An examination of developmental patterns of chronic offending from self-report records and official data: Evidence from the Pittsburgh Girls Study (PGS)

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ABSTRACT

Purpose: The analysis of criminal career dimensions has generated a large knowledge base. Unfortunately, the lion's share of this work has been undertaken with males.
Methods: The current study seeks to build on the small (but growing) body of research on female offending patterns by examining offending trajectories in general, and chronic offending in particular, among 2450 participants from the Pittsburgh Girls Study (PGS). An important feature of our work is a comparison of both official and self-reported measures of offending.
Results: The results indicate that there is some degree of concordance between self-reported and official offending trajectories and there is evidence of an overlap among those identified as chronic offenders from a variety of operationalizations of chronic offending.
Conclusions: The study limitations and directions for future research are also discussed.

1. Introduction

Criminal career research examining a host of parameters, such as the prevalence and frequency of offending, age of onset, duration of the criminal career, desistance, and developmental trajectories has been the focus of a considerable amount of research dating back to the 1970s (Wolfgang, Figlio, & Sellin, 1972), culminating in a landmark report by the National Academy of Sciences (Blumstein, Cohen, Roth, & Visher, 1986), and increasing in volume thereafter (DeLisi & Piquero, 2011; Farrington, Piquero, & Jennings, 2013; Jennings, Loeber, Pardini, Piquero, & Farrington, 2016; Le Blanc & Loeber, 1998; Loeber & Le Blanc, 1990; Piquero, Farrington, & Blumstein, 2003, 2007; Piquero, Hawkins, & Kazemian, 2012). Furthermore, this upward surge in scholarly attention shows no signs of waning given the recent special issue of the Journal of Research in Crime and Delinquency that was devoted to the 1986 report's 30 year anniversary (see Sullivan & Piquero, 2016). While this literature is robust, the overwhelming majority of this research has examined these criminal career dimensions exclusively among males (e.g., Blumstein et al., 1986; Brame, Turner, Paternoster, & Bushway, 2012; Farrington et al., 2013; Jennings et al., 2016). This situation has largely been the result of research that has widely documented male offending as more common, frequent, and serious (Loeber et al., 2015).

Nevertheless, there has been a recent and growing amount of attention on evaluating the various criminal career parameters among females either for descriptive purposes (e.g., Ahonen, Loeber, Farrington, Hipwell, & Stepp, 2016; Chesney-Lind, 1997; Chesney-Lind & Irwin, 2008; Zahn, 2009) or to make direct comparisons with males' criminal career characteristics (Loeber, Jennings, Ahonen, Piquero, & Farrington, 2017).[2] One of the key conclusions from this line of research has been that, with some exceptions, most female offenders do not offend at the kinds of high offending frequencies that have characterized male offending patterns, but there does appear to be a small group of early-onset female offenders whose offending is both chronic

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and persistent (Goldweber, Broidy, & Cauffman, 2009; see also Russell, Robins, & Odgers, 2014). With some notable exceptions (e.g., Ahonen, Jennings, Loeber, & Farrington, 2016; Loeber et al., 2017), the majority of the extant criminal career research with females has been conducted with small to moderate sized samples, with a limited number of observations, and often with juvenile-justice involved youth. Having said this, there are a series of studies that are exceptions to these characterizations. And, while space precludes a detailed overview of these studies, we do highlight a few that we explicitly seek to build upon, given their focus on descriptive, longitudinal analyses of offending patterns among girls.

For example, Kratzer and Hodgins (1999) used official conviction data from a cohort of all persons born in Stockholm, Sweden in 1953 who were followed for 30 years. Using Moffitt, Caspi, Rutter, and Silva' (2001) developmental taxonomy as a guiding theoretical framework, the authors *a priori* divided the sample into five groups: no-crime group, adolescence-limited group (convicted before age 18 but not after), discontinuous offender group (convicted for at least one crime during two age periods, with at least one conviction occurring prior to age 18 and one after age 18), adult-starter group (convicted after age 18 but not before), and a stable early-starter group (convicted both before and after age 18 and convicted at least once during each of three or more age periods). The results showed that males were more likely to be classified as early-starter offenders (6.2% vs. 0.4%), as well as adolescence-limited offenders (9.9% vs. 2.2%), when compared to females. And, even among early-starter offenders, the volume of offending measured through official convictions was much higher for males than for females.

Using official police contact data from the Second Philadelphia Birth Cohort, D'Unger, Land, and McCall (2002) identified different numbers of trajectories for males and females, yet also uncovered some similarities and some differences in offending patterns across sex (see also Cohen, Piquero, & Jennings, 2010). Specifically, the authors identified a three-group model for the Philadelphia females, consisting of non-offenders, a low-rate adolescence-peaked group, and a high-rate adolescence-peaked group, the last of which peaked toward mid/later adolescence and slowly curtailed their offending through the mid-20s. Among males, however, a five-category solution was optimal and included: non-offenders, a low-rate chronic group, a low-rate adolescence-peaked group, a high-rate chronic group, and a high-rate adolescence-peaked group. One of the key distinctions across males and females, regardless of the characterization of the trajectory group, was the salient difference in the frequency of offending, which was much higher in the male trajectories compared to the female trajectories. In fact, even among the low-rate adolescence-peaked offenders, the highest estimated police contact rate at age 15 for females was just under 0.20 police contacts, while for males it was about 1.00 police contacts. In sum, there was heterogeneity in the offending patterns among females, females tended to begin offending later, they did not offend as frequently as males, and they generally curtailed their offending earlier than males.

Piquero, Brame, and Moffitt (2005) used data from the Dunedin (New Zealand) 1972 birth cohort study to examine gender differences in offending patterns through age 26 via a search of conviction records at all courts in New Zealand and Australia. Not surprisingly, their analyses indicated that the vast majority of the sample was not convicted –and among those who were convicted the frequency of such convictions was quite small. Furthermore, they also detected that more males than females were convicted by age 26. Most interesting, their finite mixture models revealed that a three-class solution provided the best fit for males (essentially groups comprised of low, medium, and high frequency offenders) while a two-class model, comprising essentially offenders (medium frequency) and non-offenders (low to very-low frequency), provided the best fit for the female sample.

Using a serious adolescent offender sample, Cauffman, Monahan, and Thomas (2015) identified unique offending trajectories among 172

females (and a matched sample of 172 males) in the Pathways to Desistance study. Using a repeated self-reported variety of offending measure, the authors found that a five-group solution provided the best fit to the female sample, including: low-rate offenders, moderate offenders, early-desisters, late-desisters, and a small (6.7%) persister group who averaged around 4 different offenses per year throughout the seven-year study period. Among males, the authors also identified five unique groups, labeled similarly, but whose offending was much more varied over time. As an example, the male persister group had a very high involvement in self-reported offending throughout the early years of the study, of 6 and 12 offenses per year, only to reduce to about four offenses per year toward the end of the follow-up period. In sum, while there was heterogeneity in self-reported offending within the female sample of the Pathways study, most women desisted quickly over time, with only a very small proportion persisting into their mid-20s. In addition, the results demonstrated that the level of female offending was much more truncated than the level of offending in the matched male sample.

In an interesting analysis of all individuals born in 1983/1984 with at least one court finalization for a criminal offense in Queensland, Australia, Broidy et al. (2015) found that, between ages 10 and 25, most of the cohort did not have contact with the criminal justice system. Analyzing those individuals with one or more official convictions, the authors' trajectory model estimation on the full sample of males and females yielded a five-group solution, with groups identified as: adolescent onset-low offending, adult onset-low offending, adolescent onset-moderate offending, early onset-chronic offending, and adolescent onset-chronic offending. When the authors cross-tabulated their trajectory solutions with the sex of the cohort member, they found that females were most likely to be in the low frequency offending trajectories while, across the other offending trajectories, the ratio of males to females ranged from 1.7:1 to 4.3:1, indicating a much less visible presence of females in the other offending groups (yet, there remained a non-trivial number of females in the most extreme offender classification).

Finally, Jolliffe, Farrington, and Piquero (2016) examined and compared two operationalizations of an official measure (convictions) of chronic offending among male participants in the Cambridge Study in Delinquent Development. Specifically, their analysis revealed that 29 of the 393 males at risk (7.4%) had at least 10 convictions (and were labeled by the researchers as chronic offenders), and that they were responsible for 53.3% of all of the convictions among the CSDD participants. More importantly, 17 of these 29 "hard-coded" chronic offenders (58.6%) were also identified as high rate chronic offenders based on a trajectory analysis.

2. The current study

The great majority of the afore-mentioned trajectory-based studies on longitudinal female offending patterns tend to support the view that there is meaningful heterogeneity within samples of females in the shape and level of their offending over various periods of the life-course. It is also the case that female offending patterns tend to be more subdued in terms of volume when compared to male offending patterns. It is also the case that most of the studies reviewed above used official records of criminal activity, with self-reports being used in the minority of cases. To the best of our knowledge none of the studies examined offending patterns, especially chronic offending patterns, using both self-report and official records of offending. This is an important issue given that using both measures simultaneously would be ideal (Maxfield, Weller, & Widom, 2000, p. 108), but the problem has been that the inclusion of both types of crime measurement in the same longitudinal study has been the exception and not the norm.

Our aim in the present study is to use both official and self-reported offending data to examine the issue of chronic offending in the Pittsburgh Girls Study. An additional feature of our work is that we