Center for Advanced Studies in Child Welfare



Minnesota-Linking Information for Kids

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RESEARCH BRIEF

Youth with Disabilities in Minnesota's Juvenile Delinquency Courts

Purpose of the study

The purpose of this study was to investigate whether youth with disabilities were overrepresented in the juvenile court system as a group and whether youth with particular disability labels were overrepresented.

BACKGROUND & PURPOSE

The United States has a juvenile incarceration rate that is five times higher than the next highest country and costs U.S. taxpayers six billion dollars annually (Hazel, 2008). Involvement in the juvenile justice system is associated with a number of negative long-term outcomes (e.g., not completing high school, low wages, unemployment; Aizer & Doyle, 2013; Mendel, 2011; Western & Beckett, 1999).

An alarming number of youth in the juvenile justice system are racial or ethnic minorities, come from impoverished backgrounds, and have an education-related disability (youth with disabilities [YD]). Prevalence estimates of YD in secure juvenile facilities vary from 33% to 58% (Bullis & Yovanoff, 2005; Quinn et al., 2005),



Youth with disabilities are 2.5 to 4.5 times more likely to be incarcerated than their non-disabled peers.

indicating that YD are 2.5 to 4.5 times more likely to be incarcerated than their non-disabled peers. In addition, youth with disabilities risk receiving inadequate educational services (Leone & Cutting, 2004) and have higher recidivism rates than their non-disabled peers (Zhang et al., 2011).

Previous research on youth in the juvenile justice system has typically not included disability status, has aggregated all disability categories, or focused on only one disability category (e.g., learning disabilities), while ignoring others. In addition, most research on youth involvement in juvenile justice has focused on youth who are incarcerated. Studies on incarcerated youth only include information about juvenile offenders who committed more egregious offenses or were repeat offenders, and do not reflect the whole population of juvenile offenders.

The purpose of this study was to investigate whether YD were overrepresented in the juvenile court system as a group and by individual disability category. The following questions guided the study:

- 1. What is the risk of court appearance for youth with disabilities compared to non-disability identified peers?
- 2. How does risk of court appearance vary by disability category compared to non-disability identified peers?

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METHODS

Minnesota Department of Education disability category was used to identify youth disability (or lack thereof). Logistic regression was used to gauge the extent to which youth with disabilities were involved in Minnesota's juvenile delinguency courts. The first instance of court involvement was used as the outcome of the study, with disability status, gender, race and ethnicity, and free and reduced-priced lunch status included as covariates.

FINDINGS

Youth with disabilities are more likely to make an appearance in juvenile court. After controlling for gender, race and ethnicity, and free- and reduced-priced lunch status, youth with emotional behavioral disorders and other health impairments were 2.11 times and 1.36 times more likely to end up in court than their non-disabled peers, respectively.

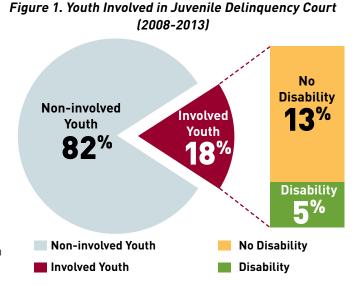
Through Minn-LInK, Minnesota Department of Education and State Court Administrator's Office Office data were linked. Juveniles in fifth through eighth grade during the 2008-09 academic year were followed for four years. Youth gender, race/ethnicity, and disability status were identified from education records. The most recent disability status prior to juvenile delinquency court. appearance was used for court-involved youth. For non-involved

Table 1. Disability status categories		
ASD	Autism Spectrum Disorder	
EBD	Emotional-Behavioral Disorder	
SLD	Specific Learning Disabilities	
SLI	Speech-Language Impairment	
P&S	Physical or Sensory Impairment (deaf/hard of hearing, blind/ visual impairment, deaf-blind, traumatic brain injury, severe-multiply impaired)	
ОНІ	Other Health Impairments	
DCD	Developmental Cognitive Disability (mild-moderate and severe)	
Section 504	Accommodations via a Section 504 Plan	

Tabla 1 Disability status satamarias

youth, a disability was recorded if they had ever received special education services or had a section 504 plan on file during the four-year study period. (See Table 1 for disability status categories.) Logistic regression was used to investigate the risk of delinquency court involvement for youth with disabilities compared to youth without disabilities. Because juvenile court involvement was higher than 10% in the population, Zhang and Yu's (1998) odds ratio to relative risk equation was used to more accurately capture the risk of delinquency court involvement.

As shown in Figure 1, over the course of four years approximately 18% of youth were involved in Minnesota's juvenile delinquency courts (regardless of adjudication). The majority of youth did not receive special education services or accommodations under section 504. As can be seen in Table 2, males, youth of color, those who received FRL, and those who had a disability all had higher court involvement rates than would be expected given their prevalence in the population.



Results of logistic regression analyses revealed all coefficients were statistically significant (p<.001). Because this is common with large sample sizes, relative risk ratios were used to more accurately determine over- and underrepresentation. To adjust odds ratios provided by logistic regression, the following equation from Zhang and Yu (1998) was used: OR / [(1-P) + (P*OR)], where OR represents the adjusted odds ratio from the logistic regression and P represents the prevalence of youth without a disability who entered the juvenile court system. For relative risk ratios, a risk level of one indicates that the group of interest (e.g., youth with EBD) have the same risk of court involvement as the comparison group, while relative risk indices greater than 1.25 or less than 0.75 indicate over- and underrepresentation, respectively.

Logistic regression results indicated that YD in Minnesota were overrepresented in the juvenile court system. YD were 1.38 times more likely than a non-disabled peer to appear in court. After controlling for youth gender, race/ethnicity, and receipt of free- or reduced-priced lunch, YD were only slightly more prevalent in the court system than their non-disabled peers

Table 2. Demographic Characteristics of Youth (2008-13)

	No Court (N=188,947)	Court Involved (N=41,813)
Gender		
Male	48%	64%
Female	52%	36%
Race/Ethnicity		
White	80%	68%
Black	07%	16%
Hispanic	05%	08%
Native American	02%	05%
Asian American	06%	03%
Free-Reduced Priced Lunch		
Receipt	38%	64%
Special Education/504		
Receipt	18%	26%
ASD	05%	02%
EBD	08%	16%
SLD	15%	16%
SLI	06%	02%
P&S	02%	01%
ОНІ	09%	11%
DCD	03%	02%
Section 504	06%	03%

NOTE: Percentages are column percentages.

(relative risk = 1.07). Including the additional controls also improved model fit (McFadden $pseudo-R^2$ = .05 compared to $pseudo-R^2$ = .01).

As can be seen in Figure 2, some disability categories were overrepresented in Minnesota's juvenile delinquency courts while others were underrepresented. Without controlling

for student gender, race/ethnicity, or FRL status, youth who were diagnosed with EBD, OHI, and SLD were 2.98 times, 1.74 times, and 1.55 times more likely to appear in juvenile court, respectively, than youth without a disability. Youth diagnosed with P&S (Relative Risk = 0.50), ASD (Relative Risk = 0.49), and SLI (Relative Risk = 0.41) were underrepresented in the juvenile court system as compared to their non-disabled peers.

Controlling for demographic characteristics improved model fit (McFadden pseudo- R^2 = .09 compared to pseudo- R^2 = .03) and reduced the effect of disability status on court involvement. Youth with EBD and youth with OHI were 2.11 and 1.36 times more likely to be involved in court, respectively. Youth with SLD were 1.15 times more likely to be in the juvenile court system, indicating that their non-covariate adjusted overrepresentation may have been due in part to their race/ethnicity and FRL status. Youth with DCD were underrepresented (Relative Risk = 0.52) compared to nondisabled peers. Youth with physical sensory impairments, ASD, or SLI continued to be underrepresented in the juvenile court system. Females were less likely to be involved than males (Relative Risk = 0.55). Native American youth were 2.00 times more likely to end up in juvenile court than their White peers, and Black youth were 1.57 times more likely to be involved in juvenile court. Hispanic youth were involved in juvenile court at a rate similar to their White peers (relative risk = 1.08). Asian American youth were under-represented compared to White peers (relative risk = 0.48). Lastly, youth who qualified for FRL were 2.03 times more likely to become involved in the juvenile court system than youth who had not received FRL.

3.00 Unadjusted 2.75 Adjusted 2.50 2.03 2.25 2.00 1.75 1.50 1.25 1.00 0.75 0.88 0.50 0.550.50 0.49 0.39 0.38 0.41 0.25 0.00 P&S Female ASD Asian EBD \exists 5504 DCD SLI Black Hispanic 님 Nat. Amer

Figure 2. Relative Risk of Juvenile Court Involvement by Demographic Characteristics

Conclusion

This study sought to illuminate the relationship between youth with an educational-disability (YD) and juvenile court involvement. YD were significantly overrepresented in the juvenile court system. However, following adjustment for gender, race, and FRL status, YD were no longer overrepresented in the juvenile court system. Additional analyses demonstrated that youth involvement by disability category is heterogeneous, with some categories of youth overrepresented (e.g., EBD and OHI) and others underrepresented (e.g., ASD) even after controlling for demographic information.

The higher rate of youth with EBD in juvenile courts is concerning given that many juvenile correction facilities do not use best practices in behavior management, such as positive behavior support systems (Danielson et al., 2007), and put security above education, which may lead to inadequate educational experiences for detained or incarcerated youth (Leone & Cutting, 2004). However, there are programs and interventions that may reduce court involvement and recidivism for at-risk youth. Counseling and skill-building services (e.g., cognitive-behavioral therapy),

LIMITATIONS

This study may underestimate the relative risk of court involvement for youth with disabilities due to the way disability status was conceptualized for youth not involved in the juvenile justice system (See methods). Courtinvolvement included adjudicated and non-adjudicated cases. These analyses do not explain why certain groups are over- or under-represented, which may be due to differential propensities to commit offenses, varying arrest rates, diversion program completion, or factors not included in analyses.

monitoring where youth are and what they are doing, and providing strong, research-based and effective academic and behavioral interventions in school when youth are struggling could reduce youthful offending (Christle et al., 2005; Lipsey, 2009). After-school and summer intervention courses would both increase academic skills and reduce the amount of time youth could commit offenses. In addition, providing safe spaces for youth to gather and participate in choice activities would allow for greater monitoring in a positive atmosphere. School, juvenile court, and state-level officials should consider alternative programs that focus on counseling, skill-building, and academic remediation as opposed to traditional incarceration.

While we do not know why these youth are more likely to be involved with the juvenile court system, we do know that some YD are overrepresented. Further analyses should investigate additional factors related to both risk and resiliency, the types of offenses youth with disabilities commit, and what programs may help reduce the overrepresentation of YD in the juvenile courts.

References

- Aizer A. & Doyle, J. J. (2013). Juvenile incarceration, human capital and future crime: Evidence from randomly-assigned judges. (Working Paper No. 19102). Retrieved from National Bureau of Economic Research website: http://www.nber.org/papers/w19102
- Bullis, M., & Yovanoff, P. (2005). More alike than different? Comparison of formerly incarcerated youth with and without disabilities. *Journal of Child and Family Studies*, 14, 127–139. doi:10.1007/s10826-005-1127-7
- Christle, C. A., Jolivette, K., & Nelson, C. M. (2005). Breaking the school to prison pipeline: Identifying school risk and protective factors for youth delinquency. *Exceptionality*, *13*, 69-88.
- Danielson, L., Cobb, B., Sanchez, S., & Horner, R. (2007). Evidence-based practices: A technical assistance perspective. Presentation given as part of the 2007 Office of Special Education Projects Project Directors' Conference, Washington, DC.
- Hazel, N. (2008). Cross-national comparison of youth justice. Retrieved from Youth Justice Board: http://dera.ioe.ac.uk
- Leone, P. E., & Cutting, C. A. (2004). Appropriate education, juvenile corrections, and No Child Left Behind. *Behavioral Disorders*, 29, 260-265. http://www.jstor.org/stable/23889474

- Lipsey, M. W. (2009). The primary factors that characterize effective interventions with juvenile offenders: A meta-analytic overview. *Victims and Offenders*, 4, 124-147. doi: 10.1080/15564880802612573
- Mendel, R. A. (2011). No place for kids: The case for reducing juvenile incarceration. Annie E. Casey Foundation. Retrieved from http://eric.ed.gov/?id=ED527944
- Quinn, M. M., Rutherford, R. B., Leone, P. E., Osher, D. M., & Poirer, J. M. (2005). Youth with disabilities in juvenile corrections: A national survey. Exceptional Children, 71, 339–345. doi: 10.1177/001440290507100308
- Western, B., & Beckett, K. (1999). How unregulated is the U.S. labor market? The penal system as a labor market institution. *American Journal of Sociology, 104*, 1030-1060. doi: 10.1086/210135
- Zhang, D., Barrett, D. E., Katsiyannis, A., & Yoon, M. (2011). Juvenile offenders with and without disabilities: Risks and patterns of recidivism. *Learning and Individual Differences*, 21, 12–18. doi:10.1016/j.lindif.2010.09.006
- Zhang, J., & Yu, K. F. (1998). What's the relative risk? A method of correcting the odds ratio in cohort studies of common outcomes. *Journal of the American Medical Association*, 280, 1690-1691. doi: 10.1001/jama.280.19.1690

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The Center for Advanced Studies in Child Welfare (CASCW) is a resource for child welfare professionals, students, faculty, policy-makers, and other key stakeholders concerned about child welfare in Minnesota. Minn-Link is a unique collaborative, university-based research environment with the express purpose of studying child and family well being in Minnesota using state administrative data from multiple agencies.