



# Age of Onset, Gender and Persistent Offending Over Time

Yu-Ling Chiu

Ph.D. Candidate | chiu22@illinois.edu  
 School of Social Work | University of Illinois at Urbana-Champaign  
 1010 W. Nevada Street | Urbana, IL 61801

Children and Family  
 Research Center

University of Illinois at Urbana-Champaign



## Purpose

Onset age of first offending is known to be an important predictor for chronic offenders (e.g. Loeber and Farrington, 2000). Some studies report that early onset age increases the future risk; while others found that later onset age increases the risk of future offending. Most studies focus on male samples (e.g. Carroll et al., 2009). There is a lack of studies on females (e.g. Archwamety and Katsiyannis, 1998). To address this knowledge gap, we include both females and males in the sample and examine whether onset age has different impacts on the continuation of offending.

## Research Questions

1. To examine the impact of onset age on persistent offenses with the control of the dually involvement status (involved in both Child Welfare and Juvenile Justice systems);
2. To examine the gender specific impact of onset age.

## Conclusions

The findings that persistent offenders are more likely to be girls at the earlier onset age and boys at the late onset age in two years help inform the practice of gender specific intervention. Future studies may need to address whether the types of subsequent offense vary from gender and onset age. In addition, the findings show that the child welfare population for both genders is at an increased risk of engaging in persistent delinquent behavior is consistent with many studies (e.g. Ryan, & Testa, 2005). The unique needs of the child welfare population in the juvenile justice system should be addressed.

## Sample Selection

- Datasets include: administrative records from child welfare and juvenile justice in the State of Washington.
- The sample consists of 13,521 first time offenders aged between 8 and 16 years in 2005.
- The sample includes 62% of males, 49% of white, 7% (n=945) of African American, 5% of Hispanic, 39% of unknown, and 50.8% of reoffenders. The mean age is 14.4 (SD=1.5).

## Measures

- Independent variable : Onset age was categorized into 2 groups, 13 and under (n=3,519, 26%) and 14-16 (n=10,002, 74%).
- Dependent variable: Subsequent offense records were traced in two years after first offending. Subsequent offense is categorized into 4 types, including no re-offense, 1 re-offense, 2 re-offenses, 3 or more re-offenses.

## Analytic Approach

- Descriptive analysis, bivariate analysis, and multinomial regression was applied.
- Multinomial regression was conducted for the whole sample, female subsample, and male subsample respectively.

## Findings

### Descriptive analysis:

- Around 17% are the dually involved cases. Among these dually involved cases, 4% were the dually adjudicated cases (the case who were child welfare case opened while they were arrested).
- Around 61% of cases did not reoffend within 2 years. Around 10% of cases are persistent offenders (3 and more offenses within 2 years).

### Bivariate analysis: (Table1)

- 46% of youth from the child protection system had their initial arrest before 13 years old; while only 24% of youth without any child welfare contact had their initial arrest before 13 years old.
- 18% for those aged 13 and below, and 21% for those aged 14 and over had one re-offense within two years; However 11% for those aged 13 and below, and 9% for those aged 14 and over became persistent offenders.
- Around 17% of youth from the child protection system become persistent offenders; while only 8% of youth without CW contact became persistent offenders.

### Multinomial regression:

- For the entire sample (Table 2), the multinomial regression shows that, being male, being African American or Hispanic, and being dually involved youth are associated with a greater risk of multiple re-offenses. Late onset age is associated greater risks of 1 re-offense and 2 re-offenses, but not persistent offenders (3 or more re-offenses).
- The results of female and male subsamples do show that onset age has different impacts on continuing.
- For female subsample, female youths at the early onset age (13 years old and under) are found to be 1.5 times more likely to be a persistent offenders (3 and more re-offenses) than those at the late onset criminal age.
- For male subsample, male youths at the late onset criminal age (14 years and older) are found to be 1.3 times more likely to be a persistent offenders than those at the early onset criminal age.

## Tables

Table 1:  
Bivariate Analysis

	Non-dually involved	Dually involved	Early onset	Late onset
Offense Age				
Early onset (13 and under)	8913(24%)	3672(46%)	-	-
Late onset (14 and over)	29087(76%)	4237(54%)	-	-
Persistent Offense				
No re-arrest	24264(64%)	3839(49%)	7782(62%)	20321(61%)
1 re-arrest	7509(20%)	1775(22%)	2319(18%)	6965(21%)
2 re-arrests	3087( 8%)	981(12%)	1113( 9%)	2955(9%)
3 and more re-arrests	3140( 8%)	1314(17%)	1371(11%)	3083(9%)

Table 2: Multinomial Regression for the entire sample

	1 re-arrest		2 re-arrests		3 and more re-arrests	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Female	-.32	.03	-.55	.04	-.84	.04
Race						
White	-	-	-	-	-	-
Black	-.09	.05	-.15	.06	-.56	.05
Hispanic	-.07	.06	1.08	.38	.07	1.46***
Other	1.27	.03	.30***	1.83	.05	0.16***
CW Case Open						
JJ only	-	-	-	-	-	-
Before arrest	-.24	.04	1.27***	-.51	.05	1.67***
During arrest	-.48	.06	1.62***	.69	.08	1.99***
Early Onset	-.17	.03	.84***	-.18	.04	.89***
Initial Charge						
Violence	-	-	-	-	-	-
Weapon	.16	.10	0.85	.19	.14	1.09
Property	.16	.03	.85***	.19	.04	0.83***
Drug	-.10	.04	1.11*	-.07	.06	1.07
Other	.27	.05	.077***	.32	.07	0.73***
Reference group: No re-offense (2)						
1 re-offense (1)			-.20	.05	1.22***	-.38
2 re-offenses (2)						
3 or more re-offenses (3)						