

Female Gang Members and Desistance: Pregnancy as a Possible Exit Strategy?

by
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Abstract

This study sought to evaluate differential gang processes as they vary by gender through a quantitative analysis of the National Longitudinal Survey of Youth, 1997. Specifically, this investigation explored the role of motherhood as a potential exit strategy for female gang membership, which had been previously examined in the qualitative work of Fleisher and Krienert (2004). All in all, this investigation found no support for Fleisher and Krienert's (2004) assertions of the causality of motherhood as a potential desistance mechanism, nor for the magnitude of their sixty-three percent finding.

INTRODUCTION

Much research has set out to establish the unique nature of those who join gangs from those who never have had affiliation (Battin et al., 1998; Esbensen and Huizinga, 1993; Thornberry et al., 1993). Further examinations have found that such membership is not the only distinction that must be made (Esbensen and Deschenes, 1998; Fleisher and Krienert, 2004; Thornberry, 1998). Rather, gender within the gang appears to have an influence on gang processes. Male and female gang members differ in several aspects regarding these gang processes before, during, and after gang membership. This study aimed to investigate how one of these processes, desistance, varies by gender. Specifically, this research sought to build upon Fleisher and Krienert's (2004) qualitative inquiry, which

contends that female gang members most often leave the gang because of motherhood and perhaps are using such motherhood as an exit strategy to avoid violent repercussions.

First, a descriptive analysis of the National Longitudinal Survey of Youth² was able to provide conclusions about the timing of pregnancies and live births in regards to affiliation. This analysis was necessary in order to answer the first research question of this study: *Do the majority of female gang members leave the gang through pregnancy and/or having children?* It was hypothesized that this sample mirrored such temporal patterns; pregnancy/live birth prior to or in the same year as desistance. Second, a quantitative analysis allowed for better interpretation regarding causal order. This causal interpretation was achieved through the use of a logit model, where certain spurious relationships were controlled. Causal interpretation was vital for both the second and third research questions: *Do female gang membership and live birth have a significant positive relationship, even after controlling for other sexual behavior factors? And, does pregnancy in 1997 and 1998 and live birth in 1998 predict desistance in 1998?* It was posited that these relationships do exist and must be present in order for Fleisher and Krienert's (2004) findings to be replicated in a nationally representative sample.

REVIEW OF RELEVANT LITERATURE

Patterns and extent of gang participation

The extent of male and female participation in gangs differs considerably among the research, although males are consistently found to have greater involvement (Esbensen and Huizinga, 1993; Miller, 1975³). The most current estimates cite fourteen percent of males and eight percent of females as affiliated during some point of their lives, and from one up to fifty percent of gang members as female (Esbensen and Winfree, 1998). Part of the discrepancy between estimates regarding the gender composition of gangs is the result of methodology. General survey data tends to overrepresent females, while case and observation studies, along with police data, underreports their involvement (Curry, 1998; Esbensen and Winfree, 1998). Researchers have noticed an increase in gang members, and especially affiliated females, although this may be due to the additional attention that has particularly been given to females as of late. Age appears to be factor in estimates as well. Most females both enter and exit gangs earlier in life than their male counterparts; highest participation for females has been found in the eleven to fifteen age range (Esbensen and Huizinga,

1993). Thus, the age of samples must be taken into consideration when looking at numbers involving gang members (Esbensen and Winfree, 1998).

Delinquency

Although both male and female gang members are more delinquent than both nonaffiliated males and females (Bjerregaard and Smith, 1993; Esbensen and Winfree, 1998), female gang members are less likely to participate in delinquent acts than male gang members (Curry et al, 1994; Esbensen et al., 1999). As Curry et al. (1994) discovered, of those crimes considered gang-related, females committed only fourteen percent of the property crime, thirteen percent of the drug crime, and around three percent of the violent crime. In fact, these researchers found that this was due to the fact that violent crime is considered to be the duty of men in the gang and as a result, women are excluded either by themselves or by the male members. Chesney-Lind et al. (1994) found similar patterns; female gang members had less frequent involvement in delinquency than affiliated males and that the delinquency that females did participate in was often of a less serious nature. For instance, larceny theft accounted for the largest amount of crime among affiliated females (thirty-eight percent), where male gang members most often committed assaults (twenty-seven percent).

Victimization

Overall, gang members have been found to be victimized more than their unaffiliated counterparts (Curry et al., 2001; Huff, 1996; Peterson et al., 2004), although this victimization takes very different forms depending upon gender. For males, this form tends to be physical violence and can often be retaliatory in nature. While it is evident that female gang members are more likely to be violently victimized than those females not in a gang (Miller, 1998), it is not as probable that these female will endure as much of this type of victimization as male gang members. There are several studies that support this notion including the St. Louis Homicide Project which found that, “from 1990 to 1996, 229 gang homicides occurred in the project’s study area. Only nineteen (eight percent) of these involved female victims; moreover the great majority of the women were not the intended targets” (Miller and Brunson, 2000: 425)⁴.

Instead, the victimization of female gang members most often takes the form of sexual abuse, exploitation, and/or assault rather than homicide or physical assault as it does with males (Miller, 1998; Moore, 1991). As

Miller (1998) notes, “my findings suggest that gender may function to insulate young women from some types of physical assault and lessen their exposure to risks from rival gang members, but also to make them vulnerable to particular types of violence, including routine victimization by their male peers, sexual exploitation, and sexual assault” (p.453). This victimization for females can be classified into two categories: internal and external.

The internal victimization that Miller (1998) addresses, that which happens by male peers, can manifest itself through a number of ways including expected sexual availability (Fishman, 1995; Moore, 1991) and the initiation of females into the gang. This initiation is sometimes conducted through a process referred to as “sexing in”⁵⁶ (Miller, 1998; Miller and Brunson, 2000). “Sexing in” involves the initiate engaging in sexual acts with any male member that desires such acts, although Miller and Brunson (2000) found that the number of men allowed into the initiation may be limited if many wish to pursue sexual contact.

A further form of what could be argued to be internal sexual victimization is the prevalence of sexually transmitted diseases among female gang members. An unfortunate lack of research exists regarding this topic, save one study conducted by Wingood et al. in 2002. These researchers found significant differences in sexually transmitted infections between those who did and did not report a history of gang involvement. As they stated, “A key finding is the significant association between STD/HIV-associated sexual behaviors and STD status, with adolescents reporting a history of gang involvement being more than 3 ½ times likely to test positive for *N gonorrhoeae* and twice as likely to test positive for *T vaginalis*” (Wingood et al., 2002:60).

External sexual victimization is victimization that takes place outside of the gang. One form of external victimization is the targeting of females by rival male gang members through the kidnapping and then the resulting sexual assault (Miller and Brunson, 2000). This form of victimization is used, “to send a message or retaliate against the gang” (Miller and Brunson, 2000:439). These incidences are also used to gain information about the rival gang. Females are targeted for this purpose based on the male view that such females are more vulnerable and willing to give up information. Females do agree that they are viewed as more vulnerable and as a result are in danger of kidnapping and/or sexual victimization; although these females do not necessary identify with notions of being vulnerable (Miller and Brunson, 2000).

Desistance

The processes by which and the reasons that motivate the disaffiliation of gang members have been examined through a number of studies; this process also appears to vary by gender (Decker and Lauritsen, 2002; Fleisher and Krienert, 2004; Molidor, 1996; Wang, 2000). The majority of gang members are active for less than one year and certain research would suggest that such short and uninvolved affiliation often garners little to no response from the gang (Decker and Lauritsen, 2002; Thornberry et al., 2003). However, Molidor's (1996) small sample of female gang members suggested that when such a female decides to leave she is then raped and beaten by the other members the majority of the time. Wang (2000), in his sample of at-risk females, did not find as strong of a relationship between leaving a gang and retaliatory aggression as Molidor (1996) had, but a relationship existed nonetheless. In response to this researcher's question, "What happens if a girls wants to quit a gang?...Thirty-nine percent indicated being beaten, thirty-five percent reported getting killed, and six percent forcing sex" (Wang, 2003:624).

As for reasons behind the desistance of gang members, research has found that those that maintain affiliation do so to either preserve the status that they feel they receive from the gang or because of limited educational or employment opportunities that may otherwise encourage desistance (Decker and Lauritsen, 2002). In regards to gendered differences, Fleisher and Krienert (2004) found that sixty-three percent of their sample⁷ cited pregnancy as their main influence for becoming an inactive gang member due to their need to "settle down." Of those that did not claim pregnancy, "a proxy for pregnancy was often used. One respondent stated, 'I was getting older and wanted to settle down.' When asked to elaborate, it was found that 'settling down' meant motherhood and establishing an independent residence" (Fleisher and Krienert, 2004:619). For those that do not completely leave the gang after pregnancy, most alter the amount of or types of activities they engage in. As Fleisher and Krienert (2004) state,

Even members who considered their gang status active reported differences in their activities when they became mothers. A few women in their early to mid 20s said (paradoxically) they were still active gang members, but had stopped hanging out, fighting, and being 'crazy.' Pregnancy leads to a disinterest in hanging around the streets and an interest in the safety of the fetus that leads to reduced (or eliminated) drug use. Some women said when they got pregnant they thought for the first time about employment. Active

gang women said they did not fight pregnant women, fearing injury to the fetus (p. 619).

Thus, pregnancy would appear to have a positive effect on the lives of these female gang members, through removing them from a detrimental situation or by limiting their engagement in that situation. It could be argued that affiliated females seek out this pregnancy in order to leave the gang without repercussions. As one participant noted in Fleisher and Krienert's (2004) study, "You can't punch a pregnant girl in the stomach. That's just wrong" (p.619).

It is important to evaluate this contention, pregnancy and/or having children as potential exit strategies for affiliated females, as it would establish a unique gendered process within gangs and add to the desistance literature as a whole. Therefore, the next sections seek to operationalize and determine if the majority of female gang members leave the gang due to pregnancy/live birth, if these pregnancies result more often in children for affiliated females, and if there a causal connection between motherhood and desistance.

DATA AND METHODS

Hypotheses

From the review of the literature, it is clear that gender differences exist within gang processes. It has also been established that such gender differences are especially apparent in the manner in which males and females desist from the gang; for females, pregnancy is the main reason given for desistance and perhaps a way out of gang life without repercussion (Fleisher and Krienert, 2004). This study hypothesizes that within a nationally representative sample, verification of this assertion, pregnancy as a potential exit strategy, will be discovered. This will be analyzed through the testing of three main hypotheses. (1) The majority of female gang members will leave the gang due to pregnancy and/or live birth. That is, they will fit patterns that would be consistent with Fleisher and Krienert (2004) in relation to the timing of their membership and any pregnancies and/or live births. These patterns will be especially apparent in a more comparable sample to that of Fleisher and Krienert's (2004). (2) Of those that have been pregnant, affiliated females will be more likely to have live births resulting from their pregnancies, even when controlling for other sexual behavior factors. (3) A significant positive relationship between both pregnancy in 1997 and 1998 and having a live birth in 1998 and desistance will be discovered.

Data and Instrument

The data used to examine this issue was the National Longitudinal Survey of Youth, 1997, or the NLSY, a subset of the National Longitudinal Surveys administered by the Bureau of Labor Statistics. The initial purpose of this data set was to, “document(s) the transition from school to work...and to be representative of people living in the United States who were born during the years 1980 through 1984” (Center for Human Resource Research, 2005: 11). Currently, data through 2003 is available (seven waves).

Of particular interest to this study is that of the Youth Questionnaire, a CAPI instrument administered to the participants in each round, which takes, on average, an hour for the interviewee to complete. This questionnaire, due to the sensitive nature of its inquiries, allows for participants to enter their answers into the interviewer’s laptop directly⁸. Such inquiries cover topics such as the, “respondent’s family background, social behavior, health status...(and) focus in detail on the youth’s schooling and employment activities” (Center for Human Resource Research, 2005:18). The Youth Questionnaire provides for a number of variables useful to this investigation, and again allows for these variables to be studied over time.

Sample

A total of 8,984 youth between the ages of 12 and 16⁹ were surveyed in the first wave. These youth are broken down in two subsets: “(1) a cross-sectional sample of 6,748 respondents born between January 1, 1980, and December 31, 1984 (2) a supplemental sample of 2,236 respondents, which is designed to oversample Hispanic and black people during the same time period as the cross-sectional sample” (Center for Human Resource Research, 2005:14). Table 1 lists the distribution of gender and race within these two samples. Several steps are taken in order to ensure that the cross-sectional sample is, “an accurate representation of different sections of the population defined by race, income, region, and other factors” (Center for Human Resource Research, 2005:25). This complicated sampling procedure increases the amount of external validity overall, allowing for the generalizability of this youth cohort to youth overall in the United States.

Compensation in the form of ten dollars is given for each interview in the first three rounds, while a range of between ten and twenty dollars was implemented in the latter rounds (Center for Human Resource Research, 2005). Interviews occurred within a six month period, save the first which utilized two fielding periods in order to collect the initial background

information. Table 2 lists the retention rate after each wave. After the fifth wave, retention is relatively high, with roughly eight-eight percent of those participants originally in the sample continuing to be active in the study. Thus, attrition is not a major threat to this study¹⁰.

Table 1 here

Analysis, Hypothesis (1)

A descriptive analysis was employed in order to determine the role of pregnancy and live birth as desistance mechanisms among affiliated females. Specifically, this analysis evaluated the frequency of pregnancies and live births within the sample of affiliated females and if applicable, distinguished the temporal order of pregnancy, live birth, and gang membership. This assisted in pinpointing if pregnancy did occur, if such pregnancy was before, during, or after affiliation and whether that pregnancy resulted in a child. That is, are the majority of female gang members becoming pregnant/having children and if so, are these females becoming pregnant/having a child and then joining a gang, becoming pregnant/having a child during membership, or becoming pregnant/having a child after desistance? Only by identifying when each event occurred can

such conclusions were made. The same descriptive analysis was also run on a subsample, more similar to that in the Fleisher and Krienert (2004) study: urban, African American, affiliated females. This allowed for more direct comparisons to be made between Fleisher and Krienert (2004) and this current work.

Table 2 here

Analysis, Hypothesis (2)

A quantitative analysis was run on female gang membership and live birth with other sexual behavior controls. This established whether affiliated females are more likely than those without affiliation to have their pregnancies result in live births. “Settling down” as an exit strategy is more believable if the pregnancy results in a child. Cross-sectional sampling weights were employed in order to guarantee that the sample was representative.

Analysis, Hypothesis (3)

Finally, a quantitative analysis was also conducted on the wave with the most female gang members, the 1997 wave, to determine whether pregnancy in 1997 and 1998 and or/live birth in 1998¹¹ predicted desisting from the gang in the 1998 wave. As previously noted, either temporal pattern would be evidence of Fleisher and Krienert’s (2004) findings and

consequently their causality was tested here. Again, cross-sectional sampling weights were utilized.

Logit Model

Due to the fact that the dependent variables in hypotheses (2) and (3) were dichotomous, a binary logit model was utilized. These models allow for interpretation through either odds ratios or predicted probabilities. The former gives, “the odds of having an event occurring versus not occurring, per unit change in an explanatory variable, other things being equal,” (Liao, 1994:32) while the latter permits direct comparison among independent variables. For straightforward interpretation purposes, odds ratios are utilized here. Thus, the models are as follows:

model here

Measures

It is from this model that the four main constructs of the hypothesis will be operationalized: gang membership, desistance from gang membership, pregnancy, and live birth. In addition, four sexuality control variables will be added to the analysis in hypothesis (2): sexual intercourse, amount of sex, number of partners, and poor birth control use. Table 3 lists how each construct will be operationalized, while Table 4 is the descriptive statistics of each of the included variables among the entire female sample (N=4385)¹².

Variables of interest

A primary variable of interest to this investigation is that of gang membership. The NLSY defines a gang as, “a group that hangs out together, wears gang colors, has set clear boundaries of its territory or turf,

and protects its members and turf against other gangs through fighting or threats” (Center for Human Resource Research, 2005:208). This was operationalized through variables collected on the Youth Questionnaire concerning this membership at waves 1997 through 2003¹³. Such variables include not only whether a female participant has ever been a member of a gang, but also if she has been a member, her membership status since the last round of interviews, and the age at which she joined the gang and if applicable, desisted. A dummy variable was created indicating whether a subject was a gang member in the years 1997-2003 (one is equal to gang membership).

table 3 here

table 4 here

Three percent of the female sample divulged that they had been a member of a gang in the years 1997-2003. This number is less than the previously noted eight percent that Esbensen and Deschenes reported in their 1998 study. Nevertheless, the current sample is more nationally representative and less urban contingent than that of the Esbensen and Deschenes (1998) investigation, which may explain the lower percentage here.

Figure 2 demonstrates gang membership over the seven years of the survey. These patterns are consistent with the aforementioned research ascertaining that membership is highest between eleven and fifteen (Esbensen and Huizinga, 1993); here membership peaks during 1997, when all participants were between the ages of 12 and 16. This also mirrors the idea that females enter and exit gangs at an early age (Esbensen and Winfree, 1998) and that they spend one year or less as an active member (Thornberry et al., 2003), as discussed in the literature review. That is, the majority of these females are joining during the peak of membership (1997-1998, ages 12-16) and then desisting soon afterwards (by 1999, ages 14-18).

figure 2 here

Of the gang members, twenty-five percent were female. As previously noted, estimates of female gang members vary to upwards of fifty percent of the gang and general survey data tends to overrepresent females (Esbensen and Winfree, 1998). Therefore, this study's sample (twenty-five percent of the gang members as female) appears to fall well within the range of estimates and explains why this particular sample may be on the higher side.

Another variable of interest is desistance, operationalized again through a dummy variable. Here, one is equal to a female not reporting gang affiliation during at least one wave subsequent to the same female divulging membership in a previous wave. Around three percent of this total female sample and ninety-four percent of the female gang member subsample desisted affiliation in the years 1998 through 2003. This again is similar to

previous findings that suggest that gang members are only active for one year or less (Thornberry et al., 2003).

Other variables employed in this study include the most influential factors of parenthood (Woodward & Fergusson, 1999; Yampolskaya, et al., 2004). These variables helped in distinguishing the robustness of the relationship between gang membership and live birth. The first factor is that of sexual intercourse, measured between 1997 and 2003. A dummy variable indicating whether a female had engaged in sexual intercourse before she turned 21 was created (one is equal to being sexually active)¹⁴. In reference to this sexual activity, seventy-three percent of females had had sexual intercourse by the age of 21. This is similar to other estimates of female sexual activity; around seventy-five percent of young women are sexually active before their twentieth birthday (Guttmacher Institute, 1999).

Second, the amount of sexuality activity was investigated. Research has consistently shown that the more sexual incidences a female engages in, the higher likelihood she has of becoming pregnant (Guttmacher Institute, 1999). A dummy variable was developed; where one is equal to a woman disclosing that she had sexual intercourse once a week or more since the date of the last interview.¹⁵ Of those females that had admitted to being sexually active, fifty-eight percent constituted this “frequent sexual activity” group in at least one wave from 1997 to 2003. This is consistent with the Guttmacher Institute, which notes that of those that have engaged in sexual activity in the last three months, around half report such activity on a weekly basis (1999).

The number of sexual partners will also be an essential element to observe through the use of another dummy variable. Here one is equal to a female reporting two¹⁶ or more sexual partners since the date of the last interview.¹⁷ From this investigation, approximately seventy-percent of sexually active females noted that they had two or more partners in at least one wave from 1997 to 2003. According to the Guttmacher Institute, this group of females comprised around sixty-three percent¹⁸ (1999).

Inadequate contraceptive use was also explored. Of the seventy-three percent of females who had become sexually active, nineteen percent noted that they did not use contraceptives and specifically indicated that they did not use condoms since the date of the last interview¹⁹. This number is similar to what national statistics indicate. According to the Center for Disease Control, around eight-three percent of females are actively using contraception compared to the eight-one percent in this sample (2002).

Table 6 here

Another primary variable of interest, pregnancy, was measured²⁰ through a female participant disclosing that she has been pregnant either at or before the age of 20.²¹ Again, these questions were taken from the Youth Questionnaire from waves 1997 through 2003. From such questions, a dichotomous variable, where one indicates pregnancy was created. Of the entire sexually-active female sample, thirty-seven percent had experienced a pregnancy. This statistic is around that of the national average reported in 2003; thirty-four percent of the sexually-active female population became pregnant²² (National Campaign to Prevent Teen Pregnancy). Of the subsample, that of female gang members, forty-three percent were pregnant at or before the age of 21 (twenty-six percent of nonaffiliated females had experienced a teenage pregnancy).

A dummy variable, where one is equal to a subject having a live birth at or before the age of 21 was also added to the analysis. This variable was constructed through the question, “How many of these pregnancies have resulted in children born alive to you?” asked in waves 1998²³ through 2003 and was conditioned on an affirmative response to the pregnancy variable. Approximately twenty-six percent of females who had experience a pregnancy reported that these pregnancies resulted in children. The percentage of these pregnancies increases to forty-nine percent when twenty-year-olds are removed from the sample. This is similar to national statistics, which estimate around fifty-six percent of all teen (age

19 or younger) pregnancies produce children (Weiss, 2006).

Correlations

Gang membership, and pregnancy and live birth, have positive correlations of 0.08. Other correlations with pregnancy and live birth have larger magnitudes, with the highest being that of sexual intercourse (0.37), followed by poor contraceptive use (0.32), frequent sexual activity (0.31, 0.32 respectively), and then multiple partners (0.28). Leaving the gang has virtually the same correlations with the dependent variables as gang membership alone (0.08). Other correlations of note are those among the sexual behavior variables. Despite the fact that these high associations may result in multicollinearity, a scale would reduce important variation. Therefore, all sexual behavior variables are included separately. Table 6 lists all correlations. All correlations were significant at the 0.001 level.

RESULTS

Analysis, Hypothesis (1)

In regards to Fleisher and Krienert's (2004) findings, their study would be validated here if (1) the majority of female gang members become pregnant and (2) two temporal patterns occurred among those that became pregnant. Sixty of the 139 female gang members, forty-three percent, had experienced a pregnancy (although not necessarily had a child) during at least one wave between 1997 through 2003. Of these females, all but two had desisted at some point during their membership. Appendix 1 lists all females in this subsample and the waves in which they were in the gang, became disaffiliated, were pregnant, and if applicable, had children. Interestingly, most female gang members who were pregnant at some point experienced multiple pregnancies. In fact, around sixty percent of these affiliated females who became pregnant were pregnant more than once. Moreover, the greater part of this sample, sixty-six percent, went on to have children.

If motherhood is the main reason that affiliated women leave the gang, then such motherhood must occur either one interview period prior to or in the same interview period as desistance. However, the minority of female gang members, around sixteen percent, fit these temporal patterns in regards to pregnancy (compared to Fleisher and Krienert's (2004) sixty-three percent); although most of this sixteen percent went on to have a live birth. Appendix 2 lists all affiliated females in the pregnancy/live birth subsample and the waves in which they were in the gang, became disaffiliated, were pregnant, and if applicable, had children. Twenty-five percent of female gang members became pregnant and had children after desistance, while around two percent of the sample, were pregnant or had children before gang

membership.²⁴ Both of these patterns would not support Fleisher and Krienert (2004). Figure 3 demonstrates these summary statistics.

figure 3 here

A second temporal analysis was conducted on a more similar sample to that in the Fleisher and Krienert (2004) study. Here, only urban, African American female gang members were examined. This sample was actually less representative of Fleisher and Krienert's (2004) findings (again, sixty-three percent of their sample desisted because of motherhood). Similar to the larger sample, the minority of female gang members here, forty-two percent, had experienced a pregnancy. Appendix 2 lists these twenty-nine females with again the wave(s) they were in the gang, desisted, had a pregnancy, and if applicable, had a live birth. Thirteen percent of female gang members left the gang either one interview period prior to or in the same interview period that they became pregnant/had a live birth. The majority of this thirteen percent again did go on to have children. Twenty-six percent of female gang members experienced motherhood after desistance, while seven percent became pregnant/had a live birth before affiliation. Figure 4 demonstrates these summary statistics.

Analysis, Hypothesis (2)

A multivariate logit analysis with the sexual behavior control variables yielded an insignificant relationship with that of female gang membership and having a live birth. Again, cross-sectional sample weights were utilized. Table 8 lists the odds ratios and significance levels for all variables.

Surprisingly, only frequent sexual activity had a significant ($p < 0.05$) relationship with live birth among those females that had experienced a pregnancy.

figure 4 here

table 8 here

Analysis, Hypothesis (3)

The results of the three bivariate logit analyses with cross-sectional sampling weights produced interesting findings. As previously noted, the 1997 wave was originally chosen for this analysis due to the fact that it had the largest number of female gang members. Unfortunately, every one of the sixty-seven females that joined in 1997 desisted in 1998, thus rendering a desistance analysis impossible as the outcomes do not vary. Again, this is consistent with the desistance literature that notes most gang members remain affiliated for a short period of time (Thornberry et al., 2003).

DISCUSSIONS AND CONCLUSIONS***Summary***

This investigation has purported to examine gendered processes within a distinct group, that of gang members, in order to discern whether motherhood is an exit strategy for females within this group. This study served as a direct quantitative test of prior qualitative research; specifically of Fleisher and Krienert (2004). An initial temporal analysis indicated that the majority of female gang members did not become pregnant/have children. In addition, those that did experience a pregnancy did so after desistance from membership rather than prior to or within the same interview period as such desistance. A further look at a sample more similar to that of Fleisher and Krienert (2004), urban, African American females, yielded comparable results. In fact, the urban, African American females in this examination fit Fleisher and Krienert's (2004) temporal patterns less often than did the general sample. In addition, a causal examination of gang membership and live birth was conducted to determine whether affiliated females were more likely to have children than those without affiliation. This examination yielded an insignificant relationship between these two variables both within a bivariate analysis and when sexual behavior controls were added. Such a finding limits support for the notion of pregnancy as an exit strategy; this idea is more convincing if children result from such pregnancies. Finally, the bivariate logit analyses could not be conducted regarding pregnancy in 1997 and both pregnancy and live birth in 1998 in relation to desistance in 1998. This was due to the fact that the outcomes did not vary; all female gang members that joined in 1997 had desisted in 1998. All in all, this investigation found no support for Fleisher and Krienert's (2004) assertions of the causality of motherhood as a potential desistance mechanism, nor for the magnitude of their sixty-three percent finding.

Limitations

There are certain limitations to this study that should be considered, particularly those that come with any research that utilizes self-report data. Memory issues, under and overreporting, telescoping, interviewer bias and exhaustion are just a few of the potential problems that this data can present. However, the NLSY's procedures and policies are such that they address these problems and may decrease them more so than most self-report surveys can. Moreover, reliability regarding participants' answers was extremely high. For example, those that answered "yes" to ever having sexual intercourse in the first wave answered "yes" to the same question in the latter waves.

In addition to the general issues that result from using self-report data are the prospective drawbacks and the potential measurement error specific to the NLSY. As noted in the measures section of this manuscript, certain questions are asked of the entire population at times, while others are not of the whole group, and still other questions are not asked in every wave. This is likely due to the fact that this is a survey constructed primarily to measure economic outcomes of youth. Therefore, it would seem that delinquency and health variables are not as precisely operationalized as perhaps these economic outcome measures. Moreover, the NLSY does not oversample at-risk youth and as a result provides for small sample sizes in which to make conclusions about gang members. This may limit the external validity somewhat. Finally, the statistical techniques utilized in this particular investigation are basic and can only be preliminarily utilized to comment on the role of motherhood as a desistance mechanism. More sophisticated statistical techniques are needed in order to analyze the larger picture of gang membership and motherhood.

Despite these limitations, this investigation has served as an advance in the general scope of gang literature. The development of qualitative research into quantitative testing is a direction that gang research should continue. Both avenues should serve as complimenting, rather than competing resources. Without Fleisher and Krienert's (2004) work, this study would have been without focus. Conversely, without this research, reconsideration of a qualitative finding would not occur.

BIBLIOGRAPHY

- Akers, R. (1994). *Criminological theories*. Los Angeles: Roxbury.
- Bardone, A., Moffitt, T., Caspi, A., Dickson, N., & Silva, P. (1996). Adult mental health and social outcomes of adolescent girls with depression and conduct disorder. *Development and Psychopathology*, 8, 811-829.
- Battin, S. R., Hill, K. G., Abbott, R. D., Catalano, R. F., & Hawkins, J. D. (1998). The contribution of gang membership to delinquency beyond delinquent friends. *Criminology*, 36, 93-115.
- Bjerregaard, B. & Smith, C. (1993). Gender differences in gang participation, delinquency and substance use. *Journal of Quantitative Criminology*, 4, 329- 355.
- Brotherton, D. (1996). 'Smartness, toughness, and autonomy:' Drug use in the context of gang female delinquency. *Journal of Drug Issues*, 26, 261-277.
- Caldwell, L. & Altschuler, D. (2001). Adolescents leaving gangs: An analysis of risk and protective factors, resiliency and desistance in a developmental context. *Journal of Gang Research*, 8, 21-34.
- Campbell, A. (1984, 1991). *The girls in the gang*. Cambridge: Basil Blackwell.
- Center for Disease Control. (2002). *Teenagers in the United States: Sexual activity, contraceptive use, and childbearing*. Washington, D.C.
- Center for Human Resource Research. (2005). *NLSY user's guide: A guide to the rounds 1-7 data*. Columbus: Ohio State University Press.
- Chesney-Lind, M. (1993). Girls, gangs, and violence: Anatomy of a backlash. *Humanity & Society*, 17, 321-344.
- Cohen, L. & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Societal Review*, 44, 588-608.

Curry, G. D. (1998). Female gang involvement. *Journal of Research on Crime and Delinquency*, 35, 100-118.

Curry, D., Ball, R. & Fox, R. (1994). Gang crime and law enforcement recordkeeping. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Cyr, J. & Decker, S. (2003). Girls, guys, and gangs: Convergence or divergence in the gendered construction of gangs and groups. *Journal of Criminal Justice*, 31, 423-433.

Decker, S. (1996). Collective and normative features of gang violence. *Justice Quarterly*, 13, 243-264.

Decker, S. & Lauritsen, J (2002). Breaking the bonds of membership: Leaving the gang. In C.R. Huff (Ed.), *Gangs in America III* (pp. 103-122), Thousand Oaks: Sage Publications, Inc.

Esbensen, F. & Deschenes, E. (1998). A multisite examination of gang membership: Does gender matter?" *Criminology*, 36, 799-827.

Esbensen, F. & Huizinga, D. (1993). Gangs, drugs, and delinquency. *Criminology*, 31, 565-590.

Esbensen, F., Huizinga, D., & Weiher, A. (1993). Gang and non-gang youth: Differences in explanatory variables. *Journal of Contemporary Criminal Justice*, 9, 94-116.

Esbensen, F., Miller, M., Taylor, T., He, N., & Freng, A. (1999). Differential attrition rates and active parental consent. *Evaluation Review*, 23, 316-335.

Esbensen, F. & Winfree, L. (1998). Race and gender differences between gang and non-gang youth: Results from a multi-site survey. *Justice Quarterly*, 15, 505-525.

Estes, R. & Weiner, N. (2001). The commercial sexual exploitation of children in the U.S., Canada, and Mexico. Philadelphia: University of Pennsylvania, School of Social Work, Center for the Study of Youth Policy.

Fergusson, D. & Woodward, L. (1999). Maternal age and educational and psychosocial outcomes in early adulthood. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 40, 479-489.

Fishman, L. (1995). The vice queens: An ethnographic study of black female gang behavior. Pp. 83-92 in *The Modern Gang Reader*, eds. M. Klein, C. Maxson, & J. Miller. Los Angeles: Roxbury.

Fleisher, M. (1998). *Dead end kids: Gangs girls and the boys they know*. Madison: University of Wisconsin Press.

Fleisher, M. & Krienert, J. (2004). Life-course events, social networks, and the emergence of violence among female gang members. *Journal of Community Psychology*, 32, 607-622.

Glueck, S. & Glueck, E. (1950). *Unraveling juvenile delinquency*. New York: Commonwealth Fund.

Gordon, R., Lahey, B., Kawai, E., Loeber, R., Stouthamer-Loeber, M., & Farrington, D. (2004). Antisocial behavior and youth gang membership: Selection and socialization. *Criminology*, 42, 55-89.

Guttmacher Institute. (1999). [Teen sex and pregnancy](#). New York.

Hill, K., Howell, J., Hawkins, J., & Battin-Pearson, S. (1999). Childhood risk factors for adolescent gang membership: Results from Seattle. *Journal of Research in Crime and Delinquency*, 36, 300-322.

Hindelang, M., Gottfredson, M., & Garofalo, J. (1978). *Victims of personal crime*. Cambridge: Ballinger.

Huff, R. (1996). The criminal behavior of gang members and nongang at-risk youth. In C. Ronald Huff (ed.), *Gangs on America* (2nd edition). Thousand Oaks: Sage Publications.

Huizinga, D., Loeber, R., & Thornberry, T. (1993). Longitudinal study of delinquency, drug use, sexual activity, and pregnancy among children and youth in three cities. *Public Health Reports*, 108, 90-96.

Joe, K. & Chesney-Lind, M. (1995). 'Just every mother's angel': An analysis of gender and ethnic variations in youth gang membership. *Gender and Society*, 9, 408-430.

Joe, K. & Hunt, G. (1997). Violence and social organization in female gangs. *Social Justice*, 24, 148-169.

Klein, M. & Maxson, C. (1989). Street gang violence. Pp. 198-213 in *Violent Crime, Violent Criminals*, eds. N. Weiner and M. Wolfgang. Newbury Park: Sage

Klepinger, D., Lundberg, S., & Plotnick, R. (1995). Adolescent fertility and the educational attainment of young women. *Family Planning Perspectives*, 27, 23-28.

Lancot, N. & Smith, C. (2001). Sexual activity, pregnancy, and deviance in a representative urban sample of African American girls. *Journal of Youth and Adolescence*, 30, 349-372.

Lauderback, D. (1992). Sisters are doin' it for themselves: A black female gang in San Francisco. *The Gang Journal*, 1, 57-70.

Lauritsen, J., Sampson, R., & Laub, J. (1991). The link between offending and victimization among adolescents. *Criminology*, 29, 265-292.

Liao, T. (1994). *Interpreting probability models: Logit, probit, and other generalized linear models series: Quantitative applications in the social sciences*. London: Sage.

Miller, J. (1998). Gender and victimization risk among young women in gangs. *Journal of Research in Crime and Delinquency*, 35, 429-453.

(2001). *One of the guys: Girls, gangs, and gender*. New York: Oxford Press.

Miller, J. & Brunson, R. (2000). Gender dynamics in youth gangs: A comparison of males' and females' accounts. *Justice Quarterly*, 17, 419-447.

Miller, W. (1975). Violence by youth gangs and youth groups as a crime problem in major American cities. Washington, D.C.: Government Printing Office.

Molidor, C. (1996). Female gang members: A profile of aggression and victimization. *Social Work, 41*, 251-257.

Moore, J. (1991). Goin' down to the barrio: Homeboys and homegirls in change. Philadelphia: Temple University Press.

Moore, H. & Hagedorn, J. (1996). What happens to girls in the gang? pp. 205-218 in *Gangs in America*, 2nd ed., eds. C. R. Huff, Thousand Oaks, CA: Sage.

(2001). Female gangs: A focus on research. Bulletin. Youth gang series. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

National Campaign to Prevent Teen Pregnancy. (2003). Fact sheet: A look at the real costs of teen pregnancy. Washington, DC.

Peterson, D., Miller, J., Esbensen, F. (2001). The impact of sex composition on gangs and gang member delinquency. *Criminology, 39*, 411-447.

Peterson, D., Taylor, T.J., & Esbensen, F. (2004). Gang membership and violent victimization. *Justice Quarterly, 21*, 793-815.

Portillos, E. (1999). Women, men, and gangs: The social construction of gender in the barrio. In *Female gangs in America: Essays on girls, gangs, and gender*, edited by Meda Chesney-Lind and John M. Hagedorn, 232-244. Chicago: Lake View Press.

Santelli, J., Lowry, R., Brener, N. (2000). The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among us adolescents. *American Journal of Public Health, 90*, 1-7.

Shaffer, J. N., & Ruback, R. B. (2002). Violent victimization as a risk factor for violent offending among juveniles. *Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Schalet, A., Hunt, G., & Joe-Laidler, K. (2003). Respectability and autonomy: The articulation and meaning of sexuality among the girls in the gang. *Journal of Contemporary Ethnography*, 32, 108-143.

Taylor, Carl. (1993). *Girls, gangs, women, and drugs*. East Lansing: Michigan State Press.

Thornberry, T. (2001). Membership in youth gangs and involvement in serious and violent offending. In *The Modern Gang Reader*, edited by Miller et al., 164- 172. Los Angeles: Roxbury Publishing.

Thornberry, T. P., Krohn, M. D., Lizotte, A. J., Smith, C., & Tobin, K. (2003). *Gangs and delinquency in developmental perspective*. Cambridge: Cambridge University Press.

Thornberry, T., Krohn, M., Lizotte, A., & Chard-Wierschem, D. (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime and Delinquency*, 30, 55-87.

Tolman, Deborah. (1994). Daring to desire: Culture and bodies of adolescent girls. In *Sexual cultures and the construction of adolescent identities*, edited by Janice M. Irvine, 250-284. Philadelphia: Temple University.

Venkatesh, Sudhir A. (1998). Gender and outlaw capitalism: A historical account of the black sisters united “girl gang.” *Signs*, 23, 683-709.

Wang, John Z. (2000). Female gang affiliation: Knowledge and perceptions of at-risk girls. *International Journal of Offender Therapy and Comparative Criminology*, 44, 618-632.

Weiss, Deborah. (2006). *Pregnancy and childbearing among U.S. teens*. Washington: McCormick Library.

Wingood, G., DiClemente, R., Crosby, R., Harrington, K., Davies, S., & Hook, E. (2002). Gang involvement and the health of African American female adolescents. *Pediatrics*, 110, 57-64.

Woodward, L., Fergusson, D., & Horwood, L. (2001). Risk factors and life processes associated with teenage pregnancy: Results from a prospective study from birth to 21 years. *Journal of Marriage and the Family*, 63, 1170-1184.

Woodward, L., & Fergusson, D. (1999). Early conduct problems and later risk of teenage pregnancy in girls. *Development and Psychology, 11*, 127–141.

Yamaguchi, K., & Kandel, D. (1987). Drug use and other determinants of premarital pregnancy and its outcome: A dynamic analysis of competing life events. *Journal of Marriage and the Family, 49*, 257-270.

Yampolskaya, S., Brown, E.C., & Vargo, A. C. (2004). Assessment of teen pregnancy prevention interventions among middle school youth. *Child & Adolescent Social Work Journal, 21*, 69-83.

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END NOTES:

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² Hereafter referred to as the NLSY.

³ To name just a few of the studies that have estimated the number/percentage of gang members.

⁴ It should be noted that the fact that violent crime is already a male phenomenon, in respect to both the victims and offenders, does limit the significance of this finding.

⁵

⁶ It should be noted that initiation in the form of “sexing in” is not as common as entry through a physical fight (usually between the initiate and other women who are already in the gang).

⁷ Fleisher and Krienert (2004) utilized a sample of seventy-four black females in a poverty stricken area of Champaign, Illinois. The study was field work conducted over several years with women that identified with the Gangster Disciples, Vice Lord, or Black P-Stones.

⁸ Participants were allowed to take this portion in either English or Spanish. Audio assistance was also available via headphones attached to the laptop.

⁹ These ages were as of December 31, 1996.

¹⁰ Despite this contention, this study does acknowledge that gang members or delinquent youth in general, may be more likely to drop out of a study than their nondelinquent counterparts.

¹¹ There is no measure of live birth in 1997 so that cannot be tested. See *Measures* section for further details.

¹² Missing values in this table refers to those answers that were an “invalid skip,” “refused to answer,” and “don’t know.” “Valid skip” and “noninterview” were not included.

¹³ It should be clarified that the NLSY has certain discrepancies involving the gang membership questions. Therefore, both “Have you ever been a gang member?” and “Have you been a gang member since the date of the last interview?” were used to measure gang membership in the years 1997-2001. That is, if a participant answered yes to both questions they were considered to be a gang member. Both questions were utilized in the coding because the latter was only asked if the former was answered in the affirmative. As timing was crucial to this study, the former questions could not be used in and of themselves. For the years 2002-2003, the question “Have you been a gang member since the date of the last interview?” was inexplicably asked of the entire group, consequently allowing for that question to be the sole measure of membership in those waves. Again, those participants that answered “yes” to this question were classified as gang members.

¹⁴ This variable was created by using an “or” logic statement. That is, if a female answered yes to either, “Have you ever engaged in sexual intercourse?” or “Have you engaged in sexual intercourse since the date of the last interview?” they were considered to be sexually active. Both questions were employed in order to reduce measurement error. The first wave was the exception as only the former question was asked.

¹⁵ The question for 1997 was worded as, “How many times have you had sexual intercourse in the last twelve months?”

¹⁶ Two or more partners, although seemingly a small cut off, had been previously established in the literature (Guttmacher Institute, 1999) and consequently was utilized in this study.

¹⁷ The question for 1997 was worded as, “How many partners have you had sexual intercourse with in the last twelve months?”

¹⁸ This statistic only includes females ages 15 to 19.

¹⁹ The question regarding condoms was not asked in 1997.

²⁰ Here, only the date of the last interview question was needed as that was asked of the entire sample in the years 1998 through 2003. To measure pregnancy in 1997, however, the inquiry, “Are you currently pregnant?” was used as it was the only question that could distinguish that a pregnancy occurred in the last year.

²¹ The age of 21 was employed as a cutoff to garner a more similar sample to that of Fleisher and Krienert (2004).

²² This statistic does not include twenty-year-olds, as this study does. When this research omits twenty-year-olds, the percentage of sexually active females that experience pregnancy is reduced to thirty.

²³ There was no question regarding live births asked in 1997.

²⁴ In the case of multiple pregnancies, if one such pregnancy transpired in the same interview period as desistance, it was classified as a match under Fleisher and Krienert's model. Similarly, if participants desisted more than once from the gang, but if the timing of either desistance fit the necessary temporal pattern, it was included.