one has nothing more than her or his professional clinical/legal experience and personal clinical/legal hunch or intuition to aid in arriving at a decision as to whether one is/is not remorseful. We further assert that a lack of standardization in how remorse is appraised may lead to variable, incomplete, and inaccurate summations about a construct that, to date, has been approached in a singular rather than pluralistic manner.



Humility at the Outset and Along the Way: Research is Constantly Changing

- According to Rest, Narvaez, Bebeau, and Thoma (2009),
- "Successful research is never final or completed. One solid finding leads to further questions, conjecture, and theorizing, which in turn lead to further research. Sometimes—happily—the new directions lead to fruitful new theories and new findings" (p. 99).
- We note from the outset that our study's findings are merely a starting place.
- We acknowledge that there is a great deal of research to come.
- We believe that critical dialogue, in conjunction with applied scientific study, is needed to better understand the complex phenomena of the remorse experience (RE).



The Importance of the Study

- A weighted factor in criminal cases during sentencing.
- A weighted factor at Legal Hearings for Life-sentenced inmates and suitability for parole.
- Thus far it is a quasi- and misunderstood construct.



Remorse in Literary Circles

- Remorse has been reflected upon in many literary works.
 - In *A Dialogue of Self and Soul*, William B. Yeats (1929) states

*When such as I cast out remorse
So great a sweetness flows into the breast
We must laugh, and we must sing,
We are blessed by everything,
Everything we look upon is blessed.*

Yeats also wrote a poem entitled *Remorse for Intemperate Speech* in 1932.



- In *A Clean Conscience Never Relaxes*, Ogden Nash (2007) states that “[r]emorse is a violent dyspepsia of the mind, [b]ut is very difficult to treat because it cannot even be defined” (p. 369).
- In *Remorse: A Tragedy, In Five Acts*, Samuel Taylor Coleridge (1813, p. 2) states “Remorse is as the heart in which it grows: If that be gentle, it drops dews Of true repentance; but if proud and gloomy, It is a poison-tree, that pierced to the inmost Weeps only tears of poison.”
- In *The Giaour*, Lord Byron (reissued in 2002) referring to remorse notes


*Nor ear can hear, nor tongue can tell
The tortures of that inward hell!—*



- Emily Dickenson (published, 1935) wrote:

*Remorse – is Memory – awake –
Her Parties all astir –
A Presence of Departed acts –
At window – and at Door –
Its Past – set down before the Soul
And lighted with a Match –
Perusal – to facilitate –
And help Belief to stretch –
Remorse is cureless – the Disease
Not even God – can heal –
For ‘tis His institution – and
The Adequate of Hell –*







What is Remorse?

- Dictionary definition:
 - According to the Webster's Unabridged Dictionary, Second Edition, Remorse can be defined as *deep and painful regret for wrongdoing; compunction* (Random House, 2001, p. 1630).
 - Compunction, may be defined as *a feeling of uneasiness or anxiety of the conscience caused by regret for doing pain and causing pain; contrition; remorse* (p. 421).
 - Horne, 1999, notes that remorse is derived from the Latin roots "*re* and *mordere*, to bite, sting or attack" (p. 23). By virtue of this definition, he goes on to note that "remorse is...a repetitive or perhaps recurrent experience rather than something that is transient [and] follows serious rather than trivial wrongdoing" (p. 23).
 - As a starting place in our understanding of remorse, this definition indicates that regret is one core component of the remorse experience (RE). However, it is not regret alone that defines the RE. It is also one that is experienced deeply and painfully.
 - In response to this definition, we ask, can "deeply" and "painfully" be seen? If not, why? If so, how?


Comical Enough

- And, finally, one college freshman at the University of North Carolina, Chapel Hill, stated- Remorse is the experience of attending a "double-kegger," followed by an early morning class.

Other Definitions of Remorse

- According to Carbone, J.D.
 - "Remorse is: (a) empathy and (b) making amends" (Winter Newsletter, 2010).
 - "Empathy is putting yourself in the shoes of the victim and his/her family...[it is] viewing the crime through the eyes of [the] victim and his/her family" (Carbone, 2010).
 - According to Carbone (2010), there are three parts to making amends. These are as follows:
 - "direct amends" → expressed through a behavior/action such as writing an apology letter to the victim or asking for forgiveness.
 - "indirect amends" → is a behavior/action directed towards assisting others, whether through money or time, who are/were as close to the victim as possible.
 - "living amends" → is a behavior/action that says that the individual who committed the crime is doing everything possible to live differently as a result of the incident, e.g., looking at her/his "dysfunctional behavior," and getting involved in activities to further bolster and/or lead to greater problem-solving and conflict resolution. In the prison system, we tend to see persons involved in activities such as peace day, conflict resolution workshops, individual therapy, pursuit of higher education, recovery-based support groups, etc.
- What we appreciate about Attorney Carbone's description of remorse is that it also involves a behavioral component, specifically making amends. He further divides amends into three different types and specifies the array of behavior found within each subcategory such that the behavior is not only observable (quantifiable) but qualitative as well.



Adding to Our Understanding of Remorse



- ❑ Recently, a workshop by the Office of Victim and Survivor Rights and Services (OVSRS) presented a handout entitled “REMORSE—HOW can you demonstrate it?” The following information was presented
- ❑ 1. “Write a letter of apology to the victim or the victim’s family [or next of kin].”
- ❑ 2. “Pay your court-ordered restitution.”
- ❑ 3. “Express your apology at your Board hearing.”
- ❑ 4. “Communicate your feelings of remorse to the psychologist and counselor.”
- ❑ 5. “Participate in Victim Awareness and related self-help groups.”
- ❑ 6. “Make amends by ‘Giving Back.’”
- ❑ 7. “Make sure your attorney is aware of your past expressions of sorrow and shame, so she/he can let the panel know about them in closing argument.”
- ❑ 8. “ADMIT YOUR CRIME FULLY, don’t be in denial, don’t minimize your role.”
- ❑ Again, OVSRS, such as Cabone, J.D., specifically indicates behavior as well as feeling as two components of remorse.

Remorse and Guilt



- ❑ One item in the *Hare Psychopathy Checklist Revised* (PCL-R) indicates that the absence of remorse or guilt is a characteristic or trait, among others, of psychopathy.
 - It is admirable that Hare considers remorse/guilt as a variable worthy of evaluation and appraisal.
 - Kelley, 1927, discusses the “jingle” and “jangle” fallacies.
 - ❑ Described in his text, *Interpretation of Educational Measurement*, Kelley states, “Dr. Thorndike quotes Professor Aikins as describing [the] ‘jingle fallacy’ [which indicates] that there is merely verbal resemblance and no sufficient underlying factual similarity between the classes.”
 - ❑ Kelley, 1927, contrasted the “jingle fallacy” with his conception of the “jangle fallacy” (p. 64).
 - ❑ Kelley notes, “equally contaminating to clear thinking is the use of two separate words or expressions covering in fact the same basic situation, but sounding different, as though they were in truth different.” He termed this the “jangle fallacy.”
 - So, what is your opinion?
 - ❑ Are remorse and guilt an example of the “jingle” or “jangle” fallacy?
- ❑ In fact, there is no standardized approach noted to determine whether one is or is not remorseful.

Broadening Our Understanding of Remorse

- ❑ In *Remorse and Reparation*, Cox (1999) notes that remorse is in a state of continual flux or change. He suggests that “[remorse] [lies] between categories of thought, or clinical diagnostic categories” (p. 15). He goes on to say that “it is both cognitive and affective.” In addition, he indicates that it is “inter-disciplinary and not the exclusive prerogative of any single field of enquiry” (p. 15).
- ❑ Cox broadens our understanding of remorse. It is not simply a feeling. It also involves affect and cognition.
 - In this definition, we have an assertion that serves as a partial cornerstone for our research, specifically that remorse is an experience that is affective, emotional, cognitive and, we would add, behavioral. By behavioral, we are referring both to pro-personal behavior, e.g., anything done to better one’s self and pro-social, e.g., anything done to better the lives of others.
- ❑ In addition, we must utilize myriad disciplines and resources to fully understand the complexity of how remorse is experienced, evaluated, and reported affectively, emotionally, cognitively, and behaviorally in clinical- and forensic-based fields of practice.


How Can We Know if Someone is Remorseful? (Questions to Think About)




- With what amount of confidence can we know someone is or is not remorseful?
- Are the criteria you use to define the presence or absence of remorse the same as another professional? How do you know?
- As a professional, is mere "feeling" enough to substantiate the presence or absence of remorse?
- Have you ever considered that there are no empirical studies exploring remorse?

The Evolution of Remorse

- Moral Development
- Emotional Development
- Cognitive Development
- Affective Development
- Behavioral Development
- Neurological/Physiological Development



Moral Development: The Starting Place



- ✓ Myriad variables influence how a child, and later adult, evolves to/not to experience remorse.
- ✓ No one discipline alone can explain how a child evolves to experience remorse affectively, emotionally, cognitively, and/or behaviorally.
- ✓ In *The Theory of Moral Sentiments*, Adam Smith (1854) considered remorse to be a moral "sentiment" (p. 122). He stated that, of all the sentiments, remorse is the "most dreadful" to "enter the human breast."
- ✓ Smith (1854) went on to say that "it is made up of shame from the sense of impropriety of past conduct; of grief for the effects of it; of pity of those who suffer by it; and of the dread and terror of punishment" (p. 122).

A Sixty-Second Overview of Moral Development

- ❑ In the *Handbook of Moral Behavior and Development*, Lamb (1991) indicates that many theorists in the field of moral development believe that children first show signs of morality by two years of age (p. 171).
- ❑ Historically, investigators of childhood moral development have followed one of two trajectories.
 - The first has looked at “prosocial behaviors”, e.g., sharing, protecting, helping, and nurturing, as well as empathy in children (Lamb, pp. 171-172).
 - The second has looked at standards.



Remorse and Moral Development

- ❑ A plethora of moral developmental research has evolved over the years, each with a core focus. A few early researchers and primary focal points are:
 - Kohlberg (1969, 1971, 1981) created a “cognitive developmental” theory of moral obligation.
 - Turiel (1979) created a “social interactional” theory.
 - Gilligan (1993) created a developmental theory of care.
 - Kagan (1984) and Hoffman (2000) have respectively considered the relationship between familial emotional relationships and moral development.
 - Dunn, Brown, and Slomkowski & Killen (1992) emphasize a “sociocognitive perspective and view the development of social and emotional understanding as a key part of the development of moral reasoning and judgment” (Dunn, 1996, p. 332).
- ❑ Based on the work of these researchers, we propose that early moral development, including the ability to experience remorse later in life, begins in childhood and dynamically evolves—initially—within a child’s social and cognitive experiences and interactions within the respective family system (Dunn, 2006).



Moral Development

- ❑ If remorse may be thought of as a moral sentiment, and toddlers and children first experience “morality” socially and cognitively within the family system, what does this tell us about the ability to/not to experience remorse?
 - First, toddlers and children initially learn about others’ feelings within a constellation of others e.g., a family, and, in doing so, this establishes a foundation for “moral sensitivity” (Dunn, 2006, p. 333).
- ❑ While in the second year of life, children begin to understand the psychological and feeling states of others (Dunn, p. 333).
- ❑ Second, children at this age of development also begin to engage in behaviors to comfort others in distress and show concern for those who are afraid or worried (Dunn, p. 333). It is interesting to note that these behaviors have been observed before children are able to engage in formal speaking (Dunn, p. 333).
- ❑ Third, as children’s’ vocabularies become more complex, children “verbally articulate...[and] discuss feeling states and other psychological states of both self and other with other family members” (Dunn, p. 333). It is during the third year that children make connections between inner states and actions.” The roots of more formal empathy begin during this time period (Dunn, p. 333).

Adult Standards, Societal Rules and Accountability

- ▣ Children initially become aware of “adult standards and social rules” within their respective family units starting at the second year, and extending into the third year, of life (Dunn, 1998).
- ▣ Children learn about what is considered “acceptable” and “unacceptable” at this time.
- ▣ During this time, it is not uncommon to see children attempt to redirect the focus away from their respective mishap, while at the same time calling attention to those of others (Dunn, 2006, p. 333).
- ▣ Within this time, children also begin to learn about the concept of “responsibility” (Dunn, p. 333). When a child engages in a prohibitive act, she learns that she is accountable, e.g., she swings Fluffy the pet cat by its tail.
- ▣ During the third year, children frequently reposition the blame, e.g., “he did it,” or flatly deny having committed the offensive behavior (Dunn, 1988).

Moral Developmental Variance

- ▣ Research on childhood moral development shows that, although a child may “demonstrate empathic behavior, understanding of moral transgressions, and efforts at reparation” within her family, she may not necessarily apply this to another context or relationship (Dunn, 2006, p. 334). Contingent on the relationship, a child may find a behavior more or less permissible (Dunn, 2006, 334).

Moral Development and Emotion

- ▣ Depending on emotional and cognitive development, a child may experience more or less difficulty in moral internalization (Dunn, 2006, p. 335).
 - For a robust discussion of emotional development and morality, see *Emotions, Aggression, and Morality in Children: Bridging Development and Psychopathology* by William F. Aresenio and Elizabeth A. Lemerise (2010).
- ▣ There are several factors that impact a child’s ability to internalize and behave “morally;” these include “the use of language” ... the development of empathy,” and cognitive and emotional development (p. 335).

A Quick Note about Remorse and Moral Development

- It is impossible to discuss remorse and moral development in its entirety in a ninety-minute presentation. Therefore, the interested reader is encouraged to see *Psychotherapy and the Remorseful Patient*, edited by E. Mark Stern (1988); the *Handbook of Moral Development*, edited by Melanie Killen and Judith Smetana (2006); and *Postconventional Moral Thinking*, by James Rest, Darcia Narvaez, Muriel J. Bebeau, and Stephen J. Thoma (1999) for a robust look at remorse, moral development, and the evolution and cultural understanding of moral thought throughout history.

Philosophy and Emotion



REASON VS. EMOTION

- Plato, Aristotle, Stoics, Middle Ages, Descartes, Spinoza, Hume, Kant, Nietzsche, Satre
- What troubles philosophers.

Theories of Emotions

- Constructivist theory
- Sociological Analysis of Emotion
- Differential Emotions Theory (Izard)
- Bridges (1932)
- Sroufe (1996)



Development of Emotion

- ❑ Elicitors: response-connectors
- ❑ Emotional states: inferred constructs that can occur without organisms' being able to perceive these states.
- ❑ Emotional Expressions: observable surface changes in face, voice, body and activity level.
- ❑ Emotional Experiences: interpretations and evaluations by individuals of their perceived situations, emotional states, and expressions.



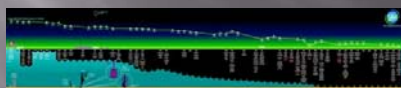
Children's understanding of emotion

- ❑ Ages 4-5: generally accurate in recognizing the impact of thoughts and beliefs on action.
- ❑ Ages 5-6: recognize the impact of beliefs on emotion.
- ❑ Younger children focus on what they "do" feel.
- ❑ Older children are able to focus on what they "should" feel.



Timeline of Emotion

- ❑ Young infants (< 10 months)
- ❑ Older Infants and Toddlers (10-24 months)
- ❑ Two-Year-Olds
- ❑ Preschoolers



Emotion and Attachment

- ❑ Cassidy (1994): attachment style is related to children's regulation of emotion and linked to emotional competence, empathy, and vicarious emotional response.
- ❑ Thompson (2006): attachment predicts children's social competence.



Affect

- ❑ Development of Affect:
 - Charlesworth and Kreutzer (1973)
 - Darwin
 - Elkman
 - Universality of facial expression
 - Pathology of facial recognition
- ❑ Measuring Affect
 - Facial Affect Scoring Technique (FAST)



Theories of Affect

- ❑ Ontogenetic View (Oster, 2005)
- ❑ Functionalist Approach (Barrett and Campos, 1987)
- ❑ Sociocultural Internalization Model (Holodynski and Friedlmeier, 2006)
- ❑ Dynamic Systems Perspective



Physiology and Emotion

☐ Somatic Nervous System

- Darwin (1890)
- Ekman (1973)
- Facial Electromyography (EEG)
- Schwartz and Colleagues (1975)
- Neumann et al (2005)





Physiology and Emotion

☐ Autonomic Nervous System

- James (1884, 1890)
- Cannon (1927)
- Schacter and Singer (1962)
- Ekman (1983)
- Levenson (1992)
- Cacioppo et al (2000)
- Lang (1990)
- Taylor (1991)/ Cacioppo (2000)



Physiology and Affect

☐ Central Nervous System

- Schwartz et al (1979)
- Davidson (1993, 2003)



Neuroscience and Emotions

- ❑ Subcortical Telencephalon
 - Amygdala
 - Hippocampus
 - Basal Ganglia
- ❑ Paralimbic Cortex
 - Orbito-frontal cortex
- ❑ Neuroanatomy
 - Limbic System



Remorse and Cognitive Development



- ❑ Again, depending on the theorist and her theory, we begin this subsection by again noting that, contingent on theory, there may be myriad transmutations of the Remorse Experience (RE). As remorse has been positioned within a moral developmental framework, we initially looked at moral development in general. At this juncture, we will consider cognitive development historically and more recently and discuss its relationship to the RE.






Remorse and Behavior

- ❑ Prosocial Behavior and Evidence:
 - Sharing
 - Helping
 - Comforting
- ❑ What motivates prosocial behavior?
 - Rather than what a child might get out of it, e.g., a toy, etc., most caregivers hope that altruistic motives spur on prosocial behaviors.
 - What is an altruistic motive?
 - The empathic response
 - The sympathetic response
 - Later in life, altruistic motives includes the ability to act in accordance w/ one's own personal moral/ethical value system.
- ❑ The largest environmental factor that influences the development of prosocial behavior is the socialization process within a family system (Siegler, et al., 2006, p. 551).




Other factors that influence how prosocial behavior develops include:

- One's unique culture
- Parenting style
- Disciplinary style
- Peer group influence
- The unique temperament of the individual
- The interception of socialization and biology

A New Model of Remorse: The Backdrop for the Study

- Affect (outward display of emotion and/or voice tone)
- Emotion (the feelings/sentiments endorsed by the client, e.g., anger, fear, sadness, etc.).
- Cognition (the ability of the individual to reflect on her or his actions and how such action has impacted the individual).
- Behavior (any physical action taken to improve self or others).
- We propose that each domain should be enumerated in clinical and forensic-based reports for the reader. It is no longer acceptable to say, "Look at her [referring to affect]." "She is a coldhearted criminal!"
- We are not arguing against using clinical intuition or experience alone in this area. We are simply raising awareness that, to date, there is no standardized way of referencing or evaluating remorse. It is hoped that this research will further broaden our understanding of a complex experience and contribute information for our forthcoming *Remorse Appraisal Measure (RAM)*.



Current Study

Purpose:

- In a broad sense, the study was conducted to empirically explore the concept of remorse and provide normative data.
- The study was also conducted to identify objectively those words/adjectives utilized by a sample to describe remorse.
- Second, the study was conducted to determine whether there is empirical justification to broaden how remorse is evaluated and/or conceptualized based on individual perceptions of the construct, e.g., affective, emotional, cognitive, behavioral, etc.
- Third, the study, using a vignette format, was conducted to explore information subjects utilize or find most relevant in arriving at an appraisal as to whether one does/does not experience remorse.
- Information from the study will be utilized to create the forthcoming *Remorse Appraisal Measure (RAM)*, Abercrombie, et al.

Method-Participants

- ❑ A total of 501 college students from both Eastern and Western academic institutions.
- ❑ In addition, 113 employees from the Fresno County Police Department.
- ❑ A summary of sample demographics are as follows:



Demographics-Gender

Table 1.
Summary of Gender of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	<i>%a</i>
Gender		
Female	380	62
Male	234	38

Demographics-Student Status

Table 2.
Summary of Student Status of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	<i>%a</i>
Student Status		
Full-time	469	77
Part-time	047	08
Neither	097	16

Demographics-Academic Year

Table 3.
Summary of Academic Year of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	n	% ^a
Freshman	185	30
Sophomore	110	18
Junior	071	12
Senior	068	11
Advanced Degree	081	13
None/Auditing	095	16

Demographics-Grade Point Average

Table 4.
Summary of Grade Point Average of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	n	% ^a
Grade Point Average		
4.0 or Greater	029	05
3.5 to 3.9	183	30
3.0 to 3.4	168	28
2.5 to 2.9	109	18
2.0 to 2.4	013	02
1.5 to 1.9	013	02
Not Applicable/Auditing	095	16

^a All percentages rounded to the nearest whole.

Demographics-Major

Table 5.
Summary of Major of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	n	% ^a
Major		
Psychology	059	12
Social work	002	0.4
Math/Statistics	001	0.2
Sociology	006	1.2
Nursing	004	0.8
Public Health Science	007	1.4
Advertising	008	1.6
Electronic Media		
Production	001	0.2
Broadcast Journalism	001	0.4
Family Therapy	002	0.4
Business	002	1.6
Speech Pathology	001	0.2
Health Science and Nutrition		
Nutrition	001	0.2
Liberal Arts	002	0.4
Criminology	002	0.4
Public Speaking/Communication	004	0.8
English	003	0.6
Exercise Training/Exercise Physiology		
Athletics	009	1.8

Demographics-Major

Table 5 (continued).
Summary of Major of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	n	%
Major		
Child Development/	001	0.2
Child Education	003	0.6
International Studies	001	0.2
Music	004	0.8
Sports Science	009	1.8
History	007	1.4
Biology	010	1.9
Religious Studies	004	0.8
Economics	001	0.2
Geography	002	0.4
Dramatic Arts	001	0.2
Environmental Studies	001	0.2
Art History	002	0.4
Foreign Language	001	0.2
Family Studies	001	0.2
Linguistics	001	0.2
Women's Studies	001	0.2

Demographics- Primary Caretaker(s)

Table 6.
Summary of Primary Caretakers of 616 subjects from both Eastern and Western Regions of the United States.

Characteristic	n	%
Primary Caretaker		
Biological Parents	500	82.0
Mother Only	052	8.5
Father Only	008	1.3
Grandparents	010	1.6
Relative	003	0.5
Adoptive Care Giver	007	1.1
Other	006	1.0
Mother & Siblings	002	0.3
Mother & Stepfather	011	1.8
Foster Parents/Group Homes	003	0.5
Siblings (Who became Guardian)	001	0.2
Mother & Grandparents	003	0.5
Father & Step-mother	002	0.3
Biological Parents & Grandparents	001	0.2
Biological Parents & Step-parents	001	0.2

Demographics- Race/Ethnic Background

Table 7.
Summary of Race/Ethnicity of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	n	%
Race/Ethnic Background		
African-American	040	6.6
White/Caucasian	388	63.7
Asian/Pacific Islander	036	5.9
Native American/Alaskan Native	004	0.7
Latino/Hispanic	105	17.2
Biracial/Multiracial	031	5.1
Other	001	0.2
Arab-American	001	0.2
German/Norwegian	001	0.2
Hmong	001	0.2
Middle Eastern	001	0.2

[illegible]

Characteristic	<i>n</i>	%
Annual Income		
0 to 9,999	357	57.5
10,000 to 19,999	067	11.0
20,000 to 29,999	025	04.1
30,000 to 39,999	021	03.4
40,000 to 49,999	024	03.9
50,000 and above	121	19.8
Denoted Parents' Income	001	00.2

Demographics- Political Affiliation

Table 11.
Summary of Political Affiliation of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Political Affiliation		
Republican	203	033.1
Democrat	251	040.9
Other	047	007.7
Independent	050	008.2
Libertarian	008	001.3
Undecided	009	001.5
Neither/None	032	005.2
Moderate	005	000.8
Apathetic	005	000.8
Whig	001	000.2
Both	002	000.3

Demographics- Geographical Region

Table 12.
Summary of Geographical Region of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Geographical Region		
Rural	119	019
Urban	202	033.1
Suburban	289	047.4

Demographics- Population Size

Table 13.
Summary of Population Size of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Population Size		
Less than 50,000	110	018.5
50,001 to 99,999	119	019.5
100,000 to 249,999	114	019.2
250,000 to 499,999	088	014.8
500,000 to 999,999	146	024.6
1,000,000 or larger	017	002.9

Demographics- Self-Appraisal

Table 14.
Summary of Self-Appraisal of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Self-Appraisal		
Liberal	132	21.6
Conservative	129	21.1
Liberal About some things and conservative about others	340	55.7
Others	006	01.0
Open-minded	002	00.3
Secular Conservative	001	00.2

Demographics- Relationship Status

Table 15
Summary of Relationship Status of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Relationship Status		
Single/ Unpartnered	366	59.5
Married	110	17.9
Partnered/ Living	108	17.6
With Significant Other		
Separated/ Divorced	31	5.0

Demographics- Work Status

Table 16.
Summary of Work Status of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Work Status		
Employed full-time	159	25.9
Employed part-time	200	32.6
Unemployed or on leave from work	221	36.0
Self-employed	012	01.9
Other	008	01.3
Seasonal	013	02.1
Rotational	001	0.2

Demographics- Employment Status

Table 17.
Summary of Employment Status of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Employment Status		
Not currently working	254	41.4
Working full-time	161	26.2
Working part-time	199	32.4

Demographics- Type of Work

Table 18.
Summary of Type of Work of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Type of Work		
Assistant Design Technician	002	000.8
Pharmacy Technician	001	000.4
Insurance Sales Person	001	000.4
Service Representative	001	000.4
Warehouse Employee	002	000.8
Maintenance/Janitorial	001	000.4
Government Employee	001	000.4
Bookkeeping/Payroll	001	000.4
Personnel	002	000.8
Personal Trainer	004	001.6
Certified Nursing Assistant	002	000.8
Photographer	001	000.4
Lifeguard	001	000.4
Referee	001	000.4
Research Assistant	004	001.6
Residential Advisor	001	000.4
Work Study	005	002.0
Financial Aid Counselor	001	000.4
System Administrator	001	000.4
Cancer Registry Data Assistant	001	000.4
Analytic Chemist	001	000.4
Movie Theater Attendant	001	000.4
Library Assistant	003	001.2
Intern	002	000.8
Recreational Facility Supervisor	001	000.4

Demographics- Type of Work

Table 18. (continued)
Summary of Type of Work of 616 subjects from both Eastern and Western Geographical Regions of the United States.

Characteristic	<i>n</i>	%
Type of Work		
YMCA Employee	002	000.8
Production Services	001	000.4
Optometric Technician	001	000.4
Leasing Agent	001	000.4
Camp Counselor	001	000.4
Care Provider	001	000.4
Fitness Monitor	001	000.4
Audio-Video Support	001	000.4
Advertising Account	001	000.4
Executive	001	000.4
Student Union Employee	001	000.4

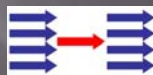
Procedure



- Prior to gathering data from students, Institutional Review Boards (IRB) at respective universities were contacted. Respective review processes and permission were granted prior to gathering data at each respective campus.
- Once IRB approval was obtained, researchers coordinated with respective faculty members and indicated the following: (1) the nature of the study, (2) forms to be completed, and (3) the amount of time needed to complete all measures.
- Each participant in the college-based sample was given a written *Informed Consent* (IC) form to be signed. Participants were asked to raise their hands once the IC was signed. After collected, the subjects were given the first set of questionnaires, consisting of a *Demographic Questionnaire* (DQ) and a *Remorse Exploratory Questionnaire* (REQ). The only identifying information on these questionnaires was a five-digit code number in the upper right-hand corner of the page. After completion, the subjects were instructed to raise their hands to receive the second set of questionnaires, which included a *Remorse Opinion Checklist* (ROC) and *Remorse Vignette* (RV.) Subjects were randomly given either a Remorse Vignette with a remorseful protagonist (RV+) or one with a remorseless protagonist (RV-).
- Once provided with the second set of questionnaires, the subjects were instructed to write the five-digit code number in the upper right-hand corner of the ROC and RV.
- The first and second sets of questionnaires were administered separately in order to prevent subjects from looking back at previous responses and/or modifying prior or later responses.

Procedure (Continued)

- Such as was noted with university-based recruitment of subjects, prior to gathering data from Fresno Police Department personnel the study was first reviewed by a professional overseeing research within the department.
- Once researchers obtained approval, an electronic letter was sent out to all Fresno Police Department personnel inviting them to participate in the study. Participation was voluntary and anonymous.
- Subjects from the police department were administered identical surveys.
- However, surveys were administered electronically through *Monkey Survey*.
 - *Monkey Survey* is a web-based survey medium (*Monkey Survey*, 2010).
- The modifications in administration are noted as follows:
 - First, a subject did not raise her/his hand upon completion of the consent form. Rather, she/he was instructed to advance to the next field, which offered the first set of questionnaires.
 - Upon completion of the first questionnaires, the subject was made aware that once she/he advanced to the next set of questionnaires, she/he would not be able to go back to these items previously answered.
 - For responses to vignettes, subjects were instructed to either complete Vignette One or Two (based on birth month).
 - Rather than underlining text, content in the electronic vignette was broken down into sentences. The sentences were presented next to a small rectangular-shaped box. If the subject utilized the content in the sentence to answer following questions, she/he was asked to click on the box. Once clicked, the box was filled in with an "X."



Questionnaires

- Informed Consent Form (IC)
- Demographic Questionnaire (DQ)
- Remorse Exploratory Questionnaire (REQ)
- Remorse Opinion Checklist (ROC)
- Remorse Vignette (RV)
 - w/ a Remorseful Protagonist (RV+)
 - w/ a Remorseless Protagonist (RV-)



STUDY: An Investigative Study of the Construct of Remorse

You have been selected to participate in a research study to better understand the construct of remorse. There are three questionnaires that you will be asked to complete. First, you will be asked to complete a Demographic Questionnaire followed by a 5-item Secondary Questionnaire. Lastly, you will be asked to complete an Opinion Checklist. Upon completion of the Demographic Questionnaire and Secondary Questionnaire, please raise your hand and a researcher will provide you with the final questionnaire, which is the Opinion Checklist. Please notice the numerical code in the upper right-hand corner of the Demographic Questionnaire and Secondary Questionnaire. Please write this code in the upper right-hand corner of the final questionnaire. Please respond to the questions honestly and openly. If you have any questions, raise your hand. Depending on your professor's policy, extra credit may be awarded for your participation. Participation in this study is voluntary and you can withdraw at any time. It is estimated that the completion of the questionnaires will take approximately 15 to 30 minutes. Ethan Abercrombie, Ph.D., Adrianna Shoji, Ph.D., Jwa Kim, Ph.D., Gloria Hamilton, Ph.D., Paige Johnson, Research Assistant, and individuals providing consultation about the study will be the only persons viewing the data.

All information gathered will be confidential and secured in a locked cabinet. Your consent form will be separated from your questionnaire to ensure anonymity. If at any time during this study you feel as though you are unable to complete these questionnaires, please raise your hand, and someone will come by to pick up your information. You may discontinue your participation without any negative consequences.

If you have any question or concerns regarding this research, you can contact Dr. Abercrombie, Licensed Psychologist (CA PSY # 21994) at (559) 907-0700 (mthab@csucsb.edu) or Dr. Adrianna Shoji, Licensed Psychologist (CA PSY # 21478) at (559) 270-4311 (piglitphd@hotmail.com).

If you would like feedback regarding this study, please check the following box, and list your email below.

Yes, I would like feedback. _____ (Email)
No, thank you. I am not interested in feedback regarding the study.

PRINT NAME: _____

SIGNATURE: _____ DATE: _____

(You must sign this form in order to participate. By signing this form, you acknowledge that you are at least 18 years of age and that your participation is voluntary. This form must not be turned in with questionnaires. Once signed, please raise your hand and a research assistant will gather your form and provide you with the questionnaires.)

Thank you for your participation.

Demographic Questionnaire
(Page One)

DEMOGRAPHIC QUESTIONNAIRE

Part I
Demographic Questionnaire
INSTRUCTIONS: Please indicate your responses with an X.

(1) Sex
___ Male
___ Female

(2) Age
___ 18 ___ 19 ___ 20 ___ 21 ___ 22 ___ 23 ___ 24 ___ 25 ___ 26 ___ 27 ___ 28 ___ 29 ___ 30 ___ 31 ___ 32 ___ 33 ___ 34 ___ 35 ___ 36 ___ 37 ___ 38 ___ 39 ___ 40 ___ 41 ___ 42 ___ 43 ___ 44 ___ 45 ___ 46 ___ 47 ___ 48 ___ 49 ___ 50 ___ 51 ___ 52 ___ 53 ___ 54 ___ 55 ___ 56 ___ 57 or more (Age) _____

(3) Year
___ Freshman
___ Sophomore
___ Junior (Indicate year)
___ Senior (Indicate year)
___ Planning an advanced degree (e.g., MA, PhD, MEd, MFT, etc.) (Please indicate)
___ None of the above (e.g., studying culture, etc.) (please)

(4) Student status
___ Full-time student
___ Part-time student
___ Neither a student

(5) My current Grade Point Average
___ 4.0 or greater
___ 3.5 to 3.9
___ 3.0 to 3.4
___ 2.5 to 2.9
___ 2.0 to 2.4
___ 1.5 to 1.9
___ 1.0 or less
___ NA (Not applicable, e.g., auditing class)

Demographic Questionnaire
(Page Two)

(6) What state are you located in?
___ Alaska
___ Arizona
___ Arkansas
___ California
___ Colorado
___ Connecticut
___ Delaware
___ Florida
___ Georgia
___ Hawaii
___ Idaho
___ Illinois
___ Indiana
___ Iowa
___ Kansas
___ Kentucky
___ Louisiana
___ Maine
___ Maryland
___ Massachusetts
___ Michigan
___ Minnesota
___ Mississippi
___ Missouri
___ Montana
___ Nebraska
___ Nevada
___ New Hampshire
___ New Jersey
___ New Mexico
___ New York
___ North Carolina
___ North Dakota
___ Ohio
___ Oklahoma
___ Oregon
___ Pennsylvania
___ Rhode Island
___ South Carolina
___ South Dakota
___ Tennessee
___ Texas
___ Utah
___ Vermont
___ Virginia
___ Washington
___ West Virginia
___ Wisconsin
___ Wyoming

(7) Race/Ethnicity (Check all that apply)
___ African American
___ Asian American
___ Black or African American
___ Native Hawaiian/Other Pacific Islander
___ Latino/Hispanic
___ White (Non-Hispanic/Latino)
___ Other (Please describe)

(8) Sexual Orientation
___ Straight
___ Gay
___ Homosexual
___ Bisexual
___ Queer
___ Other (Please describe)

(9) Religious/Spiritual Affiliation
___ Buddhist
___ Hindu
___ Catholic
___ Protestant
___ Christian
___ Muslim
___ Jewish
___ Other (Please describe)

(10) Annual Income
___ \$0-\$10,000
___ \$10,001-\$20,000
___ \$20,001-\$30,000
___ \$30,001-\$40,000
___ \$40,001-\$50,000
___ \$50,001-\$60,000
___ \$60,001-\$70,000
___ \$70,001-\$80,000
___ \$80,001-\$90,000
___ \$90,001-\$100,000
___ \$100,001-\$150,000
___ \$150,001-\$200,000
___ \$200,001-\$250,000
___ \$250,001-\$300,000
___ \$300,001-\$350,000
___ \$350,001-\$400,000
___ \$400,001-\$450,000
___ \$450,001-\$500,000
___ \$500,001-\$550,000
___ \$550,001-\$600,000
___ \$600,001-\$650,000
___ \$650,001-\$700,000
___ \$700,001-\$750,000
___ \$750,001-\$800,000
___ \$800,001-\$850,000
___ \$850,001-\$900,000
___ \$900,001-\$950,000
___ \$950,001-\$1,000,000
___ \$1,000,001-\$1,500,000
___ \$1,500,001-\$2,000,000
___ \$2,000,001-\$2,500,000
___ \$2,500,001-\$3,000,000
___ \$3,000,001-\$3,500,000
___ \$3,500,001-\$4,000,000
___ \$4,000,001-\$4,500,000
___ \$4,500,001-\$5,000,000
___ \$5,000,001-\$5,500,000
___ \$5,500,001-\$6,000,000
___ \$6,000,001-\$6,500,000
___ \$6,500,001-\$7,000,000
___ \$7,000,001-\$7,500,000
___ \$7,500,001-\$8,000,000
___ \$8,000,001-\$8,500,000
___ \$8,500,001-\$9,000,000
___ \$9,000,001-\$9,500,000
___ \$9,500,001-\$10,000,000
___ \$10,000,001-\$10,500,000
___ \$10,500,001-\$11,000,000
___ \$11,000,001-\$11,500,000
___ \$11,500,001-\$12,000,000
___ \$12,000,001-\$12,500,000
___ \$12,500,001-\$13,000,000
___ \$13,000,001-\$13,500,000
___ \$13,500,001-\$14,000,000
___ \$14,000,001-\$14,500,000
___ \$14,500,001-\$15,000,000
___ \$15,000,001-\$15,500,000
___ \$15,500,001-\$16,000,000
___ \$16,000,001-\$16,500,000
___ \$16,500,001-\$17,000,000
___ \$17,000,001-\$17,500,000
___ \$17,500,001-\$18,000,000
___ \$18,000,001-\$18,500,000
___ \$18,500,001-\$19,000,000
___ \$19,000,001-\$19,500,000
___ \$19,500,001-\$20,000,000
___ \$20,000,001-\$20,500,000
___ \$20,500,001-\$21,000,000
___ \$21,000,001-\$21,500,000
___ \$21,500,001-\$22,000,000
___ \$22,000,001-\$22,500,000
___ \$22,500,001-\$23,000,000
___ \$23,000,001-\$23,500,000
___ \$23,500,001-\$24,000,000
___ \$24,000,001-\$24,500,000
___ \$24,500,001-\$25,000,000
___ \$25,000,001-\$25,500,000
___ \$25,500,001-\$26,000,000
___ \$26,000,001-\$26,500,000
___ \$26,500,001-\$27,000,000
___ \$27,000,001-\$27,500,000
___ \$27,500,001-\$28,000,000
___ \$28,000,001-\$28,500,000
___ \$28,500,001-\$29,000,000
___ \$29,000,001-\$29,500,000
___ \$29,500,001-\$30,000,000
___ \$30,000,001-\$30,500,000
___ \$30,500,001-\$31,000,000
___ \$31,000,001-\$31,500,000
___ \$31,500,001-\$32,000,000
___ \$32,000,001-\$32,500,000
___ \$32,500,001-\$33,000,000
___ \$33,000,001-\$33,500,000
___ \$33,500,001-\$34,000,000
___ \$34,000,001-\$34,500,000
___ \$34,500,001-\$35,000,000
___ \$35,000,001-\$35,500,000
___ \$35,500,001-\$36,000,000
___ \$36,000,001-\$36,500,000
___ \$36,500,001-\$37,000,000
___ \$37,000,001-\$37,500,000
___ \$37,500,001-\$38,000,000
___ \$38,000,001-\$38,500,000
___ \$38,500,001-\$39,000,000
___ \$39,000,001-\$39,500,000
___ \$39,500,001-\$40,000,000
___ \$40,000,001-\$40,500,000
___ \$40,500,001-\$41,000,000
___ \$41,000,001-\$41,500,000
___ \$41,500,001-\$42,000,000
___ \$42,000,001-\$42,500,000
___ \$42,500,001-\$43,000,000
___ \$43,000,001-\$43,500,000
___ \$43,500,001-\$44,000,000
___ \$44,000,001-\$44,500,000
___ \$44,500,001-\$45,000,000
___ \$45,000,001-\$45,500,000
___ \$45,500,001-\$46,000,000
___ \$46,000,001-\$46,500,000
___ \$46,500,001-\$47,000,000
___ \$47,000,001-\$47,500,000
___ \$47,500,001-\$48,000,000
___ \$48,000,001-\$48,500,000
___ \$48,500,001-\$49,000,000
___ \$49,000,001-\$49,500,000
___ \$49,500,001-\$50,000,000
___ \$50,000,001-\$50,500,000
___ \$50,500,001-\$51,000,000
___ \$51,000,001-\$51,500,000
___ \$51,500,001-\$52,000,000
___ \$52,000,001-\$52,500,000
___ \$52,500,001-\$53,000,000
___ \$53,000,001-\$53,500,000
___ \$53,500,001-\$54,000,000
___ \$54,000,001-\$54,500,000
___ \$54,500,001-\$55,000,000
___ \$55,000,001-\$55,500,000
___ \$55,500,001-\$56,000,000
___ \$56,000,001-\$56,500,000
___ \$56,500,001-\$57,000,000
___ \$57,000,001-\$57,500,000
___ \$57,500,001-\$58,000,000
___ \$58,000,001-\$58,500,000
___ \$58,500,001-\$59,000,000
___ \$59,000,001-\$59,500,000
___ \$59,500,001-\$60,000,000
___ \$60,000,001-\$60,500,000
___ \$60,500,001-\$61,000,000
___ \$61,000,001-\$61,500,000
___ \$61,500,001-\$62,000,000
___ \$62,000,001-\$62,500,000
___ \$62,500,001-\$63,000,000
___ \$63,000,001-\$63,500,000
___ \$63,500,001-\$64,000,000
___ \$64,000,001-\$64,500,000
___ \$64,500,001-\$65,000,000
___ \$65,000,001-\$65,500,000
___ \$65,500,001-\$66,000,000
___ \$66,000,001-\$66,500,000
___ \$66,500,001-\$67,000,000
___ \$67,000,001-\$67,500,000
___ \$67,500,001-\$68,000,000
___ \$68,000,001-\$68,500,000
___ \$68,500,001-\$69,000,000
___ \$69,000,001-\$69,500,000
___ \$69,500,001-\$70,000,000
___ \$70,000,001-\$70,500,000
___ \$70,500,001-\$71,000,000
___ \$71,000,001-\$71,500,000
___ \$71,500,001-\$72,000,000
___ \$72,000,001-\$72,500,000
___ \$72,500,001-\$73,000,000
___ \$73,000,001-\$73,500,000
___ \$73,500,001-\$74,000,000
___ \$74,000,001-\$74,500,000
___ \$74,500,001-\$75,000,000
___ \$75,000,001-\$75,500,000
___ \$75,500,001-\$76,000,000
___ \$76,000,001-\$76,500,000
___ \$76,500,001-\$77,000,000
___ \$77,000,001-\$77,500,000
___ \$77,500,001-\$78,000,000
___ \$78,000,001-\$78,500,000
___ \$78,500,001-\$79,000,000
___ \$79,000,001-\$79,500,000
___ \$79,500,001-\$80,000,000
___ \$80,000,001-\$80,500,000
___ \$80,500,001-\$81,000,000
___ \$81,000,001-\$81,500,000
___ \$81,500,001-\$82,000,000
___ \$82,000,001-\$82,500,000
___ \$82,500,001-\$83,000,000
___ \$83,000,001-\$83,500,000
___ \$83,500,001-\$84,000,000
___ \$84,000,001-\$84,500,000
___ \$84,500,001-\$85,000,000
___ \$85,000,001-\$85,500,000
___ \$85,500,001-\$86,000,000
___ \$86,000,001-\$86,500,000
___ \$86,500,001-\$87,000,000
___ \$87,000,001-\$87,500,000
___ \$87,500,001-\$88,000,000
___ \$88,000,001-\$88,500,000
___ \$88,500,001-\$89,000,000
___ \$89,000,001-\$89,500,000
___ \$89,500,001-\$90,000,000
___ \$90,000,001-\$90,500,000
___ \$90,500,001-\$91,000,000
___ \$91,000,001-\$91,500,000
___ \$91,500,001-\$92,000,000
___ \$92,000,001-\$92,500,000
___ \$92,500,001-\$93,000,000
___ \$93,000,001-\$93,500,000
___ \$93,500,001-\$94,000,000
___ \$94,000,001-\$94,500,000
___ \$94,500,001-\$95,000,000
___ \$95,000,001-\$95,500,000
___ \$95,500,001-\$96,000,000
___ \$96,000,001-\$96,500,000
___ \$96,500,001-\$97,000,000
___ \$97,000,001-\$97,500,000
___ \$97,500,001-\$98,000,000
___ \$98,000,001-\$98,500,000
___ \$98,500,001-\$99,000,000
___ \$99,000,001-\$99,500,000
___ \$99,500,001-\$100,000,000
___ \$100,000,001-\$100,500,000
___ \$100,500,001-\$101,000,000
___ \$101,000,001-\$101,500,000
___ \$101,500,001-\$102,000,000
___ \$102,000,001-\$102,500,000
___ \$102,500,001-\$103,000,000
___ \$103,000,001-\$103,500,000
___ \$103,500,001-\$104,000,000
___ \$104,000,001-\$104,500,000
___ \$104,500,001-\$105,000,000
___ \$105,000,001-\$105,500,000
___ \$105,500,001-\$106,000,000
___ \$106,000,001-\$106,500,000
___ \$106,500,001-\$107,000,000
___ \$107,000,001-\$107,500,000
___ \$107,500,001-\$108,000,000
___ \$108,000,001-\$108,500,000
___ \$108,500,001-\$109,000,000
___ \$109,000,001-\$109,500,000
___ \$109,500,001-\$110,000,000
___ \$110,000,001-\$110,500,000
___ \$110,500,001-\$111,000,000
___ \$111,000,001-\$111,500,000
___ \$111,500,001-\$112,000,000
___ \$112,000,001-\$112,500,000
___ \$112,500,001-\$113,000,000
___ \$113,000,001-\$113,500,000
___ \$113,500,001-\$114,000,000
___ \$114,000,001-\$114,500,000
___ \$114,500,001-\$115,000,000
___ \$115,000,001-\$115,500,000
___ \$115,500,001-\$116,000,000
___ \$116,000,001-\$116,500,000
___ \$116,500,001-\$117,000,000
___ \$117,000,001-\$117,500,000
___ \$117,500,001-\$118,000,000
___ \$118,000,001-\$118,500,000
___ \$118,500,001-\$119,000,000
___ \$119,000,001-\$119,500,000
___ \$119,500,001-\$120,000,000
___ \$120,000,001-\$120,500,000
___ \$120,500,001-\$121,000,000
___ \$121,000,001-\$121,500,000
___ \$121,500,001-\$122,000,000
___ \$122,000,001-\$122,500,000
___ \$122,500,001-\$123,000,000
___ \$123,000,001-\$123,500,000
___ \$123,500,001-\$124,000,000
___ \$124,000,001-\$124,500,000
___ \$124,500,001-\$125,000,000
___ \$125,000,001-\$125,500,000
___ \$125,500,001-\$126,000,000
___ \$126,000,001-\$126,500,000
___ \$126,500,001-\$127,000,000
___ \$127,000,001-\$127,500,000
___ \$127,500,001-\$128,000,000
___ \$128,000,001-\$128,500,000
___ \$128,500,001-\$129,000,000
___ \$129,000,001-\$129,500,000
___ \$129,500,001-\$130,000,000
___ \$130,000,001-\$130,500,000
___ \$130,500,001-\$131,000,000
___ \$131,000,001-\$131,500,000
___ \$131,500,001-\$132,000,000
___ \$132,000,001-\$132,500,000
___ \$132,500,001-\$133,000,000
___ \$133,000,001-\$133,500,000
___ \$133,500,001-\$134,000,000
___ \$134,000,001-\$134,500,000
___ \$134,500,001-\$135,000,000
___ \$135,000,001-\$135,500,000
___ \$135,500,001-\$136,000,000
___ \$136,000,001-\$136,500,000
___ \$136,500,001-\$137,000,000
___ \$137,000,001-\$137,500,000
___ \$137,500,001-\$138,000,000
___ \$138,000,001-\$138,500,000
___ \$138,500,001-\$139,000,000
___ \$139,000,001-\$139,500,000
___ \$139,500,001-\$140,000,000
___ \$140,000,001-\$140,500,000
___ \$140,500,001-\$141,000,000
___ \$141,000,001-\$141,500,000
___ \$141,500,001-\$142,000,000
___ \$142,000,001-\$142,500,000
___ \$142,500,001-\$143,000,000
___ \$143,000,001-\$143,500,000
___ \$143,500,001-\$144,000,000
___ \$144,000,001-\$144,500,000
___ \$144,500,001-\$145,000,000
___ \$145,000,001-\$145,500,000
___ \$145,500,001-\$146,000,000
___ \$146,000,001-\$146,500,000
___ \$146,500,001-\$147,000,000
___ \$147,000,001-\$147,500,000
___ \$147,500,001-\$148,000,000
___ \$148,000,001-\$148,500,000
___ \$148,500,001-\$149,000,000
___ \$149,000,001-\$149,500,000
___ \$149,500,001-\$150,000,000
___ \$150,000,001-\$150,500,000
___ \$150,500,001-\$151,000,000
___ \$151,000,001-\$151,500,000
___ \$151,500,001-\$152,000,000
___ \$152,000,001-\$152,500,000
___ \$152,500,001-\$153,000,000
___ \$153,000,001-\$153,500,000
___ \$153,500,001-\$154,000,000
___ \$154,000,001-\$154,500,000
___ \$154,500,001-\$155,000,000
___ \$155,000,001-\$155,500,000
___ \$155,500,001-\$156,000,000
___ \$156,000,001-\$156,500,000
___ \$156,500,001-\$157,000,000
___ \$157,000,001-\$157,500,000
___ \$157,500,001-\$158,000,000
___ \$158,000,001-\$158,500,000
___ \$158,500,001-\$159,000,000
___ \$159,000,001-\$159,500,000
___ \$159,500,001-\$160,000,000
___ \$160,000,001-\$160,500,000
___ \$160,500,001-\$161,000,000
___ \$161,000,001-\$161,500,000
___ \$161,500,001-\$162,000,000
___ \$162,000,001-\$162,500,000
___ \$162,500,001-\$163,000,000
___ \$163,000,001-\$163,500,000
___ \$163,500,001-\$164,000,000
___ \$164,000,001-\$164,500,000
___ \$164,500,001-\$165,000,000
___ \$165,000,001-\$165,500,000
___ \$165,500,001-\$166,000,000
___ \$166,000,001-\$166,500,000
___ \$166,500,001-\$167,000,000
___ \$167,000,001-\$167,500,000
___ \$167,500,001-\$168,000,000
___ \$168,000,001-\$168,500,000
___ \$168,500,001-\$169,000,000
___ \$169,000,001-\$169,500,000
___ \$169,500,001-\$170,000,000
___ \$170,000,001-\$170,500,000
___ \$170,500,001-\$171,000,000
___ \$171,000,001-\$171,500,000
___ \$171,500,001-\$172,000,000
___ \$172,000,001-\$172,500,000
___ \$172,500,001-\$173,000,000
___ \$173,000,001-\$173,500,000
___ \$173,500,001-\$174,000,000
___ \$174,000,001-\$174,500,000
___ \$174,500,001-\$175,000,000
___ \$175,000,001-\$175,500,000
___ \$175,500,001-\$176,000,000
___ \$176,000,001-\$176,500,000
___ \$176,500,001-\$177,000,000
___ \$177,000,001-\$177,500,000
___ \$177,500,001-\$178,000,000
___ \$178,000,001-\$178,500,000
___ \$178,500,001-\$179,000,000
___ \$179,000,001-\$179,500,000
___ \$179,500,001-\$180,000,000
___ \$180,000,001-\$180,500,000
___ \$180,500,001-\$181,000,000
___ \$181,000,001-\$181,500,000
___ \$181,500,001-\$182,000,000
___ \$182,000,001-\$182,500,000
___ \$182,500,001-\$183,000,000
___ \$183,000,001-\$183,500,000
___ \$183,500,001-\$184,000,000
___ \$184,000,001-\$184,500,000
___ \$184,500,001-\$185,000,000
___ \$185,000,001-\$185,500,000
___ \$185,500,001-\$186,000,000
___ \$186,000,001-\$186,500,000
___ \$186,500,001-\$187,000,000
___ \$187,000,001-\$187,500,000
___ \$187,500,001-\$188,000,000
___ \$188,000,001-\$188,500,000
___ \$188,500,001-\$189,000,000
___ \$189,000,001-\$189,500,000
___ \$189,500,001-\$190,000,000
___ \$190,000,001-\$190,500,000
___ \$190,500,001-\$191,000,000
___ \$191,000,001-\$191,500,000
___ \$191,500,001-\$192,000,000
___ \$192,000,001-\$192,500,000
___ \$192,500,001-\$193,000,000
___ \$193,000,001-\$193,500,000
___ \$193,500,001-\$194,000,000
___ \$194,000,001-\$194,500,000
___ \$194,500,001-\$195,000,000
___ \$195,000,001-\$195,500,000
___ \$195,500,

[illegible]

Remorse Vignette (With Remorseful Protagonist)

Remorse Vignette
Please read the following vignette and underline information that you believe/feel to be helpful in determining whether Ms. Jones is remorseful.

Ms. Jones is a 55-year-old, divorced, African-American female serving a twenty-year to life sentence for first-degree murder. She is approximately 5'3" and weighs 150 pounds. Ms. Jones has a cane that assists her in walking. She has been in prison now for over 22 years. She has had no disciplinary write-ups for 22 years and has accomplished many things, e.g., has earned her GED, is taking college classes, is a member of various lifer programs, and has attended workshops on domestic violence, healing from abuse, and making better choices. When Ms. Jones presents before the Parole Board, she states that she is sorry for what she did. She sits with her hands in her lap and is unable to look at anybody in the room. Her head is down and a few tears are rolling down her cheeks. Her speech is soft, and she says – "I regret what I did. It should never have happened. The guilt is something that I live with every day. I think about how one wrong move led to such a sad outcome. If I knew then what I know now, I would never have fired that gun. I really am trying to become a better person as a result of what I did. I have written letters to the victim's family trying to apologize for what I have done, sharing with them – "If I could go back, I would do it all differently."

Remorse Vignette (With Remorseless Protagonist)

Remorse Vignette
Please read the following vignette and underline information that you believe/feel to be helpful in determining whether Ms. Jones is remorseful.

Ms. Jones is a 55-year-old, divorced, African-American female serving a twenty-year to life sentence for first-degree murder. She is approximately 5'3" and weighs 150 pounds. Ms. Jones has a cane that assists her in walking. She has been in prison now for over 22 years. She has had many disciplinary write-ups over the past 22 years for fighting and refusing to follow directions. She has not attended any workshops to improve herself. Although she never completed high school, and has had the opportunity to complete her GED, she has failed to do so. When Ms. Jones presents before the Parole Board, she says: "I can't say that I am sorry for what I did. I was just defending myself." She sits with her arms crossed and is leaning back in her chair. She has a smile on her face and fidgets in her chair. Her tone of voice is loud, and she frequently interrupts board members while they are talking. Lastly, Ms. Jones states – "I wish that I could say that I feel guilty, but I don't. I do feel bad about taking someone's life, but – not guilty. Being in prison these past 22 years hasn't taught me anything."

Vignette Follow-up Questions

- ☐ Regardless of condition, e.g., RV+ or RV-, each subject responded to the following questions after reading her/his respective vignette.

Please check any of the following that apply:

- ☐ Ms. Jones expresses remorse affectively or facially.
☐ Ms. Jones expresses remorse cognitively or in thought.
☐ Ms. Jones expresses remorse behaviorally through her actions.
☐ Ms. Jones expresses remorse neurochemically/physiologically.

Do you believe that Ms. Jones is remorseful? YES NO

Hypotheses

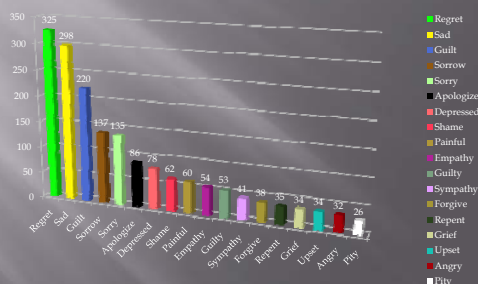
Hypotheses

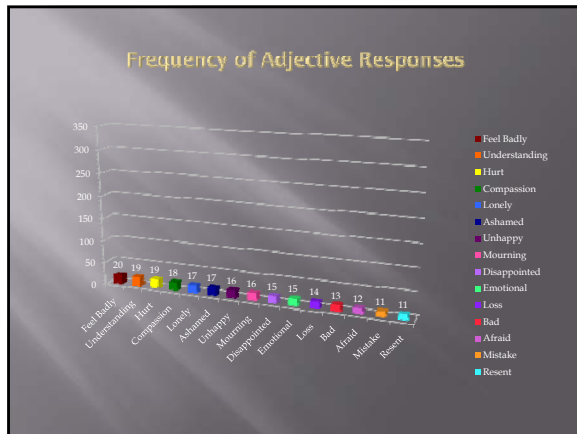
1. Based on demographic factors, subjects will be able to identify between 1 and 5 words/adjectives to describe remorse.
2. Remorse (Rmrs) is a four-factor structure composed of Affect (Aft), Emotion (Emtn), Cognition (Cog), and Behavior (Behvr).
3. On a vignette with either a remorseful protagonist (R+) or remorseless protagonist (R-), subjects are able to identify affective, emotional, cognitive, and/or behavioral cues to determine whether one is remorseful or remorseless.
4. Based on findings, adjectives and words from the initial survey might be utilized to create a measure of remorse based on emergent data.
5. Results from this research study might be used to further create a model and measure of remorse.

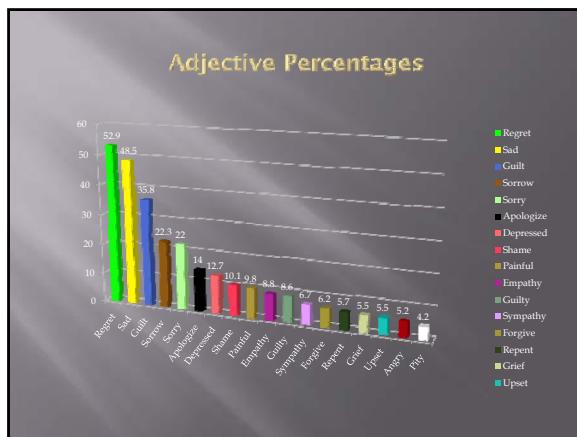
Summary of Hypothesis One

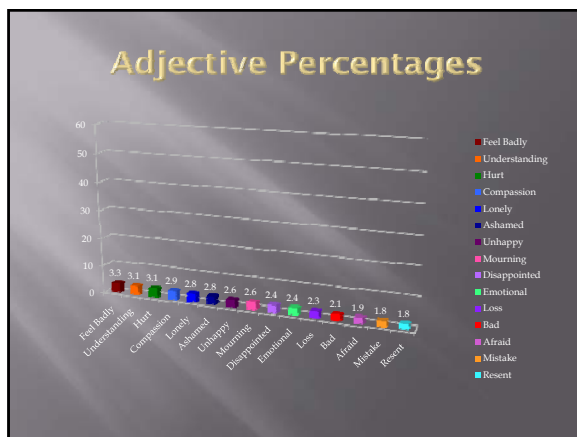
- Subjects used a total of 431 words to describe remorse.
- The most frequently occurring words/adjectives were: (1) Regret/Regretful/Regrets (52.9%), (2) Sad/Sadness/Saddened/To feel sad (48.5%), (3) Guilt (35.8%), (4) Sorrow/Sorrowful (22.3%), (5) Sorry/Sorry for/Feel sorry/Sorry about (22.0%), (6) Apologetic/Apologize/Apology (14.0%), and (7) Depressed/Depressing/Depression (12.7%).
- Currently our research assistant is organizing/inputting data regarding parts of speech (noun, verb, preposition).

Frequency of Adjective Responses









Results from Hypothesis Two: Remorse Opinion Checklist

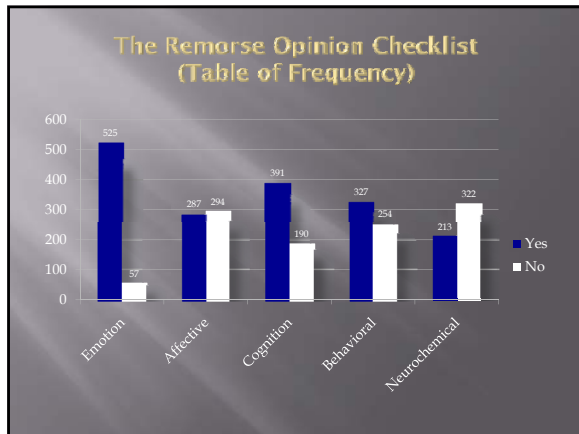
- ▣ In part II, the subject was provided with the following question:
 - When someone is said to be "remorseful," I believe that he or she experiences this _____.
 - ▣ ____ emotionally, e.g., she or he has a feeling experience.
 - ▣ ____ cognitively, e.g., she or he has a thinking experience.
 - ▣ ____ behaviorally, e.g., she or he may do something [prosocial]
 - ▣ ____ affectively, e.g., her or his facial expression [or voice tone] changes
 - ▣ ____ neurochemically, e.g., various chemicals are released in the brain and/or various areas of the brain respond
 - ▣ ____ other; please describe
 - The subject was provided with the opportunity to select as many, if any, responses that she/he believed best described the construct of remorse.

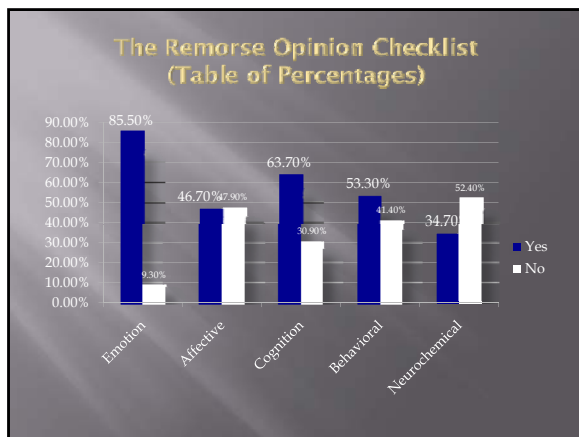
Hypothesis Two (Continued)

- ▣ Results revealed the following:
 - ▣ Five hundred twenty-five subjects (85.5%) endorsed that Remorse is an Emotional experience, while 57 (9.3%) did not.
 - ▣ Two hundred eighty-seven subjects (46.7%) endorsed that Remorse is an Affective experience, while 294 (47.9%) did not.
 - ▣ Three hundred ninety-one subjects (63.7%) endorsed that Remorse is a Cognitive experience, while 190 (30.9%) did not.
 - ▣ Three hundred twenty-seven subjects (53.3%) indicated that Remorse is a Behavioral experience, while 254 (41.4%) did not.
 - ▣ Two hundred thirteen subjects (34.7%) believed that Remorse is a Neurochemical experience, while 322 (52.4%) did not.

Results from the Opinion Checklist (Continued)

- ▣ Within the "other" category, a small group of subjects also described remorse as a physiological and/or spiritual experience. There was also a small group of individuals who provided either a written description of another variable impacting one's ability to/not to experience remorse or a personal description of her/his understanding of remorse.
 - Four subjects (0.7%) indicated that Remorse is a Physiological experience.
 - Six subjects (1.0%) noted Remorse to be a Spiritual experience.
 - Eleven subjects (4.9%) provided a written description of another variable which might impact one's ability to experience Remorse.
 - One individual (0.4%) indicated that "he/she turns away from the [action] and does not repeat it."






**Results from the Opinion Checklist
(Continued)**

- It was not uncommon for subjects to select more than one component to describe the construct of Remorse. Frequency and percentage breakdowns of all possible combinations are noted in the following tables.

**Remorse Opinion Checklist
(All Combinations)**

Experienced	Frequency	%
Emotional	149	25.6
Cognitive	16	2.7
Behaviorally	2	.3
Affectively	7	1.2
Neurochemically	5	.9
All of the Above	146	25.1
Emotional/Cognitive	28	4.8
Emotional/Behavioral	11	1.9
Emotional/Affective	3	.5
Emotional/Neurochemical	2	.3
Cognitive/Behavioral	1	.2
Behavioral/Neurochemical	1	.2



**Remorse Opinion Checklist
(All Combinations)**

Experienced	Frequency	%
Emotional/Cognitive/Behavioral	30	8.6
Emotional/Cognitive/Affective	21	3.6
Emotional/Cognitive/Neurochemical	18	3.1
Emotional/Behavioral/Affective	8	1.4
Emotional/Affective/Neurochemical	4	.7
Emotional/Cognitive/Affective/Behavioral	66	11.3
Emotional/Cognitive/Affective/Neurochemical	5	.9
Emotional/Cognitive/Behavioral/Neurochemical	25	4.3
Emotional/Behavioral/Affective/Neurochemical	5	.9
Emotional/Cognitive/Behavioral/Muscular	1	.2
Emotional/Cognitive/Affective/Neurochemical/Muscular	1	.2
Emotional/Cognitive/Affective/Neurochemical/Spiritual	1	.2

**Remorse Opinion Checklist
(All Combinations)**

Experienced	Frequency	%
Emotional/Cognitive/Affective/Behavioral/Neurochemical/Spiritual	1	.2
Emotional/Cognitive/Behavioral/Compassion/Repentfully/Realizing Actions	1	.2
None	3	.5
Cognitive/Behavioral/Neurochemical	1	.2



- Two vignettes were randomly presented to participants in the study.
- One vignette portrayed a remorseful protagonist (RV+), while another portrayed a remorseless protagonist (RV-).
- Subjects were asked to read the respective vignette and underline text that aided them in answering the two final questions.
- Both of the final questions pertained to the subject's perception of the protagonist in each respective vignette.
- The first question in the last section asked the subject to "Check any of the following that apply:"
 - Ms. Jones [the protagonist] expresses remorse affectively or facially.
 - Ms. Jones expresses remorse cognitively or in thought.
 - Ms. Jones expresses remorse behaviorally through her actions.
- Lastly, the final question asked, "Do you believe that Ms. Jones is remorseful?" Yes ____ No ____

Vignette One

□ Vignette One:

- Ms. Jones is a 55-year-old, divorced, African-American female serving a twenty-year to life sentence for first degree murder. She is approximately 5'3" and weighs 150 pounds. Ms. Jones has a cane that assists her in walking. She has been in prison for over 22 years. She has had no disciplinary write-ups for 22 years and has accomplished many things, e.g., has earned her GED, is taking college classes, is a member of various lifer programs, and has attended workshops on domestic violence, healing from abuse, and making better choices. When Ms. Jones presents before the Parole Board, she states that she is very sorry for what she did. She sits with her hands in her lap and is unable to look at anybody in the room. Her head is down and few tears are rolling down her cheeks. Her speech is soft and she says – "I regret what I did. It should never have happened. The guilt is something that I live with every day. I think about how one wrong move led to such a sad outcome. If I knew then what I know now, I would never have fired that gun. I really am trying to become a better person as a result of what I did. I have written letters to the victim's family trying to apologize for what I have done, sharing with them – "If I could go back, I would do it all differently."

Vignette Two

□ Vignette Two:

- Ms. Jones is a 55-year-old, divorced, African-American female serving a twenty-year to life sentence for first-degree murder. She is approximately 5'3" and weighs 150 pounds. Ms. Jones has a cane that assists her in walking. She has been in prison for over 22 years. She had many disciplinary write-ups over the past 22 years for fighting and refusing to follow directions. She has not attended any workshops to improve herself. Although she never completed high school, and has had the opportunity to complete her GED, she has failed to do so. When Ms. Jones presents before the Parole Board, she says: "I can't say that I am sorry for what I did, I was just defending myself." She sits with her arms crossed and is leaning back in her chair. She has a smile on her face and fidgets in her chair. Her tone of voice is loud, and she frequently interrupts board members while they are talking. Lastly, Ms. Jones states – "I wish that I could say that I feel guilty, but I don't. I do feel bad about taking someone's life, but – not guilty. Being in prison these past 22 years hasn't taught me anything."

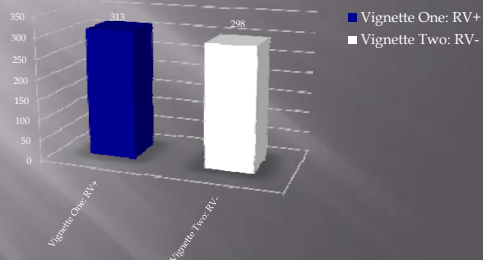
A Note About Each Vignette

- Each respective vignette was broken down into segments of text that were later coded as either affect, emotion, cognition, and/or behavior, contingent on the subject's underlined text.
- Therefore, the subject's underlined text, in relation to her/his responses to the final two questions, might also be analyzed.

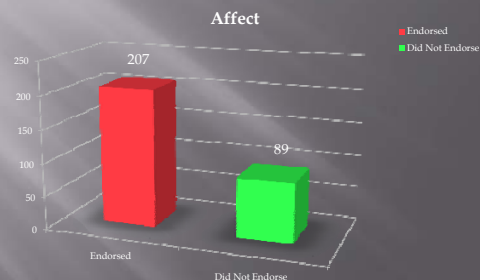
Vignette Findings

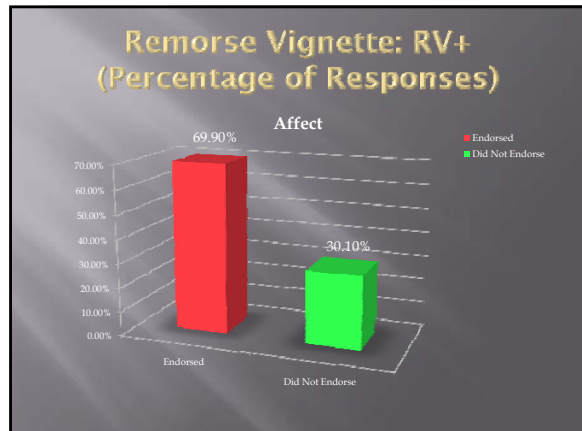
- Three hundred thirteen subjects (51.2 %) completed Vignette 1 (RV+).
- Two hundred ninety-eight subjects (48.8%) completed Vignette 2 (RV-).
- Vignette One:
 - Of those 313 subjects completing RV+, 207 (69.9%) believed that Ms. Jones expressed remorse affectively, while 89 subjects (30.1%) did not.
 - Two hundred twenty subjects (74.1%) believed that Ms. Jones expressed remorse cognitively, while 76 subjects (25.6%) did not.
 - Two hundred sixty-four subjects (89.2%) indicated that Ms. Jones expressed remorse behaviorally or through her actions, while 32 (10.8%) did not.
 - Of those subjects completing RV+, 266 (90.8%) believed Ms. Jones was remorseful, while only 21 subjects (7.2%) indicated that she was not.
 - Discrepancies in sum totals can be attributed to either missing data or no indication one way or the other.

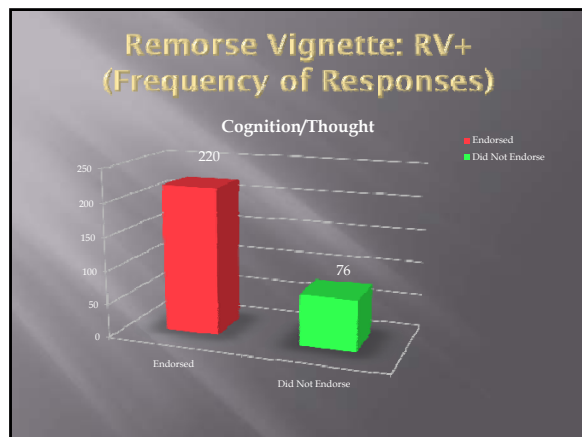
Number of Subjects Completing Each Vignette

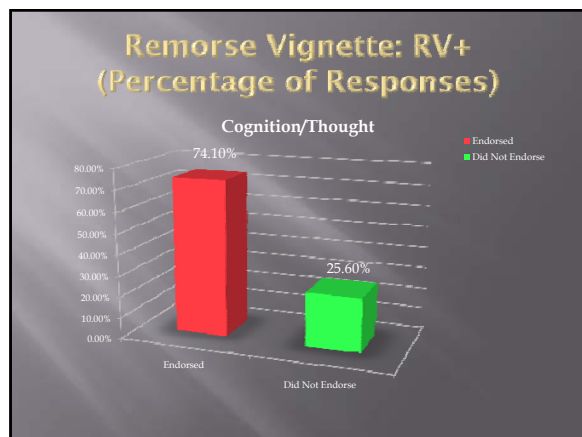


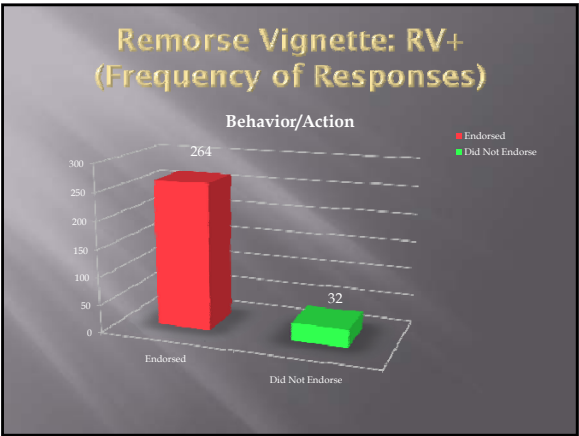
Remorse Vignette: RV+ (Frequency of Responses)

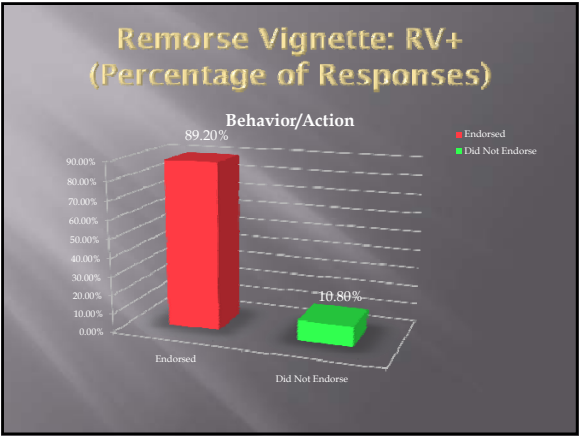


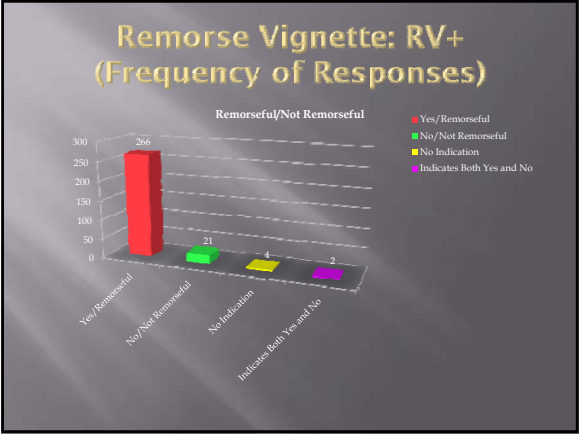


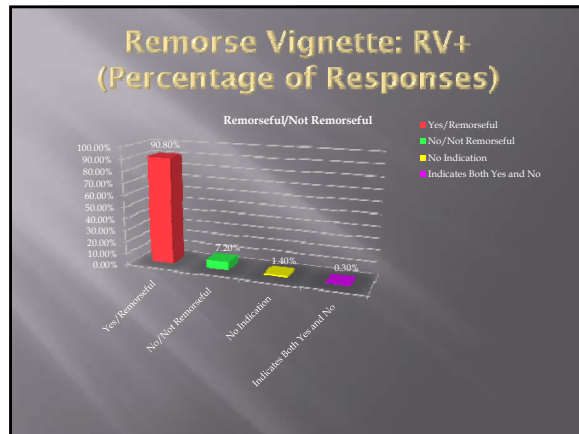


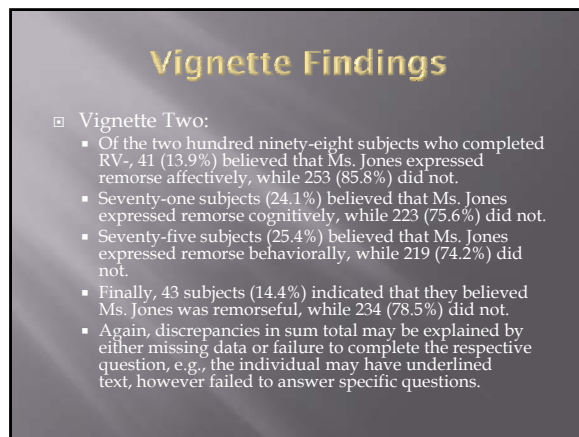


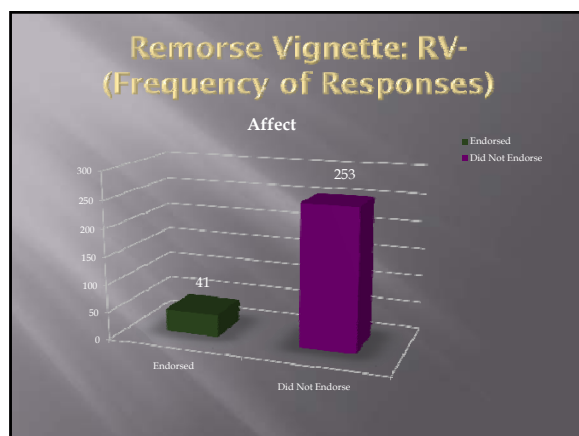


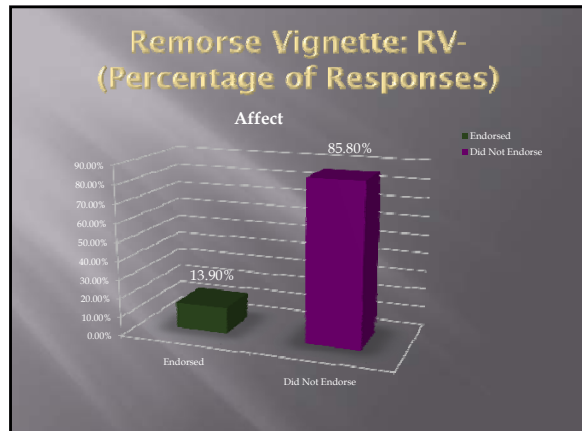


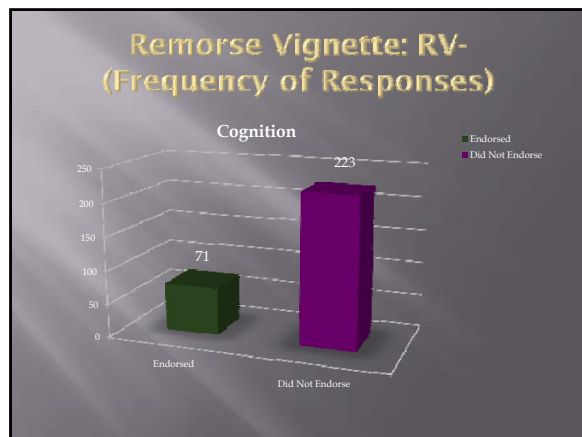


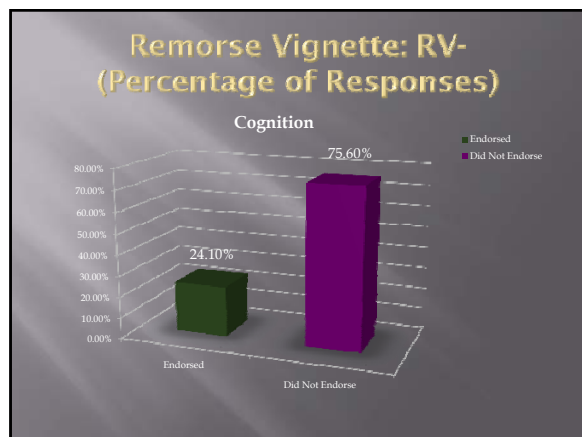


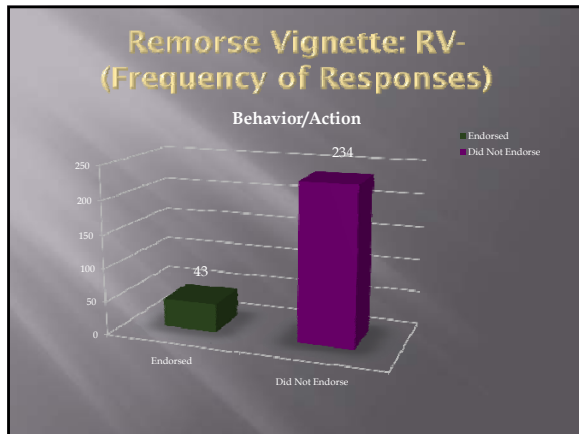


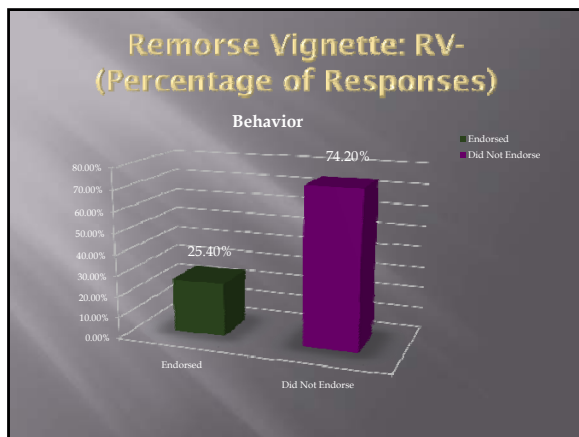


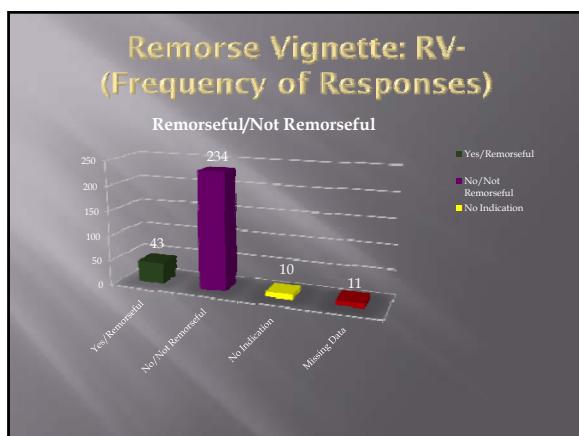


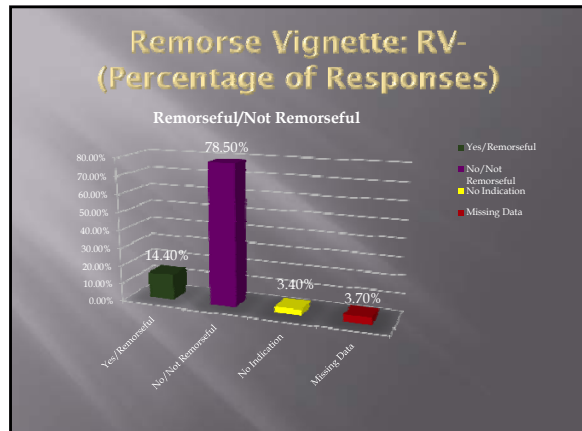


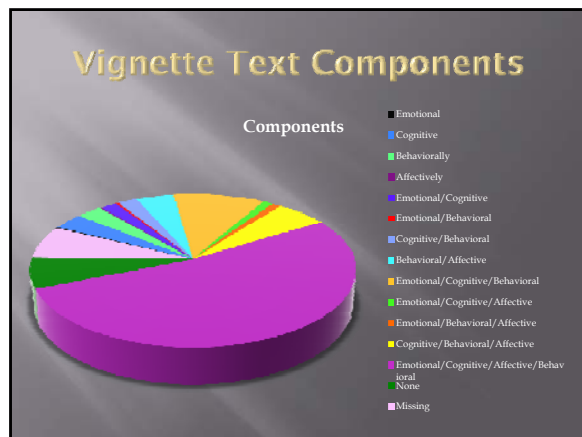














Vignette Components (Frequencies and Percentages)

Vignette Components	Frequency	Percent %
Emotional	1	.2
Cognitive	20	3.3
Behavioral	17	2.8
Affective	1	.2
Emotional/Cognitive	11	1.8
Emotional/Behavioral	2	.3
Cognitive/Behavioral	13	2.1
Behavioral/Affective	25	4.1
Emotional/Cognitive/Behavioral	60	9.9
Emotional/Cognitive/Affective	7	1.1
Emotional/Behavioral/Affective	6	1.0
Cognitive/Behavioral/Affective	34	5.6
Emotional/Cognitive/Affective/Behavioral	307	50.4
None	65	10.7
Missing	40	6.6








Ethical Considerations

- According to the American Psychological Association's *Ethical Principles of Psychologists and Code of Conduct*, Standard 9: Assessment, which was amended in 2010,
 - Psychologists base the opinions contained in recommendations, reports, and diagnostic or evaluative statements, including forensic testimony, on information and techniques sufficient to substantiate their findings.
 - For purposes of this presentation, we are most concerned with the notation regarding forensic testimony. Currently, we assert that there is no technique sufficient to substantiate whether one is/is not remorseful (unless she/he states that she/he is not). As such, there is no technique "sufficient," to date, to evaluate remorse.
 - In addition, we also believe that the "information" utilized to arrive at a decision must be empirically derived and/or guided by scientific research. Mere "professional opinion" and/or "clinical hunch" is insufficient information and should be confronted as such.


Ethical Considerations


- The Preamble of the 2010 (amended) *Ethical Principles of Psychologists and Code of Conduct* Principle A: Beneficence and Nonmaleficence states the following:
 - "Psychologists strive to benefit those with whom they work and take care to do no harm. In their professional actions, psychologists seek to safeguard the welfare and rights of those with whom they interact professionally and other affected persons..."
- By referring to someone in a report as lacking "remorse" or being "remorseless," we believe that psychologists/evaluators may unintentionally do harm.
- What is more beneficial is to know more about the assessment process leading to such a conclusion, and this, we believe, can be standardized.
- We are not saying that someone should never be described as lacking remorse or remorseless.
- However, we are asserting the need for a standardized and integrative framework to evaluate the Remorse Experience (RE), as well as a standardized format for presenting the results in both oral and written format. If not, professional hunches and clinical opinions may come off as irrefutable facts. In addition, the reader of such a report has no way to synthesize content which is offered subjectively by the evaluator.



Limitations of the Study


- Generalizability of the Results
 - Sample characteristics
- Cultural Differences





Future Research

- Results from the study will be utilized to create the *Remorse Appraisal Measure* (RAM).
- The RAM will provide a structured approach for appraising remorse.
- Currently, questions are being written and will be tested in the upcoming year.
- The model for the RAM, without questions, may be seen in the next few slides.
- Findings will be utilized to create a clinical treatment approach to assist those with a limited capacity to experience remorse.
- We are most hopeful that the Remorse Experience (RE) will be further deconstructed, and, with greater understanding, individuals will be able to experience remorse as something other than a learned convention, e.g., saying, "I am remorseful."
- Future researchers would benefit by rendering a more sophisticated rationale as to what makes an act or "transgression" worthy of remorse.
- Future research might explore the socialization experiences that enhance the ability to experience remorse.




Future Research

- Future research might also explore age discrepancies in cognitive, emotional, and behavioral development in the articulation and experience of remorse.
- Future investigation of relational dynamics between child and caregiver(s) may illuminate various behaviors which obstruct or strengthen the Remorse Experience.
- Individual motives, as well as personal- and other-related cues that enhance or weaken the ability to experience remorse, might also be worthy of empirical investigation.
- Future research may wish to consider the relationship between the reflective "cognitive restructuring of [a] situation" (see Hoffman, 1975, p. 619) and the emotional, affective, and prosocial behaviors of the Remorse Experience.
- Cultural differences in the experience and expression of remorse would also be worthy of consideration, e.g., is there a difference between societies that place a core emphasis on individualism versus pluralistic interdependency?

Future Research

- Albeit an initial study of remorse, our research team is also investigating the construct of insight.
- Future research will provide a theoretical and operationalized definition of insight based on empirical data.
- In conjunction with the aforementioned, our research team will create the *Insight Appraisal Measure* (I-AM).
- It is believed that the RAM /I-AM will provide both structure and continuity in the appraisal of each respective construct.



The Upcoming Study

- The upcoming study will incorporate the adjectives/words that were utilized most frequently to form the Remorse Appraisal Measure (RAM).
- The model was previously presented in the presentation.
- The RAM will provide a standardized approach to not only the appraisal of remorse, but its description in clinical and forensic-based reports.
- The final slide gives you a sneak peek of a portion of the upcoming measure.



