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The journey of dually-involved youth: The description and prediction of rereporting and recidivism

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ABSTRACT

Dually-involved youth refers to youth that are simultaneously receiving services from both the child welfare and juvenile justice systems. The current study focused on a sample of dually-involved youth (N=1148). The study examined the characteristics of dually-involved youth and reported and predicted the incidence of subsequent maltreatment and re-offending. We found that 8% of dually-involved youth had at least one arrest before entering child welfare system, 32% experienced new reports of maltreatment referrals subsequent to arrest, and 56% were charged with a second offense (i.e., recidivated). The court outcomes received in delinquency court were associated with both rereporting and recidivism. These findings support the development of a shared services model for child welfare and juvenile justice systems.

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1. Introduction

Victims of abuse and neglect are at an increased risk of juvenile delinquency. Ryan and Testa (2005) reported that the delinquency rates were approximately 47% greater for youth associated with at least one substantiated allegation of maltreatment. For children in out-of-home placements, Courtney et al. (Courtney, Terao, & Bost, 2004) indicated that approximately 50% experienced at least one juvenile arrest, approximately one-third experienced at least one overnight stay in detention and approximately one-fifth were convicted of at least one offense. Given the existing overlap between child welfare and iuvenile justice populations, some states (e.g. New York) have initiated models of shared services (Mattingly, 2010), and at least 15 jurisdictions have implemented the Crossover Youth Practice Model developed by the Center for Juvenile Justice Reform at Georgetown University since the spring 2010. To provide a more comprehensive picture of how youth move between child welfare and juvenile justice systems, we followed a cohort of dually-involved youth over six-years. We focused particular attention on the timing of justice involvement for child welfare cases, and the likelihood of subsequent reports of maltreatment and the risk of re-offending. In the current study, dually-involved youth refers to the population of youth that were simultaneously receiving services from both the

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child welfare and juvenile justice systems (Herz, Ryan, & Bilchik, 2010).

1.1. Child welfare and juvenile justice involvement

Measurement strategies vary in the study of child welfare juvenile justice contact. Justice involvement might refer to informal police contact, formal arrest records, adjudications or self-reports. Consequently, findings are often mixed. Widom (1991) studied a sample of 772 abused/neglected children between 1967 through 1971. Widom reported that abused and neglected children who were not placed and those placed for abuse or neglect had a similar risk of arrest, and that these youth had a much lower risk as compared with children placed for behavior problem and abuse or neglect. Regarding placement type, children with no placements or only foster care placements experienced lower arrest rates as compared with children in alternative placement settings (e.g. residential placement). Widom argued that, "The presence of these children (i.e. a small group of abused and neglected children who have behavior problems before entering placement) may account for the high rates of delinquency, adult criminality, and violent criminal behavior often associated with children in foster care." (p. 208).

With regard to mixed findings, some authors reported that placement might actually help reduce the risk of juvenile justice involvement. Leitenberg, Burchard, Fuller, and Healy (1981) analyzed police contacts for 187 children in Vermont state custody over three years. The authors reported that police contact was significantly lower for children living in out-of-home placement (foster home, group home, "reform" school) as compared with children remaining

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with their parents. Jonson-Reid and Barth reported similar findings. Using incarceration as the dependent variable, the authors investigated the moderating role of child welfare services (Jonson-Reid, 2002a; Jonson-Reid & Barth, 2000). Jonson-Reid and Barth (2000) analyzed administrative data of 159,549 maltreated children in ten California counties. The authors reported that the provision of child welfare services, including in-home and foster placement, did not change the risk of incarceration for White children. However, for African American and Hispanic children the receipt of child welfare services significantly decreased the risk of entry into juvenile corrections. A second study by Jonson-Reid (2002a) reported similar findings utilizing a sample of 36,653 maltreated children. Similarly, Lemmon (2006) reported the moderator role of placement services, using administrative data of a cohort (N=632) receiving financial supports or other services from the Pennsylvania Department of Public Welfare's Office of Income Maintenance. Lemmon found that among the maltreatment subgroup (N = 267), having a child welfare placement reduced the odds of a delinquency referral by four times, controlling for other important covariates.

In contrast, other authors reported the deleterious effects of placement experiences. Runyan and Gound (1985) examined the effects of foster care on juvenile delinquency using a historical cohort design. One hundred fourteen foster children were compared with 106 victims of maltreatment who remained with parents. The authors reported no statistical difference in overall crime rates between the two groups. However, the number of foster home placements was correlated with an increased risk of delinquency. Ryan and Testa (2005) investigated placement, placement instability, and juvenile delinquency. They analyzed data from two birth cohorts: 18,676 children with at least one substantiated report of maltreatment in Cook County, Illinois. Their findings indicated that children in placement were at an increased risk of delinquency (more than double the risk) as compared with children not entering placement. Using similar administrative data from Illinois, Doyle (2007) reported that children on the margin of placement achieved better outcomes when they remained at home as compared with children removed from the biological family. Specifically, Doyle concluded that children removed from home had significant higher delinquency rates, teen birth rates, and significantly lower earnings.

1.2. Child welfare and juvenile justice processing

Although limited in scope, there exist a few studies that focused on experiences in the juvenile justice system post-arrest. In general, these studies identified a bias against child welfare cases in juvenile justice processing. Research conducted by the Vera Institute of Justice (Conger & Ross, 2001) measured the foster care bias in detention decisions, using data of 13,000 youths admitted to detention between 1997 and 1999. The authors reported that the probability of detention for youth in foster care was ten percentage points higher than the probability for youth not in foster care. Ryan, Herz, Hernandez, and Marshall (2007) investigated the relationship between child welfare status and two disposition outcomes: case dismissal and probation. Using child welfare and juvenile justice administrative data from Los Angeles County, the authors reported that as compared with non-child welfare youth, adolescents coming to juvenile justice from the child welfare system were less likely to receive probation as a first time offender. Consequently, child welfare cases were more likely to receive dispositions that moved them into group homes, delinquency camps or the California Youth Authority (CYA).

There is a growing interest in the overlap between child welfare and juvenile justice populations. This interest will only increase as states contemplate merging child welfare and juvenile justice agencies. Unfortunately, the literature has yet to keep pace with changes in the field. The purpose of the current study was to move the literature beyond the point of arrest and investigate key outcomes

including subsequent reports of maltreatment and recidivism. We also sought to estimate the proportion of cases that enter child welfare with a history of juvenile offending. We intended for this study to provide a more comprehensive descriptive picture of the movement between child welfare and juvenile justice systems. The following questions guided our analyses.

- 1. What proportion of dually-involved youth has an arrest prior to entering child welfare system?
- 2. What proportion of dually-involved youth experience an allegation of maltreatment subsequent to arrest? Which factors are associated with the likelihood of experiencing subsequent maltreatment?
- 3. What proportion of dually-involved youth re-offend? Which factors are associated with the likelihood of re-offending?

2. Methods

2.1. Data and sample

Several sources of data were used in the current study, which included administrative records for all children and families involved with the Department of Children and Family Services and the Department of Juvenile Probation in Los Angeles County, California. The child welfare data (DCFS) included demographic information (birthdates, race, gender), allegations of maltreatment (report date, type of maltreatment, finding), and child welfare services (placement dates, placement types). The measure of maltreatment included official reports of physical abuse, sexual abuse, neglect, emotional abuse, and substance exposure at birth. The delinquency records included demographic characteristics (birthdates, race, and gender), arrest date, arrest charge type, judicial disposition, and detention. The child welfare and juvenile justice records were linked by common identifiers using probabilistic matching software.

The initial sample included all youth (n = 346,754) involved with DCFS between January 2002 and June 2008 in Los Angeles County. Involvement with child welfare in Los Angeles County referred to any open or ongoing case between January 2002 and June 2008. Such cases included both children receiving in-home services and children in out-of-home placements. From these records, we selected a cohort of youth involved with child welfare in 2003 (n = 61,884). We then linked the child welfare cases with the delinquency records from juvenile probation. The match identified 1427 youth that had both child welfare and juvenile justice involvement in 2003. We further limited our sample to the child welfare cases that were open on the arrest date, and arrived at our final sample of 1148 dually-involved cases.¹ For cases in the final sample, we traced their delinquency records, maltreatment, and child welfare records from 2003 to the end of 2008, which provided us a six-year timeline to exhibit their paths.

2.2. Analytic techniques

We used descriptive statistics and developed regression models to best capture the flow of youth between child welfare and juvenile justice systems. The regression models focused on two outcomes: rereporting and recidivism. Rereporting measured the repeat of child maltreatment referral subsequent to arrest. Recidivism measured the incidence of re-offending subsequent to arrest. The models included child demographics, child welfare service history, and arrest related information, including most serious charge type and disposition component. The disposition component was a categorical variable.

¹ With the purpose of better presenting the variance among ethnicity groups, we dropped six cases from ethnicity group other than African American, Caucasian, Hispanic, or Asian or Pacific Islander.

There were three categories: having only juvenile justice placement²; having only other disposition³; having both juvenile justice placement and other disposition. Some youth had both juvenile justice placement and other disposition, since disposition could change according to the youth's performance.

For Cox Regression, we employed three different strategies for creating time variable depending on their different event experiences and age. The first strategy was to use the actual receive date of subsequent maltreatment referral and the next arrest date. Specifically, for cases having subsequent maltreatment, the time variable was created by calculating the date difference between first arrest date in 2003 and the receive date of subsequent maltreatment referral. For those with a new offense, the time variable was created by calculating the date difference between first arrest date in 2003 and the next arrest date. For cases without either a subsequent report of maltreatment or new offense, we calculated a date difference between the first arrest date in 2003 and December 31, 2008 (the end of our period of observation). Finally, we censored cases that turned 18 years of age prior to December 31, 2008.

3. Results

Among the 1148 dually-involved children, 32% (n = 372) were female, and 68% (n = 776) were male. Fifty-five percent (n = 627) were African American; 33% (n = 380) were Hispanic; 11% (n = 122) were Caucasian; and 2% (n = 19) were Asian or Pacific Islander. The mean age was 15.34 years old on their first arrest date in 2003.

To better distinguish the characteristics of the dually-involved cases, we compared demographic characteristics of three groups: juvenile justice only ($N\!=\!23,\!088$), dually-involved ($N\!=\!1148$), and child welfare only ($N\!=\!32,\!562$). In juvenile justice only group, 21% were female; and 79% were male. In the dually-involved youth, 32% were female; and 68% were male. In child welfare only group, 52% were female; 48% were male.

Regarding race, in the juvenile justice only group, 27% were African American; 59% were Hispanic; 13% were Caucasian; and 2% were Asian/Pacific Islanders. In the dually-involved youth, 55% were African American; 33% were Hispanic; 11% were Caucasian; and 2% were Asian/Pacific Islanders. In child welfare group, 40% were African American; 41% were Hispanic; 15% were Caucasian; and 3% were Asian/Pacific Islanders.

3.1. Child welfare history and juvenile justice

Regarding service history, the majority (92%, n=1052) entered child welfare before contact with juvenile justice, while 8% (n=96) had at least one arrest before entering the child welfare system. Sixty-six percent of the sample (n=762) were in an out-of-home placement (OHP) when arrested in 2003, and the remaining 34% (n=386) were receiving in-home services at the time of arrest. More specifically, we found 17% (n=199) of the children were in a foster home; 23% (n=260) children were in a group home; and 20% (n=234) were placed in a relative home; 6% (n=69) were in other out-of-Home Placement (e.g. guardian home, court specified home).

Counting the total number of placements for each child until their first arrest in 2003, we found 16% of children had never been in an

out-of-home placement; 16% had been in one placement only; 13% had been in two placements; and 55% had been in three or more placements. This distribution reflected a common pattern of placement instability that often preceded dual involvement.

The delinquency records included the most serious charge, disposition type, and detention. Aggregating the most serious charge to individual level, 16% ($n\!=\!183$) of the youth were charged with a weapon related offense; 33% ($n\!=\!379$) were charged with a violence related offense; 36% ($n\!=\!414$) were charged with a property related offense; 8% ($n\!=\!87$) were charged with a substance related offense; and 7% ($n\!=\!85$) were charged with other types of offense (Table 1).

There was some evidence in the literature that offense types vary by placement settings (Ryan, Marshall, Herz, & Hernandez, 2008). Thus, we compared the distribution of charge types across different placement settings (see Fig. 1). Nearly half (45%) of youth in group home setting were charged with a violence offense, far greater than any other placement.

Regarding specific types of dispositions, 16% ($n\!=\!184$) of youth were assigned to a correctional placement (including Probation Camp or placement with the California Department of Juvenile Justice-formerly known as the California Youth Authority); 16% ($n\!=\!178$) were assigned to Suitable Placement; 35% ($n\!=\!399$) were assigned to Probation; 12% ($n\!=\!140$) were assigned to Deferred Entry of Judgment; and 17% ($n\!=\!189$) dismissed. Regarding the experience of detention, 39% ($n\!=\!442$) of the youth experienced at least one episode of detention. The average length of stay in detention was 33 days.

3.2. Dually-involved youth timeline

As a way to present the experiences of youth over time, we created timelines for two cases in the dually-involved youth. Each case was

Table 1Child welfare history and juvenile justice process (N = 1148).

J J J I (, ,	
Variable	N (%)
CW history before 2003 arrest	
Entering CW before any arrest	1052 (92)
OHP during 2003 arrest	762 (66)
Location during 2003 arrest	
Foster care	199 (17)
Group home	260 (23)
Relative home	234 (20)
Other OHP	69 (6)
In-home services	386 (34)
Placement stability before 2003 arrest	
No placement	188 (16)
1 Placement	181 (16)
2 Placements	149 (13)
3 or more	630 (55)
Arrest and disposition related information	
Most serious charge	
Weapon	183 (16)
Violence	379 (33)
Property	414 (36)
Substance	87 (8)
Other	85 (7)
Disposition count	
0	395 (34)
1	178 (16)
2	147 (13)
3 or more	428 (37)
Disposition type (one person could have multiple types)	
Correctional placements	184 (16)
Suitable placement	178 (16)
Probation	399 (35)
Deferred entry of judgment	140 (12)
Dismiss	189 (17)
Detention ever	442 (39)
Detention stay length (mean)	33

² Juvenile justice placement includes probation camp, placement with the California Department of Juvenile Justice-formerly known as the California Youth Authority, and suitable placement. Suitable placement includes residential treatment placements and group home supervised by juvenile probation.

³ Other disposition includes probation and deferred entry of judgment. Similar to probation, deferred entry of judgment requires the offenders to comply with certain terms, such as completing education, treatment or rehabilitation program. The difference is that deferred entry of judgment would result in the dismissal of charges if an offender successfully complies with the terms.

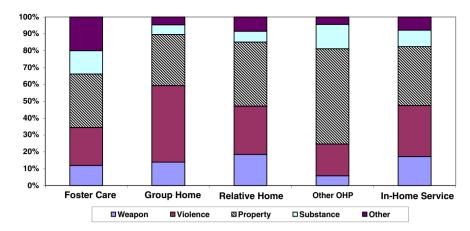


Fig. 1. Charge type for each placement type.

tracked from the last placement prior to the 2003 arrest and followed through the end of our observation, December 31, 2008. In each figure, we inserted the event labels related to child welfare placements, maltreatment referrals, arrest charges, and detention above the timelines, and inserted the event labels related to dispositions below the timelines. We also reported the duration for events related to child welfare placements and detention by using X-error bars. In the following description, we illustrated the events that occur to each case, as exhibited in the timelines. We purposefully selected two cases — as a mean of representing the variation of dually-involved youth. The first case had one arrest and the second case had two arrests in the observation period.

As shown in Fig. 2, Case 1 was a male adolescent, who was placed in group home at the time of arrest on March 28, 2003. He stayed in the same group home for 108 days prior to the arrest for a violent offense. He was placed into this group home due to his experience of sexual abuse at home. Subsequent to arrest, he was transferred into detention and stayed there for 89 days until June 24. On June 20, he received a disposition for a correctional placement. On November 20, 2003, the youth aged out of the juvenile justice system with disposition of "termination".

As shown in Fig. 3, Case 2 was a male adolescent arrested on February 22, 2003 for a weapon offense. Subsequent to arrest, he was transferred to detention and stayed there for four days. On April 8, he received first disposition, probation (this was court ordered informal probation, which allowed a dismissal of charges upon successful completion of probation), and was dismissed on October 7. During the period before and after his February 22 arrest, he mostly stayed in the same group home as his child welfare placement. There was a maltreatment referral of sexual abuse on August 3, when he was living in the group home. Shortly after case dismissal, he committed a second weapon related offense on

December 20. He was transferred to detention and stayed there for 46 days until he received a disposition of Suitable Placement on February 3, 2004. The youth had a maltreatment referral associated with caretaker absence/incapacity on June 29, 2005. The youth was placed into group home (this group home is a child welfare placement rather than juvenile justice placement) on July 20, 2005 and stayed there until January 30, 2007, at which point he turned 18 years of age. Case 2 showed the complicated experience for a dually-involved youth who experienced maltreatment subsequent to arrest and continued offending.

3.3. Rereporting and recidivism

Previous studies did not capture the likelihood of maltreatment subsequent to arrest. To address this significant gap in literature, we investigated new allegations of maltreatment subsequent to the youth's initial arrest. Surprisingly we found that a relatively high proportion (32%) of youth had subsequent maltreatment referrals. Regarding allegation type, 16% of the youth were associated with a report of caretaker absence; 4% were associated with emotional abuse; 0.3% were associated with exploitation; 13% were associated with general neglect; 7% were associated with physical abuse; 0.2% were associated with severe neglect; 4% were associated with sexual abuse; 5% were associated with substantial risk; and 3% were associated with at risk, sibling abused. With respect to continued offending (recidivism), we found more than half (56%) of adolescents committed at least one new offense (Table 2).

We used Cox regression to model the risk of subsequent maltreatment (rereporting) and the likelihood of re-offending (recidivism). The models included child demographics, child welfare service history, and arrest related information, including most serious charge type and disposition components.

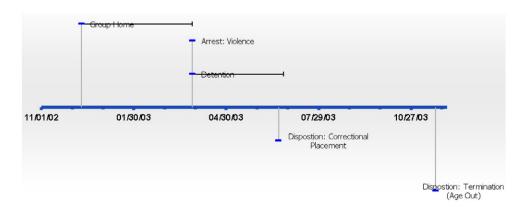


Fig. 2. Timeline for Case 1.

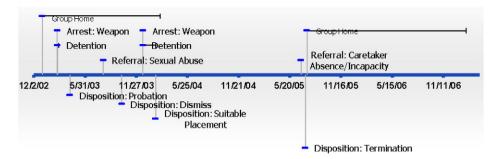


Fig. 3. Timeline for Case 2.

The results from the Cox Regression were displayed in Tables 3 and 4. To model rereporting, we only included cases with valid dispositions (i.e. dismiss, juvenile justice placement, probation, deferred entry of judgment). The first regression model in Table 3 focused on the risk of subsequent maltreatment (rereporting). The Exp (b) represented the proportional hazard. A hazard ratio (Exp (b)) greater than 1 indicated a higher likelihood of having subsequent maltreatment referral, whereas a hazard ratio less than 1 indicated a lower likelihood of having subsequent maltreatment referral.

As Table 3 shows, male was less likely to have subsequent maltreatment. The rate was 35% lower for males relative to females. Older children were less likely to have subsequent maltreatment referrals than younger children. Every additional year of age decreased the likelihood of having subsequent maltreatment referrals by 34%. Ethnicity was not significantly associated with rereporting. Also, neither of child welfare history variables was significantly associated with rereporting. Regarding justice related variables, the most serious charge type was not significantly associated with rereporting, while disposition components were significantly influential. As compared with dismissed cases, those having disposition other than juvenile justice placement (Exp (b) = 1.89) had higher rates of rereporting, while those having juvenile justice placement combined with other disposition (Exp (b) = .28) had lower rates of rereporting.

The regression models in Table 4 focused on the likelihood of recidivism. To model recidivism, we only included cases with valid dispositions (i.e. dismiss, juvenile justice placement, probation, deferred entry of judgment). The variables included in the recidivism model were the same as the variables used in the maltreatment rereporting model. As Table 4 shows, male were more likely to have new offense. The rate was 33% higher for male than for female. Age and ethnicity were not significant. Also, neither of child welfare history variables was significantly associated with recidivism. Regarding justice related variables, most serious charge type was not associated with recidivism, while disposition components were significant. As compared

Table 2Descriptive analysis of revictimization and recidivism (N = 1148).

Variable	N (%)
Maltreatment after 2003 arrest	367 (32)
Maltreatment type after 2003 arrest	
(one person could have multiple types)	
Caretaker absence	181 (16)
Emotional abuse	43 (4)
Exploitation	4 (0.3)
General neglect	144 (13)
Physical abuse	78 (7)
Severe neglect	2 (0.2)
Sexual abuse	44 (4)
Substantial risk	58 (5)
At risk, sibling abused	37 (3)
New offense	641 (56)

with dismissed cases, all three other groups, having disposition other than juvenile justice placement (Exp (b) = 2.547), having juvenile justice placement only (Exp (b) = 7.860), and having juvenile justice placement combined with other disposition (Exp (b) = 2.194) had higher rates of recidivism. It was possible that the three other groups captured more serious offense.

To better understand the recidivism rate associated with dually-involved youth, we compared the risk of recidivism for dually-involved youth compared to youth without a child welfare history in delinquency. Fifty six percent of dually-involved youth were charged with a second offense as compared with only 41% the delinquency only sample.

4. Discussion

The objectives of the current study were (1) to identify the proportion of dually-involved youth that has an arrest prior to entering child welfare system, (2) to identify the proportion of dually-involved youth that experience an allegation of maltreatment subsequent to arrest and (3) to identify the proportion of dually-involved youth that re-offend. The findings related to each of these objectives are summarized below.

Table 3 Cox regression: predicting the rate of rereporting (N = 646).

Variable	b	S.E.	Exp(b)
Child demographics			
Male	44^{*}	.21	.65
Age	42 ^{***}	.07	.66
Ethnicity (reference group: African American)			
Caucasian	.07	.32	1.07
Hispanic	.01	.22	1.01
Asian/Pacific Islander	.01	1.03	1.01
Experience in child welfare system			
Arrest After CW	01	.44	.99
OHP	04	.22	.96
Arrest related information most serious charge	e (reference groun:	other)	
Most serious charge (reference group; other			
Weapon	.54	.55	1.72
Violence	.50	.54	1.65
Property	.58	.53	1.78
Substance	.73	.65	2.07
Disposition components (reference group: d	lismissed cases)		_,,,
Disposition other than Placement	.64*	.29	1.89
[] Placement only	.3041	.64	1.35
Placement combined with other	-1.27***	.40	.28
χ^2 , df, Sig.	98.57, 14, <.01		.20
χ2, ui, 3ig.	30.37, 14, <.01		
* n< 05			

^{*} p<.05.

^{**} p<.01.

^{***} p<.001.

Table 4 Cox regression: predicting the rate of recidivism (N = 622).

Variable b S.E. Exp(b) Child demographics Male .29* .13 1.33 Age .05 .05 1.06 Ethnicity (reference group: African American) .05 .05 1.06 Ethnicity (reference group: African American) .22 .69 Caucasian 37 .22 .69 Hispanic 21 .14 .81 Asian/Pacific Islander 10 .51 .90 Experience in child welfare system .90 .22 .93 OHP 19 .13 .83 Arrest After CW 08 .22 .93 OHP 19 .13 .83 Arrest related information Most serious charge (reference group: other) .84 .91 Weapon 09 .28 .91 Violence 15 .27 .86 Property 12 .27 .89 Substance 04 .36 .96		, ,			
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Disposition components (reference group: dismissed cases) Disposition other than JJ Placement .94*** .24 2.55 JJ Placement only 2.06*** .37 7.86 JJ Placement combined with other .79** .26 2.19	Property	12	.27	.89	
Disposition other than JJ Placement .94*** .24 2.55 JJ Placement only 2.06*** .37 7.86 JJ Placement combined with other .79** .26 2.19	Substance	04	.36	.96	
JJ Placement only 2.06**** .37 7.86 JJ Placement combined with other .79*** .26 2.19	Disposition components (reference group: dismissed cases)				
JJ Placement only 2.06**** .37 7.86 JJ Placement combined with other .79*** .26 2.19	Disposition other than JJ Placement	.94***	.24	2.55	
JJ Placement combined with other .79** .26 2.19	JJ Placement only	2.06***	.37	7.86	
	JJ Placement combined with other	.79 ^{**}	.26	2.19	
	χ^2 , df, Sig.				

^{*} p<.05.

4.1. The history of juvenile offending prior to child welfare

In our sample of dually-involved youth, the majority (92%, $n\!=\!1052$) entered child welfare before contact with juvenile justice, while 8% ($n\!=\!96$) had at least one arrest before entering the child welfare system. Having an arrest prior to entering the child welfare system did not predict any more recidivism than having an arrest subsequent to entering the child welfare system.

4.2. The prevalence of rereporting

The rate of subsequent maltreatment (rereporting) after an arrest was 32%, over five years. To our knowledge, this is the first study reporting rereporting rate for dually-involved youth. Previous studies of rereporting focused only on child welfare populations, without attention paid to involvement with other allied systems of care (Connell, Bergeron, Katz, Saunders, & Tebes, 2007; Drake, Jonson-Reid, & Sapokaite, 2006; Drake, Jonson-Reid, Way, & Chung, 2003; English, Marshall, Brummel, & Orme, 1999; Fuller & Nieto, 2009).

The rereporting rate was also related to judicial disposition. The dually-involved youth in disposition other than juvenile justice placement had higher rates of rereporting as compared with dismissed cases. It might be because that the dually-involved youth in disposition other than juvenile justice placement have more contacts with mandatory reporters, such as probation officers. Therefore, their new maltreatment experiences are more likely to be reported than the dismissed youth. Those having juvenile justice placement combined with other disposition had lower rates of rereporting as compared with dually-involved cases having no disposition. This could be understood, since staying in placement, especially disposition placement decreases the chance of being exposed to abusive caretakers. Therefore, less subsequent maltreatment occurs to those

These findings, however, may be unique to the County of Los Angeles because of statutory laws that prohibit a youth from formally being under both the child welfare system and the juvenile justice system simultaneously (i.e. California Welfare and Institutions section 241.1; see Nash & Bilchik, 2009 for a review of this law). If, for

example, delinquency charges are sustained against a youth by the court, and the youth becomes a ward of the delinquency court, his/ her child welfare case is closed immediately. Once the delinquency disposition is completed, probation may re-refer the youth back to the child welfare system because there is no safe home or no home at all to which the youth can return. Regardless of the referral, though, child welfare must still investigate the case and make a recommendation to the court. Youth with previous child welfare histories who were subsequently placed in a correctional facility are potentially less likely to reenter the child welfare system because child welfare does not believe it can provide adequate housing and services for those youth. Additionally, Probation currently access Title IV-E funding to pay for Suitable Placements (i.e., group home placements), and by doing so, they are required by law to follow the same requirements as child welfare with regard to these placements. Consequently, youth in these placements may be less likely to be re-referred to child welfare as a result.

Currently, Los Angeles County is implementing a dual-status protocol allowed by AB 129 in two delinquency court locations. Under this protocol, youth may now be in both systems simultaneously and the need for a re-referral to child welfare from probation is unnecessary. This move attempts to bridge the two systems and the services available within them for youth who cross between them and is planned for countywide implementation by end of 2012. This effort is also consistent with the Center for Juvenile Justice's Crossover Youth Practice Model (note: Los Angeles is a participating site of this work), which calls for more coordination and collaboration across systems to improve the seamless handling of dually-involved youth to meet their needs and improve their outcomes. Thus, it will important to examine the rereporting rate over time to determine whether it is a function of the separate jurisdiction law or a reflection of continued maltreatment at home.

With regard to the characteristics of youth who were re-referred, we found that males are less likely to have re-referrals as compared with females. This gender difference was consistent with some of previous literature (Fluke, Shusterman, Hollinshead, & Yuan, 2005; Fryer & Miyoshi, 1994). However, other studies found no significant differences on the re-referral rates between female and male. Using administrative data from Jan 1, 1992 through December 31, 1994 in ten California counties, Jonson-Reid (2002b) reported females do not experience significantly higher rates of rereporting than males. Lipien and Forthofer (2004) also found no significant difference between female and male, using administrative data from Florida. We think that the significant gender difference is related to the age group of our sample, which is older than the overall child welfare population. Although older age is less perceived of physical vulnerability (Jonson-Reid, 2002b), female adolescents are involved in more maltreatment than male adolescents (Powers & Echkenrode, 1988). Perceived more vulnerable, female adolescents are more likely to receive attention from mandatory reporters. Mandatory reporters show high responsiveness of reporting, as maltreatment occurs or the risks of maltreatment are present for female adolescents.

4.3. The prevalence of recidivism

The rate of re-offending in our sample was 56% over five years. This was close to the recidivism rates reported in previous studies. A study of Rhode Island administrative data found that juvenile probationers with child maltreatment experience were 1.5 times more likely to recidivate as compared with non-maltreated youth (71% versus 46%). A study on Arizona administrative data reported the recidivism rate 62% for dually-involved cases, which was more than double the recidivism rate (30%) for delinquency only cases. Similarly, the recidivism rate in our sample was also higher than the recidivism rates for delinquency only cases (56% versus 41%). This trend was also consistent with the relationship between child maltreatment and recidivism

^{**} p<.01.

^{***} p<.001.

revealed in previous studies (Ryan, 2006). To explain this relationship, theoretical perspectives identify the impact of social control. Child maltreatment is believed to result in poor attachment to parents and others, which may lead to the lack of restraints on delinquency (Brezina, 1998).

Youth gender and disposition components were associated with the likelihood of committing re-offense. Regarding gender effect, male was more likely to have arrest recidivism as compared with female. The odd for male to have recidivism was 1.33 times female. This finding is consistent with juvenile justice and criminal justice research at large: Males are more likely to commit crime than females (Minor, Wells, Angel, 2008; Cottle, Lee, & Heilbrun, 2001). As compared with dismissed cases, dually-involved cases with any sort of disposition experience other than dismiss had higher rates of arrest recidivism. At least two reasons may help explain this finding. First, placements are typically used for more serious offenders—those that pose an increased risk to the public because of their criminal offense history and/or the seriousness of their offending; thus, youth in placements may be more likely to re-offend because they have higher levels of risk relative to youth who receive other dispositions. A second possible explanation involves the need for services among this population. One of the reasons youth in placement pose a higher risk to society is because they have higher levels of treatment need than other youth. Unfortunately, the availability of services (e.g., mental health, substance abuse, education) is significantly limited in placement, so the recidivism finding may be a reflection of unmet needs among a high-risk population within placement.

While this research provides much needed insight into the rereporting and recidivism for dually-involved youth, future research is needed to expand our understanding of these processes. First, whenever possible, risk factors such as prior offenses and offense seriousness (static risk factors) should be included as well as dynamic risk factors that capture educational issues, behavioral health issues, and family support. Second, factors at the disposition placement level such as the size and demographics of probation camp or other disposition placement should also be included for analysis.

5. Conclusion

The current study provided a comprehensive picture of how dually-involved youth move between child welfare and juvenile justice systems. We focused particular attention on the timing of justice involvement for child welfare cases, and the likelihood of subsequent reports of maltreatment and the risk of re-offending. To date, very few studies went beyond the point of arrest and investigated key outcomes including subsequent reports of maltreatment and recidivism. The current study clearly showed that a proportion of dually-involved youth experienced subsequent reports of maltreatment and continued offending and underscores the need for more coordination and collaboration between the child welfare and juvenile justice systems at a minimum and with mental health and educational systems whenever possible. Specifically, our findings generally support the current trend of merging child welfare and juvenile justice agencies as long as close attention is given to the specific needs and special circumstances of dually-involved youth. In this way, the research also encourages the use of best practices in the field such as those outlined in the Center for Juvenile Justice Reform's Crossover Practice Model (Bowden, Lutz, & Herz, 2010).

References

- Bowden, L., Lutz, L., & Herz, D. (2010). Crossover youth practice model. Retrieved October 5, 2011 from. http://cjjr.georgetown.edu/pm/practicemodel.html
- Brezina, T. (1998). Adolescent maltreatment and delinquency: The question of intervening processes. *Journal of Research in Crime and Delinquency*, 35(1), 71–99.
- Conger, D., & Ross, T. (2001). Reducing the foster care bias in juvenile detention decisions: The impact of project confirm. New York: Administration for Children's Services, The Vera Institute for Justice.
- Connell, C. M., Bergeron, N., Katz, K. H., Saunders, L., & Tebes, J. K. (2007). Re-referral to child protective services: The influence of child, family, and case characteristics on risk status. Child Abuse & Neglect. 31(5), 573–588.
- Cottle, C., Lee, R., & Heilbrun, K. (2001). The prediction of criminal recidivism in juveniles: A meta-analysis. *Criminal Justice and Behavior*, 28(3), 367–394.
- Courtney, M. E., Terao, S., & Bost, N. (2004). Evaluation of the adult functioning of former foster youth: Conditions of Illinois youth preparing to leave state care. Chicago: Chapin Hall Center for Children.
- Doyle, J. J., Jr. (2007). Child protection and child outcomes: Measuring the effects of foster care. *The American Economic Review*, 97(5), 1583–1610.
- Drake, B., Jonson-Reid, M., & Sapokaite, L. (2006). Rereporting of child maltreatment: Does participation in other public sector services moderate the likelihood of a second maltreatment report? *Child Abuse & Neglect*, 30(11), 1201–1226.
- Drake, B., Jonson-Reid, M., Way, I., & Chung, S. (2003). Substantiation and recidivism. *Child Maltreatment*. 8(4). 248–260.
- English, D. J., Marshall, D. B., Brummel, S., & Orme, M. (1999). Characteristics of repeated referrals to child protective services in washington state. *Child Maltreatment*, 4(4), 297–307
- Fluke, J. D., Shusterman, G. R., Hollinshead, D., & Yuan, Y. T. (2005). *Rereporting and recurrence of child maltreatment: Findings from NCANDS*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.
- Fryer, G. E., & Miyoshi, T. J. (1994). A survival analysis of the revictimization of children: The case of colorado. *Child Abuse & Neglect*, 18(12), 1063–1071.
- Fuller, T., & Nieto, M. (2009). Substantiation and maltreatment rereporting: A propensity score analysis. *Child Maltreatment*, 14(1), 27–37.
- Herz, D. C., Ryan, J. P., & Bilchik, S. (2010). Challenges facing crossover youth: An examination of juvenile-justice decision making and recidivism. Family Court Review, 48(2), 305–321.
- Jonson-Reid, M. (2002a). Exploring the relationship between child welfare intervention and juvenile corrections involvement. *The American Journal of Orthopsychiatry*, 72(4), 559–576.
- Jonson-Reid, M. (2002b). After a child abuse report. *The journal of Early Adolescence*, 22 (1), 24–48.
- Jonson-Reid, M., & Barth, R. P. (2000). From maltreatment report to juvenile incarceration: The role of child welfare services. *Child Abuse & Neglect*, 24(4), 505–520.
- Leitenberg, H., Burchard, J. D., Fuller, E., & Healy, D. (1981). Nondelinquent children in state custody: Does type of placement matter? *American Journal of Community Psychology*, 9 (3), 347–360.
- Lemmon, J. H. (2006). The effects of maltreatment recurrence and child welfare services on dimensions of delinquency. *Criminal Justice Review*, 31(1), 5–32.
- Lipien, L., & Forthofer, M. S. (2004). An event history analysis of recurrent child maltreatment reports in florida. Child Abuse & Neglect, 28(9), 947–966.
- Mattingly, J. (2010). City council hearing on the merger of New York City's Administration For Children's Services and Department of Juvenile Justice Juvenile Justice and General Welfare Committees. Retrieved September 28, 2011 from. http://www.nyc.gov/html/acs/downloads/pdf/testimony_djj_budget_march10.pdf
- Minor, K. I., Wells, J. B., & Angel, E. (2008). Recidivism among juvenile offenders following release from residential placements: Multivariate predictors and gender differences. *Journal of Offender Rehabilitation*, 46(3/4), 18.
- Nash, M., & Bilchik, S. (2009). Child welfare and juvenile justice Two sides of the same coin, part II. *Juvenile and Family Justice Today*, 18, 22–25.
- Powers, J. L., & Echkenrode, J. (1988). The maltreatment of adolescents. *Child Abuse & Neglect*, 12, 189–199.
- Runyan, D., & Gound, C. (1985). Foster care for child maltreatment: Impact on delinquent behavior. *Pediatrics*, 75, 562–568.
- Ryan, J. P. (2006). Dependent youth in juvenile justice: Do positive peer culture programs work for victims of child maltreatment? *Research on Social Work Practice*, 16(5), 511–519
- Ryan, J. P., Herz, D., Hernandez, P. M., & Marshall, J. M. (2007). Maltreatment and delinquency: Investigating child welfare bias in juvenile justice processing. *Children and Youth Services Review*, 29(8), 1035–1050.
- Ryan, J. P., Marshall, J. M., Herz, D., & Hernandez, P. A. (2008). Juvenile delinquency in child welfare: Investigating group home effects. *Children and Youth Services Review*, 30(9), 1088–1099.
- Ryan, J. P., & Testa, M. F. (2005). Child maltreatment and juvenile delinquency: Investigating the role of placement and placement instability. *Children and Youth Services Review*, 27 (3), 227–249.
- Widom, C. S. (1991). The role of placement experiences in mediating the criminal consequences of early childhood victimization. *The American Journal of Orthopsychiatry*, 6, 195–209.