EXECUTIVE SUMMARY

Finding effective ways to reduce truancy:

An evaluation of the Ramsey County Truancy Intervention Programs

Grantee Organization: University of Minnesota

Award: 2014-IJ-CX-0010

Principal Investigators

Clea McNeely, DrPH
Department of Public Health
University of Tennessee, Knoxville
1914 Andy Holt Drive
Knoxville, TN 37996

Lynette M. Renner, PhD, MSW
School of Social Work
University of Minnesota
105 Peters Hall, 1404 Gortner Avenue
St. Paul, MN 55108

September 2019

Prepared by Clea A. McNeely, Won F. Lee, Besufekad Alemu, Janet E. Rosenbaum, and Lynette M. Renner

This project was supported by Award No. 2014-IJ-CX-0010, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this report are those of the authors and do not necessarily reflect those of the Department of Justice.

Executive Summary

Problem

During the 2013-14 school year, more than 6 million children or 1 in 7 students in the U.S., were chronically absent (defined as missing 15 days or more of school). Excessive absence from school, including elementary school, is a barrier to academic achievement and, ultimately, to graduation. Chronic absenteeism is also a powerful predictor of delinquent behavior and chronic offending in adulthood. Over 40% of the total incarcerated population did not graduate high school, compared to 18% of the general population.

Findings of two recent meta-analyses demonstrated that truancy interventions—interventions aimed at reducing unexcused absences—can modestly improve attendance, academic achievement, and school completion. However, even after these improvements, the mean rates of absenteeism remained above 10% or 18 days per year. The authors of these meta-analyses pointed out the limited number of high-quality studies on this topic.

Juvenile justice-based responses to absenteeism. During the 1990s and 2000s, states and school districts turned to juvenile courts as the solution to chronic absenteeism. Juvenile justice-based strategies focus on reducing unexcused absences, which typically represent fewer than half of all absences. Most states have laws that mandate or allow schools to refer students with a certain number of unexcused absences, defined as truancy, to juvenile court. Each year between 2010 and 2017, the most recent year for which data are available, approximately 45,500 students were formally adjudicated and received a disposition for truancy, the equivalent of a charge and finding. This number is a tiny proportion of all students petitioned to juvenile court for truancy since the vast majority of petitions result in a non-adjudicatory resolution that is not publicly recorded. As evidence has emerged that adolescent status offenses did not lead to adult

criminal behavior but, rather, the formal processing of status offenses by the juvenile justice system did lead to greater adult criminality, school districts adopted court-diversion strategies to simultaneously reduce the number of truancy petitions and increase attendance. Court diversion has become the most common type of truancy intervention in the U.S., used in 63% of U.S. school districts; and since 2007, the number of truancy cases processed by U.S. courts fell from 61,000 to 54,000.

But do court-diversion interventions increase attendance? The theory behind court diversion has received little empirical support, but there is some evidence that diversion programs reduce recidivism for status offenses other than truancy, such as alcohol use, curfew violations, and running away. A recent randomized trial evaluating a truancy diversion program that was grounded in a restorative justice model found positive effects on attendance, suggesting that diversion is a promising approach. Typically, court-diversion programs have three steps: 1) a group meeting with truant students and parents, 2) development of a formal attendance-improvement plan with the student and family that includes, as appropriate, referrals to social service agencies, and 3) a petition to juvenile court. Referral to the next step occurs only if attendance does not improve.

Purpose

We conducted a rigorous quasi-experimental study to determine the effects of two truancy court-diversion programs in Ramsey County, Minnesota on student attendance. The Truancy Intervention Program (TIP) is designed for adolescents ages 12–17. The Family Truancy Intervention Program (FTIP) is for children ages 5–11.

Key to interpreting the effectiveness of diversion programs is understanding the comparison condition. The overall question answered in this study was whether TIP and FTIP

increased attendance above and beyond the standard practice of direct petition to juvenile court (TIP) or referral to child protective services for educational neglect (FTIP). In both intervention and control conditions, schools were required to send a letter to the family notifying them of attendance problems before making any external referrals. The specific research questions for this study were:

Research question 1. Does referral to the Truancy Intervention Program (TIP) improve overall school attendance among middle and high school students compared to similarly truant students who do not receive TIP?

Research question 2. Does referral to the Family Truancy Intervention Program (FTIP) improve overall school attendance among elementary school students compared to students with similar absenteeism who do not receive FTIP?

Research question 3. Are there racial or ethnic disparities in the rates of referral to TIP or FTIP?

Research Design

To answer the first two research questions, we conducted difference-in-differences analyses using matched comparison groups of adolescents from adjacent school districts that did not have a court-diversion program. We used descriptive statistics to answer the third research question.

The Truancy Intervention Program (TIP). TIP is designed for students ages 12 and above. It involves a three-step process. Any school in the county can refer a student with five or more unexcused absences to TIP. The referral initiates Step 1, a letter from the County Attorney's Office to the student's home stating that the student and parent(s) are required to attend a group meeting at the school. At this group meeting, an assistant County attorney

explains Minnesota's Compulsory Attendance Law (i.e., the expectation for full attendance), the legal and social consequences of poor school attendance, and the TIP process.

Students who fail to improve their attendance complete an in-school contract with school personnel and their parent(s). If the student continues to be truant, the school may refer the student to Step 2, a School Attendance Review Team (SART) hearing. The SART hearing is a meeting with the young person and their parent(s), school district staff, an assistant County attorney, and sometimes a youth engagement worker from the child welfare system. At the hearing everyone works together to develop a written attendance contract signed by all SART hearing participants. The contract may include referrals to social service agencies, chemical dependency evaluations, mental health evaluations, and individual or family counseling. A student may also be assigned a school monitor to check on daily attendance of the child and report the results to the SART team. If attendance does not improve after the SART hearing, the school can request a truancy petition to be filed in Juvenile Court (Step 3). No petitions can be filed without going through the TIP process first. The three steps of the program do not begin anew each school year.

The Family Truancy Intervention Program (FTIP). FTIP follows a three-step model similar to TIP. Students are eligible for FTIP after five unexcused absences or seven tardies. Step 1 consists of a one-on-one or small group meeting with the parent(s) of each child referred by the school for educational neglect. Children who continue to miss school without lawful excuse are referred to Step 2, a School Attendance Review Team (SART) hearing. A referral to Step 2 produces a simultaneous report of maltreatment to Ramsey County's Child Protective Services (CPS). A case worker completes an assessment with the family prior to the SART hearing. At the SART hearing, the school representative, child protection worker, assistant County attorney, and

the parent(s) discuss the reasons for the child's poor attendance. An attendance contract is created, linking the family to services to address and eliminate the problems causing the child to be absent from school and committing the parents to improving their child's attendance. If the child's attendance does not improve, a Child in Need of Protection or Services petition for educational neglect is filed with the Juvenile Court. Petitioning a parent to court for educational neglect is the third step of the FTIP process. The three steps of the program do not begin anew each school year.

Data. Data for this project came from eight sources: the Ramsey County Attorney's Office TIP and FTIP records, daily attendance records from the five main school districts in Ramsey County, Minnesota Departments of Education (MDE) and the Minnesota Department of Human Services (DHS). The latter two data sources were made available through Minnesota Linking Information for Kids (Minn-LInK) at the Center for the Advanced Study of Child Welfare at the University of Minnesota School of Social Work. We linked data from these multiple sources to create a panel dataset containing all students ever enrolled in a Minnesota public school between 2004 and 2016.

Measures

Program participation. The study used two measures of program participation: referral to TIP or FTIP and whether the parent attended the parent meeting.

School attendance. The primary outcome variable was the student's annual daily attendance rate (ADA), defined as the proportion of days a student was enrolled in any public school in the state (called "membership days") that the student attended. As a secondary outcome we used the number of excused and unexcused days absent in the months following referral to TIP or FTIP.

Demographic and academic characteristics. Race/ethnicity was measured as American Indian or Alaskan Native, Black (not of Hispanic Origin), White (not of Hispanic Origin), Hispanic, and Asian or Pacific Islander. Poverty was measured by eligibility for free lunch in each year the child was in school and by homelessness in each year. In addition, measures were available for gender (male or female) and age. Several academic measures were also used: student attendance in current year and prior years, student scores on the Minnesota Comprehensive Assessment (MCA) test in math, reading, and science for all grade levels the test is given, history of suspensions and expulsions, history of school transfers, homelessness, English language learner status, and special education status. These measures were also available at the school level (e.g., proportion free lunch).

Because average daily attendance in the year of referral could include a program effect and thereby bias estimated effects towards zero, we also matched or checked the balance of the matched samples on three alternative measures of attendance: attendance in the year before referral, the change in attendance between the prior year and the year of referral, and three-year attendance trajectories prior to the year of referral.

Analytic Strategy

We analyzed program effects for the years 2006 to 2010. A concern for identifying causal effects in non-equivalent group designs is bias from differential selection into treatment and control conditions. Because schools exercised discretion regarding who they referred to the intervention, it is likely that the referred students differed systematically from the non-referred students on unobserved characteristics such as achievement motivation. If these unobserved characteristics were related to school attendance, a naïve estimation of program effects could be

biased. As an identification strategy, we employed matching and difference-in-difference methods.

Matching. We first matched school districts by conducting nearest-neighbor matching with replacement. We used the following sociodemographic characteristics for matching: proportion minority students, standardized math and reading scores, the total number of students, and the proportion eligible for free lunch. The matching process identified four school districts in neighboring Hennepin County that, on average, had the same sociodemographic profile as the five districts in Ramsey County. We then matched at the individual level within grade-year strata using a two-step method. We first randomly pruned observations from the comparison group that had values outside of the area of common support on race/ethnicity and free-lunch eligibility. We then implemented nearest-neighbor matching with replacement based on the Mahalanobis metric. After matching, we checked whether all covariates of the matched sample had acceptable balance for the grade of referral. The matching process was conducted separately for each measure of program participation.

Difference-in-differences (DiD) estimation. DiD models eliminate selection bias from time-invariant unobserved characteristics under the assumptions that: 1) the magnitude of the selection bias from time-invariant characteristics is constant over time, and 2) the trend over time in the outcome variable, in the absence of treatment, is the same for both treatment and comparison groups (the parallel slopes assumption). Using the matched samples, we estimated a dynamic DiD model to examine program effects over time. All analyses were conducted using Stata 14 software.

Subgroup and sensitivity analyses. When samples sizes allowed, we conducted subgroup analyses to determine if program effects varied by demographic subgroups. We also

conducted sensitivity analyses by examining the short-term effect of referral to the program using daily attendance data. The key advantages of using daily attendance data, rather than annual data, was that we could distinguish the timing of absences relative to the date of referral to TIP. A secondary advantage was that the absences were classified as excused or unexcused, which enabled us to match based on unexcused absences—the actual criteria for program referral. Unfortunately, because this attendance data was only available for Ramsey County students, all potential matches also had the potential to be referred.

Results

Research question 1: Does TIP improve school attendance?

Program implementation. The linked dataset contained 4,412 students in grades 7–10 who had been referred to TIP by the five school districts between 2006 and 2010. Of the referred students, 61% (n=2,679) had a parent attend the group parent meeting, 28% (n=1,219) had a SART hearing, and 17% (n=749) were eventually petitioned to juvenile court for truancy (61% of those referred to a SART hearing).

Approximately 22% of students with five or more unexcused absences were referred to the program in the three districts where we could calculate eligibility. Among students eligible for TIP, those actually referred were more likely to be eligible for free or reduced lunch (80% vs. 71%), were more likely to have been retained one or more grades (49% vs. 41%) and had lower standardized test scores, particularly in math (-.95 vs. -.77 s.d. units).

Covariate balance after matching was assessed by comparing standardized differences in the mean values of observed individual-level characteristics. After matching, almost all of the standardized mean differences fell within the 0.2 standard deviation recommended threshold.

Attendance trends in the matched samples. Figure 1 presents the trends in average daily attendance rates for students referred to TIP and the matched comparison groups. Students in all grades experienced a fairly sharp decline in attendance in the year prior to the intervention. This suggests that the program effectively targeted students with serious declines in attendance. In bivariate tests of difference, the intervention and matched comparison groups had statistically indistinguishable attendance trends in the years after the intervention, with the exception of students referred in 7th grade, who had lower attendance in the first year after the intervention. Attendance trends for the students whose parents attended the parent meeting and their matched comparison groups also were indistinguishable over time.

Difference-in-differences models. The findings from the dynamic DiD model were consistent with the trends in Figure 1. In a few cases, the intervention group had statistically significantly lower attendance than the comparison group staring in Year 2 after the intervention, but the effect sizes were small (approximately a 1-percentage-point difference in the attendance rate), and there was no consistent pattern that would suggest a systematic negative effect of the program. The full report provides full details on this pattern of findings.

Subgroup and sensitivity analyses. We found no evidence of enhanced program effectiveness in subgroups based on age, grade, and race/ethnicity. We could not test for subgroups differences for the sample of students whose parent(s) attended the parent meeting due to the difficulty of obtaining good matches. The analysis of short-term program effects on attendance in the months after referral also found statistically indistinguishable attendance trends between the intervention and comparison groups.

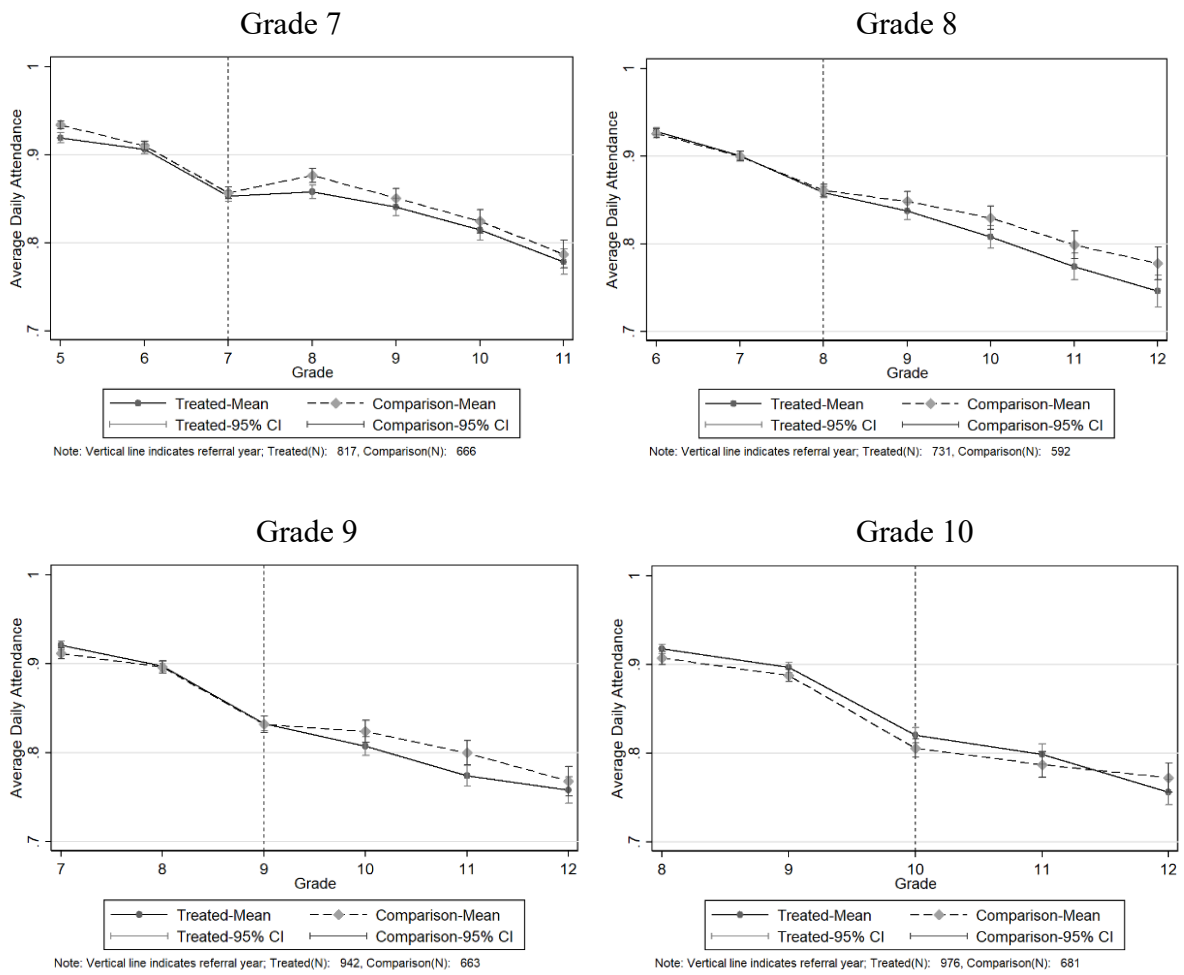

Figure 1. Trends in average daily attendance rates for the students referred to TIP and matched comparison groups, by grade.

Research question 2: Does FTIP improve school attendance?

***Program implementation*.** The linked dataset contained 1,285 students in grades 2–5 who had been referred to FTIP by the five school districts between 2006 and 2010. Of the referred students, 57% (n=736) had a parent attend the group parent meeting, 34% (n=431) had a SART hearing, and 17% (n=221) were eventually petitioned to family court for educational neglect (51% of those referred to a SART hearing).

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Among students referred to FTIP, the average daily attendance rate was 89%, the equivalent of missing 20 days of school in a full academic year. Most (88%) were eligible for free lunch, and on average, each student attended 1.5 schools in the year of referral. About one fifth of referred students had been held back a grade (21%) and their average score on standardized reading and math tests was nearly one standard deviation below the mean. Approximately 10% of students with five or more unexcused absences were referred to the program in these three districts. We do not know what proportion of students who became eligible due to tardies alone were referred to FTIP.

Attendance trends in the matched samples. After matching, almost all of the standardized mean differences fell within the 0.2 standard deviation recommended threshold. Figure 2 presents the average attendance trend before and after the year of FTIP referral for the intervention group and the matched comparison sample. The attendance trends in the two groups were statistically indistinguishable. Both groups experienced a decline in attendance in the year of referral. In the earlier grades (grades 2 and 3 and partially grade 4) both intervention and comparison groups showed a clear transitory bounce back in attendance in the year after referral. This bounce back highlights the risk of falsely inferring a positive program effect in the absence of adequate counterfactuals. Because the FTIP-referred students, by definition, were those belonging to the low-attendance category in the first place, it is possible that the low-attendance bounce back occurred naturally after a year of low attendance (i.e., regression to the mean).

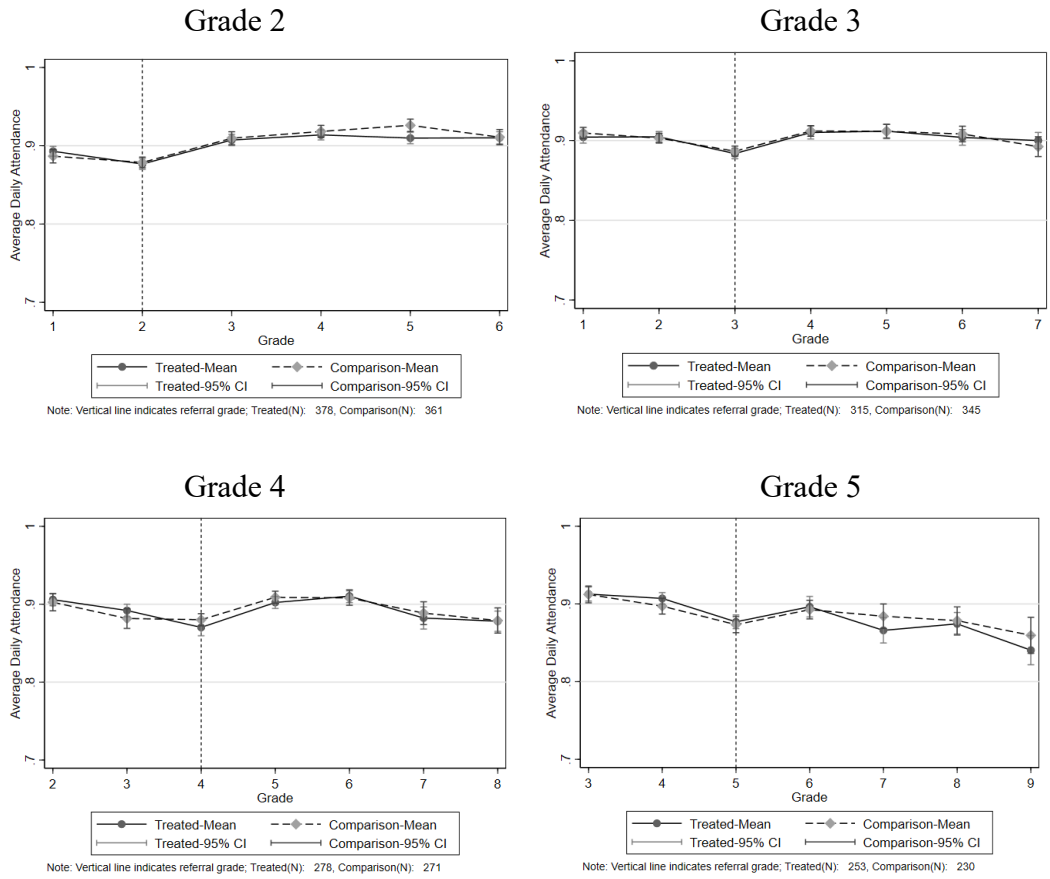

Figure 2. Trends in the average yearly attendance rate for the intervention and comparison groups.

Difference-in-differences models. The dynamic DiD estimates of the difference in attendance trends between the intervention and comparison samples was close to zero and statistically nonsignificant at conventional levels.

Subgroup and sensitivity analyses. We could not conduct analyses of demographic subgroups due to the difficulty of obtaining good matches within subgroups. Similar to the main analysis, in the sensitivity analyses, the intervention and matched comparison groups had statistically indistinguishable attendance trends across all months following the month of referral.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Research question 3: Are there racial or ethnic disparities in referral to TIP or FTIP?

We examined disparities in rates of initial referral to TIP and FTIP based on two indicators of student attendance: the number of total absences as calculated from the annual attendance rate (MDE data) and the number of unexcused absences accrued in the year (district report). The annual attendance rate adjusts for the length of the time the child was a student in a district school, whereas the number of unexcused days is simply a total number of days absent with no excuse. Both measures are informative for understanding racial disparities. Annual attendance is used to assess progress on federally-mandated attendance goals that all states must achieve. Unexcused absences are the criterion used to refer students to TIP and FTIP.

Results for TIP. Figure 3 shows that at each level of absenteeism, measured using the annual absenteeism rate, White students were referred to TIP at lower rates than students in all other racial and ethnic groups. In contrast, there were no statistically significant racial/ethnic differences in the proportion of students referred to TIP at each level of unexcused absences, as shown in Figure 4.

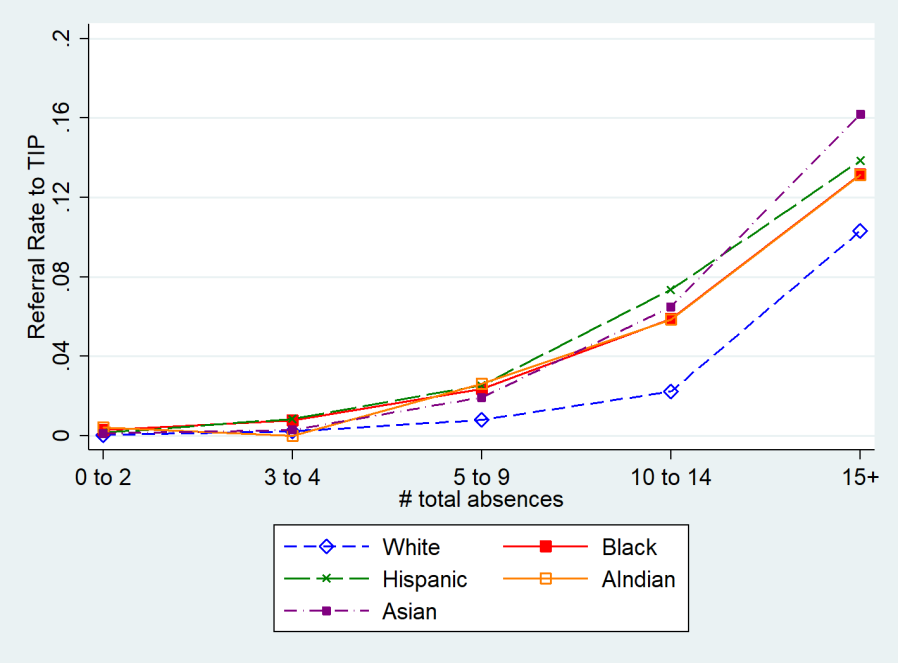

Figure 3. The proportion of Ramsey County students referred to TIP, by racial/ethnic group and level of absenteeism (as measured using the average attendance rate), 2006–2015.

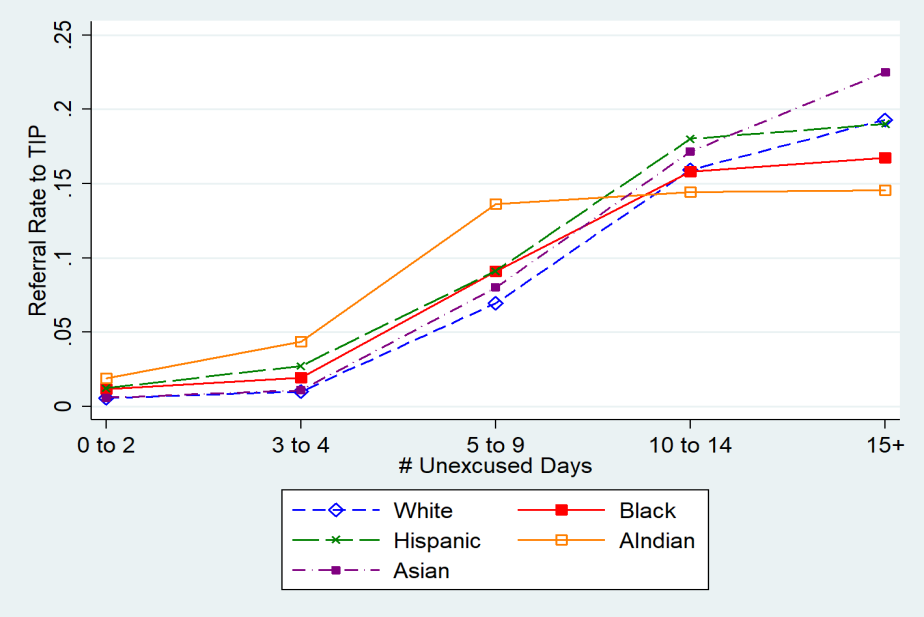

Figure 4. The proportion of Ramsey County students referred to TIP, by racial/ethnic group and number of unexcused absences, 2006–2015.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 5 presents the explanation for these disparate results. The figures show that at each level of total days absent, measured based on the annual attendance rate, White students had a smaller proportion of their absences coded as unexcused compared to all other racial/ethnic groups. Because referral to TIP is only possible after five unexcused absences, White students were less likely to be eligible to be referred to TIP, even when they had the number of total absences as did racial and ethnic minority students. For example, among students with 10–14 total absences, 47% of those absences were coded as unexcused for Black students compared to just 24% for White students. That means that, on average, almost all Black students with 10–14 absences were eligible for TIP but, on average, none of the White students were eligible.

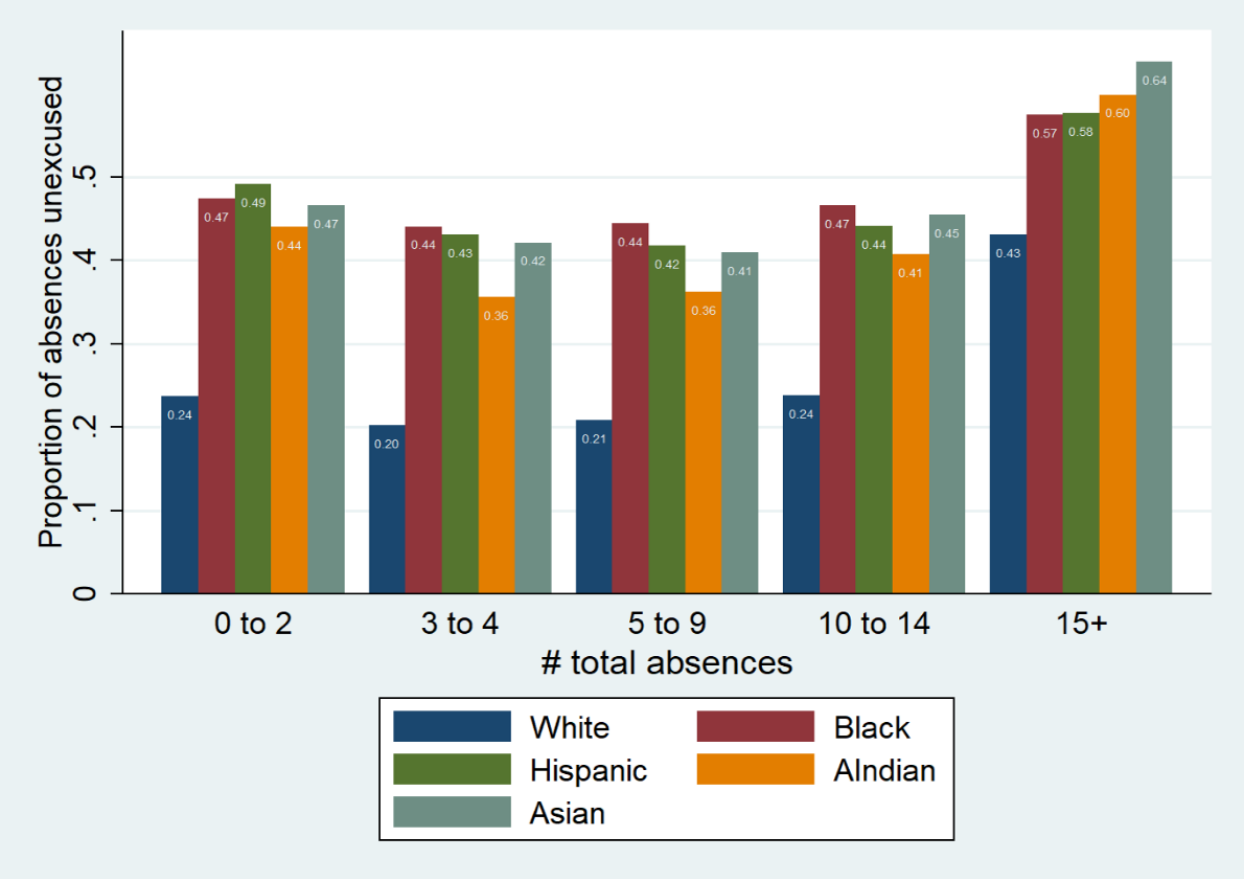

Figure 5. The proportion of absences coded as unexcused, by race and total number of absences, middle and high schools in three Ramsey County districts, 2006–2015.

Results for FTIP. As shown in Figure 6, a higher proportion of Black and American Indian/Alaskan Native students were referred to FTIP, compared to all other students, at each level of total absences, as calculated from the ADA. In contrast, there was no statistically-significant racial disparity in referral to FTIP when attendance was measured as the number of unexcused days, the actual referral criteria for FTIP, as shown in Figure 7.

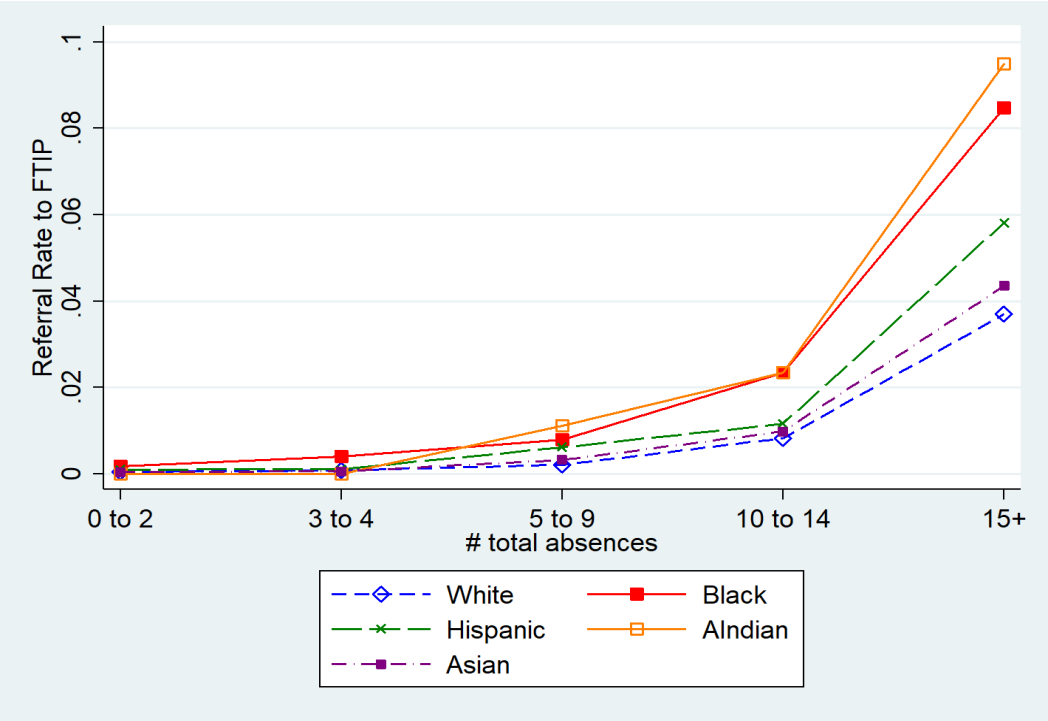

Figure 6. The proportion of Ramsey County students referred to FTIP, by racial/ethnic group and level of absenteeism (as measured by average daily attendance), 2006–2015.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

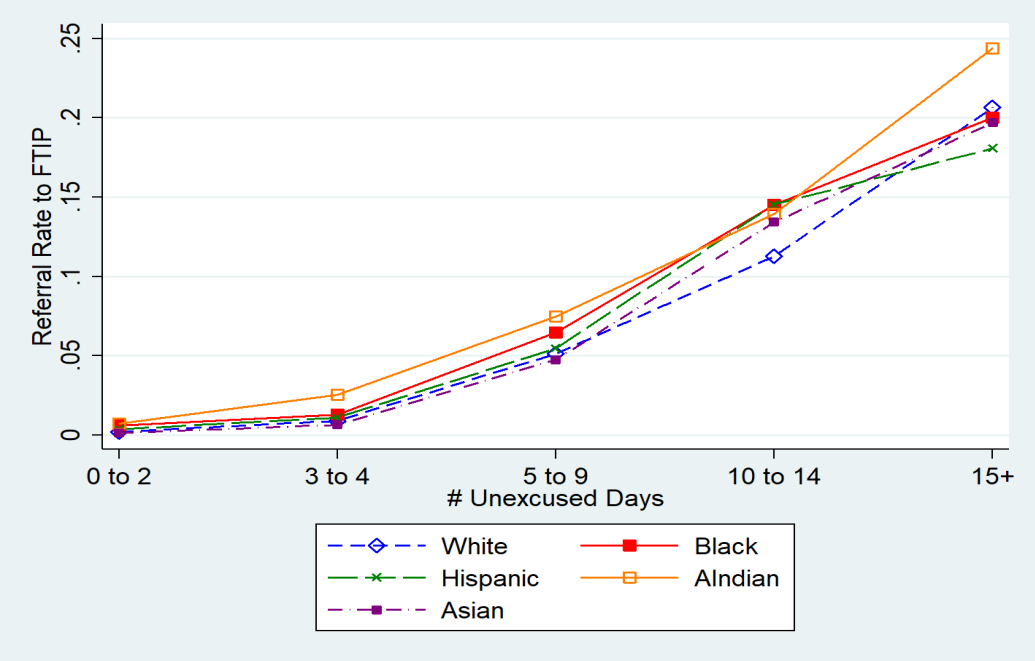

Figure 7. The proportion of Ramsey County students referred to FTIP, by racial/ethnic group and number of unexcused absences, 2006–2015

Figure 8 presents the proportion of total absences that were unexcused. Regardless of the total number of absences, White students had a smaller proportion of their absences coded as unexcused, making them less eligible to be referred to FTIP even though they had the same number of total absences as racial/ethnic minority students.

Conclusions

Using matched sampling and dynamic difference-in-differences models with population data, we found that involvement in TIP or FTIP did not improve either short-term or long-term attendance among students with five or more unexcused absences, relative to the matched comparison group from a contiguous, demographically similar county where the program was not available.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

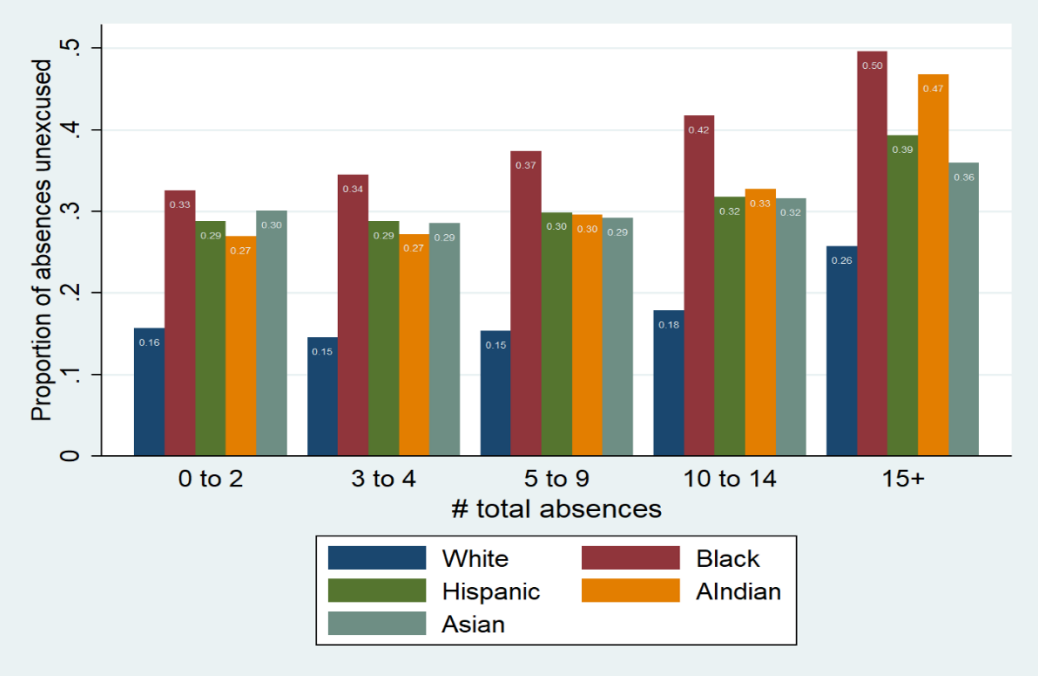

Figure 8. The proportion of absences coded as unexcused, by race and total number of absences, Ramsey County elementary students from 2006–2015

There were no racial or ethnic disparities in referrals to TIP or FTIP based on the referral criterion of five or more unexcused absences. However, in middle and high schools, Black, Hispanic, American Indian/Alaskan Native and Asian youth were all more likely to be referred to TIP than White youth because each absence of theirs was more likely to be coded as unexcused. In elementary schools, Black and American Indian/Alaskan Native children had a greater proportion of their absences coded as unexcused relative to Whites, setting them up for earlier referral to FTIP.

Study limitations. Despite the rigorous quasi-experimental design and sensitivity analyses, our study has some limitations. First, we do not have documentation of either implementation fidelity or what other strategies schools in both the intervention and comparison groups implemented to prevent chronic absenteeism or truancy. Second, it is possible that the

counterfactual is non-equivalent to the intervention group on time-varying unobserved characteristics related to the outcome. If this is the case, our results are biased, although the direction of the bias is not easy to sort out. Although we conducted sensitivity analyses to overcome the limitation of using annual attendance as a baseline measure, which could be affected by the intervention, the sensitivity analysis itself was challenged by the fact that students in the matched sample were eligible for the program but were not referred for unknown reasons. However, the consistent findings of null to negative program effects across different measures of program implementation, different measures of attendance, and multiple comparison groups, gives us confidence that the findings are not spurious, as the predicted biases using these different approaches were not all in the same direction.

Implications for policy and practice. Since the National Institute of Justice funded this evaluation study, three-step court diversion programs for chronic absenteeism have become the single-most common truancy intervention in the U.S. In the past few years, for example, Tennessee and Texas have passed state laws requiring the three-step truancy diversion model be implemented in every school district.

To our knowledge, our study is one of only two rigorous studies testing this model, and the only one we know of in the U.S. The other study, conducted in Queensland, Australia, found that a diversion strategy incorporating principles of restorative justice increased student attendance by approximately 30% in the three semesters following the intervention. One potential reason for different results is the different comparison groups. The students in the Queensland study received a minimal set of interventions outside of the diversion program. In the county where our study occurred, students in both the intervention and comparison groups likely benefitted from a wide array of attendance-focused interventions over the years. Students

in both groups in our study were likely experiencing interventions that were wide-reaching and individualized, although rarely explicit.

Perhaps the most important difference was the theoretical paradigm on which the intervention was based. Whereas the TIP and FTIP models are grounded in deterrence theory and used a social work or case management paradigm involving child protective services and linking families to other social services, court diversion models implemented by other researchers are based on principles of procedural and restorative justice.

One aspect of the TIP and FTIP diversion strategies was their relatively low cost compared to multi-tiered ecological interventions. Other low-cost strategies such as text messaging absent students and their parents have been shown to produce small improvements in attendance (in the range of a few percentage points) but there is no clear evidence that they work for students who are chronically absent. Together, these findings might point to the fact that there is no easy solution to chronic absenteeism. However, neither is it sufficient to make sweeping recommendations for multi-level strategies that involve students, schools, and communities. Needed are studies that compare the three-step model as currently implemented with a model of the same three-step structure but which has a focus on restorative and procedural justice. Yet, this work needs to be done thoughtfully and carefully, as some restorative justice programs have been found to actually increase recidivism.

For researchers, our findings present a warning to using simple pre- and post-mean comparisons of the program-referred students to test program effectiveness. Results from these study designs can be misleading due to regression to the mean. Moreover, the overall declining trend in attendance across the academic years could also lead to biased estimates of program effects in studies without a legitimate counterfactual group.