The Patterns of Women Serial Killers in a Climate of Changing Gender Norms

Lizzie Benkart

Skidmore College

Word Count = 6,540

*Please direct all correspondence to Lizzie Benkart, 815 N. Broadway, Skidmore College, Saratoga Springs, NY 12866. E-mail: ebenkart@skidmore.edu. Acknowledgments to Professor Andrew Lindner.

The Patterns of Women Serial Killers in a Climate of Changing Gender Norms

Existing research suggests that patterns of both men and women serial killers are hyper-gendered. In American society, however, gender norms for women have dramatically changed over time. This study proposes that the patterns of women serial killers reflect the femininity ideals of the time period in which they operated in. The shifts in gender norms are operationalized by three time periods representative of the waves of feminism. The Radford/Florida Gulf Coast University's serial killer database is used to establish a sample of 1,321 serial killers. Using multivariate regression analyses and controlling for age of last kill, which could potentially alter the kill method but be unrelated to gender, women serial killers do appear to be impacted by the femininity ideals of their time period but not as clearly as initially anticipated. Men serial killers were also found to be affected by changes in femininity ideals. Both women and men serial killers had more feminine kill patterns during the first wave of feminism, but men serial killers had a very violent, hyper-masculine peak during the second wave of feminism that women serial killers did not have.

Despite the rarity of serial killers, this phenomenon occupies a big space in the popular imagination. There are even television shows like *Dexter* and *Mind Hunters* that play off of this morbid fascination American society has. Most of the attention, however, is directed towards men serial killers. Women serial killers seem to be excluded from society's definition of a criminal (Herz and Kania 2002). The idea that a woman can be violent and criminal is at odds with the feminine role (Herz and Kania 2002; Lee and Stevenson 2006; Islam et al. 2014).

Although the patterns of men serial killers have been established, little research exists on women serial killers. While there are more men than women killers, one in six serial killers is a woman (Farrell, Keppel, and Titterington 2013). The limited research that does exist on both sexes suggests that patterns of serial killers are hyper-gendered. On one hand, men commit violent, strength-based, and sexually charged murders, whereas women murder in response to a loss of a traditional "women's" role like a wife or mother, less violently, and are commonly economically motivated (Thompson and Ricard 2009). The patterns are either hyper-masculine or hyper-feminine. What is also known is that gender norms for women have dramatically fluctuated over time. More research is needed to examine if the patterns of women serial killers change to reflect gender norms shift.

Although serial killers are rare, and women serial killers even more so, it is still essential to understand their patterns. Evidence suggests that women serial killers might be even more dangerous than their male counterparts as women have an active period double the length of men. Therefore, women have the potential to harm even more victims (Farrell et al. 2013). Women serial killers are currently an under-researched and underestimated population. An increase in knowledge could lead to a significant decrease in potential victims' harm. Some studies even suggest preventative measures if an at-risk population can be identified (Farrell et

al. 2013). Law enforcement solving these crimes are unlikely to have experience with this specific type of crime, as it is so rare, so more knowledge about the patterns could prevent law enforcement from acting blindly (Farrell et al. 2013). Further research could benefit law enforcement in aiding in identification, preventing linkage blindness, and providing other pertinent data to help inform investigations (Farrell et al. 2013). This issue also matters sociologically because it could provide knowledge on how pervasive gender socialization in this population is or tell if this population is more idiosyncratic.

THEORY

There are examples of gender influencing patterns of behavior in everyday life. Men were recruited at high rates for World War One, leaving behind a large number of job openings. Thus, women entered the workforce for the first time, which was traditionally a masculine thing to do. This led to women adopting masculine tendencies, evident by increased rates of women smoking. This new gender norm influenced their behaviors (Anderson, Glantz, and Ling 2005).

Existing research suggests gender socialization theories might provide a useful framework to understand how gender impacts crime patterns (Chesney-Lind 2006; Islam et al. 2014; Peltola, Milkia and Presser 2004; Butler 2000). Chesney-Lind (2006) suggests that patriarchy is a system of social stratification, and therefore is used as a way of social control to support male power and subordinate women. An example of social control is law and criminal justice policies. One popular and related theory that Islam, Banarjee, and Khatun (2014) discuss is masculinization theory. This theory suggests that the criminalities of women are dependent on how masculine they are (Adler 1975; Adler 2004). Furthermore, empowered women are more likely to be involved in more serious and violent crimes than non-empowered women.

Another gender theory that could provide a possible framework is marginalization theory, which explains that the marginality of a woman, such as lower class or family victimization, leads a woman to kill. This theory might be particularly useful in understanding why women kill in domestic contexts (Islam et al. 2014; Chesney-Lind 1986). Therefore, examining women serial killers in relation to femininity and masculinity is vital in understanding their patterns.

Shifting gender norms can be understood by the waves of feminism (Butler 2000; Scanlon 2009). Chesney-Lind (2006) suggests that ever since the first wave of feminism, there has been a trend in thinking that “a woman’s demand for equality would result in dramatic change in the character and frequency of women’s crime” (Chesney-Lind 2006:12). Examining the patterns of women through the theoretical framework of the three waves of feminism might be useful in understanding how their patterns might change.

In the early twenty-first century, women’s desire to enter the political world gave rise to the first wave of feminism. The issues centered around women’s suffrage, but the values differed from that of later waves. Rather than focusing on gender inequality as a justification for women getting the right to vote, there was simply an argument that women should serve as a moral compass in the political sphere. Women were not viewed as equal to men, and classical ideologies of femininity prevailed (Scanlon 2009).

Feminist literature published in the 1960s catalyzed the second wave of feminism. This wave differed from the first as issues of gender inequality were at the forefront of change. The way to mitigate gender inequality was to downplay femininity and adopt more masculine tendencies. For example, large numbers of women entered the workforce for the first time (Scanlon 2009).

The third wave of feminism emerged in the 1990s (Scanlon 2009). This wave is also known as inclusivity feminism, as it centers around including women who were previously excluded

from other social movements due to their identity (Rasmusson 2003). Furthermore, a woman's sexuality was a central concern. Third wave feminists prioritized sexual pleasure over sexual danger. There was also a new idea of reclaiming femininity in an attempt to make feminism fun and youthful (Scanlon 2009). While the second wave identified gender inequality, third wave feminists take an empowered position that women can utilize their femininity and erotic power to their advantage (Morgan 1999; Cortese 1997; Cox et al. 1997). This contrasts ideals of the second wave as it was antifeminist to draw attention to the female body (Scanlon 2009). As this wave is about inclusion, women felt free to express their femininity however they pleased, whether it be adopting masculine behaviors or embracing their femininity.

Hypothesis

Many sociologists have studied gender socialization theory and its impact on gendered behaviors (Chesney-Lind 2006; Islam et al. 2014; Peltola, Milkia and Presser 2004). Furthermore, criminologists suggest that the patterns of serial killers are hyper-gendered (Farrell et al. 2013). Gender norms for women have dramatically fluctuated throughout American history, such as with the three waves of feminism (Scanlon 2009). This study intends to examine the patterns of serial killers within the waves of feminism. I hypothesize that the patterns of women serial killers will reflect femininity ideals of their time period.

Hypothesis 1: Women serial killers who acted during the first wave of feminism, from 1850 to 1964, will have less masculine patterns of killing than those who operated in the third wave of feminism.

Hypothesis 2: Women serial killers who acted during the second wave of feminism, from 1965 to 1989, will have more masculine patterns of killing than those who operated in the third wave of feminism.

LITERATURE REVIEW

The lack of existing literature on serial killers is a result of the earlier definition of a serial killer having gender exclusive criteria (Castle and Hensley 2002; Thompson and Ricard 2009; Farrell et al. 2011). Furthermore, some studies have examined how the patterns of serial killers compare across gender (Kenney and Heide 1994; Messing and Heeren 2004; Farrell et al. 2011). Sociologists have also used gender socialization theories as an explanatory factor for why women and men serial killers have such starkly different and gendered patterns (Kenney and Heide 1994; Messing and Heeren 2004; Thompson and Ricard 2009; Farrell et al. 2011; Lawton and Clark 2015).

Our society has predominantly focused on men serial killers (Thompson and Ricard 2009; Harrison et al. 2015). In part because men are the vast majority, but also because the earliest definition of a serial killer excluded women. The first definition of a serial killer is a man who committed a sexual attack that involved a psychological pattern and resulted in the death of women, men, or children (Castle and Hensley 2002). Thus, the scarcity of research on women serial killers is partially due to the narrowly constructed and gendered definition. Whereas patterns of men serial killers are established, patterns of women serial killers have “been misconstrued, overlooked, and underestimated” (Harrison et al. 2015, 384). Later definitions were redefined to allow women to be included in the description (Thompson and Ricard 2009; Farrell et al. 2011). Therefore, women serial killers have only recently begun to be researched and much remains unknown.

Although men serial killings are a rare occurrence, a significant amount of research is dedicated to understanding their patterns. These findings might provide insight into the patterns of women serial killers as well. Three categories emerge in examining the patterns of serial

killers: murder and post-murder behaviors, social and psychological history, and demographic information (Kenney and Heide 1994). The most significant differences in gendered patterns are in murder and post-murder behaviors.

Men serial killers commonly kill their victims in hands-on, violent, and strength-based ways (Kenney and Heide 1994; Messing and Heeren 2004). Their most common victim pool is adult strangers. Furthermore, they are often sexually motivated as men commonly engage in the fantasy life of killing (Kenney and Heide 1994; Messing and Heeren 2004). Regarding victim-offender relationships, men typically have one-sided relationships with their victims. Men also spend time getting to know their victims, while the victim is unaware of their offender's existence. Engaging in stalking-luring behaviors is common, even after the death of their victims, such as attending their funerals (Farrell et al. 2011).

When examining patterns of women serial killers, there are more differences than similarities when compared to their male counterpart (Keeney and Heide 1994). The most popular weapon choice or method women serial killers used in some studies was found to be poison (Keeney and Heide 1994; Harrison et al. 2015) and in another study was found to be guns (Messing and Heeren 2004). Both methods are less hands-on and strength based than the typical kill of a man serial killer. Keeney and Heide's (1994) study exemplifies the difference in motivations across gender. They found that out of 62 confirmed victims, not a single victim was sexually assaulted or tortured. In regards to motivation, while men are sexually motivated, the most common motives for women are financial gain or extreme emotional response (Kenney and Heide 1994; Harrison et al. 2015). Kenney and Heide (1994) examined victim torture. Although men frequently torture their victims, this study finds no indication women abuse their victims or use torture as a way of sexual release that men do.

Women serial killers also differed in regards to the victim-offender relationship. Women rarely engaged in stalking behaviors (Keeney and Heide 1994). Regarding victim demographics, a study conducted by Farrell et al. (2011) also found that 33% of victims were adults who personally knew the offender, 23% were children who personally knew the offender, and 14% were children acquainted with the offender. The most common victim for men, adult strangers, was found to be the smallest victim pool for women. Harrison et al.'s study (2015) similarly found that every woman serial killer in their sample targeted a victim who was either a child, elderly or an infirm. Women serial killers seem to target people dependent on them. While the role of a caretaker is an essential element for women serial killers, the role of sexuality appears to be more important for men serial killers who favor adult victims.

Many studies use gender socialization theory to explain the differences of men and women serial killers (Kenney and Heide 1994; Messing and Heeren 2004; Thompspon and Ricard 2009; Farrell et al. 2011; Lawton and Clark 2015). Men serial killers are aggressive, kill in hands-on or strength based ways, and are commonly sexually motivated. The kills of men are violent and hyper-masculine. On the other hand, women are likely to be driven by extreme emotional responses and kill less brutally, such as with poison or guns (Kenney and Heide 1994; Messing and Heeren 2004). Women attempt to retain their femininity even when in a violent atmosphere. In American society, men are seen as more violent and women are viewed as more nurturing, which transcends to their kill patterns as well.

In relation to gender socialization theory, the role of domesticity is a vital element when analyzing women serial killers. In Harrison et al.'s (2015) analysis of a past study, all of their sample was involved in caretaking jobs, such as nursing or being a stay-at-home mother. Another study finds that the most common triggering event for a woman serial killer is a sudden loss of a

caregiving role, such as a divorce or loss of custody of children, prevalent in 70% of cases (Messing and Heeren's 2004). Harrison et al.'s study (2015) similarly finds a quarter of their sample to have suffered from a recent familial crisis. Furthermore, three women serial killers who acted in teams were examined and found to have maintained violence-free lives until they met their male partners (Thompson and Ricard 2009). Their partners persuaded them to kill, and the women felt a desire to keep that relationship at all costs. Women are gender socialized to view their self-worth in relation to their partner. The loss of a caregiving role, or even potential for loss, has the power to bring women to extreme violence. In contrast, when men kill, it is a hyper-masculine act and means of power and control. The ultimate way for a man to gain power is to commit violence against women and keep them in a subservient role (Thompson and Ricard 2009).

As stated previously, while literature exists on the patterns of men serial killers, less is known about women serial killers. The research that does examine both men and women suggests that their kills are hyper-gendered. While men serial killers tend to use more violent kill methods and are sexually motivated, women serial killers use less torturous methods and tend to be economically or emotionally driven. Existing research on women serial killers, however, does not take into account that gender norms for women have dramatically changed over time. It is possible that patterns of women serial killers change over time to reflect gender norm shifts. The three waves of feminism define major shifts in women's gender norms. Therefore, further research is needed to see if the patterns of women serial killers change to reflect femininity ideals of the time they were active in.

METHODS

Radford/Florida Gulf Coast University's serial killer database provides data for assessing the relationship between the waves of feminism and gendered patterns (Aamodt, Dobbert, and Leary N.d.). It is the largest non-governmental database for the population of known serial killers and mass murderers that exists and contains a sample size of 3,304 subjects with over 175 variables including background information, victim preference, and victim treatment. Data date back to pre-1900 and continue through recent times. Data are collected from public documents, such as websites, books, court documents, and governmental agencies. Users, who are required to apply for membership, are also encouraged to submit new data. A team of graduate students with advanced research experience reviews all submissions. The unit of analysis for this study is the individual (Aamodt, Dobbert, and Leary N.d.).

For data analysis, after deleting all missing cases, this study's sample size is 1,321. The addition of the variable stalk significantly reduced the total number of cases as it has over 500 missing cases. In the original data set, there were no codes given to missing answers, and the answers were left blank. All blank answers were excluded from this study. This study seeks to research the impact of the waves of feminism on the patterns of serial killers, moderated by serial killers' sex.

My independent variable is the waves of feminism, which is an operationalization of the shifts in femininity ideals. The dataset's variable that measured the final year a serial killer operated in was used to create two variables for the first and second wave of feminism. The answers for the final year variable are four-digit years. The first variable was created from by excluding all years except those from 1850 to 1964 to represent the first wave of feminism. All years within 1850 to 1964 got a value of one, and all other years got a value of zero. The second variable was created by excluding all years except those from 1965 to 1989 to represent the

second wave of feminism. All years within 1965 to 1989 got a value of one, and all other years got a value of zero. All other years, post-1990, represent the third wave of feminism that is the reference category (Aamodt, Dobbert, and Leary N.d.; Scanlon 2009).

The dependent variable is how gendered a serial killer's pattern, which is measured by a masculinity M.O. scale ($\alpha = .49$). This variable intends to operationalize perceived levels of masculinity and femininity in the patterns of serial killers. The masculinity scale is composed of seven variables. Each variable is recoded so if an answer represents a masculine pattern, a point is added. If an answer suggests a feminine pattern, a point is subtracted. Neutral or other answers that are not masculine nor feminine receive a value of zero. Table one depicts all variables included in the masculinity M.O. scale and values given to the answers.

TABLE 1 ABOUT HERE

The first variable in the masculinity scale is *stalk*. The possible answers are either yes or no, and a point is added if the masculine tendency to stalk, is present (Farrell et al. 2011; Keeney and Heide 1994). The second variable is *torture*. The possible answers are yes or no. Similar to stalk, torture represents a masculine pattern, so a point is added if this is present (Farrell et al. 2011; Keeney and Heide 1994). The third variable is a *killer's relationship to their victim*. This variable was recoded where masculine relationships, such as the general public and sexual encounters, receive a point. Common feminine relationships, such as lovers, former lovers, patient/wards, wards, childcare, nursing homes, home care, family, spouse, children, newborn, parents, grandparents, other relatives, girl/boyfriends, in-laws, neighbors, acquaintance and elderly, get a value of -1 (Thompson and Ricard 2009; Kenney and Heide 1994; Messing and Heeren 2004). The fourth variable is *motivation* behind the kill. Common male motivations, such as enjoyment (including rape, thrill, and lust) receive a point, whereas common female

motivations, such as financial gain (including family, romantic relationships, acquaintance), black widow, lethal caretaker, cost cutters, angel of death, and anger (revenge) get a point subtracted (Kenney and Heide 1994; Harrison et al. 2015). The fifth variable is the *kill method*. Methods used by men serial killers, such as strangulation and blunt-force, get a point. Methods used by women serial killers, such as the use of guns or poison, get subtracted a point (Kenney and Heide 1994; Harrison et al. 2015). When both a popular male and female method were present in one subject, no points were added. The sixth variable is the presence of a *child victim*. While men serial killers target adult strangers, this is the smallest victim pool for women. Instead, women serial killers commonly target either children they are related to or acquainted with. If the serial killer did target a child victim, a point is subtracted to represent a feminine pattern. If the target did not target a child victim, a point is subtracted to represent a masculine pattern. The seventh variable is whether or not the murder was a *hand-on kill*. Men serial killers tend to have hyper-masculine kills that are strength-based and hands-on, whereas women serial killers tend to retain their femininity even in this violent atmosphere and rarely use their hands and instead opt for guns or poison. Therefore, if the killer did use his or her hands, a point will be added to represent a common masculine trait. If the killer did not use his or her hands, a point will be subtracted to represent a common feminine trait (Kenney and Heide 1994; Messing and Heeren 2004; Aamodt, Dobbert, and Leary N.d.).

The moderating variable is a serial killer's sex. Sex is a dummy of the original sex variable where women are coded as one and men are coded as 2. This variable has been recoded so women are coded as zero and men are coded as one (Aamodt, Dobbert, and Leary N.d.). This study controls for the serial killer's age at last kill, which could impact crimes but be unrelated to gender. For example, an elderly man might opt out of the traditional hands-on kill method

because of age-related weakness. The ages range from 15 to 74 years old. (Aamodt, Dobbert, and Leary N.d.).

FINDINGS

Table two reports the means, medians, and standard deviations for all variables. Table three indicates the frequency distribution for the dependent variable, the Masculinity Scale. This table shows that although the sample is overwhelmingly men, the scale's mean is 1.7 with a standard deviation of 2.4. This means that the majority of serial killers have neither hyper-masculine nor hyper-feminine patterns but slightly favor more traditionally masculine tendencies.

TABLE 2 ABOUT HERE

TABLE 3 ABOUT HERE

According to the second table, the mean for the dummy variable for the first wave of feminism is .89 with a standard deviation close to .287. The mean for the dummy variable for the second wave of feminism is .43 than one with a .50 standard deviation. Table four depicts the frequency distribution for the waves of feminism. This study uses two dummy variables and a reference group from the original 'final year when kill' variable. Table four shows that 9% of serial killers operated during the first wave, 44% operated during the second wave, and 47% operated during the third wave. The first wave has the smallest sample size. It is important to note that the small number of serial killers during the first wave is not necessarily due to there being fewer serial killers during this time. A possible explanation is that the definition of a serial killer was a man who was sexually motivated, which excluded a significant portion of women

serial killers (Farrell et al. 2011). Furthermore, data collection and technology was a lot less advanced during this time.

TABLE 4 ABOUT HERE

Table five shows that the majority of serial killers in the sample are men. As table two shows, the mean is .89 with a standard deviation of .31. Although the sample is majority men, the demographics of this study's sample mirror the demographics of serial killers. While only 11% of the sample are women, 15% of known serial killers are women (Farrell et al. 2011).

TABLE 5 ABOUT HERE

The age at which a serial killer last killed is the control variable. As table six shows, ages range from as young as 15 to as old as 74. The largest age group is in the 20 to late 30-year-old range. As table two shows, the mean is 32 years old with a relatively large standard deviation of 10 years. Still, even at age 40, it is unlikely that a serial killer's strength would be so significantly impaired he or she had to alter the kill method.

TABLE 6 ABOUT HERE

Bivariate Results

Table seven shows the correlation coefficients of all variables. The relationship between the first wave of feminism and the masculinity scale, this study's dependent variable, is a statistically significant, negative, and very weak relationship ($r = -.156$). Therefore, serial killers who operated in the first wave of feminism have more feminine patterns when compared to the

third wave of feminism. The relationship between the second wave of feminism and the masculinity scale is a statistically significant and positive relationship, but also extremely weak ($r=.09$). Unlike serial killers who acted during the first wave, those who acted in the second wave might be slightly more masculine when compared to the third wave of feminism, but the relationship might be too weak to infer anything. This study also finds that the relationship between men and the masculinity scale is statistically significant, positive, and a weak to moderate relationship ($r = .334$). Similar to findings in existing literature, this study's findings indicate that men have more masculine patterns than women. The relationship between the age at which the serial killer last killed, the control variable, and the masculinity scale is a statistically significant, negative, but too weak of a relationship to suggest anything about serial killers ($r = -.076$).

The relationship between the age which a serial killer last killed and the first wave of feminism is statistically significant and positive but too weak of an association to infer anything ($r = .058$). The relationship between the age at which a serial last killed and the second wave of feminism is statistically significant and a negative, very weak relationship ($r = -.127$). Therefore, serial killers who killed in the first wave tend to be younger when compared to the third wave of feminism. There was not a statistically significant relationship between the age at which last killed and sex. There was a statistically significant, negative, and weak relationship between sex and the first wave of feminism ($r = -.149$). Therefore, more women operated during the first wave than compared to the third wave. There was no statistically significant relationship between men and the second wave of feminism.

TABLE 7 ABOUT HERE

Multivariate Results

Table eight shows the multivariate regression model with the sample including both men and women serial killers with a dummy variable for men. The R squared value is .127, so all variables together account for about 13% of the variation in how masculine or feminine the patterns are. The model is significant at the .01 level with an F value of 47, so the equation with additional variables is different than the y-intercept only model.

The results suggest that serial killers who operated during the first wave have .747 less masculine of a pattern than serial killers who operated during the third wave. There is a statistically significant relationship between the second wave of feminism at the .05 level. The unstandardized coefficient for serial killers in the second wave is .276, so serial killers in the second wave have more masculine ways of killing when compared to serial killers in the third wave. The sex dummy variable shows that men are more masculine.

The control variable, age last kill, is not statistically significant. Age, therefore, has no observed effect on how masculine or feminine patterns were. Out of all the variables, being a man has the biggest effect, with a standardized coefficient of .38, on the masculinity or femininity of patterns. The findings in the multivariate regression model with a sample of both sexes support the hypotheses that the first wave of feminism will experience more feminine patterns and the second wave of feminism will experience more masculine patterns. Furthermore, the findings in this study also match what criminologists have previously established that gender affects crime patterns.

TABLE 8 ABOUT HERE

The sample was examined by men and women separately to examine if the waves of feminism have a different effect on men versus women serial killers. Table nine shows the

multivariate regression model with the effects of the variables on women serial killers and men serial killers separately. For women serial killers, the R squared is .125, so the variables included in this model explain 12.5% of the variation in gendered ways of killing. The model is significant at the .01 level with an F value of 6 and therefore is different than the y-intercept only model. Women serial killers who operated in the first wave of feminism have 1.775 fewer points on the masculinity scale, which is significant given that it is a 12-point scale. Therefore, women serial killers who operated during the first wave of feminism are much more feminine than those who operated during the third wave of feminism. There is no observed effect of the second wave of feminism on gendered patterns. Similar to the multivariate model with both men and women included in the sample, age last kill has no observed effect on how masculine or feminine the patterns of women serial killers are. The first wave of feminism has the largest effect on gendered kill patterns.

For the multivariate regression model with a sample of only men serial killers, the R squared is .014, so 1.4% of the variation in the gendered patterns of serial killers is explained by these variables. Compared to the third wave of feminism, men serial killers who operated in the first wave have about half a point less on the masculinity scale at the .05 level of significance. Therefore, regarding gendered kill patterns, men serial killers in the first wave have more feminine patterns than those in the third wave. The relationship between the second wave of feminism and gendered patterns is statistically significant at the .01 level with an unstandardized coefficient of .385. Men serial killers in the second wave of feminism have more masculine patterns when compared to men in the third wave. Figure one shows a visualization of how masculine a serial killer's M.O. is for each wave of feminism. Women serial killers, the pink and

lower line on the graph, were less masculine during each wave of feminism than men serial killers. There is no observed effect of age last kill on how masculine or feminine patterns are.

TABLE 9 ABOUT HERE

FIGURE 1 ABOUT HERE

In summary, the findings for the multivariate model support this study's hypotheses when the sample consists of men and women serial killers. There are higher levels of feminine patterns during the first wave of feminism and higher levels of masculine patterns during the second wave of feminism when compared to the third wave. The second model, with a sample of women only, suggests that women serial killers during the first wave are much more feminine when compared to women in the third wave. There was no observed effect of women serial killers in the second wave on the gendered patterns. These findings thus support the first hypothesis but reject the second hypothesis. Like women, the results suggest men also have more feminine patterns during the first wave when compared to men in the third wave. Men also have more masculine patterns in the second wave when compared to men in the third wave.

DISCUSSION

The results of this study mirror criminology research in that gender effects crime patterns. Overall, men scored higher on the masculinity scale during each wave of feminism than women. This finding mirrors what gender socialization theory would predict. Men and women are socialized differently, internalize these norms, and their behaviors reflect the process even for something so outside of what we are socialized to do such as killing.

During the first wave of feminism, both men and women serial killers were less violent and rarer. While this study hypothesized that women serial killers would be impacted by classical

femininity ideals during this time, thus having lower levels of masculinity, it was surprising that men were also less masculine during the first wave (Scanlon 2009). The meaning of this finding is ambiguous as gender socialization theory would predict that a shift in femininity ideals would only impact the patterns of women. It is important to note that this finding mirrors murder rates in the United States as homicide rates in the first third of the twentieth-century were at an all-time low (Eckberg 1995).

Then, during the second wave of feminism, male serial killers had a peak of violence that women serial killers did not. This study initially hypothesized that women serial killers would have more masculine patterns during the second wave as it is characteristic of women adopting masculine tendencies (Scanlon 2009). Instead, men were affected in the way women serial killers were predicted to be. The variable for the second wave of feminism includes years between 1965 to 1989. The hyper-masculine and violent patterns for men serial killers mirrors crime rates in the United States. There was an increase in violence during this period, with an all-time high homicide rate in 1980 (Eckberg 1995). As the findings are consistent with crime data, a possible explanation is that people were just more violent during this time. On the other hand, the upsurge of violence juxtaposes this period's economic growth, high employment rates, historical racial progress, and increase in government social programs, which would all likely lead to an era of low crime levels (Pinker 2013). Therefore, the surge in violence is less likely a result of socioeconomic variables and more likely a result of cultural ones. Using gender socialization theories as a framework, another possible explanation for men's patterns being hyper-violent and masculine is that men were acting out and resisting the progressiveness of femininity ideals characteristic of the second wave. There seems to be a backlash by men in response to shifts in women's gender roles.

The patterns of both male and women serial killers seem to be leveling out during the third wave of feminism. It is unknown whether they will continue to increase or decrease in masculinity and violence in the future. It is possible that the serial killings follow the same patterns of other forms of crime and the mid-century peak was a violent abnormality.

Therefore, whether or not the findings support or reject the hypothesis is complex. While the results did support the first hypothesis, that the patterns of women during the first wave would be more feminine, the results do not support the second hypothesis, that the patterns of women during the second wave would be more masculine. Furthermore, the hypothesis did not predict shifts in femininity ideals would also impact men. It is, however, possible that the shifts are reflective of entirely different dynamics at work.

CONCLUSION

Existing research suggests the patterns of serial killers are hyper-gendered. Gender norms for women have dramatically fluctuated throughout American history, such as with the three waves of feminism. This study examines if the patterns of women serial killers reflect femininity ideals of the time period in which a serial killer operated in. The Radford/Florida Gulf Coast University's serial killer database is used to establish a sample of 1,321 serial killers. Using multivariate regression analyses and controlling for age of last kill, which could potentially alter the kill method but be unrelated to gender, women serial killers do appear to be impacted by the femininity ideals of their time period but not as clearly as originally anticipated. Men serial killers were also found to be affected by changes in femininity ideals, but less significantly than women serial killers. Both women and men serial killers had more feminine kill patterns during the first wave of feminism, men serial killers had a very violent, hyper-masculine peak during the second wave of feminism that women serial killers did not experience.

This study suffers from several limitations. The first is a lack of additional, more extensive measures. The changes in gender norms are measured through the three waves of feminism, but there are many more fluctuations in gender norms than merely what the waves of feminism capture. Many other possible variables could have contributed to hyper-masculine and violent peaks or more feminine and peaceful times that this study does not include. Socioeconomic factors would be crucial to examine in future research, as well as controlling for many more cultural factors. Furthermore, this study would benefit from an additional examination of gendered patterns by decades or even a year by year metric, rather than such large chunks of time.

Additionally, the level of consciousness of the serial killers about gender norms is the most significant limitation. For example, just because a woman serial killer is exhibiting masculine patterns during the second wave of feminism does not mean she was a feminist or even influenced by the waves of feminism. Serial killers are a very unique and minute fraction of the overall population. It is possible that all serial killers could have had very unusual gender socialization even for their time. Maybe women serial killers during the second wave of feminism who did not partake in the masculinity trend and went to cotillion had very ladylike, feminine kills, or maybe they had extremely masculine ones as an act of rebellion. This preliminary study suggests gender socialization is an interesting variable to examine. To really establish the relationship with more confidence, we need to know more about factors such as how a serial killer was gender socialized, their upbringing, and ideologies.

Future research should improve upon this study by examining the ideologies of serial killers when caught to see if a relationship exists between the pervasiveness of gender norms and a killer's pattern. Given the findings, it appears that women serial killers are getting more

masculine and men serial killers are becoming less masculine in recent times. Law enforcement should be made aware of the altering patterns of killers to prevent linkage blindness and reduce potential victims.

Serial killers remain both rare and understudied. This study has shown that both men and women serial killers had a more feminine, peaceful time during the first wave of feminism. The masculinity of men serial killers' patterns peaked during the second wave of feminism. Overall, the patterns for women serial killers more closely adheres to the waves of feminism. This suggests evolving gender ideals might be pervasive enough to change the patterns of women serial killers as it has changed the daily lives of all women.

References

- Aamodt, Micheal, Duane Dobbert, and Terence Leary. N.d. "Serial Killer Database Research Project." *Radford/FGCU*.
- Adler, Freda., Mueller, Gerhard. O. W., & Laufer, William. S. 2004. *Criminology*, 5th Edition, New York: McGraw-Hill Higher Education.
- Adler, Freda. 1975. "Sisters in Crime: The Rise of the New Female Criminal." USA: McGraw Hill Company.
- Aizenman, Nurith. 2017. "Gun Violence: How The U.S. Compared with Other Countries." *NPR*.
- Anderson, Glants, and Ling. 2005. "Emotions for Sale: Cigarette Advertising and Women's Psychosocial Needs." *Tobacco Control*, 14, 127-135.
- Butler, Judith. 1988. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal*, 40(4), p.519.
- Castle, Tammy, and Christopher Hensley. n.d. "Serial Killers With Military Experience: Applying Learning Theory to Serial Murder." n.p.: *International Journal of Offender Therapy and Comparative Criminology*, 46(4), 453-456.
- Chesney-Lind, Meda. 2006. "Patriarchy, Crime, and Justice: Feminist Criminology in an Era of Backlash." *Feminist Criminology*, 1(1), 6-26.
- Cortese, Janis. 1997. "The Third WWave: Who we are, what we see."
- Cox, Ana Marie, Freya Johnson, Annalee Newitz, and Jullian Sandell. 1997. "Masculinity without Men: Women Reconciling Feminism and Male-Identification." *Third Wave Agenda*.
- Eckberg, Douglas Lee. 1995. "Estimates of Early Twentieth-Century U.S. Homicide Rates: an

- Econometric Forecasting Approach.” *Demography*, 32(1), 1-16.
- Farrell, Amanda L., Robert D. Keppel, and Victoria B. Titterington. 2011. "Lethal Ladies: Revisiting What We Know About Female Serial Murderers." *Homicide Studies*, 15(3), 228-252.
- Farrell, Amanda L., Robert D. Keppel, and Victoria B. Titterington. 2013. "Testing Existing Classifications of Serial Murder Considering Gender: An Exploratory Analysis of Solo Female Serial Murderers." *Journal of Investigative Psychology & Offender Profiling*, 10(3), 268-288.
- Harrison, Marissa A., Murphy, Erin A., Ho, Lavina Y., Bowers, Thomas G., and Flaherty C. V. 2015. "Female Serial Killers in the United States: means, motives, and makings." *The Journal of Forensic Psychology*, 26(3), 383-406.
- Herz, Annette, and Harald Kania. 2002. "Everyday Perceptions of Crime." *European Journal of Crime, Criminal Law & Criminal Justice* 10(4):276-285
- Islam, Mohammed J., Subrata Banarjee, and Nurjuhan Khatun. 2014. "Theories of Female Criminality: A Criminological Analysis." *International journal of Criminology and Sociological Theory*, 7(1), 1-8.
- Keeney, Belea T., and Kathleen M. Heide. n.d. "Gender differences in serial murderers." *Journal Of Interpersonal Violence*, 9(3), 383-398.
- Lawton, Michelle, and Roger Clark. 2015. "The Fear of Crime in the United States: A Tale of Two Genders." *International Journal of Sociology of the Family*, 41(2), 117-129.
- Lee, Matthew R., and Ginger D. Stevenson. 2006. "Gender-Specific Homicide Offending in Rural Areas." *Homicide Studies* 10(1):55-73
- Meda Chesney-Lind Sage Publications, Thousand Oaks, London, New Delhi 1997, 219 pp.).

European Journal of Crime, Criminal Law & Criminal Justice, 8(1), 79–82.

Morgan, Joan. 1999. *When Chicken Heads Come Home to Roost: my life as a hip-hop feminist*.

New York: Simon & Schuster.

Messing, Jill Theresa, and John W. Heeren. 2004. "Another Side of Multiple Murder: Women

Killers in the Domestic Context." *Homicide Studies*, 8(2), 123-158.

Peltola, Pia, Melissa Milkie, and Stanley Presser. 2004. "The 'Feminist' Mystique." *Gender and*

Society, 18, 122-144.

Rasmusson, Sarah L. 2003 "Third Wave

Feminism: History of a Social Movement." *Encyclopedia of American Social Movements*.

Scanlon, Jennifer. 2009. "Sexy from the Start: Anticipatory Elements of Second Wave

Feminism." *Women's Studies*, 38(2):127-150

Thompson, Jennie, and Suzanne Ricard. 2007. "Women's Role in Serial Killing Teams:

Reconstructing a Radical Feminist Perspective." *Critical Criminology*, 17(4), 261-275.

Table 1. Dependent Variable, Masculinity M.O. Scale

Variable Name	Masculine (+1)	Feminine (-1)	Neutral (0)
Stalk	Yes	--	No
Torture	Yes	--	No
Child Victim	No	Yes	--
Kill with Hands	Yes	No	--
Victim Relationship	Sex and Strangers	Lovers, patients, elderly, family, children, neighbors, etc.	Hitchhikers
Kill Method	Strangulation and Blunt Force	Gun, poison, suffocation	Drowning or Fire
Motive	Enjoyment (rape/thrill/lust)	Financial Gain, Caretaker, Revenge	Anger

Table 2. Means, Medians, and Standard Deviations for all Variables
(N = 1321)

Variable	Mean	Median	S.D.
Masculinity Scale	1.7	2.0	2.4
Men	.89	1	.31
First Wave of Feminism	.09	.0	.287
Second Wave of Feminism	.43	.0	.50
Age Last Kill	32.4	31	10.2

Table 3. Masculinity Scale (in percentages)

Masculinity Scale	Percent
-5, Most Feminine Score	.3
-4	.8
-3	2.3
-2	5.0
-1	11.9
0	17.6
1	6.6
2	10.1
3	19.2
4	13.4
5	11.1
6, Most Masculine Score	1.7

Table 4. Waves of Feminism

Waves of Feminism	Percent
First Wave 1850-1964	9.1
Second Wave 1965-1989	43.6
Third Wave Post 1990	47.3

Table 5. Sex

Sex	Percent
Women	11.1
Men	88.9

Table 6. Age at Last Kill

Age at Last Kill	Percent
Ages 15 to 35	66.7
Ages 36 to 49	26.3
Ages 50 +	7.0

Table 7. Bivariate Analysis

Variable	First Wave	Second Wave	Men	Age Last Killed
Masculinity Scale	-.156*	.093*	.334*	-.076*
First Wave 1850-1964		-.278*	-.149*	.058*
Second Wave 1965-1989			.023	-.127*
Men				-.051

*p < .01

Figure 1. Visualization of Gendered Patterns by Sex in each Wave of Feminism

Table 8. Multivariate Regression Analysis with both female and male serial killers

Variable	Both Sexes	
	<i>b</i>	β
First Wave of Feminism	-.747	-.091**
Second Wave of Feminism	.276	.058*
Men	2.394	.318**
Age Last Kill	-.006	-.025
Constant	-.290	
R^2	.127	
<i>F</i>	$F(4,1316) 47.992^{**}$	

* $p < .05$, ** $p < .01$

Table 9. Multivariate Regression Analysis with sex separated

Variable	Women Serial Killers		Men Serial Killers	
	<i>b</i>	β	<i>b</i>	β
First Wave of Feminism	-1.775	-.336**	-.503	-.060*
Second Wave of Feminism	-.718	-.163	.385	.086**
Men	--	--	--	--
Age Last Kill	-.024	-.134	-.002	-.007
Constant	.959		1.904	
R^2	.125		.014	
F	$F(3, 142) 6.736^{**}$		$F(3, 1171) 5.409^{**}$	

* $p < .05$, ** $p < .01$