RELATIONSHIP OF ATTACHMENT TO ABUSE IN INCARCERATED WOMEN

A Dissertation

by

BRANDON LEE DAVIS

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2004

Major Subject: Counseling Psychology
RELATIONSHIP OF ATTACHMENT TO ABUSE IN INCARCERATED WOMEN

A Dissertation

by

BRANDON LEE DAVIS

Submitted to Texas A&M University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Approved as to style and content by:

Michael Duffy
(Chair of Committee)

Donna S. Davenport
(Member)

Victor L. Willson
(Member)

Brian Stagner
(Member)

Victor L. Willson
(Head of Department)

August 2004

Major Subject: Counseling Psychology
ABSTRACT

Relationship of Attachment to Abuse in Incarcerated Women. (August 2004)
Brandon Lee Davis, B.A., Buena Vista University; M.A., Truman State University
Chair of Advisory Committee: Dr. Michael Duffy

Four adult attachment styles that have been extensively reported in the literature have been labeled secure, dismissing, preoccupied, and fearful. Unfortunately, there are no existing published studies that measure attachment styles of incarcerated women. This study used responses from 158 women incarcerated at a federal prison on the Relationship Questionnaire, Millon Clinical Multiaxial Inventory-III (MCMI-III), and Record of Maltreatment Experiences to examine several facets of the association of attachment styles with childhood abuse and scales on the MCMI-III. The inmates who survived abuse endorsed the fearful and preoccupied attachment styles more, and the secure style less, than did the women who did not acknowledge a history of abuse. There was no statistically significant finding among attachment styles based on physical or sexual abuse. Inmates who were abused by a family member were more likely to endorse the fearful attachment style. The depressive, sadistic, and dependent MCMI-III scales were determined to be more highly associated with fearful or preoccupied attachment styles than with dismissing or secure styles. Finally, the inmates endorsed the anxious/ambivalent (fearful and preoccupied) attachment style more, and the secure style less, than non-incarcerated individuals as reported in the literature.
ACKNOWLEDGMENTS

I would like to thank Dr. Duffy for his work over the last three years as my advisor and dissertation chair. His guidance through this dissertation, as well as graduate school in general, was invaluable. He was a wonderful role model and was able to share his gift for therapy with his students. I grew personally and professionally as a result of working with him.

Dr. Davenport had a positive impact by teaching how creativity and imagery can be beneficial in therapy. In addition, her suggestion to add the MCMI-III to this dissertation made a considerable improvement. Dr. Willson lending his statistical expertise was greatly appreciated. He was able to help with this project and provide suggestions despite having limited time due to his new responsibilities. Dr. Stagner obviously has a passion for psychology, which spreads quickly to his students. His challenging questions helped to push me to explore my limits. Susan Cromwell also served as a valuable resource throughout this process by working tirelessly with me through the application of statistical procedures.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Questions</td>
<td>3</td>
</tr>
<tr>
<td>II LITERATURE REVIEW</td>
<td>4</td>
</tr>
<tr>
<td>Attachment Styles</td>
<td>4</td>
</tr>
<tr>
<td>Attachment and Abuse</td>
<td>10</td>
</tr>
<tr>
<td>Prevalence of Attachment Styles in Abuse Survivors</td>
<td>13</td>
</tr>
<tr>
<td>Attachment in Incarcerated Women</td>
<td>15</td>
</tr>
<tr>
<td>III METHOD</td>
<td>19</td>
</tr>
<tr>
<td>Participants</td>
<td>19</td>
</tr>
<tr>
<td>Instruments</td>
<td>19</td>
</tr>
<tr>
<td>Procedure</td>
<td>21</td>
</tr>
<tr>
<td>IV RESULTS</td>
<td>23</td>
</tr>
<tr>
<td>Questions 1-2</td>
<td>23</td>
</tr>
<tr>
<td>Question 3</td>
<td>23</td>
</tr>
<tr>
<td>Question 4</td>
<td>25</td>
</tr>
<tr>
<td>Question 5</td>
<td>27</td>
</tr>
<tr>
<td>Question 6</td>
<td>32</td>
</tr>
<tr>
<td>Question 7</td>
<td>32</td>
</tr>
<tr>
<td>Additional ROME Questions</td>
<td>34</td>
</tr>
<tr>
<td>V DISCUSSION AND CONCLUSIONS</td>
<td>37</td>
</tr>
<tr>
<td>Questions 1-3</td>
<td>37</td>
</tr>
<tr>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Question 4</td>
<td>37</td>
</tr>
<tr>
<td>Question 5</td>
<td>38</td>
</tr>
<tr>
<td>Question 6</td>
<td>39</td>
</tr>
<tr>
<td>Question 7</td>
<td>39</td>
</tr>
<tr>
<td>Additional ROME Questions</td>
<td>40</td>
</tr>
<tr>
<td>Limitations</td>
<td>41</td>
</tr>
<tr>
<td>Further Research</td>
<td>42</td>
</tr>
<tr>
<td>Implications</td>
<td>43</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>44</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>49</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>51</td>
</tr>
<tr>
<td>VITA</td>
<td>52</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attachment Styles Along Dimensions of Model of Self and Other</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Distribution of Attachment Styles for Entire Sample</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Distribution of Attachment Styles for Abused Inmates</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>$\chi^2$ Results of the Comparison of Abused Inmates to Non-Abused Inmates</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>$\chi^2$ Results of the Comparison of Inmates in the Present Study to Non-Incarcerated Samples as Reported in the Literature</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Eigenvalues for Canonical Variables</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>Statistical Significance for Canonical Variables</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>Variable Loadings</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>Group Centroids for Attachment Styles</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>$\chi^2$ Results of the Distribution of Attachment Styles Among the Intrafamilial Abuse Group</td>
<td>34</td>
</tr>
<tr>
<td>11</td>
<td>$\chi^2$ Results of the Comparison of Inmates Who Received Treatment to Those Who Did Not Receive Treatment</td>
<td>36</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

The childhood attachment styles of secure, avoidant, anxious/ambivalent, and disorganized have been extended into adulthood and labeled secure, dismissing, preoccupied, and fearful. Someone with a secure style can be conceptualized as desiring relationships that have an equal balance of closeness and autonomy. The dismissing style is characterized by discomfort with intimacy, a tendency to minimize the value of relationships, and compulsive self-reliance. People with preoccupied attachment styles are likely to be so afraid of rejection that they seek extreme degrees of closeness. A fearful attachment style suggests a desire for intimacy, but distrust for others and an avoidance of situations where rejection is possible prevents intimacy from being established.

There has been considerable research on adult attachment styles using non-incarcerated samples, including investigations of the association between attachment and childhood abuse. Although attachment styles are believed to be relatively stable over a person’s lifetime, those who experience significant life events such as abuse are more likely to shift from a secure attachment style to an insecure style than those who do not experience abuse. Abuse survivors are more likely to have fearful attachment styles and less likely to have secure styles than those who deny abuse.

Unfortunately, there is limited research on women in prison in general and no

This dissertation follows the style and format of *Journal of Counseling Psychology.*
existing published studies that measure attachment styles of incarcerated women who have experienced abuse. Therefore, the primary goal of this study was to examine the distribution of attachment styles among incarcerated females. In addition, this distribution was compared to the distribution among non-incarcerated females as reported in the literature. This comparison seemed important to establish whether or not a difference exists between the two populations and whether further research on inmates is necessary.

Another component of this project was to compare the attachment styles of inmates with and without histories of abuse. Previous research in non-incarcerated samples found secure styles to be endorsed more by those who were not abused rather than those who experienced abuse. Participants who reported abuse were more likely to have a fearful attachment style. The possibility of the same trend occurring among inmates was important to investigate.

Another variable of interest was the type of abuse the inmates experienced and whether or not that had a relationship to attachment. Only one previous study in the literature reported examining this possibility. Although that study failed to find a significant association, further investigation seemed warranted.

A final abuse variable of interest to the present study was the relationships of the abused inmates to their perpetrators and how those relationships were associated to attachment styles. Previous studies indicated participants who were abused by a family member were more likely to endorse fearful attachment styles than those with an abuse perpetrator from outside the family.
The relationship of attachment styles to scales on the Millon Clinical Multiaxial Inventory-III was also investigated. Studies with non-incarcerated samples concluded that people with fearful attachment styles tended to elevate the avoidant scale. Those with preoccupied styles were more likely to have elevated dependent scales than people with other attachment styles. The borderline scale was elevated more frequently by respondents with fearful or preoccupied attachment styles. As with the previous research questions for this study, the existence of similar trends in an incarcerated sample seemed important to investigate.

Questions

1) What is the distribution of attachment styles among incarcerated females?

2) What is the distribution of attachment styles among incarcerated females with histories of abuse?

3) Is the distribution of attachment styles among abused female inmates different from the distribution of attachment styles of inmates who were not abused?

4) Is the distribution of attachment styles of incarcerated females different from non-incarcerated samples as reported in the literature?

5) How are the inmates’ attachment styles related to scales on the Millon Clinical Multiaxial Inventory-III?

6) Are different types of abuse associated with different attachment styles?

7) Are different types of relationships between the survivors and perpetrators of abuse associated with different attachment styles?
CHAPTER II
LITERATURE REVIEW

Attachment Styles

The basic tenet of attachment theory is that early attachment relations form a prototype for later relationships throughout the lifespan (Styron & Janoff-Bulman, 1997). Bowlby (1977) explained it as, “Any form of behavior that results in a person attaining or retaining proximity to some other differentiated and preferred individual” (p. 203). In childhood, as well as adulthood, the goal of any attachment style is to maintain a perceived sense of safety (Bartholomew, 1990). However, each attachment style is associated with a different means to maintain safety and a different perception of what constitutes safety.

Upon the introduction of the concept of attachment, a majority of the research focused on children’s attachments to their caregivers. However, this was not meant to imply that attachment related only to childhood and was irrelevant to adults. Bowlby (1977) stated that, “While especially evident during early childhood, attachment behavior is held to characterize human beings from the cradle to the grave” (p. 203). He expressed the belief in a strong relationship between people’s early relationships with parents and the later capacity to form bonds with others, as manifested by marital discourse. Bowlby also mentioned a link between childhood attachment and emotional distress and the development of personality disorders during adulthood.
Due to Bowlby’s conceptualization and presentation of attachment theory being applicable throughout the entire lifespan, attachment styles in adults were eventually studied. Although the names often differ, the four adult attachment styles are extensions of those seen in childhood (Alexander & Anderson, 1994). The four attachment styles in adults that have been identified are secure (analogous to secure attachment styles of children), dismissing (avoidant in children), preoccupied (resistant, anxious, ambivalent, or anxious/ambivalent in children), and fearful (disorganized in children).

One way to understand the four attachment styles is on the dimensions of view of self and view of others (see Table 1). Bartholomew’s (1990) conceptualization of attachment is on the basis of one’s view of self and others. The model of self can be expressed through dependence, where a negative view of self is associated with high dependence and a positive view of self is associated with low dependence. People with negative views of themselves have also been found to exhibit higher levels of anxiety and depression than those who do not hold that particular view (Muller, Lemieux, and Sicoli, 2001). These dysfunctional beliefs may prevent someone from adequately dealing with stress and increasing the likelihood of developing psychopathology.

The other dimension, model of others, is expressed through avoidance. Someone with a negative view of others is high in avoidance, while a person who views others positively is low in avoidance. The secure attachment style represents a positive view of self and others. The dismissing attachment style is also characterized by a positive view of self, but this group has a negative model of others. The preoccupied style has a negative model of self and positive model of others. Finally, the fearful style has a
TABLE 1
Attachment Styles Along Dimensions of Model of Self and Other

<table>
<thead>
<tr>
<th>Positive Model of Self</th>
<th>Negative Model of Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Low Dependence)</td>
<td>(High Dependence)</td>
</tr>
<tr>
<td>Positive Model of Other</td>
<td></td>
</tr>
<tr>
<td>(Low Avoidance)</td>
<td>Secure</td>
</tr>
<tr>
<td></td>
<td>Preoccupied</td>
</tr>
<tr>
<td>Negative Model of Other</td>
<td></td>
</tr>
<tr>
<td>(High Avoidance)</td>
<td>Dismissing</td>
</tr>
<tr>
<td></td>
<td>Fearful</td>
</tr>
</tbody>
</table>

The conceptualization of attachment styles through models of self and others was given additional support from a study involving 118 undergraduates (38 men and 80 women) at the University of Southern California (Collins & Read, 1990). The authors found that individuals who fit with a secure attachment style tended to have a higher sense of self-worth and greater social self-confidence than did others. They also viewed others as trustworthy, dependable, and altruistic. Alexander and Anderson (1994) further described people with secure attachment styles as able to acknowledge distress in the past or present, but believe in the possibility of a positive future. They are also able to examine contradictory feelings and tolerate more distress in therapy. McCarthy and
Taylor (1999) viewed the secure attachment style as being associated with desiring relationships that have an equal balance of closeness and autonomy.

On the other hand, although someone with a dismissing attachment style would also have a positive view of self, that person would have a negative view of others. After again administering questionnaires to 406 undergraduates at USC (206 women, 184 men, and 16 who did not report sex), Collins and Read (1990) found that people described as having avoidant (dismissing) attachment styles were uncomfortable with intimacy, not confident in others’ abilities, and not worried about being abandoned. They have also been described as tending to deny the existence of problems, minimize the value of relationships, and be compulsively self-reliant (Alexander & Anderson, 1994). Bartholomew (1990) argued that the difficulty with intimacy for an avoidant attachment is actually a fear of closeness rather than simply detaching. She claimed the dismissing style is a defensive style meant to guard against experiencing negative affect, which typically activates attachment-seeking behaviors.

The third attachment style is the preoccupied style. McCarthy and Taylor (1999) described people with preoccupied attachment styles as being so afraid of rejection that they seek extreme degrees of closeness. Their confidence in others and lack of self-confidence leads them to be fearful of, and preoccupied with, being abandoned and unloved (Collins & Read, 1990). Bartholomew (1990) stated their insatiable desire to gain approval from others exacerbates their needs for dependency. They are also believed to be less assertive, have less of a sense of control over their environment, and
engage in more self-disclosure. In romantic relationships, people with preoccupied styles are seen as clinging, jealous, and dependent (Alexander & Anderson, 1994).

The fourth, and most recently identified style, is the fearful attachment style, which is characterized by a sense of unworthiness combined with an expectation that others will be rejecting (Bartholomew & Horowitz, 1991). People who utilize this style experience significant anxiety and have difficulty trusting themselves or others (Coe, Dalenberg, Aransky, & Reto, 1995). They want intimacy, but distrust others and actively avoid situations where the possibility of rejection exists (Bartholomew, 1990). This process often destroys their chances of establishing satisfying relationships.

Fearful attachment styles often have a combination of traits of preoccupied and dismissing attachment styles. The fear of rejection is common in both fearful and preoccupied attachment styles. When Alexander (1993) administered questionnaires to 112 female incest survivors, she found support for the avoidance of interpersonal contact aspect of a fearful attachment style, which also occurs in a dismissing attachment style. Despite these similarities, Coe et al. (1995) described a fearfully attached adult as someone who is unable to be preoccupied with powerful others (as in preoccupied attachment), or be compulsively self-reliant (as in dismissing attachment). This lack of resources may lead to an overuse of specific defenses.

One such defense that may be over-utilized by someone with a fearful attachment style is dissociation. Anderson and Alexander (1996) found a statistically significant relationship between dissociation and the fearful attachment style. These individuals may have had poor relationships with their parents, which left the children in situations
where their source of support (their parents) was also the source of great anxiety. Thus, the children never learned how to regulate their own affect, trust others, or cope with stressors. This combination of high anxiety, which would typically activate attachment behavior in others, combined with high avoidance, leaves the individual with a “paradox that cannot be solved” (Liotti, 1992, p. 198).

In addition to dissociation, another variable related to attachment styles that has been examined is personality disorders. Alexander et al. (1998) conducted a study to examine the relationship between personality disorders, as measured by the Millon Clinical Multiaxial Inventory-II (MCMI-II), and attachment styles among female incest survivors. This study used 92 of 112 women from an earlier study by Alexander (1993). Alexander et al. (1998) found elevations on the avoidant scale of the MCMI-II more likely among women with fearful styles than with secure or dismissing. Those with preoccupied attachment styles were also more likely to elevate the avoidant scale than people with dismissing styles. On the dependent scale, women with preoccupied styles showed more elevations than those with secure, fearful, or dismissing styles. The borderline scale was more likely to be elevated by someone with a fearful attachment style than by someone with a secure or dismissing style. In addition, women with preoccupied styles were more likely to elevate the borderline scale than women with dismissing styles.

The MCMI-II was also used by Bender, Farber, and Geller (2001) to study the relationship between attachment and personality disorders. Their study involved 30 male and female adult outpatients at a university-based training clinic. The results suggested
the histrionic, narcissistic, antisocial, borderline, and aggressive-sadistic scales were more associated with insecure attachment styles rather than secure styles. People with aggressive-sadistic tendencies were believed to need others for purposes of exploitation, not to satisfy needs of security, reassurance, or nurturance.

Attachment and Abuse

It is likely that significant life events, such as abuse, affect the stability of attachment. In order to examine the stability of attachment, Waters, Merrick, Treboux, Crowell, and Albersheim (2000) conducted a longitudinal study. In 1975 and 1976, 60 one-year olds participated in the Ainsworth and Wittig Strange Situation experiment. Most of the infants also participated in a follow-up study at the age of 18 months. In 1995, 50 of the original participants (29 females and 21 males) agreed to be interviewed for another follow-up study using the Berkeley Adult Attachment Interview (AAI). The authors also recorded the number of negative life events that occurred prior to the age of 18 for the participants by using the transcripts from the AAI. Negative life events were defined as the loss of a parent, parental divorce, life-threatening illness of parent or child, parental psychiatric disorder, or physical or sexual abuse by a family member.

The results of the study indicate that 36 of the 50 (72%) participants maintained the same attachment classification on a secure-insecure dichotomy in adulthood as they did in childhood (Waters et al., 2000). They also found that secure infants who had at least one negative life event were more likely to have an insecure attachment in adulthood than secure infants with no negative life events. Stressful life events were not statistically significantly related to insecure infants change in attachment style. The
authors noted that although measurement error may account for a portion of their findings, the possibility exists that experiences beyond infancy are a factor of adult attachment.

Another longitudinal study also examined the issue of stability of attachment styles (Cozzarelli, Karafa, Collins, and Tagler, 2003). This sample consisted of 442 women recruited from three women’s clinics. A follow-up interview occurred at approximately one month after the initial contact with another happening after two years. The same attachment style was endorsed at the initial contact and two-year follow-up by 54% of the participants. The authors concluded that although attachment is relatively stable, it can be affected by stressful life events such as the breakup of a relationship, rape, or assault.

One negative life event in particular, childhood abuse, seems to be an important factor in attachment (Styron & Janoff-Bulman, 1997). In another study, 879 undergraduates rated their attachments to each parent and the students’ romantic partners. Approximately 26% of their sample reported verbal, physical, or sexual childhood abuse. The researchers combined all three insecure styles as they examined the differences between the students who reported abuse and those who did not. They found the abuse group reported statistically significantly more insecure attachments to their mothers, fathers, and romantic partners.

When abuse categories are considered separately, sexual abuse has been found to be associated with insecure attachments. Lewis, Griffin, Winstead, Morrow, and Schubert (2003) conducted a study using 255 participants from a university’s
psychology department. Childhood sexual abuse survivors acknowledged more depression and anxiety and were more likely to endorse fearful, preoccupied, or dismissing attachment styles than those who did not report childhood abuse.

Roche, Runtz, and Hunter (1999) also studied attachment among sexual abuse survivors. They asked 307 female undergraduates to complete the Relationship Questionnaire (Bartholomew & Horowitz, 1991) and information regarding childhood abuse. A total of 27% reported the presence of abuse, with 10% indicating intrafamilial abuse and 17% of the total participants acknowledging extrafamilial abuse. The combined abuse groups were more likely to have fearful attachment styles and less likely to have secure styles than the group who denied abuse. The Abuse groups’ model-of-self and model-of-other was less positive than the No Abuse group. Within the Abuse group, the Intrafamilial Abuse participants endorsed fewer secure and dismissing styles, but more fearful attachments, than did the Extrafamilial Abuse participants. Although the Extrafamilial Abuse group had more positive model-of-self views than the Intrafamilial Abuse group, there were no differences on model-of-other between these groups.

Sexual abuse was also studied by Anderson and Alexander (1996) when those authors interviewed 92 women who reported histories of incest. They found that a fearful style was statistically significantly related to dissociation. These authors posited that because many of the participants’ parents had also been abused, they also resorted to dissociation as a coping mechanism, which left the children unable to depend on their parents. If the children were also put in the role of caregiver for the adults, the children may not have been able to successfully integrate such a variety of self-concepts into one,
integrated model of self. Thus, dissociation would likely result, which would prohibit the children from building self-confidence or trust in others.

Dissociation is a common feature of PTSD, which also has links to attachment (Kroll, 1993). Muller, Sicoli, and Lemieux (2000) found that participants with fearful and preoccupied attachment styles reported higher levels of PTSD symptomatology than the dismissing and secure styles. A noteworthy point is that the former groups possess a negative view of self, while the latter groups maintain a positive view of self. A negative view of self was found to be a better predictor of PTSD symptoms than negative view of others or abuse types (physical, psychological, domestic, and sexual). Of the four types of abuse, only physical abuse was a statistically significant predictor of PTSD symptoms.

In addition to type of abuse experienced, other abuse-related variables have also been studied. Alexander et al. (1998) dissected the concept of abuse in relation to attachment and found that attachment was not statistically significantly related to age of onset of the abuse, type of abuse, severity of abuse, degree of coercion, or the number of perpetrators. Interestingly, they did report higher secure attachments among women who had been abused by their fathers or stepfathers than among women abused by someone other than a father figure. The fearful, preoccupied, and dismissing attachment styles were not related to the survivor’s relationship with the perpetrator.

**Prevalence of Attachment Styles in Abuse Survivors**

In order to study the prevalence of attachment styles in general, Hazan and Shaver (1990) used the results of 670 responses (522 women, 143 men, 5 did not report)
to a questionnaire they published in a local newspaper. Of their respondents, 50% classified themselves as secure, 30% as avoidant, and 19% as anxious/ambivalent (preoccupied). These findings were consistent with their previous work when 51% to 56% of their samples endorsed secure attachment styles, 23% to 28% classified themselves as avoidant, and 19% to 21% claimed to be anxious/ambivalent (Hazan & Shaver, 1987; Shaver & Hazan, 1987). Feeney and Noller (1990) also found similar results among university students, as 55% were secure, 30% avoidant, and 15% ambivalent. However, none of these authors reported information on the presence of abuse among their participants.

Although McCarthy and Taylor (1999) included information on abuse histories among their participants, there were similarities to previous findings. They interviewed and administered Hazan and Shaver’s adult attachment questionnaire to 39 women who were known to have received poor parenting in childhood and who had participated in previous research. The incidence of at least one form of childhood abuse (sexual, physical, or emotional) in this sample was 41%. Of the total sample, 44% reported secure attachments, 41% had avoidant attachment styles, and 15% rated themselves as anxious/ambivalent (preoccupied). Although there was less of a gap between secure and avoidant, the rank order was consistent with previous studies.

Muller, Sicoli, and Lemieux (2000) not only examined prevalence rates of attachment styles among abuse survivors, their participants were chosen based on the presence of childhood abuse. Of the 66 participants (24 men and 42 women), 58% met the screening criteria for physical abuse and 42% met the criteria for sexual abuse. The
dismissing style was the most prevalent (42%), followed by secure (24%), then fearful (21%), and finally preoccupied (12%). Although this study’s finding that the dismissing style was the most prevalent overall conflicts with results of previous research, a point of consistency is that the dismissing style is the most prevalent insecure attachment style.

Two other studies that examined responses by incest survivors reported contradictory findings. When Alexander (1993) administered the Relationship Questionnaire to 112 incest survivors, 58% endorsed a fearful attachment style, 16% as dismissing, 14% as secure, and 13% as preoccupied. She concluded, “Incest is indeed associated with a higher rate of insecure attachment and especially with a higher rate of fearful/disorganized attachment” (Alexander, 1993, p. 353). Alexander et al. (1998) subsequently interviewed a subset of 92 people from the same sample using the Family Attachment Interview. They found 60% had a fearful attachment style, 21% were preoccupied, 11% were dismissing, and 9% were secure.

Attachment in Incarcerated Women

Most of the published literature on attachment is based on non-incarcerated samples. Gorsuch, however, performed two studies using women who had been referred to psychiatric facilities by prison medical officers. The first study involved a review of the medical notes of 44 women (Gorsuch, 1998). A group of 22 ‘difficult to place’ women (target group) were compared on demographic and psychosocial variables to a group of 22 women who received the hospital placement without difficulty (comparison group). The target group had a statistically significantly higher rate of violent crimes and having committed multiple offenses. The target group reported statistically significantly
higher rates of sexual and physical abuse than the comparison group. The physical abuse that was reported by the target group appeared to have been severe, causing serious physical injuries. Perpetrators of the sexual abuse that was reported by the target group tended to be male members of their immediate families.

Gorsuch’s (1999) follow-up study involved a structured interview and administration of the MCMI-II with a subset of 10 of the 22 ‘difficult to place’ women. A common theme from the interviews was “being pulled between unbearable isolation and terrifying involvement with others” (Gorsuch, 1999, p. 110). Their fear of social contact was as severe as their emotional pain from isolation. According to Gorsuch, most incarcerated women are able to establish a place for themselves within the prison culture. However, women similar to the target group in her study often cannot relate to others well enough to adequately cope with the stress of being in prison. The author argued that incarceration may increase the inmates’ proximity-seeking behavior, as expressed by thinking about, and wishing to be with, loved ones outside the prison. Although Gorsuch did not use an attachment measure, these themes are similar to characteristics of a fearful attachment style.

The second feature of the follow-up study was the administration of the MCMI-II. Common elevated clinical personality pattern scales (above a base rate of 85) were avoidant, self-defeating, passive-aggressive, schizoid, and dependent. Nine of the ten inmates also elevated the borderline and schizotypal severe personality pathology scales. “The interviewed women’s MCMI-II personality profiles reflect their oscillation between strategies of distancing or detachment (schizoid, avoidant) and intense
involvement (dependent) as they constantly attempt to find relief from anxiety and distress” (Gorsuch, 1999, p. 110). Many of the MCMI-II elevations are consistent with elevations from Alexander et al. (1998) that were associated with either preoccupied or fearful attachment styles. Thus, the results from an interview and MCMI-II provide support for the prevalence of fearful or preoccupied attachment styles, rather than dismissing, among these incarcerated women.

Personality disorders were also assessed by Dolan and Mitchell (1994) when they studied 150 female offenders using the Personality Disorder Questionnaire-Revised (PDQ-R). Overall, Borderline Personality Disorder was the most common category. According to previously reviewed research, these women, with Borderline Personality Disorder diagnoses, would most likely have fearful or preoccupied attachment styles. However, limitations of this study are noteworthy. First of all, Dolan and Mitchell noted that self-report questionnaires for assessing personality disorders have been criticized as over-inclusive. Furthermore, the PDQ-R categories do not represent definitive clinical diagnoses. Finally, the authors added that their results should not be generalized to women in other prisons because their sample was from female inmates who either had not yet been tried, or were unconvicted.

Another variable that may be associated with attachment styles, besides personality disorders, is the nature of the crime committed by female inmates. Goldstein and Higgins-D’Alessandro (2001) compared the results on questionnaires from 67 female violent and non-violent offenders incarcerated in the New York City jail system to 67 females enrolled in general equivalency diploma courses also in New York City.
Although there were no differences between violent and non-violent offenders, both of those groups scored higher on the dismissing attachment style than did the control group. The violent offenders were also more likely to endorse a preoccupied attachment style than the control group. However, once again, there was no difference between the violent and non-violent offenders. As with the previous study, a limitation expressed by Goldstein and Higgins-D’Alessandro was that the results from this study should not be generalized to inmates in general because the incarcerated participants in this study had not yet had their cases adjudicated.

Although there is limited research on the relationship between women in prison and personality disorders, abuse, and type of crimes committed, there are no existing published studies that measure attachment styles of incarcerated women who have experienced abuse. This paucity of research on attachment among incarcerated women served as the rationale for conducting the present study.
CHAPTER III

METHOD

Participants

The participants for the present study were 158 female inmates at Federal Prison Camp-Bryan (FPC-Bryan) who were chosen randomly by their prison register numbers. The sample consisted of Caucasian, African-American, and Hispanic inmates who ranged in age from 19 to 69. Of the 158 inmates in the sample, 111 (70%) reported experiencing childhood abuse. Among the abused inmates, 47 acknowledged physical abuse, 14 admitted being sexually abused, and 50 claimed to have been both physically and sexually abused. Interestingly, 28 of the 111 (25%) initially denied abuse when simply asked to rate their experience with sexual or physical abuse on a four-point likert scale ranging from “not at all” to “severe.” However, those 28 individuals later acknowledged being subjected to specific acts which could be considered abusive. Therefore, the 28 individuals were included in the abuse survivor category despite their initial denial.

Instruments

Relationship Questionnaire (Bartholomew & Horowitz, 1991). All inmates who volunteered were administered the Relationship Questionnaire (RQ), which has two parts. The first part is made up of four paragraphs, each describing an attachment style. Respondents were asked to indicate which description best fits their roles in close
relationships. In the second part, the respondents were asked to rate how well the four descriptions fit them on a 7-point Likert Scale.

Bartholomew (2001) stated that there are no normative data on the RQ. However, Griffin and Bartholomew (1994) claimed to have found strong support for the construct validity of the model of self and other, the two dimensions they believed to be the basis for attachment. Across two studies, they used four methods of measuring attachment that were all based on the two dimensions and found convergent validity to range from .38 to .43 and discriminant validity to range from -.09 to .09.

Millon Clinical Multiaxial Inventory-III (Millon, Millon, & Davis, 1994). This objective instrument is a commonly used measure of personality. The inmates were asked to answer “true” or “false” to 175 self-descriptive items that make up the 11 Clinical Personality scales and 3 Severe Personality scales used for this study. Internal consistency estimates for these 14 scales range from .66 to .89.

Record of Maltreatment Experiences (Wolfe & McGee, 1994). The Record of Maltreatment Experiences (ROME) is a retrospective instrument that is intended to measure the participant’s recall of past childhood abuse. On the first page, respondents were asked to rate the severity of their physical or sexual abuse experiences. Their four severity options ranged from “not at all” to “severe.” A question was added that inquired whether or not the inmate sought treatment to cope with the abuse, and another question about the length of that treatment, if applicable. On subsequent pages, they were asked to rate the severity of specific physically or sexually abusive experiences (i.e. burned or scalded intentionally, engaged in vaginal intercourse with me, etc.). Although the
instrument contains five subscales, only the Physical Abuse and Sexual Abuse subscales were used in this study. Reliability estimates for these two scales have been reported as .81 and .91, respectively.

Procedure

Following consultation with the dissertation committee, the next step was to obtain approval from the Texas A&M University Institutional Review Board (IRB) and the Federal Bureau of Prison’s Bureau Research Review Board. After minor changes, the proposal was approved by the Texas A&M University IRB. The proposal was then submitted to the Bureau of Prisons to begin a multiple-step process. First, the plan was reviewed by the Chief Psychologist of FPC-Bryan and other staff members. Then, it was forwarded to the warden of the prison. After receiving approval from those sources, the proposal was then sent to the Regional Psychology Services Administrator’s office to be reviewed. The final step involved obtaining approval from the Bureau of Prisons’ Office of Research and Evaluation. Permission was eventually granted to conduct the study with no deviations from the original proposal required.

Officials at FPC-Bryan assisted in generating a random sample of inmates. Of the 840 total inmates at FPC-Bryan, 295 were randomly selected to participate. Since scheduled work duty takes priority over all other appointments, 51 inmates were removed from the list. The remaining 244 inmates were placed on an appointment list, called a callout, in groups of approximately 30. Of this sample, some inmates did not show up for their callouts (N=14) and others declined to participate (N=72), leaving a sample of 158 participants.
Each group administration was conducted in a similar fashion. A general script can be seen in Appendix A. The sessions began with an introduction and brief description of the study. Confidentiality, potential benefits to the inmates, and time requirements were also discussed. Inmates were told they were free to withdraw from the study at any point. The inmates who chose not to participate were then excused.

Next, the informed consent forms were distributed and questions posed by the inmates were answered. The inmates were given packets containing the three self-report instruments. A coding system was used to ensure the security of any individually identifiable data. Within each packet, all the instruments were identically labeled as 001, 002, 003, etc. The key of the inmates’ names and code numbers was stored at FPC-Bryan by the chair of the Local Research Review Board for the purposes of security.

The instructions for each instrument were read as necessary. They were instructed to first complete the Relationship Questionnaire, which assessed their attachment styles. The second instrument was the Millon Clinical Multiaxial Inventory-III, which is an objective personality instrument. The final instrument was the Record of Maltreatment Experiences, which inquired about physical and sexual abuse in their childhood. When the instruments were completed, the inmates were thanked for their participation.
CHAPTER IV
RESULTS

Questions 1-2

The first research question was “What is the distribution of attachment styles among incarcerated females?” The second research question was “What is the distribution of attachment styles among incarcerated females with histories of abuse?” Frequencies were calculated and the results for these questions can be seen in Tables 2 and 3. For the entire sample, the secure style was the most prevalent. There were an equal number of inmates who endorsed the fearful and dismissing styles, with preoccupied being the least common. For the inmates who reported abuse, the rank order was fearful, dismissing, secure, and finally preoccupied.

Question 3

The third research question asked “Is the distribution of attachment styles among abused female inmates different from the distribution of attachment styles of inmates who were not abused?” A Chi-Square Analysis was used (alpha level of .05) to compare these distributions and the results are presented in Table 4. The expected values were obtained by finding the proportion of non-abused inmates who endorsed each attachment style, then applying that percentage to the abused sample. For example, 45% of the non-abused inmates endorsed a secure attachment style. Using the hypothesis that the two distributions are equal, 45% (N=49) of the 110 abused inmates would also be expected to endorse the secure style. However, a statistically significant difference was found
TABLE 2
Distribution of Attachment Styles for Entire Sample

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>49</td>
<td>31</td>
</tr>
<tr>
<td>Fearful</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>Dismissing</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>

TABLE 3
Distribution of Attachment Styles for Abused Inmates

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Dismissing</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Secure</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>
TABLE 4

$\chi^2$ Results of the Comparison of Abused Inmates to Non-Abused Inmates

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
<th>% Contribution to Overall $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful</td>
<td>36</td>
<td>18.7</td>
<td>-21.2</td>
<td>40</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>17</td>
<td>7.0</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Secure</td>
<td>28</td>
<td>49.2</td>
<td>-21.2</td>
<td>23</td>
</tr>
<tr>
<td>Dismissing</td>
<td>29</td>
<td>35.1</td>
<td>-6.1</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. Expected values were obtained by applying proportions of each attachment style endorsed by non-abused inmates to the sample of inmates who were abused.

($\chi^2(3, N=110)=40.289, p<.001$), indicating the abused inmates endorsed the fearful and preoccupied attachment styles more, and the secure less, than the non-abused inmates.

The observed frequencies were higher than the expected frequencies for both attachment styles in the abuse group.

Question 4

The fourth research question queried “Is the distribution of attachment styles of incarcerated females different from non-incarcerated samples as reported in the literature?” The studies that reported attachment styles for abused and non-abused participants were used to calculate a median distribution for attachment styles, which was 51% secure, 30% dismissing, and 19% anxious/ambivalent. Since these studies used
### TABLE 5

χ^2 Results of the Comparison of Inmates in the Present Study to Non-Incarcerated Samples as Reported in the Literature

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
<th>% Contribution to Overall χ^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious/Ambivalent (Fearful/Preoccupied)</td>
<td>64</td>
<td>29.8</td>
<td>34.2</td>
<td>76</td>
</tr>
<tr>
<td>Secure</td>
<td>49</td>
<td>80.1</td>
<td>-31.1</td>
<td>24</td>
</tr>
<tr>
<td>Dismissing</td>
<td>44</td>
<td>47.1</td>
<td>-3.1</td>
<td>.4</td>
</tr>
</tbody>
</table>

*Note.* Expected values were obtained by applying proportions from a median distribution calculated from numbers reported in the literature to the present sample of inmates.

Anxious/ambivalent as one style as opposed to separating it into the preoccupied and fearful styles, the same procedure was used to address this research question. A Chi-Square Analysis was used to compare these distributions and the results are presented in Table 5. The proportions calculated to create the median distribution were applied to the sample used in this study to obtain the expected values. A statistically significant difference was found (χ^2(2, N=157)=51.402, p<.001), suggesting the inmates endorsed the anxious/ambivalent (fearful and preoccupied) attachment style more, and the secure style less, than non-incarcerated individuals as reported in the literature. The observed
frequency of the anxious/ambivalent style among the inmates was higher than the expected frequency.

**Question 5**

The fifth question was “How are the inmates’ attachment styles related to scales on the Millon Clinical Multiaxial Inventory-III?” A descriptive discriminant analysis was used to examine this relationship. This statistical procedure was used to determine which scales discriminate between the four attachment styles. Although the assumption of a multivariate normal distribution was violated, the skewness and kurtosis for all the scales were between -1.6 and .6, which is viewed as acceptable. This implies that although a violation of the assumption occurred, the violation was minor and not severe enough to invalidate the data.

As seen in Table 6, the discriminant analysis identified three canonical variables. The first function had the largest eigenvalue, explained 72% of the variance, and will be named Dependence. A justification for the naming of the function will be presented throughout subsequent paragraphs. Table 7 shows that statistical significance was reached only when functions one through three were analyzed ($\chi^2(42, N=149)=85.211, p<.001$). Since the other two analyses were not statistically significant, the Dependence variable appears to account for most of the finding.

As seen in Table 8, the depressive, sadistic, and dependent scales make the greatest contribution to the Dependence variable, as reflected by the standardized canonical discriminant function coefficients. Many of the scales have large differences between their structure coefficients and their discriminant coefficients, which suggest
TABLE 6

Eigenvalues for Canonical Variables

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.527</td>
<td>72.2</td>
</tr>
<tr>
<td>2</td>
<td>.169</td>
<td>23.1</td>
</tr>
<tr>
<td>3</td>
<td>.034</td>
<td>4.6</td>
</tr>
</tbody>
</table>

TABLE 7

Statistical Significance for Canonical Variables

<table>
<thead>
<tr>
<th>Test of Functions</th>
<th>Wilks’ Lambda</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Through 3</td>
<td>.542</td>
<td>.000</td>
</tr>
<tr>
<td>2 Through 3</td>
<td>.827</td>
<td>.445</td>
</tr>
<tr>
<td>3</td>
<td>.967</td>
<td>.969</td>
</tr>
</tbody>
</table>
TABLE 8
Variable Loadings

<table>
<thead>
<tr>
<th>Scales</th>
<th>Standardized Discriminant Function Coefficients</th>
<th>Structure Coefficients</th>
<th>Correlation with Depressive Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive</td>
<td>.498</td>
<td>.836</td>
<td>1.000</td>
</tr>
<tr>
<td>Sadistic</td>
<td>.497</td>
<td>.532</td>
<td>.258</td>
</tr>
<tr>
<td>Dependent</td>
<td>.435</td>
<td>.774</td>
<td>.637</td>
</tr>
<tr>
<td>Avoidant</td>
<td>.234</td>
<td>.720</td>
<td>.638</td>
</tr>
<tr>
<td>Negativistic</td>
<td>-.208</td>
<td>.604</td>
<td>.606</td>
</tr>
<tr>
<td>Borderline</td>
<td>.199</td>
<td>.776</td>
<td>.715</td>
</tr>
<tr>
<td>Compulsive</td>
<td>.178</td>
<td>-.504</td>
<td>-.440</td>
</tr>
<tr>
<td>Histrionic</td>
<td>-.159</td>
<td>-.595</td>
<td>-.583</td>
</tr>
<tr>
<td>Masochistic</td>
<td>-.137</td>
<td>.721</td>
<td>.762</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>-.126</td>
<td>.488</td>
<td>.476</td>
</tr>
<tr>
<td>Schizoid</td>
<td>-.114</td>
<td>.281</td>
<td>.406</td>
</tr>
<tr>
<td>Paranoid</td>
<td>-.076</td>
<td>.471</td>
<td>.484</td>
</tr>
<tr>
<td>Antisocial</td>
<td>.052</td>
<td>.448</td>
<td>.268</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>.032</td>
<td>-.494</td>
<td>-.444</td>
</tr>
</tbody>
</table>
TABLE 9
Group Centroids for Attachment Styles

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>-.597</td>
<td>.458</td>
</tr>
<tr>
<td>Fearful</td>
<td>.837</td>
<td>-.203</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>.874</td>
<td>.437</td>
</tr>
<tr>
<td>Dismissing</td>
<td>-.613</td>
<td>-.480</td>
</tr>
</tbody>
</table>

High correlations with other scales contribute to their correlations with the Dependence variable. Specifically, the depressive scale appears to be highly correlated with the avoidant, negativistic, borderline, histrionic, and masochistic scales. In addition, the depressive scale has a high correlation with the dependent scale and a low correlation with the sadistic scale. This suggests that the contribution made by the depressive and dependent scales to the Dependence variable is related in some manner, whereas the contribution of the sadistic scale is from a unique factor. Regardless, all three scales will be used in the interpretation of the Dependence variable.

Table 9 shows the group centroid values for each of the attachment styles and both canonical variables while the Figure provides a pictorial representation of the canonical variables’ abilities to discriminate between the styles. The Dependence variable appears to discriminate poorly between the fearful and preoccupied styles since
they have similar group centroids (.837 and .874, respectively), and thus are near each other on the X axis. Similarly, the proximity of the centroids for the secure and dismissing styles (-.597 and -.613 respectively) suggest the variable discriminates poorly between those attachment styles. The Dependence variable would therefore treat secure and dismissing as one attachment style and the fearful and preoccupied as a different attachment style. The Dependence variable appears to effectively discriminate between the secure/dismissing and fearful/preoccupied attachment styles.
Referring again to Bartholomew’s (1990) conceptualization of attachment styles as presented in Table 1, attachment can be viewed in terms of avoidance and dependence. She argued the secure and dismissing styles reflect low dependence while the preoccupied and fearful styles represent high dependence. Since the first canonical variable effectively discriminates between secure/dismissing and fearful/preoccupied attachment styles, the name of Dependence seemed appropriate. Furthermore, the naming of this variable as Dependence is supported by the high structure coefficient of the dependent scale from the MCMI-III.

**Question 6**

The sixth research question was “Are different types of abuse associated with different attachment styles?” Using a Chi-Square Analysis, no statistically significant differences were found among inmates’ attachment styles based on physical abuse ($\chi^2(3, N=47)=2.037, p=.57$) or both physical and sexual abuse ($\chi^2(3, N=49)=7.239, p=.07$). Although a statistically significant difference was also not found for sexual abuse ($\chi^2(3, N=14)=2.889, p=.41$), that analysis lacked statistical power due to a low number of participants.

**Question 7**

A Chi-Square Analysis was again used for the seventh question, which was “Are different types of relationships between the survivors and perpetrators of abuse associated with different attachment styles?” Based upon the abused inmates’ responses, the categories for perpetrators included parents (including stepparents), non-parent family members (aunts, uncles, cousins, grandparents, siblings, stepsiblings, etc.),
extrafamilial abuser (friend of family, babysitter, stranger, neighbor), or no perpetrator identified. In addition, two categories were created to account for the inmates who were abused by multiple perpetrators across categories. The first category was labeled parent and non-parent family member while the second category was family and non-family member.

In order to obtain expected values to use in the Chi-Square Analysis, each case from a particular category was removed from the entire group of inmates who reported abuse. Next, the proportion of the remaining inmates who endorsed each attachment style was applied to the specific category that was removed. A similar process was used with each category of perpetrators. There were no statistically significant differences found among attachment styles for the parents category ($\chi^2(3, N=41)=3.016, p=.39$) or for the unidentified perpetrator category ($\chi^2(3, N=32)=6.154, p=.10$). Although statistically significant differences were also not found for the non-parent family member ($\chi^2(3, N=12)=.029, p=.99$), parent and non-parent family member ($\chi^2(2, N=9)=3.962, p=.14$), family and non-family member ($\chi^2(3, N=10)=.905, p=.824$), or extrafamilial abuser categories ($\chi^2(3, N=6)=2.42, p=.49$), those analyses lacked statistical power due to low numbers of participants in each category. However, the categories consisting of family members only were combined to create an intrafamilial abuse category. The results of this analysis are presented in Table 10. A statistically significant difference was found ($\chi^2(3, N=62)=12.077, p<.01$), indicating the inmates who were abused by a family member were more likely to endorse fearful attachment styles and less likely to endorse dismissing styles. The fearful attachment style had more observed
TABLE 10

$\chi^2$ Results of the Distribution of Attachment Styles Among the Intrafamilial Abuse Group

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
<th>% Contribution to Overall $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful</td>
<td>25</td>
<td>14.2</td>
<td>10.8</td>
<td>68</td>
</tr>
<tr>
<td>Dismissing</td>
<td>13</td>
<td>20.6</td>
<td>-7.6</td>
<td>23</td>
</tr>
<tr>
<td>Secure</td>
<td>14</td>
<td>18.1</td>
<td>-4.1</td>
<td>8</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>10</td>
<td>9.1</td>
<td>.9</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Expected values were obtained by applying proportions of attachment styles from the remaining abused inmates to inmates abused by a family member.

cases than expected in the intrafamilial group and accounted for 68% of the total $\chi^2$ while the dismissing style had fewer cases than expected and accounted for 23% of the total $\chi^2$.

Additional ROME Questions

A question was added to the Record of Maltreatment Experiences (ROME) that inquired whether or not the inmate sought treatment to cope with the abuse, and another question about the length of that treatment, if applicable. Of the 111 inmates who reported abuse, 60 (54%) denied receiving treatment, 23 (21%) acknowledged receiving treatment, and 28 (25%) did not respond to the question. Using an Analysis of Variance
(ANOVA), a statistically significant difference ($F(2, 111)=20.942, p<.001$) was found between the total ROME scores across the three groups. A Tukey HSD post-hoc procedure revealed the group who received treatment indicated more childhood abuse than both the group who did not receive treatment ($p<.001$) and the no-response group ($p<.001$). No difference was found between the group who did not receive treatment and the no-response group ($p=.11$). The responses to the length of treatment varied in form and can be found in Appendix B.

When the distributions of attachment styles for the group who received treatment and the group who did not receive treatment were compared using a Chi-Square Analysis, a statistically significant difference was found ($\chi^2(3, N=59)=16.163, p<.01$). The results are presented in Table 11. The expected values were obtained by applying the proportions of attachment styles endorsed by the group who received treatment to the group who did not receive treatment. The dismissing attachment style accounted for most of the difference (85%), meaning the inmates who did not receive treatment were more likely to endorse that style than inmates who received treatment.
TABLE 11

$\chi^2$ Results of the Comparison of Inmates Who Received Treatment to Those Who Did Not Receive Treatment

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
<th>Contribution to Overall $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissing</td>
<td>18</td>
<td>7.7</td>
<td>10.3</td>
<td>85</td>
</tr>
<tr>
<td>Secure</td>
<td>13</td>
<td>18.0</td>
<td>-5.0</td>
<td>9</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>8</td>
<td>10.3</td>
<td>-2.3</td>
<td>3</td>
</tr>
<tr>
<td>Fearful</td>
<td>20</td>
<td>23.1</td>
<td>-3.1</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note.* The expected values were obtained by applying the proportions of attachment styles endorsed by the group who received treatment to the group who did not receive treatment.
CHAPTER V
DISCUSSION AND CONCLUSIONS

Questions 1-3

This study attempted to examine several facets of the association between attachment styles and abuse among women incarcerated at a federal prison. The distribution of attachment styles for the entire sample consisted of secure being the most common, followed by an equal endorsement of fearful and dismissing, and preoccupied being the least commonly endorsed. When the distributions of the abused and non-abused inmates were compared, the results suggested that the women who survived abuse endorsed the fearful and preoccupied attachment styles more, and the secure style less, than did the women who did not acknowledge a history of abuse. Viewed on the model of self and other dimensions, the abused inmates appeared to hold a more negative view of self than the non-abused inmates. One possible explanation is that the abuse during childhood interrupted the developmental task of achieving a sense of self-worth.

Question 4

A possible difference between the distributions of attachment styles of inmates in the present study and in non-incarcerated samples as reported in the literature was also explored. This question was important to answer because of the paucity of research on female inmates. If empirical studies found no differences between incarcerated and non-incarcerated samples, an argument could be made that little need would exist to learn
about both populations. Any knowledge of attachment styles learned about non-incarcerated individuals could be applied to incarcerated women without concern, and vice versa. However, these results suggest there are differences in attachment style distributions between non-incarcerated samples and women in a federal prison. The incarcerated women endorsed the anxious/ambivalent attachment style far more frequently than the non-incarcerated participants as reported in the literature. Furthermore, a smaller proportion of inmates identified having a secure attachment style than respondents did in the literature. The incarcerated women appear to hold a more negative view of self than do the participants who were not incarcerated. Being imprisoned may have played a significant role in the inmates’ worsening of their views of themselves. Or, these women may have held these views prior to prison and therefore committed illegal acts on the basis of a self-fulfilling prophecy. Either way, this finding lends support to the notion that inmates are a special population that has been under-researched and deserves further exploration.

Question 5

The relationship between attachment styles and scales on the MCMI-III was examined. Elevations on the depressive, sadistic, or dependent scales appear to be more highly associated with fearful or preoccupied attachment styles than with dismissing or secure styles. The results suggested the depressive and dependent scales might be related to a different characteristic than the sadistic scale. When viewed on the continuum of dependence, people with fearful or preoccupied styles are highly dependent on other people. It is possible that elevations on the depressive or dependent MCMI-III scales
reflect a dependency on others to fulfill a need for support and nurturance. An elevation on the sadistic scale, on the other hand, might reflect a dependency on others to gratify a destructive need to exploit people for pleasure and satisfaction.

*Question 6*

The possibility of attachment styles differing based on the type of abuse experienced was also suggested. Consistent with previous research, however, whether or not an inmate was physically, sexually, or physically and sexually abused showed little association with a particular attachment style. Although childhood abuse can have negative consequences, it is possible that the mere presence of abuse is a more important factor than the specific type of abuse endured. The fundamental insult of any form of abuse is psychological in nature.

*Question 7*

Another focus of inquiry in this study was the association between attachment styles and the survivors’ relationships with the perpetrators. A previous study concluded that attachment styles differed based on whether the perpetrator was a family member or non-family member. This research attempted to further scrutinize the issue by exploring whether being abused by a specific family member was related to developing certain attachment styles. However, no statistically significant differences in attachment styles were found when the perpetrator was a parent, a non-parent family member, when there were multiple perpetrators, or when no perpetrator was identified.

Consistent with previous research, a difference in attachment styles was found when the less-specific categorization of an intrafamilial perpetrator was examined.
Inmates who were abused by a family member were more likely to endorse the fearful attachment style and less likely to endorse the dismissing style, which suggests they are less apt to develop a positive sense of self. Anderson and Alexander (1996) hypothesized that individuals with fearful attachment styles had poor relationships with their parents, which left them in situations where their source of support was also the source of great anxiety. Thus, abuse survivors never learned how to regulate their own affect, trust others, or cope with stressors. Furthermore, they do not seem to be able to use personal resources to deal with problems. Although the finding that inmates who experienced intrafamilial abuse tended to adopt a fearful attachment style supported Anderson and Alexander’s hypothesis, a statistically significant finding would have also been expected among the inmates who acknowledged abuse only by their parents.

Additional ROME Questions

Two questions added to the Record of Maltreatment Experiences yielded interesting results. One question asked whether or not the abused inmates sought treatment to cope with the abuse, and the other question inquired about the length of that treatment, if applicable. The group who received treatment indicated they experienced more childhood abuse than both the group who did not receive treatment and the group who did not respond to the question. It is possible that a greater frequency of abuse led to a higher probability of the abuse being detected and the survivor being referred for treatment. Another possible explanation is that the increased abuse may have led to increased dysfunction, which was more likely to result in the necessity of treatment.
Another finding suggested members of the group who did not receive treatment were more likely to endorse a dismissing attachment style than those who participated in treatment. Although treatment may have been involved with improving the reliance on others and therefore causing a shift away from a dismissing attachment style, it is also possible that the inmates who use a dismissing attachment style were less likely to seek treatment.

Limitations

There were several limitations of the current study. First, there is limited generalizability to all females in the federal corrections system because the participants in this study were all from a single prison camp. Federal camps house non-violent offenders and are the settings with the lowest security levels. Data from the inmates who are in higher security settings may yield different results. Improving the ability to generalize to a larger population could have been accomplished by either including inmates from several camps or using prisons of varying levels of security. However, collecting data from multiple prisons presented a practical obstacle.

A second limitation involves the attachment measure used in this study. There are no normative data available for the Relationship Questionnaire. Unfortunately, a weakness in the field of attachment study is that few attachment measures exist that have normative data and would have been appropriate for this type of study. For example, attachment instruments requiring individual 60-minute interviews with 158 participants or requiring multiple raters would have been difficult to perform.
Other limitations are in the analysis of comparing this sample to samples reported in the literature. Since samples in the literature contained males and females, while the present study only used females, gender differences in attachment may have confounded the results. Furthermore, combining the preoccupied and fearful styles into the anxious/ambivalent category may have been problematic. Had respondents been presented with a description of the combined category, as opposed to the two descriptions they saw, the possibility exists they would not have identified with that attachment style and would have endorsed a different category. However, since previous researchers identified the preoccupied and fearful styles by dissecting the anxious/ambivalent attachment style, the reversal into a single category was believed to be justified.

The final limitation to be discussed involves the analysis of the association between attachment and the survivors’ relationships to their perpetrators. Although one intent of this study was to examine attachment styles based on specific intrafamilial perpetrators, too few inmates in those categories prevented a confident interpretation of the analyses. In addition, there were too few inmates who acknowledged abuse but whose perpetrators were not family members to interpret those results confidently.

**Further Research**

Future research to enhance the understanding of how specific variables relate to attachment styles is necessary. Due to the lack of research on women in prison, further studies to corroborate or contradict the results found in this study are needed. In addition, examining the association between types of offenses inmates commit and
attachment styles could produce useful information. Another area worthy of further exploration among incarcerated and non-incarcerated samples would be the association between perpetrators and attachment styles. The question of whether or not people abused by their parents or other specific individuals develop certain attachment styles remains unanswered.

*Implications*

Understanding the roles played by personality styles and childhood abuse in female inmates and how the attachment styles of incarcerated women vary from those of non-incarcerated women is important for several reasons. It will allow a greater understanding of the dysfunctional and often recurring relationship patterns experienced by female inmates. Specifically, understanding how the inmates’ relationships with psychologists and other prison officials are a recapitulation of previous significant relationships will clarify the type of intervention necessary to interrupt the pattern. Another important factor is that a better understanding of the relationships between personality, abuse, and attachment styles will allow mental health providers to formulate more effective and better-suited approaches to treatment. Also, research of this nature will allow mental health professionals to better identify those inmates who have greater treatment needs. Finally, this research should illuminate some of the major issues faced by the correctional system in dealing with female inmates. In this regard, it is hoped that this research will ultimately point the direction for future research inquiries that address the issues posed by female inmate populations.
REFERENCES


APPENDIX A

GENERAL SCRIPT FOR INFORMED CONSENT

Hello, my name is Brandon Davis. I am working on my Ph.D. in Psychology from Texas A&M. I was also a volunteer here at the prison for about a year. While I was here, I became interested in issues faced by inmates. So, as a research project, I have decided to do a study with inmates so I can learn more about you and so psychologists can do a better job of providing services that many inmates use and find useful. I had all of you put on the callout to see if you would agree to participate in this study. I would greatly appreciate your help here today.

Before we go any further, let me assure you that you will have confidentiality. That means that I will not go around the compound or anywhere else telling anyone anything you write today.

Possible benefits of participating include learning more about yourself and your role in relationships. You might gain insight into problems you’ve had with your relationships or find out more about why your relationships haven’t worked.

I’ll explain what I’m going to ask you to do, then I’ll give you a chance to ask any questions you might have. I’ll have you fill out three paper and pencil questionnaires. One asks about your background information, one about your personality in general, and the third asks how you view your role in relationships. In all, it’ll take about 45 minutes to complete all three.

Let me again talk about confidentiality. I will keep your responses private. The only exceptions are if you write that you want to hurt yourself or someone else. In that
case, I have to make sure everyone is safe. Or, if you tell me you were abusing a child, I have to report that. Another exception is if the court subpoenas me to testify, then I will have to. Other than those exceptions, I won’t tell anyone anything you write.

Participation in this study is completely voluntary. You can quit at any time with no punishment from either FPC-Bryan or me. But, I would really appreciate your help. Does anyone have any questions?
APPENDIX B

RESPONSES TO LENGTH OF TREATMENT FOR CHILDHOOD ABUSE

Just started 2 months ago.

6 months+ and not until I came to prison.

I have been in R-Dap for seven months dealing with past problems. I am now getting on with my life and keeping the past in the past.

9 months.

1 year.

18 months.

2 years. (N=4)

2 years through MHMR.

2 years many years after I was grown.

3 years. (N=3)

4 years.

Off and on during my teens 13-18.

Off and on for ten years. I was 26 years before I could forgive my mother.

The last 5 years incarcerated. Plus on and off for 6 years prior.

I am currently in the LiFT program (Liberation From Trauma).

At FPC-Bryan.

Laredo, TX.

Dealt with this issue many years ago.
VITA
Brandon Lee Davis
814 Andy’s North Shore Dr.,
Norfolk, NE 68701
(402) 371-9048
bdavis@neo.tamu.edu

EDUCATION
Texas A&M University, Doctor of Philosophy, 2004
• Counseling Psychology program
• APA accredited
• Dissertation title: *Relationship of Attachment to Abuse in Incarcerated Women*

Truman State University, Master of Arts, 2000
• Counselor Preparation program-Community endorsement
• CACREP accredited
• Thesis title: *Effects of Age, Occupation, Education, and Years of Experience on Hospital Employees’ Attitudes Toward the Mentally Ill*

Buena Vista University, Bachelor of Arts-Psychology, Cum Laude, 1998

CLINICAL EXPERIENCE
Predoctoral Psychology Intern, September 2003-August 2004
Norfolk Regional Center, Norfolk, NE
• Rotations include day treatment ward, chemical dependency unit, and nursing home
• Individual and group psychotherapy with inpatients at a state psychiatric hospital
• Complete weekly evaluations using diagnostic interviews and psychological testing
• Individual and couples psychotherapy at a community mental health center

PROFESSIONAL ASSOCIATIONS
Iowa Psychological Association, January 04-present

American Psychological Association Division of Psychotherapy, November 02-present

American Psychological Association, November 00-present