Serial Murder and the Case of Aileen Wuornos

Attachment Theory, Psychopathy, and Predatory Aggression

Bruce A. Arrigo and Ayanna Griffin

Contents

Abstract	3
Attachment Theory	5
Women, Psychopathy, and Homicide	8
The Case of Aileen Wuornos	10
Integrating Attachment Theory, Psychopathy, and Predatory Aggression: Serial Murder and the Case of Aileen Wuornos	14
Provisional Implications and Conclusions	17
References	18

Abstract

The extant research on female homicide has yet to offer any systematic assessment of why women murder serially. Part of the explanation is attributed to existing literature focusing on justifiable and excusable homicide, or women who kill their abusive partners because they have been battered, fear that their lives are in danger, or are otherwise victimized. Thus, predatory homicide perpetrated by women has not received extensive attention in the relevant literature. This article aims to address this deficiency by providing a detailed case study analysis of Aileen Wuornos, a convicted serial murderer executed at Broward Correctional Institution in Pembroke Pines, FL, on October 9, 2002. By linking the literature on attachment theory with the research on psychopathy and predatory aggression, this article argues that Aileen Wuornos was a cold blooded and calculated killer: a serial offender responsible for her delinquent and criminal behavior. Generalizing from the case of Aileen Wuornos, several tentative recommendations are proposed as linked to clinical and forensic prevention, diagnosis, and treatment, as well as future research on women, psychopathy, and predatory serial homicide.

Research on women and crime is a relatively recent phenomenon (see, e.g., Alder & Worrall, 2004; Chesney-Lind, 1998; Dermody-Leonard, 2002; Pollock, 1999), and efforts to investigate why women kill is an even more limited domain of academic inquiry (Mann, 1996; Schurman-Kauflin, 2000; Shipley & Arrigo, 2004). Interestingly, much of what we know about why women kill emphasizes the victimization they confront at the hands of a spouse or partner (Egger, 2002; Hickey, 1997; Kelleher & Kelleher, 1998). This position stands in stark contrast to researchers who contend that female perpetrated homicide extends beyond or outside the realm of the Battered Women's Syndrome defense (Bell & Fox, 1996; Brownstein, Spunt, Crimmins, Goldstein, & Langley, 1994; Mann, 1996). Indeed, as Thilbault and Rossier (1992, p. 12) argue, "[while] some women may kill in the home in self defense, female killers in the home also plan to kill and kill because they want to." This article aims to shed light on the phenomenon of predatory and serial homicide perpetrated by women where the crimes are motivated by reasons other than justifiable homicide or repeated victimization.

In order to address this matter, both the literature on attachment theory and the research on psychopathy are reviewed. As a general proposition, attachment theory asserts that the affective bonds formed in close interpersonal relationships between infants/adolescents and their primary caregivers are pivotal to understanding personality development (see, e.g., Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969; Levy & Blatt, 1999; Rothbard & Shaver, 1994). Moreover, as researchers historically have documented (Arrigo & Shipley, 2001; Millon, Simonsen, & Birket-Smith, 1998), there is a strong correlation between violent crime and psychopathy (Gacono, 2000; Meloy, 1992). Despite this correlation, little is known about the impact of the crime-psychopathy relationship for women who predatorily and serially kill (Shipley & Arrigo, 2004). As we argue, the case of Aileen Wuornos, a woman convicted of seven homicides and sentenced to death for her crimes, amply demonstrates the utility of turning to both attachment theory and psychopathy as a worthwhile basis to more fully understand female perpetrated serial murder.

We also note that our method of inquiry relies on the case study approach (Creswell, 1998; Stake, 1995). This is deliberate and some explanation therefore is warranted. There is a dearth of empirical scholarship on the phenomenon of predatory homicide committed by women (Kelleher & Kelleher, 1998; Mann, 1996), resulting in the underestimation of the importance of these crimes for society (Schurman-Kauflin, 2000; Shipley & Arrigo, 2004). Arguably, the absence of research is attributable to the paucity of documented cases regarding female serial killers. As such, this cohort of women has not been systematically investigated. However, as Mann (1990, p. 176) noted, statistical data on murder do

"not provide sufficiently nuanced profiles of offenders and their victims, excluding many important details specific to each situation." Moreover, responding to concerns that research on female homicide offenders had emphasized the Battered Women Syndrome and other victimization models to the near exclusion of women who kill for material reasons, Brownstein et al. (1994, p. 99) observed that "detailed personal accounts of homicides by women need to be studied in order to better understand this phenomenon." Consequently, a case study research design can potentially come much closer to describing serial homicide committed by women where issues of attachment and psychopathy figure prominently into the analysis.

Given our unique orientation to this topic, five principal goals are identified. First, the relevant literature on attachment theory, mindful of how poor or severed relations with primary caregivers can adversely impact personality development throughout the lifecourse, is outlined. Second, the research on psychopathy and predatory aggression, especially in relation to female homicide offenders, is examined. Third, the case of Aileen Wuornos, including her social, psychological, and family history from infancy to adulthood, is chronicled. Fourth, the pertinent literature on attachment theory, psychopathy, and predatory aggression is applied to the life story of Aileen Wuornos. Fifth, several recommendations regarding psychopathic women and predatory serial murder are tentatively proposed. These include suggestions for clinical/forensic prevention, diagnosis, and treatment, as well as future research on women, psychopathy, and predatory serial homicide.

Attachment Theory

Attachment theory is traceable to the work of Bowlby (e.g. 1969, 1973, 1980). The core of Bowlby's (1969) theory was the concept of "internal working models" and the emotional bond formed between infants/children and their primary caregivers through close interpersonal contact. Commenting on the continuity of attachment across the lifespan, Rothbard and Shaver (1994, p. 31) explained the phenomenon of internal working models in the following way: "As a result of early attachment experiences, a child accumulates knowledge and develops a set of expectations (known as 'internal working models') about self, significant others, and the larger social world." Bowlby's research emphasized the attachment patterns of infants formed, attenuated, or severed through interaction with the mother, arguing that this relationship was pivotal to the social, emotional, and personality development of an individual (Levy & Blatt, 1999). As he observed, "the young child's hunger for his mother's love is as great as his hunger for food", and without her the child succumbs to "a powerful sense of loss and anger" (Bowlby, 1969, p. xiii). Elaborating upon the emotional reactions the infant/child experiences when separated from its primary caregiver, Bowlby (1969) identified three distinct and predictable responses. These included the following: (i) protest, including crying, active searching, and resistance to the comforting of others; (ii) despair, described as a state of passivity and blatant sadness; and (iii) detachment, "which involves an active, seemingly defensive disregard for and avoidance of the mother if she returns" (Levy & Blatt, 1999, p. 545).

Based upon the extensive research conducted by Bowlby, subsequent investigators have further refined the psychological phenomenon of attachment. For example, Rothbard and Shaver (1994) noted that the central component of attachment theory is that humans maintain an evolutionary, adaptive behavioral system with the primary goal of keeping vulnerable infants in close proximity to their primary caregivers. In this context, the child's healthy personality development depends on his or her trust in the caregiver's accessibility. Thus, for example, if the infant perceives that its basic needs routinely go unmet, the child may develop an internal working model of others as unreliable and insensitive and the self as unlovable (Shipley & Arrigo, 2004).

Research conducted by Ainsworth et al. (1978) examined the specific attachment patterns that emerged from infants in relation to their primary caregivers. Their study was coined the "strange situation." Initially, infants were presented with several toys while interacting with the mother. Eventually, a stranger was introduced who spoke with the mother and interacted with the child. Next, the mother left the setting and then returned, during which time the child interacted only with the stranger. The baby was then left alone with the toys. After some time, the stranger reappeared and interacted with the infant. Finally, the mother returned for a final reunion with her child.

Based upon their research, Ainsworth et al. (1978) identified three patterns of attachment. These included secure attachment patterns, insecure avoidant attachment patterns, and insecure anxious/ambivalent attachment patterns. Those infants classified as "secure" were "distressed by separation, s[ought] comfort upon reunion, and explore[d] freely in their caregiver's presence" (Rothbard & Shaver, 1994, p. 34). Those infants classified as insecure avoidant exhibited "little overt distress upon separation and d[id] not seek contact upon reunion ...they kept their attention directed toward toys or other objects apparently to shift attention away from the wish to establish contact with their attachment figures" (Rothbard & Shaver, 1994, p. 34). Those infants classified as insecure anxious/ambivalent "cri[ed] more often than others, [we]re distressed prior to separation, seem[ed] unable to be reassured or comforted, and [we]re so preoccupied with their caregiver's availability as to reduce or preclude exploration" (Rothbard & Shaver, 1994, p. 34). We note that empirical investigations replicating the results of the Ainsworth

et al. (1978) study abound (e.g. Erickson, Sroufe, & Egeland, 1985; Matas, Arend, & Sroufe, 1978; Renken, Egeland, Marvinney, Margelsdorf, & Sroufe, 1989). Moreover, cross-cultural research findings lend further credence to the explanatory and predictive capabilities of Ainsworth et al. (1978) model of attachment (e.g. Main, Kaplan, & Cassidy, 1985; Sroufe & Fleeson, 1996; Waters, Wippman, & Sroufe, 1979).

Research on the continuity of attachment patterns throughout the lifecourse is also supported in the relevant scientific literature. For example, Elicker, Englund, and Sroufe (1992) and Grossman and Grossman (1991) engaged in longitudinal investigations, evaluating children over a ten-year period following their involvement in the Ainsworth et al. (1978) "strange situation" scenario. In both studies, the researchers found that core personality factors and social interactions were predictable over time. However, other findings confirm the instability of attachment patterns, especially when controlling for such things as shifts in caregiver sensitivity (Erickson et al., 1985), personality and emotional make-up of the mother (Egeland & Farber, 1984), and environmental factors and the vulnerability of the child (Lewis & Feiring, 1991).

Studies on adult attachment represent an expansion on or elaboration of childhood attachment (Main et al., 1985; Sperling, Berman, & Fagen, 1992; Zelnick & Buchholz, 1990). According to Weiss (1982), attachment in adults is distinguished from its childhood counterpart in three important ways:

(a) instead of appearing only in relationships with caretakers, attachment in adulthood also occurs with peers; (b) attachment in adulthood is less pervasive in its potential deleterious effect on other behavioral systems than in infancy; and (c) attachment in adulthood is often directed toward a person with whom a sexual relationship exists (cited by Sperling et al., 1992, p. 240).

Based on the seminal work of Ainsworth et al. (1978), Main et al. (1985) developed an interview schedule evaluating the internal working models of adults. These investigators assessed the degree and type of attachment adults have with their parents, mindful of the quality of their relationships as children and the impact these associations had for forming participants" adult personalities (Levy & Blatt, 1999). The results of the Main et al. study (1985) produced a new classification of adult attachment styles, and included the following four patterns: (i) secure/autonomous; (ii) insecure (avoidant/dismissing); (iii) insecure (dependent/preoccupied); and (iv) insecure (disorganized/controlling). Subsequent researchers have examined various aspects of these attachment patterns (e.g. Collins & Read, 1990; Fonagy, 1999; Goldberg, 1991; Rothbard & Shaver, 1994; Sperling et al., 1992), providing greater clarity on their meaning and relevance in specific psychological contexts.

Research on attachment and psychopathology is also worth noting. As Bowlby (1980, p. 37) indicated, "the loss of a parent gives rise not only to separation anxiety and grief but to processes of mourning in which aggression, the function of which is to achieve reunion, plays a major part." Although Bowlby (1980) did not principally rely on aggression or sexuality in his conceptualization of psychiatric disorder per se, other investigators have examined this connection. For example, Main (1995) asserted that direct physical or sexual abuse adversely impacted the control and development of the adolescent/adult's aggression and sexuality. Moreover, according to Cicchetti and Toth (1995), persons with abusive caretaking histories are more likely to develop insecure attachments in adulthood. Additional investigators have found that insecure attachment is linked to such phenomena as avoiding memories of abuse and personality disorders (Alexander, 1993), female abusiveness and victimization (Wekerle & Wolfe, 1998), borderline, dependent, and passive-aggressive personality disorders (Levy, 1993), and narcissistic and antisocial personality disorders (Rosenstein & Horowitz, 1996).

Attachment patterns and psychopathy also have been correlated and this association is traceable, somewhat, to the early work of Bowlby (1969). As previously indicated, Bowlby identified three psychological states related to maladaptive attachment patterns during a child's first three years: protest, despair, and detachment. Detachment signifies an adaptive strategy, allowing the child to recover from

the deep feelings of protest and despair. However, as Fonagy, Target, Steele, and Steele (1997) explain, once the child is reunited with the primary caregiver, normal attachment behavior does not follow. Indeed, the infant may be indifferent and fail to bond. Moreover, interest in physical objects and self-absorption intensify, and cursory sociability is also noted.

Bowlby's (1969) research on attachment patterns in infants led him to conclude that affectionless psychopathy in adults was linked to the absence of a maternal object and to a biological predisposition. More recently, Fonagy et al. (1997) have argued that the attachment system is implicated in both affective and predatory violence such that proximity seeking represents an intense defensive reaction of a violent nature. Indeed, as they observed, "violence and crime are ... disorders of the attachment system. They are permitted by lack of concern for others (consequent on the inhibition of bonding) and motivated by distorted desires to engage the other in emotionally significant interchange" (Fonagy et al., 1997, 163-181).

Fonagy et al. (1997) indicated that the lack of meaningful attachment relationships leaves some individuals without the necessary mental capacities to organize their internal working models such that they can establish and maintain healthy relationships. This lack of reflection on their own and others' internal states could lead to criminal actions. In particular, these researchers argued that violence against another person would not occur if it were not for the lack of mental representation of the other by the offender. Psychological conflicts cannot be resolved given inadequate mental representations and, thus, violence is seen as a solution. As such, the lack of internal representations of one's self and of others translates into the experience of ideas and feelings that are acted upon physically (Fonagy et al., 1997).

Elaborating upon their insights, Fonagy et al. (1997, p. 166) identified four ways that a failure of "mentalization" could lead to "moral disengagement." First, those unable to contemplate the mental states of others would also have reduced selfawareness. Thus, these individuals would have a diminished sense of personal responsibility for their actions. Second, these limitations on mentalizing might enable the person to disregard the psychological impact of an act upon another person. Third, devaluing or dehumanizing a victim would allow the victim to be treated as an object to be possessed or destroyed. Fourth, the inability to appreciate the "other" in their internal working models would permit ideas and actions to be reconstructed and reinterpreted. In this way, "unacceptable conduct m[ight] be reconstrued as acceptable in a selective and self-serving manner" (Fonagy et al., 1997, p. 166). Given their assessment of moral disengagement in the face of mentalization, these investigators concluded that the impact of early maladaptive patterns of attachment on the development of individuals capable of predatory violence was quite pronounced. Summarily characterizing such individuals, they noted the following:

Thus they [are] deprived of a relationship in which they [feel] sufficiently safe to explore the mind of the other, to find within it an image of themselves as thinking and feeling beings. Their limited and hostile internal working models are therefore overwhelmingly powerful, unchecked by the attenuating influence of a metacognitive capacity. Physical experience has a motivational immediacy because there is no insight into the merely representational basis of human interaction (Fonagy et al., 1997, p. 166).

Women, Psychopathy, and Homicide

Research on psychopathy and crime is now fairly abundant, leaving little doubt that there is a correlation. This has been borne out repeatedly in studies examining both juvenile delinquent (e.g. Brandt, Kennedy, Patrick, & Curtin, 1997; Forth & Mailloux, 2000; Frick, Barry, & Bodin, 2000; O'Neill, Lidz, & Heilbrun, 2003) and adult offender (e.g. Heilbrun et al., 1998; Poythress, Edens, & Lilienfeld, 1998; Skeem, Monahan, & Mulvey, 2002) populations. This relationship has also been assessed with respect to the offense of homicide perpetrated by male offenders. For example, researchers have investigated the prevalence of the psychopathy diagnosis in rapists/murderers (Yarvis, 1995), homicidal sex offenders (Firestone, Bradford, Greenberg, Larose, & Curry, 1998), serial murderers (Geberth, Vernon, & Turco, 1997), and malingering insanity acquittees (Gacono, Meloy, Sheppard, & Speth, 1995). The results from these and similar inquiries support the conviction that "... psychopaths have enjoyed more attention and research than any other character disorder [and that] they are involved in many of today's most serious problems: war, drugs, murder, and political corruption" (Gacono, 2000, p. xix).

However, what is not so clear is the association between psychopathy and female perpetrated homicide (Shipley & Arrigo, 2004). Indeed, as Eronen (1995, p. 216) indicated, when commenting on the state of research in this area, "female homicidal behavior has remained poorly studied." This notwithstanding, what we do know about this phenomenon suggests that, although women account for a small fraction of all homicides, certain subgroups among women (especially those with psychopathy) appear to have a considerably higher risk for murderous conduct (Egger, 2002; Eronen, 1995; Hickey, 1997; Kelleher & Kelleher, 1998; Schurman-Kauflin, 2000).

As a general proposition, psychopathy includes such traits and behaviors as glibness/superficial charm, grandiose sense of self-worth, pathological lying, con- ning/manipulative, lack of remorse or guilt, shallow affect, callous/lack of empathy, parasitic lifestyle, poor behavioral controls, promiscuous sexual behavior, early behavioral problems, lack of realistic long-term goals, impulsivity, irresponsibility, failure to accept responsibility for one's own actions, many short-term marital relationships, juvenile delinquency, and criminal versatility (see, e.g., Hare, 1980; Hare et al., 1990). These traits and behavioral criteria are measured by Psychopathy Checklists (Forth, Kosson, & Hare, 1997; Hare, 1991), anchored by two stable, though oblique, factors: aggressive narcissism and antisocial lifestyle (Meloy, 1992).

Summarizing the psychological and diagnostic meaning of these factors, Gacono (2000, pp. xvii-xviii) noted the following:

The first factor, aggressive narcissism .. .is characterized by egocentricity, callousness, and remorselessness; it correlates with narcissistic and histrionic personality disorders, low anxiety, low empathy, and self-report measures of Machiavellianism and narcissism The second factor, antisocial lifestyle .. ., represents an irresponsible, impulsive, thrill-seeking, unconventional, and antisocial lifestyle; it correlates most strongly with criminal behaviors, lower socioeconomic background, lower IQ and less education, self report measures of antisocial behavior, and the diagnosis of CD [conduct disorder] and ASPD [antisocial personality disorder]. Although most criminal psychopaths meet criteria for ASPD, the majority of ASPD patients are not psychopaths

Meloy (1992) argued that one way to interpret psychopathy is in the context of predatory violence. As he observed, "it is my hypothesis that the psychopathic process predisposes, precipitates, and perpetuates predatory violence by virtue of its structural and dynamic characteristics" (Meloy, 1992, p.

236). Thus, it follows that delineating the features of Meloy's model furthers this article's expressed purpose. Indeed, as we subsequently demonstrate, the assimilation of predatory violence, psychopathy, and attachment theory represents a salient context in which to explain and predict serial homicide perpetrated by women.

According to Meloy (1992), predatory aggression includes a number of distinct characteristics. In brief these include the following: (i) minimal or absent automatic arousal; (ii) no conscious experience of emotion; (iii) planned and purposeful violence; (iv) no or minimal perceived threat; (v) multi-determined and variable goals; (vi) minimal or absent displacement of the target of aggression; (vii) a time- unlimited behavioral sequence; (viii) private rituals preceding or following the predatory aggression; (ix) a primary cognitive dimension to the behavior; (x) heightened and focused sensory awareness; (xi) self and object concept dedifferentiation; (xii) unimpaired reality testing; and (xiii) heightened self-esteem.

Meloy (1992) concluded that the preceding elements regarding predatory violence make it painfully clear that psychopathy is well suited to predation. In addition, he noted that the hypo-reactivity of autonomic arousal experienced by psychopathic individuals could sustain the stalking of the victim. Indeed, fear and anxiety would not interfere with the predation. Moreover, while the psychopathic characteristics of splitting or warding off emotion might be adaptive functions in an abusive or neglectful childhood, in adulthood they might represent extremely maladaptive responses. Meloy suggested that these abilities allow the psychopath to be devoid of emotion during predatory violence and to experience exhilaration during the stalking phase of the hostility.

The psychopath's perceived malice toward others sustains the planned, goal- directed, and instrumental quality of the assailant's predatory violence (Gacono, 2000; Meloy, 1992). Moreover, as Meloy (1992) explained, the sense of the other's evil and vile intentions directed toward the offender fuels, rather than extinguishes, the killer's plan to commit a violent act. Predatory violence is not a product of an "alarm state" and the aggressor faces many factors that could moderate the desire to act out violently towards others (Meloy, 1992, p. 237).

Hyper-vigilant suspicion is also attributed to the psychopath, who is unconsciously fearful of being the victim of the predation. Meloy (1992) suggested that this is the result of the person's own continual processing of aggressive and sadistic thoughts and fantasies. For example, if the motivation for the violence is revenge or monetary gain, then the psychopath desires to render another powerless, thereby feeling omnipotent.

Arguably, one of the most significant factors predisposing the psychopathic individual to predatory violence is the lack of attachment or affective bonding with another person (Meloy, 1992; Stone, 1998). This relationship is the result of several factors. First, the inability to empathize with the victim allows the individual harmed to be devalued. In addition, the lack of empathy makes sadistic gratification possible by way of the violent acts.

Second, the aggressive interactions of the psychopathic individual combined with the individual's profound detachment from the experience of others are likely predictors of recurrently cruel exchanges. Frequently, these interactions include little affection and a large potential for predation (Meloy, 1992). Third, the psychopath's ability to detach from other people increases the chances that he or she will treat the victim of predatory violence much like an object in a private ritual. Finally, the predatory violence, especially if it benefits from media attention, receives public fascination, and results in societal fear, will only serve to strengthen the psychopathic offender's conceptualization that he or she is "larger than life' (Meloy, 1992, p. 240). In some instances, psychopathic individuals may believe that being mythologized in the media is their only opportunity to achieve notoriety.

The Case of Aileen Wuornos

The preceding observations on attachment theory, psychopathy, and predatory violence represent the essential backdrop within which the story of Aileen Wuornos can be presented and interpreted. At the outset, we reiterate that our approach relies on the case study method (Stake, 1995, 1998). Our position on case study analysis is consistent with that of Creswell (1998, p. 62) who defined this approach as "an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context." More specifically, our inquiry represents an instrumental case study investigation, wherein we focus on an issue (i.e. the attachment theory, psychopathy, and predatory homicide relationship), utilizing the case instrumentally to illustrate the issue (Stake, 1995). Data for this investigation include various books, taped interviews, television programs, and newspaper articles, chronicling the life events of Aileen Wuornos (Shipley & Arrigo, 2004).

Our selection of the particular case in question also warrants some explanation. While many women have been convicted of murder and multiple homicides, some have called Aileen Wuornos the first predatory female serial killer (Ahern, 2001; Kennedy, 1992; Russell, 1992). She hitchhiked and prostituted herself along the highways of Central Florida. She was convicted of killing seven men using a 0.22 caliber handgun. She was executed by lethal injection at Broward Correctional Institution outside of Fort Lauderdale, Florida. We argue that these facts alone make her story quite compelling, warranting a more systematic assessment of her behavior. Accordingly, in what follows, we briefly outline the social, psychological, and family history of Ms. Wuornos. This information is helpful as it explains the manifestation and maintenance of attachment disorder and psychopathy throughout much of her life. We also document the events surrounding the murder of her first victim, Richard Mallory. This information is useful as it explains the nature of her predatory (and serial) violence.

Aileen Wuornos was born on February 29, 1956. Until the age of 11, Aileen and her brother Keith believed that Lauri and Britta Wuornos (the maternal grandparents) were their parents. There were five Wuornos children in total, or so Aileen believed. Diane (the daughter of Lauri and Britta) had already left the home as Aileen was growing up. She was rarely spoken of and was estranged from her parents. Barry the son of Lauri and Britta was 12 years older than Aileen and was undoubtedly his father's favorite. He moved out of the house when Aileen was only a toddler. Lori (a second daughter of Lauri and Britta Wuornos) was only two and a half years older than Aileen and was raised with Aileen and Keith. Lori was spared much of the abuse that Aileen and Keith suffered. Aileen and Keith were often mistaken for twins and were a mere 11 months apart. Both Aileen and Keith experienced severe bouts of victimization at the hands of Lauri Wuornos, their grandfather (Ahern, 2001; Kennedy, 1992).

Aileen described sadistic abuse committed by her grandfather. She recounted numerous beatings with a leather strap on her bare buttocks. On several occasions, she was required to lay face down, naked, and spread eagle on the bed for her whippings (Ahern, 2001). Aileen spoke of being beaten on consecutive days while her skin was still raw from prior assaults. Her grandfather often told her she was "evil, wicked, worthless [and that she] should have never been born. She wasn't worthy of the air she breathed" (Russell, 1992, p. 11).

Britta, Aileen's grandmother, was complacent and did little to stop Lauri from abusing Aileen and Keith. Britta was an alcoholic, and it would claim her life when Aileen was 15 years old. She was described as quiet and introverted but with a kind demeanor. Britta was characterized as emotionally frail and nervous, despite her sturdy, physical appearance. Lori maintained that she and her mother (grandmother) did not have mother-daughter conversations (e.g., she started her period without knowing

what it was). Aileen would later say that she idealized her mother (grandmother). Britta and Lauri had a distant, affectionless relationship. Except for their once-a-year family vacation, they did little with one another. They exhibited no physical affection toward one another or toward their (grand)children.

At the age of 11, Aileen was told that Barry and Lori were her uncle and aunt, not her siblings. She was also told that the eldest child, Diane, was actually her mother. She had abandoned Aileen and Keith as babies, and Lauri and Britta had adopted them. This news served to further alienate Aileen and her brother from their grandparents, and they were informed that their mother had remarried and had two other children (Russell, 1992).

Lauri forbade Diane to date so he was particularly incensed when she began a relationship with Leo Pittman, the local "hood." Leo Pittman was the biological father of Aileen and Keith. He was raised by his grandparents and was known to be abusive to his grandmother. He was frequently truant from school, had poor grades, and engaged in petty criminal behavior (Kennedy, 1992). He was moody and had a violent, explosive temper. Leo and Diane divorced before Aileen was born. Eventually, Leo Pitman was convicted of kidnapping and brutally raping a sevenyear-old girl. He committed suicide while serving a life sentence for this crime.

Diane attempted to be a single mother for about one year. She was 15 at the time. Friends described her during this time as a good mother. However, a man Diane briefly dated recalled going to see her around lunchtime on one occasion and heard loudly crying babies as he climbed the stairs (Ahern, 2001). Entering her home, he saw Diane asleep on the couch. While she was in the same room as her children, she was unresponsive to the wailing of her babies. He woke Diane up, and she claimed to have been drunk and unable to hear them. Diane's downstairs neighbor later complained that she let her children cry all morning. Much to her friends' dismay, Diane left one day to go out for dinner and never returned. There was no phone call or explanation. The two children were left with Diane's room-mate, Marge. Aileen was approximately six months old at the time. Marge kept the kids for almost a week and finally called Lauri and Britta to come and take the children with them. They took their grandchildren in and raised them as their own for a number of years. Diane went to Texas, never clarifying why she left. When Diane was 18, she made a second attempt to reunite with her family; however, fractious relations with her parents rendered this attempt unsuccessful. When Aileen was two and Keith three, Diane left the children with a babysitter and did not return. Once again, her parents picked up the children and Diane was gone for good.

During her (pre)adolescent years, Aileen was described as incorrigible, possessing a fighting temper. Her angry outbursts were often unpredictable and frequently unprovoked. As might be expected, Aileen did not socialize well with peers. Typically, Aileen performed sexual acts with boys for cigarettes and loose change. Indeed, as Russell (1992, p. 13) observed, "this little girl learned how to disassociate herself from her body; to blank off emotions." People in her community labeled Aileen a "whore" and a "slut," and she resigned herself to the role of social outcast. Until high school, almost all agreed that Aileen was without friends (Ahern, 2001). She and her brother Keith had a strange bond in which they were quite protective of each other, but would constantly fight while at home. Friends of Keith claim to have witnessed incest between the brother and the sister. In addition, Aileen claimed that her grandfather had sex with her. However, these reports were never substantiated.

During her teenage years, Aileen shoplifted and had frequent run-ins with the police. Typically, she was thrown out of parties for being vulgar, drunk, and instigating fights. Just after her fifteenth birthday, Aileen gave birth to a baby. Several rumors circulated that the baby's father was Keith (her brother), Lauri (her grandfather), a neighbor boy, or an older man in the community. The baby was immediately given up for adoption at the request of her grandfather. Shortly thereafter, Aileen dropped out of school and was displaced from her grandparents' home (Ahern, 2001).

During this tumultuous time, Aileen experienced the loss of her grandmother, Britta, to liver failure. Lauri blamed Aileen for the death of his wife. Soon thereafter, she began a cross-country journey that took her to Florida. Aileen was 16 years old at the time (Court TV, 1999). Within five years of Britta's death, Aileen suffered the loss of her brother, Keith, to throat cancer. She blamed herself for his death.

As a young adult, Aileen continued to frequent bars, carouse, and philander. At the age of 20, she married a man 50 years her senior. During this time, she drank heavily, stayed out all night, and spent a lot of money (Kennedy, 1992). The marriage lasted a month, as Aileen's husband filed for a divorce and a restraining order against her for beating him with his own cane (Russell, 1992). Subsequent heterosexual and homosexual relationships also ended acrimoniously. Following her divorce, Aileen was repeatedly arrested. Her offenses included such things as Assault and Battery, Disorderly Conduct, Driving Under the Influence, and two arrests for weapons offenses. Aileen had a variety of additional criminal charges under a number of pseudonyms (Ahern, 2001).

Aileen moved around routinely and sometimes lived with her sister Lori and her husband. She did not have any regular employment and never helped with household chores. She continued to be argumentative and threatening, particularly to men (e.g. Lori's husband.) She bragged openly about how she survived on the road. For example, she convinced a minister and his family who resided in a different town to take her in and help her. She stayed for a few days and then left after burglarizing their residence. She also would boast about all of the truck drivers that would pick her up for sex.

On May 20, 1981, Aileen held up a convenience store for \$35 and two packs of cigarettes. She was charged with Robbery with a Deadly Weapon. Aileen was sentenced to three years imprisonment in Florida. Following her release in 1984, Aileen experienced her first homosexual relationship, although it was short lived. When Aileen spoke to Lori she would talk of men, always focusing on violence or on being used. Around this time, her criminal behavior was also escalating. She was arrested for forging two bad checks, totaling \$5,595. She never showed up for her court hearing. In 1985, she was stopped in a stolen vehicle. According to Aileen, she was prostituting herself sometimes 25-30 times a day.

At around this time, Aileen met Tyria (Ty) Moore. Their romantic relationship lasted four and a half years, spanning the time during which Aileen committed murder almost until she was arrested. Throughout their association, prostitution, deceit, transience (they lived from hotel to hotel), excessive drinking, violence, jealousy, and grandiosity were a part of Aileen's daily life (Ahern, 2001). For example, Aileen continued to have a fascination with fame and often said that someday there would be a book written about her. She told Cammie Greene (one of Ty's closest friends) that she and Ty were going to be like Bonnie and Clyde and that they would be doing society a favor (Russell, 1992).

Now in her thirties, Aileen Wuornos was extremely overweight, and looked very haggard (Ahern, 2001). She was not able to attract the same type of man that she had in the past, and this was very demoralizing to her (Court TV, 1999). During this period, Aileen met Richard Mallory, a 51-year-old man from Clearwater, FL, who owned his own electronics repair shop. Mallory had been divorced for many years and, admittedly, loved spending time in gentlemen's clubs procuring the services of prostitutes in his free time. He had no history of attacking the many women he encountered during the near 20 year period prior to his murder. Despite this, Aileen alleged that he raped her. This allegation was inconsistent with all the forensic evidence from the crime scene and his body. Aileen made the exact same claim for each of the other six victims she killed.

In each of these instances, Aileen would linger on the Florida highway until someone stopped and offered to drive her to a particular destination. While in the car, Aileen would openly admit that she was a prostitute and that she needed help making money. Alcohol, marijuana, and other stimulants were frequently used during these exchanges. While the victim parked the car in a secluded area, Aileen would peel off her clothes and discuss prices. Some hugging and kissing occurred until Aileen encouraged her companions to undress. Then, while these men took off their clothes, Aileen exited the car's passenger side, taking her belongings with her. When the victims sensed danger, Aileen would shoot and kill them. Typically, she would scream at her companions, alleging that "I knew you were going to rape me!" (Russell, 1992, p. 149). When one bullet did not suffice she would fire again and again, watching her victims die. Aileen would then put her clothes back on, take the money and/or personal effects from her dead companions, drive their automobiles to a desolate location, and drink her last beer before returning to her lover, Tyria Moore.

After being taken into police custody, Aileen Wournos gave various renditions of her crimes. For example, in one instance she indicated that the murders were the result of anger when her companions refused to have sex with her (Court TV, 1999). In another instance, Aileen reported that she would fight with her victims about sex and that when they became abusive, demanding that she have intercourse with them, she endeavored to protect herself from being raped (Ahern, 2001). Despite the assorted versions, Aileen was convicted of predatory and serial homicide.

Integrating Attachment Theory, Psychopathy, and Predatory Aggression: Serial Murder and the Case of Aileen Wuornos

During Aileen's childhood, she experienced inconsistent care, as well as emotional, physical, and possible sexual abuse at the hands of one of her primary attachment figures. She demonstrated an avoidant/dismissing style, characterized by detachment, hostility, social withdrawal, impulsive behavior, and poor sensitivity and awareness. Although Aileen's story is filled with abandonment, abuse, and neglect, Bowlby (1969) asserted that the inability to bond or form attachments and, therefore, to develop empathy for others is often a result of inconsistent or lack of caring, especially during the person's childhood.

According to attachment theory, it is critical for the child to develop trust and security from the primary caregivers. Without this development, the child begins to form an internal working model of others as unreliable, untrustworthy, and unresponsive to the infant's needs. Throughout Aileen's childhood, she developed secondary conditional strategies, such as hyper-vigilance and detachment, to cope with her exposure to abuse and the failure to have her needs met. As noted earlier, Aileen did not have any contact with her biological father, Leo Pittman. Given Leo's violent behavior, one can conclude that while the primary focus is on the environmental component as shaping one's personality (e.g. attachment patterns), the biological component of psychopathy cannot be overlooked. Indeed, Aileen's fits of rage, along with her lack of concern for others, reflect those of her biological father.

Perhaps the most damaging relationship Aileen had was with her grandfather, Lauri Wuornos. From a young age, she experienced brutal physical and emotional abuse from the man she thought was her father. From the perspective of attachment theory, Aileen learned the following: (i) I am wicked, worthless, and hated by those who are supposed to love me; (ii) those who are supposed to love me hurt me; (iii) life is filled with terror, rejection, and pain; and (iv) others cannot be trusted and I must be hyper-vigilant, in order to protect myself from others. Her internal working models consisted of a view of self as unlovable and wicked, and a view of others as hostile and rejecting (Shipley & Arrigo, 2004). In order to cope with the debilitating abuse, she shut down emotionally, and became detached form her own feelings and those of friends and intimates.

Bowlby (1969) notes that there are three reaction states to separation from a primary attachment figure: protest, despair, and detachment. Aileen's abandonment from her mother was a real separation. However, her extreme abuse from her grandfather, the passiveness from her grandmother, and their lack of verbal and physical attention toward Aileen, resulted in separation and loss. According to Bowlby (1969), this loss results in powerful and intense anger. While detachment is an adaptive strategy in the face of abuse and neglect, most children (including Aileen) cannot recover, and their ability to bond with others in a healthy way is inhibited.

Although Aileen did have some positive interactions with her grandmother, she could not turn to her for emotional support. Britta Wuornos did not have significant conversations with her grandchildren. Avoidant caregivers of infants/children tend to reject and ignore attempts to create closeness or intimacy. Britta and Lauri exhibited this behavior in their own unique ways. Lauri was violent and

emotionally abusive; Britta was oblivious to everything and was emotionally unavailable. Research indicates that adults with avoidant attachment patterns have low levels of parental communication and emotional support, and poor relationships with their fathers during childhood (Rothbard & Shaver, 1994). Additionally, research suggests that mothers of avoidant/dismissing or anxious individuals are nervous, depressed, frightened, worried, or confused (Ainsworth et al., 1978; Collins & Read, 1990). Clearly, these descriptions fit Britta Wuornos, and informed the interactions she had with her grand-daughter. Finally, avoidant attachment patterns correlate with the individual's increased anger toward his or her parents, and with the paternal figure being hurtful, mean, and hateful during the person's childhood (Rothbard & Shaver, 1994). Aileen openly expressed her disdain for her grandfather. Similar sentiments were conveyed by Lauri Wuornos toward his granddaughter.

Aileen felt like an outsider in her own family. Neither her primary attachment figures nor her peers wanted her. Intense feelings of abandonment and isolation traumatize an individual and create a negative anticipatory effect (Schurman- Kauflin, 2000). The child learns that there is no one there when the "bad things" happen. Children with insecure attachments come to believe that there will be no one there to help them when stressful situations arise (Fonagy et al., 1997). According to Meloy (1992), psychopathic individuals typically turn their feelings of social isolation to feelings of withdrawal, aggression, and hostility. This appears to be the case with Aileen. As investigators report, attachment with parents has a stronger impact on an individual's ability to interact with others than any other relationship (see, e.g., Ainsworth et al., 1978; Bowlby, 1969).

Aileen's attachment to her siblings was awkward and fragmented. She was extremely close to Keith; however, she was emotionally distant with her other siblings. Keith and Aileen gave each other a sense of protection, no matter how fragile. According to Schurman-Kauflin (2000), the bond of siblings can be derived from the comfort they provide each other during abusive periods. While the bond shared between Aileen and Keith was unhealthy in some ways (e.g. alleged incest), Aileen was extremely despondent over her brother's death.

By puberty, Aileen was already demonstrating hatred for herself and others. She did not see people, especially males, as a source of comfort, companionship, or warmth. The only emotion she readily expressed was anger, which functioned to further alienate her from others. Her internal working model was so firm that she did not trust or express her own feelings, choosing instead to view others with hostile intent and without compassion. She learned not to value human interaction because it would only cause her pain (Shipley & Arrigo, 2004). Her coping mechanisms included prostitution, alcohol abuse, violence, and crime, resulting in material gain.

In Aileen's teenage years, her feelings of being alone were heightened when she learned that Lauri and Britta were not her biological parents. By this time, Aileen was openly defiant towards her grandfather and clear about her hatred for him. Without being socialized to care about the opinion of her grandparents or others in authority, Aileen regularly acted out in school and engaged in delinquent and criminal conduct. She learned not to care about what others thought of her or how her actions made them feel. Aileen was not connected to anyone or to anything, and she was not bound by relationships or expectations. She reacted moment to moment with the only feelings that were safe to experience — rage, fear, and hatred.

Adults and children experience abuse but do not necessarily murder or otherwise victimize others. Indeed, in some healthy way, many bond to society, to its institutions, and to groups or individuals. Aileen knew right from wrong. However, she just did not care. But why would she? No one gave a second thought to harming her. For some who experience debilitating abuse, their distrust turns into resentment and then to intense levels of anger (Schurman-Kauflin, 2000). Aileen failed to experience any reasonable opportunity for healthy attachments. Therefore, she did not have an internal working model that included empathy. She was not connected to family, friends, teachers, or employers. Aileen had not been properly prepared by her family to interact with the world in a pro-social, adaptive way. She hurt others before they hurt her. She used aggression to defend against what she perceived to be threats to her sense of well-being.

Aileen frequently was a victim as a young child and typically was the abuser as an adult. Her profound sense of distrust toward others and her hyper-vigilance constantly made her fearful of abandonment, betrayal, or abuse. At a young age, Aileen learned that the physical aggressor held the power. With each instance of victimization, Aileen defiantly came to realize that one day no one would be able to touch or harm her: she would be in control; she would never be helpless again. This is how her hate grew.

In adulthood, Aileen continued to demonstrate an avoidant/dismissing style of attachment. Her relationship with her parents remained severed. Indeed, as an adult, Aileen was virtually without family: Her mother did not want anything to do with her, her father had abandoned her, her grandfather despised her, and her grandmother had been indifferent to her. The continued sexual abuse Aileen experienced prepared her to always expect the worst. Those who were kind to her had ulterior motives and could not be trusted. Although she formed an attachment to Tyria Moore, her homosexual lover, the nature of this relationship was pathological. For example, Aileen routinely demanded to be the center of attention and was painfully resentful of Ty's connections to family and friends. Drug abuse, prostitution, violence, transience, and crime were the coping mechanisms employed by Aileen when confronted with Ty's sociability toward and interest in others. Aileen had no mental representations of how to love someone and to be loved in a healthy, unconditional way. Moreover, Aileen was unaccustomed to reflecting on her emotional state and certainly those of others.

The murder of Richard Mallory was the psychological turning point for Aileen, catapulting her criminal versatility into the realm of predatory aggression. Aileen believed she lacked power and control. Thus, she engaged in preemptive predatory aggression, eventually killing seven men in a purposeful way, to restore her sense of well-being, to experience control, and to ensure financial gain (Schurman-Kauflin, 2000; Shipley & Arrigo, 2004). In addition, rather than waiting to be abused, Aileen took the offensive against the object she hated. There was no conscious experience of emotion in these acts; rather, the behavior was rational, planned, and goal directed. Aileen viewed Mallory as an evil and vile rapist, and as something to be destroyed. He had material possessions that she wanted (i.e. money), and Aileen's perception of him allowed her to conclude that he deserved to be killed. In this way, Aileen rendered Mallory, and all her victims, "ragefully devalued" objects (Meloy, 1992, p. 232).

In her interview with Court TV (1999), Aileen admitted feeling powerless in the face of the many sexual overtures and aggressive impulses from the men around her throughout her life; however, her attitude shifted once she began to kill. Indeed, after assailing Richard Mallory, her thoughts did not include remorse or guilt. Instead, her unimpaired reality testing, inflated sense of self-worth, psychopathic personality structure, fantasized violence, and goal attainment fueled her desire to avoid detection from the police and to procure financial profit from her targets. Mallory and the other victims of Aileen's predatory violence were not to be mourned; they were bodies to be ritualistically discarded (Shipley & Arrigo, 2004).

It is likely that Aileen began with a biological predisposition for psychopathy. However, her inability to reflect on her own emotional states led to violence and, finally, to murder. In addition, Aileen's inability to experience attachment or bonding toward others enabled her to devalue her victims, killing and annihilating them in a cold, calculated, and remorseless fashion (Shipley & Arrigo, 2004). Finally, Aileen's aggressive narcissism and antisocial lifestyle predisposed, precipitated, and perpetuated her predatory and serial homicides.

Provisional Implications and Conclusions

Generalizing from the case of Aileen Wuornos is at best a provisional exercise. However, there are some very speculative (and intriguing) suggestions proposed below, essentially calling for future investigations by social and behavioral scientists, as well as forensic evaluators and psycho-diagnosticians. Overall, the observations that follow are a tentative basis for continued criminological and psychological inquiry regarding women who kill serially and predatorily, where issues of attachment disorder and psychopathy figure prominently into the research and practice equation.

A critical issue implicit in this article is the importance given to quality parenting. This is parenting that is responsive to the physical and emotional needs of children. No other relationships influence a child's life as significantly as those with the primary caregivers, particularly during infancy. Better parenting is one the strongest factors in preventing or curtailing the development of psychopathy. The child's initial internal working models are formed at a young age through close and intimate associations with parents or parental surrogates. Screening children who exhibit symptoms of attachment disorder or insecure attachment patterns could help with identifying those youth in need of mental health services before a controllable problem escalates into violence or some other form of delinquent conduct or criminal behavior.

A related consideration is clinical research that offers practical guidance with respect to the warning signs of attachment disorder. It is important for psychologists to look at the various critical junctures in a person's life where the professional can intervene, endeavoring to break the cycle that leads to psychopathy and predatory homicide. Early diagnosis or identification of behaviors consistent with insecure attachment is essential for successful intervention. Along these lines, mental health professionals who make placement decisions for youth need to be educated about the connection between attachment patterns and psychopathy. In addition, clinical and forensic psychologists who evaluate and diagnose juveniles for pre-sentence, treatment, and placement recommendations need to be familiar with the impact of severe pathogenic care on children.

Another more targeted recommendation involves the development of an evaluation instrument that validly and reliably assesses for lethality among female psychopathic offenders. As the motives, feelings, and thoughts of women diagnosed with psychopathy who commit predatory homicide increasingly become understood by psychologists and criminologists, there is a strong likelihood that other similar women will be identified before they engage in violence, including murder. As such, more attention to screening women for psychopathy in outpatient settings (including better screening methods) could help detect some of these women who are susceptible to or at risk for committing murder, prior to the offense occurring.

Additional research on women, psychopathy, and predatory serial homicide is also needed. The recent trend in female-perpetrated murder emphasizes the experience of women who kill their batterers. However, studies investigating the life histories, attachment patterns, emotional states, social conditions, personality features, and behavioral aspects of predatory female killers also are quite useful. As psychological and related research of this sort materializes, we can begin to examine much more systematically the differences and similarities between victim-precipitated female murder and serial homicide. This instrumental case study analysis of Aileen Wuornos moves the academic community one step closer to initiating these types of qualitative inquiry.

References

Ahern, A. (2001). A biography of Aileen Wuornos. Retrieved June 11, 2003, from

http://www: court tv:com/onair/shows/mugshots/indepth/wuornos:html

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

Alexander, P. C. (1993). The differential effects of abuse characteristics and attachment in the prediction of long term effects of sexual abuse. *Journal of Interpersonal Violence*, 8, 346-362.

Arrigo, B. A., & Shipley, S. L. (2001). The confusion over psychopathy (I): Historical considerations. *International Journal of Offender Therapy and Comparative Criminology*, 45, 325-344.

Bell, C., & Fox, M. (1996). Telling stories of women who kill. *Social and Legal Studies*, 5, 471-494. Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic.

Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation: Anxiety and anger. New York: Basic.

Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment*, 9, 429-435.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss: Sadness and depression. New York: Basic.

Brownstein, H. H., Spunt, B. J., Crimmins, S., Goldstein, P. J., & Langley, S. (1994). Changing patterns of lethal violence by women: A research note. *Journal of Interpersonal Violence*, 5, 99-118.

Chesney-Lind, M. (1998). The female offender: Girls, women, and crime. Thousand Oaks, CA: Sage. Cicchetti, D., & Toth, S. L. (1995). Child maltreatment and attachment organization. In S. Goldberg, R. Muir, & J. Kerr (Eds.), Attachment theory: Social, developmental, and clinical perspectives (pp. 279308). Hillsdale, NJ: Analytic.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-663.

Court TV. (1999). Mugshots: Aileen Wuornos.

Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among the five traditions. Thousand Oaks, CA: Sage.

Dermody-Leonard, E. (2002). Convicted survivors: The imprisonment of battered women who kill. New York: State University of New York Press.

Egeland, B., & Farber, E. A. (1984). Infant-mother attachment: Factors related to its development and changes over time. *Child Development*, 88, 753-771.

Egger, S. (2002). The killers among us: An examination of serial murder and its investigation (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.

Elicker, J., Englund, M., & Sroufe, L. A. (1992). Predicting peer competence and peer relationships in childhood from early parent-child relationships. In R. Parke, & G. Ladd (Eds.), Family—peer relations: Modes of linkage (pp. 77-106). Hillsdale, NJ: Erlbaum.

Erickson, M., Sroufe, L., & Egeland, B. (1985). The relationship between quality of attachment and behavior problems in preschool in a high-risk sample. *Monographs of the Society for Research in Child Development*, 50, 147-166.

Eronen, M. (1995). Mental disorder and homicidal behavior in female subjects. *American Journal of Psychiatry*, 152, 216-1218.

Fonagy, P. (1999). Points of contact and divergence between psychoanalytic and attachment theories: Is psychoanalytic theory truly different? *Psychoanalytic Inquiry*, 19, 448-480.

- Firestone, P., Bradford, J., Greenberg, D., Larose, M., & Curry, S. (1998). Homicidal and non-homicidal child molesters: Psychological, phallometric, and criminal features. *Sexual Abuse: Journal of Research and Treatment*, 10, 305-323.
- Fonagy, P., Target, M., Steele, M., & Steele, H. (1997). The development of violence and crime as it relates to security of attachment. In J. Osofsky (Ed.), *Children in a violent society* (pp. 163-181). New York: Guilford.
- Forth, A. E., Kosson, D. S., & Hare, R. D. (1997). The Hare Psychopathy Checklist: Youth version. Toronto: Multi-Health Systems.
- Forth, A. E., & Mailloux, D. L. (2000). Psychopathy in youth: What do we know? In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: A practitioner's guide* (pp. 25-54). Mahwah, NJ: Erlbaum.
- Frick, P. J., Barry, C. T., & Bodin, S. D. (2000). Applying the concept of psychopathy to children: Implications for the assessment of youth. In C. B. Gacono (Ed.), The clinical and forensic assessment of psychopathy: A practitioner's guide (pp. 3-24). Mahway, NJ: Erlbaum.
- Gacono, C. B. (Ed.). (2000). The clinical and forensic assessment of psychopathy: A practitioner's guide. Mahway, NJ: Erlbaum.
- Gacono, C. B., Meloy, J. R., Sheppard, K., & Speth, E. (1995). A clinical investigation of malingering and psychopathy in hospitalized insanity acquittees. *Bulletin of the American Academy of Psychiatry and the Law*, 23, 387-397.
- Geberth, R., Vernon, J., & Turco, R. N. (1997). Antisocial personality disorder, sexual sadism, malignant narcissism, and serial murder. *Journal of Forensic Sciences*, 42, 49-60.
- Goldberg, S. (1991). Recent developments in attachment theory and research. Canadian Journal of Psychiatry, 36, 393-400.
- Grossman, K. E., & Grossman, K. (1991). Attachment quality as an organizer of emotional and behavioral responses in a longitudinal perspective. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 93-114). London: Tavistock-Routledge.
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences*, 1, 111-119.
 - Hare, R. D. (1991). The Hare Psychopathy Checklist Revised. Toronto: Multi-Health Systems.
- Hare, R. D., Harpur, T. J., Hakstian, A. R., Forth, A. E., Hart, S. D., & Newman, J. (1990). The Revised Psychopathy Checklist: Descriptive statistics, reliability and factor structure. *Psychological Assessment*, 2, 338-342.
- Heilbrun, K., Hart, S., Hare, R., Gustafson, D., Nunez, C., & White, A. (1998). Inpatient and post-discharge aggression in mentally disordered offenders: The role of psychopathy. *Journal of Interpersonal Violence*, 13, 513-527.
 - Hickey, E. (1997). Serial killers and their victims (2nd ed.). Belmont, CA: Wadsworth.
- Kelleher, M. D., & Kelleher, C. L. (1998). Murder most rare: The female serial killer. Westport, CT: Praeger.
 - Kennedy, D. (1992). On a killing day. Chicago, IL: Bonus.
- Levy, K. N., & Blatt, S. J. (1999). Attachment theory and psychoanalysis: Further differentiation within insecure and attachment patterns. *Psychoanalytic Inquiry*, 19, 541-575.
- Levy, T. M. (1993, May). Adult attachment styles and personality pathology. Presented at the American Psychiatric Association Annual Meeting, San Francisco, CA.
 - Lewis, M. (1992). Shame: The exposed self. New York: Free Press.
- Lewis, M., & Feiring, C. (1991). Attachment as personal characteristic or a measure of environment. In J. L. Gewirtz, & W. M. Kurtines (Eds.), *Intersections with attachment* (pp. 3-21). Hillsdale, NJ: Erlbaum.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society of Research in Child Development*, 50, 66-104.

- Mann, C. R. (1990). Black female homicide in the United States. *Journal of Interpersonal Violence*, 5, 176-201.
 - Mann, C. R. (1996). When women kill. Albany, NY: State University of New York.
- Matas, L., Arend, R. A., & Sroufe, L. A. (1978). Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development*, 49, 547-556.
- Meloy, J. R. (1992). The psychopathic mind: Origins, dynamics, treatment (2nd ed.). Northvale, NJ: Aronson.
- Millon, T., Simonsen, E., & Birket-Smith, M. (1998). Historical conceptions of psychopathy in the United States and Europe. In T. Millon, E. Simonsen, M. Birket-Smith, & R. D. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior* (pp. 3-31). New York: Guilford.
- O'Neill, M. L., Lidz, V., & Heilbrun, K. (2003). Adolescents with psychopathic characteristics in a substance abusing cohort: Treatment process and outcomes. *Law and Human Behavior*, 27, 299-314.
 - Pollock, J. M. (1999). Criminal women. Cincinnati, OH: Anderson.
- Poythress, N. G., Edens, J. F., & Lilienfeld, S. O. (1998). Criterion-based validity of the Psychopathic Personality Inventory in a prison sample. *Psychological Assessment*, 10, 426-430.
- Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, L. A. (1989). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. *Journal of Personality*, 57, 257-281.
- Rosenstein, D. S., & Horowitz, H. A. (1996). Adolescent attachment and psychopathology. *Journal of Consulting and Clinical Psychology*, 64, 244-253.
- Rothbard, J. C., & Shaver, P. R. (1994). Continuity of attachment across the life span. In M. B. Sperling, & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 31-71). New York: Guilford.
 - Russell, S. (1992). Damsel of death. London: BCA.
- Schurman-Kauflin, D. (2000). The new predator: Women who kill, profiles of female serial killers. New York: Algora.
- Shipley, S. L., & Arrigo, B. A. (2004). The female homicide offender: Serial murder and the case of Aileen Wuornos. Upper Saddle River, NJ: Prentice-Hall.
- Skeem, J. L., Monahan, J., & Mulvey, W. P. (2002). Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients. *Law and Human Behavior*, 26, 577-604.
- Sperling, M. B., Berman, W. H., & Fagen, G. (1992). Classification of adult attachment: An integrative taxonomy from attachment and psychoanalytic theories. *Journal of Personality Assessment*, 59, 239-247.
- Sroufe, L. A., & Fleeson, J. (1996). Attachment and the construction of relationships. In W. W. Harup, & Z. Rubin (Eds.), *Relationships and development* (pp. 51-71). Hillsdale, NJ: Erlbaum.
 - Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Stake, R. E. (1998). Case studies. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 86-109). Thousand Oaks, CA: Sage.
- Stone, M. H. (1998). The personalities of murderers: The importance of psychopathy and sadism. In A. E. Skodol (Ed.), *Psychopathology and violent crime: Review of psychiatry series* (pp. 29-52). Washington, DC: American Psychiatric Press.
- Thilbault, E. A., & Rossier, J. (1992, October). *Misframed family violence issues*. Paper presented at the annual meeting of the American Society of Criminology, Atlanta, GA.
- Yarvis, R. M. (1995). Diagnostic patterns among three violent offender types. Bulletin of the American Academy of Psychiatry and the Law, 23, 411-419.
- Waters, E., Wippman, J., & Sroufe, L. A. (1979). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. *Child Development*, 50, 821-829.
- Weiss, R. S. (1982). Attachment in adult life. In C. Parkes, & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 171-184). New York: Basic.

Wekerle, C., & Wolfe, D. A. (1998). The role of child maltreatment and attachment style in adolescent relationship violence. $Development\ and\ Psychopathology,\ 10,\ 571-586.$

Zelnick, L., & Buchholz, E. S. (1990). The concept of mental representations in the light of recent infant research. $Psychoanalytic\ Psychology,\ 1,\ 29\text{-}58.$



Bruce A. Arrigo and Ayanna Griffin Serial Murder and the Case of Aileen Wuornos Attachment Theory, Psychopathy, and Predatory Aggression 2004

Behavioral Sciences and the Law, Vol. 22: Pages 375-393. Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/bsl.583. John Wiley & Sons, Ltd. Correspondence to: Bruce A. Arrigo, Ph.D., Department of Criminal Justice, University of North Carolina at Charlotte, 9201 University City Blvd., Charlotte, NC 28223-0001, U.S.A. Tel: (704) 6872686. E-mail: barrigo@email.uncc.edu.

thelul.org