

Elderly Criminals and Aging Populations: Extending the life course perspective

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Abstract:

The age-crime curve—with a peak in offending in late adolescence and a steady decline in older age—is a well-established "social fact," whose basic shape has been consistently observed across time and place. Theories that explain criminal offending over the life course were developed in this context, and many rely on biological determinants to explain desistance from crime in older age. This paper extends the life-course perspective on crime, which is one of the few theories flexible enough to accommodate onset of offending in older age, to analyze Japan's recent gray crime wave.

Using administrative data on all elderly arrests in Japan over the last ten years, the author finds support for the life-course perspective's proposition that marital status is a key factor for offending. Whereas the life course theory posits that marriage leads to desistance, the results suggest that divorce is a precursor to onset in older age. The author identifies other key factors for elderly offending by gender, where economic factors are most relevant for older men and social factors are most pertinent to older women. She proposes that the life-course perspective can be extended to account for onset of offending in older age.

The age-distribution of crime—with a peak in offending during late adolescence and a continuous decline into adulthood—is a well-documented "social fact" that has been consistently observed over time and across place. As noted by Hirschi and Gottfredson, "no fact about crime is more widely accepted by criminologists. Virtually all of them, of whatever theoretical persuasion, appear to operate with a common image of the age distribution" (1983:552). Although differences in the age-crime curve have since been documented by crime type, time period, country, race and gender (Greenberg 1985; Farrington 1986; Steffensmeier et al. 1989), a steady decline in offending at the older ages has always been observed until now.

Over the past decade, Japan has witnessed a near tripling of the arrest rate among people 65 years and older (Ministry of Justice 2008). The combination of an increasing elderly arrest rate and an aging population has led to a rapid growth in the number of crimes committed by older adults. In 2007, 13 percent of crimes were committed by people 65 years and older (Ministry of Justice 2008). For comparison, in the United States, 0.6 percent of arrestees are elderly (Crime in the United States 2008). Surveys by the Japanese government suggest that the majority of these offenders had no prior criminal history and were arrested for the first time in older age. While Japan has been previously viewed as exceptional for its dramatically low crime rate, this new trend places Japan in a distinct position that warrants attention and research.

Investigating the case of Japan makes two contributions to theories on aging and crime. First, the dramatic increase in criminal offending in older years calls into question criminological explanations that rely primarily on biological processes or natural trajectories to account for offending patterns in older age. Often referred to as maturation

and developmental theories, these perspectives are difficult to reconcile with the case of Japan (see South and Messner 2000; J. H Laub and R. J Sampson 2003 chapter 2, for overviews). Second, the rise in elderly offending provides an opportunity to extend theories flexible enough to accommodate onset in older age, such as the life-course perspective on crime (R.J. Sampson and J.H. Laub 1995; J. H Laub and R. J Sampson 2003). Developed in the context of desistance, the life-course perspective proposes that certain key structural turning points—such as the formation of attachments to marriage and employment—reduce a person's propensity to commit crime.

In this paper, I build on the life-course perspective and suggest that structural turning points play an important role for onset in later life. In this case, the unexpected *loss* of attachments—such as divorce or widowhood and forced retirement—place individuals for risk of criminal offending in older age (65 years and older). Utilizing national and prefectural-level data on the entire universe of older adult arrests in Japan from 1995 to 2004, I find that marital status—specifically, divorce—is an important factor for elderly offending. For elderly female offenders, social determinants play a particularly important role. In contrast, economic hardship is a key factor for elderly male offenders. The findings suggest that the life course perspective can be extended to explain onset in older age and reinforce the notion that social institutions are critical for criminal offending patterns throughout the life course.

In the next section, I provide a brief background on aging and crime literature and describe the recent case of Japan. Section II describes the data, methods, and measures used in the analysis, and section III reports the findings for the national and prefectural-

level models. Section IV closes with a discussion of the results, limitations of the research, and implications for theories on aging and crime.

I. Background

Theories on crime and aging

The general shape of the age-crime pattern has been undisputed; however, the underlying factors that drive the relationship have been the subject of heated debate and controversy beginning with Hirschi and Gottfredson's seminal paper (1983). Hirschi and Gottfredson propose that the propensity to commit crime is determined by a person's level of self-control, a trait that is formed by attachments and social bonds forged in early childhood (Gottfredson and Hirschi 1990). In this framework, the age-crime pattern reflects the simple aging of the human organism—a process that is universally experienced across cultures, social structures, and time. Commonly studied criminological factors, such as delinquent peer groups, poverty, and economic strain, which vary over the life-course, do not determine criminal offending in their perspective. Because Hirschi and Gottfredson propose that self-control is developed by early childhood, they argue that it is not necessary to study offending over the life course.

Other aging or maturation theories suggest a similar conclusion, although the mechanisms are different. In their longitudinal study of delinquent and non-delinquent boys, the Gluecks proposed that maturation processes accounted for the steady and continuous decline in offending in later life. For the Gluecks, the biological aging process does not solely determine maturation, as Hirschi and Gottfredson suggest. Rather, maturation is the process of settling down and reflects a combination of biological,

psychological, and sociological factors (S. Glueck, E. Glueck, and S. Glueck 1968; see J. H Laub and R. J Sampson 2001 for a review).

Developmental theories similarly focus on underlying biological mechanisms to account for offending patterns over age. Moffitt proposes one of the more influential developmental perspectives, positing that there are two groups of criminal offenders that follow distinct trajectories over the life-course—adolescence-limited and life-coursepersistent individuals (Moffitt 1993, 1997). Adolescence-limited offenders engage in antisocial and criminal behavior during a brief time period and desist by early adulthood. Life-course-persistent offenders, however, continuously exhibit anti-social behavior from early childhood throughout adulthood, desisting only when they are physically unable to commit criminal acts or have adopted pro-social skills. Early childhood experiences largely determine whether an individual follows one or the other trajectory. In general, developmental theories assume natural progressions or stages of offending over the lifecourse, which are settled by earlier experiences.

For these perspectives, propensity for criminal offending is largely if not completely determined in early childhood. Desistance from offending must occur in older age, whether due to the aging process or a group-based trajectory, and these perspectives cannot easily accommodate onset of offending in later life.

The life-course perspective on crime is a third and more dominant approach for explaining offending over age (R.J. Sampson and J.H. Laub 1995; J. H Laub and R. J Sampson 2003; South and Messner 2000). According to Sampson and Laub, relationships and social attachments are not only important in early childhood but also moderate offending throughout the life-course (1995; 2003). In this perspective, propensity for

criminal offending changes in ways that are often unforeseen and are the result of "turning points". These turning points—for example, marital attachment and stable employment—have the potential to strengthen social bonds to normative lifestyles, reduce negative peer influences, and establish conventional routines that eventually lead to desistance. Although biological processes of aging and maturation may play some role, the life-course perspective on crime emphasizes the importance of social bonds and attachments over the entire life-course to explain criminal offending by age.

Marriage, in particular, has emerged as a critical factor for desistance in the lifecourse perspective (South and Messner 2000; J. H Laub and R. J Sampson 2001, 2003). Selection into marriage likely contributes to the association, where those individuals who choose to marry and to stay married are different from those that remain single. However, married life also entails greater social controls towards conventional lifestyles and allows less time for socialization with deviant peers (Warr 1998; J. H Laub and R. J Sampson 2001). The role of marriage, and the life course perspective more generally, was developed in the context of desistance in later life; in the theory's current form, it does not consider factors that affect onset of offending in older age. While entrance into marriage serves as a protective factor leading to desistance, it is possible that exit from marriage is a risk factor for offending in later life under certain conditions.

The case of Japan presents an opportunity to extend the life course perspective, by testing how turning points in later stages of the life-course—for example, divorce and loss of employment—can affect onset. Although elderly crime has been relatively rare, it is likely that life transitions in older age would produce anomic feelings and experiences. Similar to adolescents and young adults, elderly individuals experience several turning

points at once, such as loss of a spouse, retirement, distance from grown children, and change in residence (Feinberg 1984). In these respects, the life course perspective on crime seems well suited to explain offending in older age.

Offending in older age

Until the recent case of Japan, elderly offenders had always made up a very small proportion of all offenders and they were generally ignored (Brogden and Nijhar 2000; Mandino 2000). However, a brief flurry of research occurred in the early 1980s, prompted by nascent fears of an elderly crime wave in the US (Cullen, Wozniak, and Frank 1985; Steffensmeier 1987; Wilbanks and Kim 1984; Forsyth and Shover 1986; McCarthy and Langworthy 1988; Brogden and Nijhar 2000). While the number of elderly arrestees did increase during this period, the age-specific arrest rate did not rise more than rates for other age categories; rather, demographic shifts in the US age structure increased the number of elderly offenders.

Even though concerns about the emergence of a new elderly criminal proved unwarranted, the research provided a portrait of older offenders in the US. Among older offenders, shoplifting is the most common type of crime. In contrast to shoplifters at younger ages, elderly shoplifters act alone and usually take items for their own personal use (Cullen et al. 1985). As with all shoplifters, women make up a much larger proportion, compared to offenders who commit other types of crimes (Mandino 2000). In these characteristics, the Japan case is similar—most elderly offenders are arrested for petty larceny and nearly one-third are female (Ministry of Justice 2008).

The case of Japan

At the end of 2008, the international media announced Japan's new "gray crime wave." Elderly crime rates had been steadily increasing over the last twenty years and by 2007, the age-specific arrest rate for those 65 years and older was very high (284 for men and 97 per 100,000 for women). In the United States during a similar time period (2001), the age-specific arrest rate was only 111 for men and 22 for women (Uniform Crime Reporting Program 2003).¹ Although Japan is considered unique for its relatively low crime rate, arrest rates at the oldest ages are now higher than the US.

[Insert Figure 1 about here]

By 2007, the age-crime curve had flattened for adults, and the arrest rate for people 60 to 69 years old was nearly equal to the arrest rate for adults 30 to 39 years old (see Figure 1). In the most recent years, as elderly arrest rates were rising in Japan, arrest rates at the youngest ages (under 20 years old) were decreasing. This, combined with Japan's aging population, resulted in elderly arrests contributing a surprisingly large proportion of all arrests in Japan (13 percent) (Ministry of Justice 2008). This is nearly 22 times the proportion of elderly arrestees (0.6) in the United States (Crime in the United States 2008).

Despite their large numbers at arrest, less than half of the elderly offenders are prosecuted and incarcerated, suggesting that the majority of offenders commit relatively minor crimes and do not have criminal histories. Indeed, a nationwide survey of approximately 5,000 elderly offenders conducted by the Ministry of Justice (MOJ) confirms this, as the majority (56 percent) first began committing crimes after reaching

¹ Rates are per 100,000 people 65 years and older. The US rate includes part 1 and 2 offenses from the Uniform Crime Reports. 2001 is the most recent year available.

older age (Ministry of Justice 2008). This survey also provides preliminary evidence of the importance of social bonds and attachments for the onset of criminal offending in later life. Repeat and first-time older offenders were more likely to live alone compared to the general older adult population (78 and 23 percent, respectively, compared to 16 percent) (Ministry of Justice 2008). Economic hardship also appeared to be a motivating factor for many male elderly offenders; however, a large proportion of female offenders may not face similar economic problems. The information collected in the few available Japanese government reports and surveys provide a useful first descriptive portrait of elderly offenders; however, these reports are limited by their sampling approaches, data collection methods, and analytic strategies.²

Rising elderly crime rates place Japan in a unique position; however, the country has generally occupied a distinct place within the fields of demography and criminology. Japan was the first country to experience a declining population, a result of belowreplacement level fertility since 1973. The persistence of these very low fertility rates is unprecedented, and has resulted in a multitude of social problems and anxieties about the future such as the viability of the government pension system and the economic infrastructure (Ogawa and Retherford 1997; Morgan and Taylor 2006).

² The samples are not representative of the wider universe of elderly offenders, whether due to sampling restrictions on crime type, geographic location, or availability of case documents. Information was also collected either by extraction of data from court case records, which excludes cases with unavailable materials, or by police officials and prison officials administering surveys, which can result in biased answers to sensitive questions. Lastly, the reports provide sample means only, considering factors such as social and economic situation in isolation without controlling for possible cofounders. Despite these limitations, the reports provide a valuable source of information on elderly offenders.

Japan has been traditionally viewed as exceptional for a low crime rate. Most recently, declines in homicide by the youngest cohorts have resulted in a flattened age-homicide curve (Hiraiwa-Hasegawa 2005). Although crime at the youngest ages has been decreasing, recent increases in the overall violent crime rate sparked a new wave of media and public concern. Hamai and Ellis (2008) have since documented that much of the recent bump in violent crime resulted from police scandals and changes to police reporting methods for violent crimes in 2000. Changes in police reporting are important to consider in any study based on arrest data, and these concerns are addressed in the following sections.

II. Data, Methods, and Measures

The data and methods can be divided into two sections. The first provides a descriptive analysis of national trends to investigate whether the rise in elderly offending is real or perceived. The second extends the life course perspective on crime to test the relationship between previously identified correlates of offending and elderly arrests. *Descriptive analysis of national trends*

It is possible that rising elderly arrest rates are due to younger, more "criminal" cohorts simply growing older rather than onset in elderly age. Indeed, cohort effects explain the recent flattening of Japan's age-homicide curve (Hiraiwa-Hasegawa 2005). Government surveys with convenience samples suggest that this is not the case and that the majority of elderly offenders had no prior arrest record. In this section, I use the entire universe of adult arrests from 1975 to 2005 to disaggregate changes in the arrest rate due to age and cohort. The information on number of arrests comes from the

National Police Agency and population estimates by year are from the National Institute of Population and Social Security Research.

Although useful in separating age and cohort trends, the above analysis provides a crude view of period effects, such as the policy changes described by Hamai and Ellis (2008). In their study, there was a discernible bump in violent arrests in 2000. If the rise in elderly crime is caused by these policy changes, elderly arrests would be driven primarily by violent crimes and there would be a discontinuity in the year 2000 for violent crimes. In order to discern whether the rise in elderly crime was the result of police and reporting changes, I analyze elderly arrest rates from 1995 to 2004 by crime type and gender using arrest data that was generously provided by the Tokyo Metropolitan Police Department. I look separately at older male and female offenders because prior research suggests that men more often perpetrate violent offenses (Ministry of Justice 2008). These analyses provide evidence that the rise in elderly arrests reflect real and new increases in crime among people 65 years and older.

Extending the life-course perspective to explain elderly crime

To analyze what factors are associated with increases in elderly crime, I use prefectural level arrest data that was generously provided by the Tokyo Metropolitan Police.³ I first describe the regional variation in elderly arrest rates and compare this

³ Much of this information is publicly available in more limited forms (e.g., not separated by gender, non-standard age categories, etc) and I had previously collected information for the majority of prefectures. The process was long, tedious, and resource-intensive, but a brief explanation about these data may help other researchers interested in studying crime in Japan. Each prefectural police department publishes an annual report with detailed arrest information, including age-specific arrest tables. The National Diet Library collects some of these reports;

change to other key explanatory factors. I then use prefectural-level fixed effects models to investigate how increases in elderly offending are associated with marital status, employment, living situation, and other explanatory variables. Because correlates of offending likely differ depending on gender (Cullen et al. 1985; Ministry of Justice 2008), I also analyze separate models for men and women.

The strength of fixed effects models is that they account for any unobserved factors that are specific to the prefecture and do not vary over time. For example, fixed effects models adjust for prefectures that consistently have higher crime rates or different policing policies and practices. These models consider changes in arrest rates and explanatory variables at four time points: 1995, 1998, 2001, and 2004. For some independent variables, I use OLS regression to estimate years 1998, 2001, and 2004 using information from the 1990 to 2005 censuses (see Table 1 for a list of variables and data sources). For these estimates, I allow for non-linearity by incorporating squared and cubic year terms.

[Insert Table 1 about here]

Measures

<u>Arrest rates.</u> Age-specific arrest rates by prefecture and gender were combined with age-specific population estimates by prefecture and gender for a given year. Rates are calculated as the number of older adult arrestees per 100,000 persons 65 years and older.

however, there is not a single repository for all prefectures and years. Instead, I contacted prefectural police departments by letter or email and the majority was responsive to requests for their reports. There is a wealth of information published in prefectural police annual reports, yet I do not know of criminology research on Japan that utilizes them.

<u>Marital status.</u> The marital status of older adults is separated by gender and measured using five categorical variables: the percent of older men or women who are married, divorced, widowed, never married, and who do not report status in the census.

<u>Living situation.</u> The living situation of older adults (aged 65 years and older) is measured using four categorical variables: the percent of older people living alone, living with spouse, living with children, and living with "others."

<u>Labor force status</u>. Labor force status for older adults is separated by gender and measured by four categorical variables: not in the labor force, employed, unemployed, and status not reported in the census.

<u>Receipt of cash assistance</u>. The rate of older people receiving cash assistance from the government is used to measure the extent of poverty among older adults in the prefecture. While there are many determinants of receipt besides economic situation, such as the application procedures of the prefecture and the stigma attached to receiving aid, it is the best available measure to capture poverty rates among older adults.

<u>Commuters.</u> The percent of employed persons age 15 years and older that commute to a different prefecture for work is used to capture whether the prefecture is a commuting suburb of a nearby metropolitan area. It is likely that the everyday social environment of prefectures with large proportions of commuters is quite different from regions with less mobility. Older people who are retired and living in these communities may be at greater risk of feeling segregated and isolated, or may be more willing to commit deviant acts if informal networks are less cohesive during the day. This finding aligns with traditional criminology theories, where communities with high levels of mobility are commonly associated with higher crime rates (Shaw and McKay 1942).

<u>Police ratio.</u> The number of police officers per 1,000 residents in the prefecture is used as to capture changes in police presence that may affect the arrest rate.

<u>Density</u>. Population density (number of people per .1km² of inhabitable areas) is included to account for demographic changes related to population concentration, which is commonly correlated with crime rates.⁴

III. Results

National Trends

[Insert Figure 2 about here]

By charting the arrest rates for six birth cohorts, from 1906 to 1965, there are two striking patterns (see figure 2). First, the *level* of arrest rates by cohort does not support the hypothesis that today's elderly are simply from a cohort that is much more "criminal" compared to previous generations. The levels of the crime curves for cohorts 1916 to 1936 appear similar when extrapolated. Further, the most recent elderly cohort, those born in 1936 to 1945, had a lower arrest rate in ages 50 to 59 years old compared to the earlier 1926 to1935 cohort at the same age ten years earlier.

A second striking finding is that the *shape* of the classic age-crime curve holds for most cohorts until the time period that corresponds with 1996 to 2005. During this time period, the majority of adult cohorts experience increasing arrest rates, not only the cohorts at the oldest ages. For example, the cohort that is born in 1936 to 1945 experiences decreasing arrest rates from age 30 to 60. After age 60, which aligns with years 1996 to 2005, arrest rates increase. For the oldest cohort, those born in 1906 to

⁴ Total criminal offenses per 100,000 residents was initially included in the models as a control but was eventually dropped due to lack of statistical significance.

1915, arrest rates stay constant from ages 60 through the oldest age bracket. The exception is the cohort born in 1916 to 1925, which is the only cohort that exhibits the classic age-crime curve throughout the entire time period.

[Insert Figure 3 about here]

The upward sloping age-crime curves may reflect period-specific changes in police practices and policies enacted between 1996 and 2005, rather than describing a real increase in offending rates. While it is important to point out that arrest rates at the youngest ages (14 to 19 years old) were not increasing during this time period, it is still possible that policy changes affected arrest rates for adults. Hamai and Ellis (2008) attribute an increase in violent arrests during this period to policy changes in reporting. If arrest rates were inflated, we would expect to see the increases driven by violent crimes and discontinuity in 2000. Figure 3 graphs arrest rates by crime type and gender from 1995 to 2004. For older male and females, the majority of the increase in elderly arrests is due to larceny, including shoplifting and petty theft. For males, larceny offenses accounted for 52 percent of the increase in arrest rates, followed by "other" offenses (37 percent).⁵ Violent offenses explained a much smaller percent of the increase in elderly male arrest rates (8 percent). For females, larceny offenses made up 88 percent of the increase. Further, there is no discontinuous demarcation in arrests in 2000. These findings suggest that the increase in elderly arrest rates is not due to changes in policing policies and practices in 2000.

Extending the life course perspective to explain elderly offending

⁵ The "other" category includes a number of minor offenses, including the theft of items reported lost, such as bicycles.

Before reporting results from the fixed effects models, an analysis of arrest rates of older adults by prefecture reveals a large amount of regional variation. In 1995, older adult arrest rates were low, ranging from 11 arrests per 100,000 older people in Okinawa to 165 arrests per 100,000 in Tokyo. By 2004, older adult arrest rates in all prefectures had increased, ranging from a new low of 79 per 100,000 in Kagoshima to 215 per 100,000 in Kagawa. While several prefectures saw their arrest rates only double during this decade, others experienced an increase of over 400 percent. In general, the prefectures with the largest increases were those with smallest base rates in 1995.

Figure 4 describes the regional variation in arrests, distinguishing by gender. The percent change in elderly arrest rates from 1995 to 2004 ranges from 4 to 846 percent. While there is some clustering surrounding large metropolitan areas such as Tokyo, Osaka, Nagoya, and Fukuoka, it is not completely consistent. In general, male arrests increased more than female arrests across all prefectures. While there is greater variation for female arrests across prefectures, female arrests increased in areas that experienced correspondingly large male arrest increases. Although there are differences in degree, both male and female arrests increases are regionally clustered in the central regions of Kanto, Chubu, and Kinki. There are also increases in the southern areas of Kyushu and Okinawa.

Fixed-Effects Models

[Insert Table 2 about here]

In this prefectural analysis, I extend the life-course perspective on crime to investigate how marital and employment status, as well as other key factors, are

associated with the elderly arrest rates. Table 2 reports means and standard deviations for all measures across prefectures for 1995 and 2004. The average elderly arrest rate across prefectures was 53 per 100,000 in 1995 and 139 per 100,000 in 2004, representing a 162 percent increase overall. By gender, the older male arrest rate increased by 171 percent, from 80 per 100,000 in 1995 to 217 in 2004. For older females, the average arrest rate across prefectures increased by 147 percent, from 34 in 1995 to 84 per 100,000 in 2004.

For the other measures, there are gender differences in trends from 1995 to 2004. In terms of marital status, fewer men are married and widowed and more are divorced or never married. For women, a higher proportion are married, divorced, and never married. Fewer women are widowed, reflecting the gains in life expectancy for their partners over this time. For economic situation, the number of elderly cash assistance recipients increased by 27 percent, from an average of 13.8 to 17.58 per 1,000. The proportion of employed men and women also decreased over this period; however, more elderly men and women are reporting as not in the labor force rather than unemployed. This is again likely due to increased life expectancy, where the oldest old are comprising a larger proportion of all those 65 years and older.

[Insert Table 3 about here]

Table 3 reports fixed effects OLS regression results for prefecture arrest rates by gender. Considering older arrest rates for men and women (column 1), marital status and labor force status are both significantly associated. For marital status, increases in the proportion divorced and decreases in the proportion widowed, compared to the proportion married, are related to elderly arrests. For labor force status, the proportion of unemployed is positively associated with elderly arrests. Elderly arrests also increase in

prefectures where there are increases in elderly poverty, which is proxy measured by the receipt of cash assistance. Interestingly, the percent of commuters to other prefectures is significantly related to increases in elderly arrests, suggesting that there is something distinctive about commuter regions. The other variables, including living situation, police rate, and density, are not significantly related to elderly arrests for men and women.

Separately analyzing arrest rates by gender reveals important differences. For men, who make up the bulk of overall arrest rates, labor force status and the proportion unemployed remain significantly related to arrest rates (see table 2, column 2). While the proportion of men divorced compared to those married is positively associated, an f-test of the overall marital status measure is marginally significant. Cash assistance rates are also marginally significant, and the commuter rate remains large and positively related to elderly arrests. These findings suggest that for elderly men, the loss of attachments to marriage and employment are risks for offending in later life. This is an extension of the life-course perspective, which posits that the formation of attachments to marriage and work are important factors for desistance.

For women, economic factors are largely unrelated to the increases in elderly arrest rates (see table 2, column 3). While the proportion of older women employed compared to those not in the labor force appears to be a marginally significant protective factor against arrests, the overall labor force status measure is not significant. Poverty rates (measured by the receipt of cash assistance) are also not associated. Instead, the marital status and living situation of elderly women is important. Similar to the findings for men, higher proportions of women divorced compared to those married are related to

increases in elderly arrests. Living alone, with a spouse, or with roommates as opposed to living with children is positively associated with increases in elderly arrests for women. The findings suggest that loss of attachments to children and to marriage, rather than to work, are important factors for female offending in later life.

IV. Discussion

Theories on the age-crime relationship were developed in the context of desistance in older age, and many draw on biological determinants to explain offending patterns. The life-course perspective on crime is one exception. Whereas the life-course perspective posits that the formation of attachments to marriage and work deter offending, I propose that the loss of attachments place individuals at risk for offending in later life.

I first investigated how arrest rates vary by age, cohort, and time period to assess whether changing rates reflect a real increase in offending. The findings suggest that the increase is real, and not due to cohort differences in criminality nor to new policing practices enacted in 2000. I then analyzed how marital status and employment—two factors that have been identified as important to the desistance process—are associated with elderly arrest rates. As in early life, both of these factors are also associated with offending at later life. However, it is the *loss* of attachments to marriage and to employment that is important for elderly offending.

Separating male and female arrests highlighted important gender differences. For females, living situation and marital status—rather than economic variables—were important risk factors for offending. For men, living in a commuter region is positively

associated with elderly offending. This finding brings attention to the importance of social context for offending, and it is likely that older men that retire (either voluntary or out of necessity) experience greater anomie living in "bedroom suburbs."

This paper considered the entire universe of arrests for older people in Japan from 1995 to 2004 by prefecture. There are two limitations with this approach. First, the analysis does not consider individual-level experiences. General difficulties with accessing individual-level data in Japan (Brinton 2003) and the complete absence of crime- and arrest-related questions in nationally representative surveys has meant that individual-level crime data is unavailable to researchers outside of the government. Although contextual level approaches to studying crime and deviance have a long history (beginning with Shaw and McKay 1942), this analysis would have ideally incorporated individual-level quantitative information on arrests or offending.

Second, there are limitations with using arrests as a measure of crime. This is especially true for shoplifting, where arrests capture only a portion of overall offending (Klemke 1992). It is possible that police had been paying particular attention to elderly men and women—groups that were not traditionally the focus of police but may be new targets in aging communities. Interviews with several stakeholders, including the Tokyo Metropolitan Police, a nonprofit for the prevention of shoplifting, and storeowners, suggest this is not the case. While there have been recent police efforts to prevent shoplifting these were not adopted until 2009 and 2010. Further, these efforts have primarily targeted young people, who are viewed as greater risks for future criminality than older adults. Between 1995 and 2004—the time frame analyzed here—there was little to no formal recognition of an increase in elderly arrest rates. While this paper is not

able to definitively test this hypothesis, there is no evidence to suggest that elderly men and women were more frequently targeted for shoplifting during the time frame analyzed here.

While this paper used Japan as a case study to extend the life course perspective, there is evidence that Korea, a country with a rapidly aging population, is also experiencing rising elderly arrest rates (Ota 2009). It is possible that population aging, combined with the perceived inability of economic and social institutions to adequately support older people, have led to heightened economic and social insecurity, and increasing elderly crime rates. Clearly, this paper provides only the first step for understanding the factors related to rising elderly crime. As Japanese government agencies and social welfare organizations continue to address the growth in elderly arrest rates and the new population of elderly ex-offenders, sociologists have the opportunity to research and debate how the cases of Japan and Korea can be reconciled with long-held theories on the age-crime relationship.

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Figure 1: Arrest rate by age and year



Source: White Paper on Crime 2008.

Variable	Source and observed year
Dependent variables:	
Older arrest rate (per 100,000 persons)	Tokyo Metropolitan Police: 95, 98, 01, 04
Independent variables:	
Living situation of older adults (%)	National Institute of Population and Social Security Research: 95, 98, 01, 04
Marital status of older adults (%)	Japan census: 90, 95, 00, 05
Cash assistance for aged (per 1,000)	Social Indicators by Prefecture: 95, 98, 01, 04
Labor force status of older adults (%)	Japan census: 90, 95, 00, 05
Commuters to other prefectures (% of employed)	Japan census: 90, 95, 00, 05
Number of police per 1,000 residents	Social Indicators by Prefecture: 95, 98, 01, 04
Density: number of people per .1 km ² inhabitable area	Social Indicators by Prefecture: 95, 98, 01, 04
The term "older adults" refers to people 65 years and ol	ler

Table 1: Description, source and observed year for all variables









Male arrests

Female arrests



Figure 4: Percent change in arrest rates, by prefecture and gender from 1995 to 2004



Variable	19	995	20	004
Dependent variables:				
Older arrest rate	52.73	(26.79)	138.97	(33.31)
Older male arrest rate	80.03	(50.19)	216.72	(60.06)
Older female arrest rate	33.81	(15.60)	83.52	(23.95)
		, ,		, ,
Independent variables:				
Living situation of older adults (%)				
Alone	11.45		13.63	
With spouse	27.55		33.56	
With children	57.32		48.67	
With others	3.67		4.16	
Marital status of older adults (%): men				
Married	84.37		82.89	
Divorced	1.55		2.44	
Widowed	12.53		11.43	
Never married	1.27		1.98	
Unreported	0.28		1.25	
Marital status of older adults (%): women				
Married	43.22		46.63	
Divorced	3.01		3.56	
Widowed	50.68		45.48	
Never married	2.67		3.08	
Unreported	0.43		1.25	
Cash assistance for aged (per 1,000)	13.80	(8.37)	17.58	(9.92)
Labor force status of older adults (%): men				
Not in labor force	57.46		64.75	
Employed	40.35		31.68	
Unemployed	1.91		1.61	
Unreported	0.27		1.95	
Labor force status of older adults (%): women				
Not in labor force	83.38		84.62	
Employed	16.18		14.20	
Unemployed	0.18		0.21	
Unreported	0.26		0.97	
Commuters to other prefectures	5.55	(8.22)	6.01	(8.17)
Number of police per 1,000 residents	1.62	(.36)	1.74	(.33)
Density	1363.56	(1613.17)	1370.31	(1659.79)
The term "older adults" refers to people 65 yea	irs and older	r		

 Table 2: Means and standard deviations across prefectures, for 1995 and 2004

Table 3: OLS regression results for a fixed effects model of prefectural arrest rates for people 65 years and older, by gender

	Men and women	Men	Women
	(1)	(2)	(3)
Marital status of older adults (married)			
Divorced	89.33 (30.62)**	123.70 (50.05)*	64.17 (25.20)*
Widowed	-9.94 (4.23)*	-26.93 (20.95)	-2.39 (2.12)
Never married	-46.94 (24.07)	-44.18 (32.24)	-20.06 (15.42)
Unreported	-21.46 (14.60)	-12.56 (28.45)	-18.04 (8.14)*
Living situation of older adults (with children)			
Alone	2.79 (1.46)	3.32 (2.20)	2.29 (1.00)*
With spouse	1.20 (0.82)	1.75 (1.51)	1.49 (0.59)*
With others	3.01 (2.20)	3.40 (5.16)	2.71 (1.46)†
Labor force status of older adults (not in labor force)			
Employed	-0.17 (1.72)	1.53 (2.62)	-2.89 (1.66)†
Unemployed	87.36 (28.97)**	55.35 (21.30)*	-11.01 (74.00)
Unreported	2.57 (7.67)	0.24 (9.65)	1.41 (4.12)
Cash assistance for aged (per 1,000)	2.65 (1.08)*	5.70 (2.88)†	0.47 (1.39)
Commuters to other prefectures	16.14 (5.79)**	28.46 (9.07)**	5.06 (4.07)
Police rate (per 1,000)	24.07 (54.67)	123.50 (95.54)	-9.12 (38.73)
Density	0.05 (0.05)	0.00 (0.10)	0.03 (0.04)
Constant	-99.75 (189.49)	-425.05 (313.03)	-67.64 (186.73)
N	47	47	47
tp-value<0.10, *p-value<0.05, **p-value<0.01, ***p-va	alue<0.001		