

RESEARCH BRIEF

Homelessness as a Risk Factor for School Disciplinary Outcomes

PURPOSE OF THE STUDY

Homelessness is related to multiple academic, socioemotional, and health outcomes. Understanding the impact of homelessness on school disciplinary outcomes is important for developing preventive interventions and promoting school success. This study examined whether children who experience homelessness are at higher risk for school disciplinary outcomes (i.e., out-of-school suspensions) across time.

BACKGROUND & PURPOSE

School discipline problems have increased over the past four decades (Skiba & Knesting, 2001), with children in middle school experiencing higher rates of school discipline in comparison to other school-aged peers (Raffaele Mendez, 2003). School disciplinary actions are associated with numerous negative academic and socioemotional outcomes. Students who receive exclusionary discipline actions are more likely to drop out of school, not graduate on time, and become involved with the juvenile justice system (Gagnon et al., 2016). Empirical evidence on school discipline has largely focused on gender and ethnic-racial disparities; African American males tend to receive the harshest disciplinary outcomes among school-aged children (Welsh, 2022).

Experiencing homelessness can also undermine academic success, health, and well-being among school-aged children (Reingle-Gonzales, 2018). Little is known, however, about the relationship between experiences of homelessness and school disciplinary actions. Recent research suggests that students who experience homelessness are more likely to receive office referrals, in-school and out-of-school suspensions, and expulsions than their non-homeless peers (Erb-Downward & Blakeslee, 2021). However, research has not examined the impact of homelessness on disciplinary outcomes over time. The purpose of the current study, therefore, was to determine whether children experiencing homelessness are at higher risk for school disciplinary outcomes (i.e., out-of-school suspensions) across four academic years and how grade level might affect the association between homelessness and out-of-school suspensions.

This study addresses the following research questions:

- 1. At what grade level are school-aged children at highest risk for out-of-school suspensions?**
- 2. Are children who experience homelessness at higher risk for out-of-school suspensions over time than their residentially stable peers?**
- 3. How does grade level affect the association between homelessness and out-of-school suspensions?**



STUDENTS WHO RECEIVE EXCLUSIONARY DISCIPLINE ARE MORE LIKELY TO DROP OUT OF SCHOOL, NOT GRADUATE ON TIME, AND BECOME INVOLVED WITH THE JUVENILE JUSTICE SYSTEM. LITTLE IS KNOWN, HOWEVER, ABOUT THE RELATIONSHIP BETWEEN EXPERIENCES OF HOMELESSNESS AND SCHOOL DISCIPLINARY ACTIONS.



METHODS

This study used integrated administrative data available through Minn-LInK to assess the impact of student homelessness on out-of-school suspensions across four school years (2013–2016) using zero-inflated negative binomial growth models.

Through Minn-LInK, data from the Minnesota Department of Education Minnesota Automated Reporting Student System (MARSS) for students in Kindergarten–12th grade were integrated with the Disciplinary Incident Reporting System (DIRS). The full sample included 951,266 students attending Minnesota public schools from AY2013 through AY2016. We excluded youth who received special education services because they are subject to disciplinary rules different from those not receiving special education services. Sample characteristics are provided in Table 1.

A homeless and poverty risk variable was created using the McKinney-Vento criteria for homelessness and highly mobile status. Students were differentiated into four categories based on data combined across the four academic years: 1) children who experienced at least one episode of homelessness, 2) children who received free meals with no experience of homelessness, 3) children who received reduced price meals with no experience of homelessness, and 4) children who had no experience of homelessness and were not eligible for free or reduced price meals. To examine differences in the probability of out-of-school suspensions by grade level and homeless/poverty risk, we ran one-way ANOVAs. Zero-inflated negative binomial multilevel growth models were conducted to evaluate out-of-school suspensions over time.

FINDINGS

Children in middle school, especially students in 7th grade, were at the highest risk for out-of-school suspensions. Out-of-school suspensions increased across time by school years and grade levels. Controlling for gender, race-ethnicity, and drop-out-rates, children who received reduced price lunch, free meals, or experienced homelessness were at higher risk for out-of-school suspension than students in the general population.

Aim 1: Grade Level and Out-of-school Suspensions

We examined the grade level at which students were at highest risk for out-of-school suspensions. Results revealed significant grade differences in out-of-school suspensions, $F(12, 39) = 118.25, p < .001$. Out-of-school suspensions peaked at 7th grade for the full population (Figure 1).

Aim 2: Homelessness, Poverty Risk, and Out-of-school Suspensions

We evaluated the impact of homelessness and poverty on out-of-school suspensions using a one-way ANOVA. Students who experienced homelessness had a higher probability of being suspended compared to students who received free meals, reduced price meals, and those who did not receive free or reduced price meals, $F(3, 12) = 166.12, p < .001$ (Figure 2).

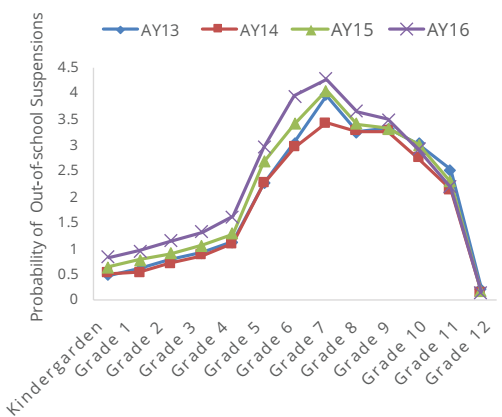
We then conducted two sets of models to consider the effect of other variables on these preliminary results and to examine changes in out-of-school suspension across time.

Table 1. Demographic Characteristics of the Sample

	Total Sample (n = 951,266)
Median age in years (in 2013)	12.64
Sex/Gender	
Male	48.1%
Female	51.9%
Race/Ethnicity	
American Indian/ Native American	2.2%
Asian or Pacific Islander	7.9%
Hispanic/Latinx	8.4%
Black/African American	11.7%
White	69.7%
Homeless and Poverty Risk	
General Population	58.3%
Reduced Price Meal	5.7%
Free Meal	32.7%
Homelessness	3.0%
Dropout Rate	1.9%

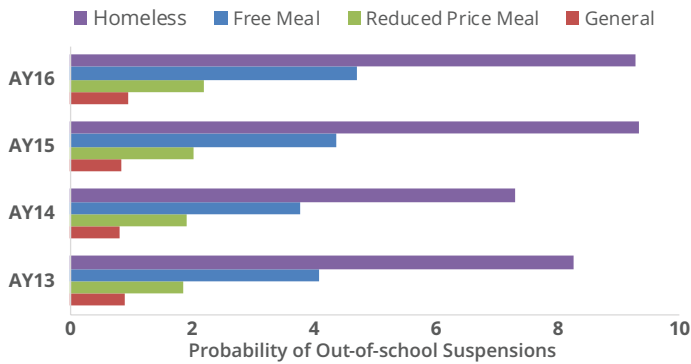
Note. With the exception of median age, all demographic characteristics represent information aggregated across four academic years (AY2013 to AY2016). A sample of 52,045 students enrolled in fourth grade in AY2013 was also included in the analysis; characteristics of this subsample did not differ significantly from those of the full sample except for median age (10.44) and dropout rate (0.3%).

Figure 1. Grade Level and Out-of-school Suspensions Across Academic Years



Note. OSS means out-of-school suspension. Probabilities were estimated by calculating the number of students suspended by the total number of students at each grade level and multiplying the value by 100 percent.

Figure 2. Homelessness and Poverty Risk on Out-of-school Suspensions Across Academic Years

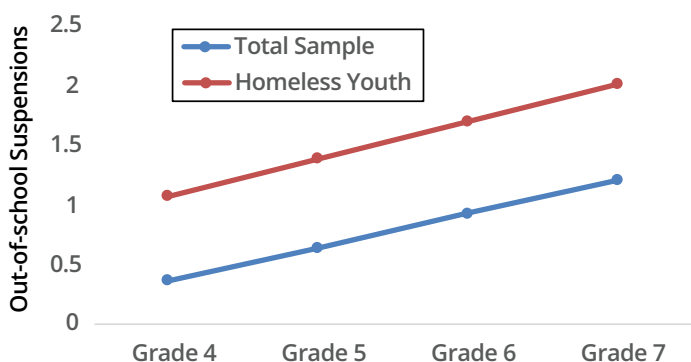


Note. Probabilities were estimated by calculating the number of students suspended by the total number of students within each risk category and multiplying the value by 100 percent.

First, we estimated an unconditional growth model to evaluate change in out-of-school suspensions across school years for the total sample. We used count data instead of probabilities; therefore, zero-inflated negative binomial models were conducted to separate the zero responses from the positive responses. While the majority of the participants (99.6%) in the sample did not have any suspensions in AY2013, findings revealed significant variation in both the intercept, ($\gamma_{00} = .07, SE = .027, p = .011$), and linear slope, ($\sigma_{10} = .012, SE = .005, p = .024$) of out-of-school suspensions. In AY2013, the expected length of out-of-school suspensions for the total sample was 1.072 days, with the number of out-of-school suspensions increasing by 1.2% each school year (Figure 3).

Second, we estimated a conditional zero-inflated negative binomial growth model to evaluate the effect of homelessness and poverty risk on the initial levels and change in out-of-school suspensions across time. For these models, gender, race-ethnicity, drop-out rate, and grade level were included as covariates. White students, and students who were not homeless and did not receive free or reduced price meals were reference groups in the analyses. Both the risk variables and all covariates predicted initial levels of out-of-

Figure 3. Average Trajectories for Out-of-school Suspensions from AY2013 to AY2016



school suspensions. Every unit increase in grade level was associated with an increase in out-of-school suspension by 1.30 days. Girls had lower rates of out-of-school suspensions (by 0.28 days) in comparison to boys. When compared to White students, an increase in out-of-school suspension was experienced by Black (9.02 days), Native American (6.12 days), and Latinx (1.46 days)

WHEN COMPARING INITIAL LEVELS OF OUT-OF-SCHOOL SUSPENSIONS, STUDENTS IN THE TOTAL SAMPLE WHO EXPERIENCED HOMELESSNESS WERE SUSPENDED 33.48 DAYS MORE THAN STUDENTS WHO WERE NOT HOMELESS AND DID NOT RECEIVE FREE OR REDUCED PRICE LUNCH.

students. Asian students had lower rates (0.52 days) of out of out-of-school suspension than their White peers. Dropping out of school was associated with 5.42 days increase in out-of-school suspensions. Compared to students in the general population, students who received reduced price and free meals had higher rates of out-of-school suspensions (2.17 and 5.50 days, respectively). On average, students who experienced homelessness were suspended 33.48 days more than students who were not homeless and did not receive free or reduced price meals. As for change in out-of-school suspensions over time, higher grade level (6.95%), dropping out of school (60.15%), and experiencing homelessness (9.15%) were associated with smaller growth or changes in out-of-school suspensions over time. In contrast, being Native American (9.42%) was associated with increases in out-of-school suspension from AY2013 to AY2016 for the total sample.

Aim 3: Accounting for Grade Effects Across School Years

Given the complexity of the models, we were unable to examine the interaction between grade level and the risk variable assessing homelessness and poverty. Previous analyses indicated that out-of-school suspension starts to increase in 4th grade; therefore, we selected students who were enrolled as 4th graders in AY2013 and analyzed their data across time. In 4th grade, the average for out-of-school suspensions was 0.371 days, but the rate of suspensions increased by 32.84% at each grade level from AY2013 to AY2016 (see Figure 3).

Estimating the effects of homelessness and poverty across grade levels revealed that after accounting for race-ethnicity, gender, and dropout rates, students who experienced homelessness were suspended 38.55 days more than students who were not homeless and did not receive free or reduced price meals. Only female gender and race-ethnicity predicted change in out-of-school suspension across grades. Experiencing homelessness was not associated with changes in out-of-school suspensions across grades.

Conclusion

The purpose of this study was to assess whether children experiencing homelessness are at higher risk for school disciplinary outcomes over time and how grade level might affect the association between homelessness and out-of-school suspensions. Students in middle school, especially those in 7th grade, were at greater risk for out-of-school suspensions compared to those in other grades. On average, females had lower suspension rates than their male peers. Ethnic-racial minority youth, except for Asian students, had higher rates of out-of-school suspensions than White students, with Black and Native American students evidencing the highest rates followed by Latinx students. However, experiences of poverty and homelessness were the most salient predictors of out-of-school suspensions, with students receiving free meals and experiencing at least one episode of homelessness exhibiting higher rates of out-of-school suspensions than other students.

These findings have implications for policy and intervention programs. Results suggest that policy efforts aimed at preventing or reducing out-of-school suspensions are needed, especially during or before middle school. Creating intervention programs that offer incentives for good behavior, providing tools to students and staff to deal with conflicts, and offering courses on emotional regulation and coping strategies have been shown to reduce suspensions among children (Dupper et al., 2009). Programs may also provide opportunities for staff to enhance their knowledge about the risk and protective factors associated with homelessness. Given that ethnic-racial minority children are at a disadvantage for out-of-school suspensions, interventions to improve cultural humility and sensitivity among school educators and staff may be crucial to engage students at risk and their families. Finally, more policy-level programs are needed to reduce student homelessness and poverty, and the effectiveness of these programs should be evaluated. For instance, efforts to reduce homelessness such as providing rental assistance or housing vouchers to vulnerable families may have positive downstream effects on out-of-school suspensions.

LIMITATIONS

We did not fully capture the interaction between grade level and risk for homelessness and poverty. Our selection of 4th graders provided a limited understanding of these effects over time. As a result, we were unable to examine the decline in out-of-school suspensions from 7th grade to 12th grade or to understand what factors predict this decline in out-of-school suspensions.

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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.

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