School and Crime

Todd R. Jones* and Ezra Karger†

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Abstract

Criminal activity is seasonal, peaking in the summer and declining through the winter. Researchers and policymakers have widely documented this fact going back to at least the 1800s. We provide the first evidence using crime-level microdata that crimes involving children follow a different pattern: peaking in the fall and spring and declining in the summer. We use a regression discontinuity design surrounding school start dates for over 200 large school districts in the U.S. to show that this pattern is caused by the academic calendar—children aged 10–18 are 15% more likely to be involved in crimes in the week following the beginning of the school year relative to the week before school opens. This sharp increase is explained by victimless crimes and student-on-student crimes from 7am–8pm, both within and outside of school. The increase in reported crimes is largest for drug and violent crimes, among Black individuals, and when the offender is acquainted with the victim. We use a nationally representative victimization survey to show that our estimates are not explained by reporting bias. School-adjacent crimes often represent children's first interactions with the criminal justice system, so policy responses to these cases have the potential to affect the lifelong relationship between children and the carceral state. We are currently exploring heterogeneity by city and school district in these patterns, as well as policies school districts could implement (or have implemented) to address these patterns.

*Mississippi State University and IZA

†Federal Reserve Bank of Chicago

1 Introduction

Criminal activity peaks at ages 14–15 before declining sharply through age 20 Shulman et al. (2013). This age-crime curve means that most adults who engage with the criminal justice system are first exposed to that system as children. While many papers document this relationship between age and criminal activity, there is little work understanding the causal predictors of early-age criminal offenses. In this paper, we use the exact dates of criminal offenses to show that school plays an important role in driving increases in criminal activity among children.

A large literature documents seasonal patterns in crime rates. Block (1984) documents seasonality in crime by crime type, highlighting 150 years of academic work in a similar vein dating back to Quetelet (1842). Quetelet, a Belgian social scientist, showed that crimes involving people peaked in the summer and dropped in the winter. Recent evidence from a large panel of U.S. cities finds modern-day empirical support for these patterns–with criminal activity peaking in the summer McDowall et al. (2012). We use incident-level data from the National Incident-Based Reporting System (NIBRS) to trace out seasonality in criminal activity by age, confirming the general finding that overall criminal activity peaks in the summer. But we then focus on children aged 10–18 and show that criminal activity involving children as either offenders or victims peaks during the school year and falls during the summer. In a paper that closely parallels our work, Hansen and Lang (2011) show that suicide rates jump in the months when school is in session.

To show that our results reflect a causal relationship, we use school start dates from over 200 large school districts linked to nearby law enforcement agencies and a regression discontinuity design to show that this reverse seasonality is largely caused by the start of the school year, which leads to a dramatic 15% increase in rates of reported crime. We draw on the work of Fitzpatrick et al. (2020), who use a similar method to show that the start of the school year leads to a sharp increase in reports of child maltreatment. We use

data from the National Crime Victimization Survey to show that our results are not driven by changes in reporting bias–we find the same patterns when we analyze monthly rates of victimization self-reported by a nationally-representative sample of respondents in The National Crime Victimization Survey (NCVS). This result is mirrored by prior work from Carbone-Lopez and Lauritsen (2013) who are the first we know of to descriptively document seasonality in victimization rates among children (albeit at a monthly level), also using the NCVS. We explore heterogeneity in our results, finding that the increase in crime caused by the school year is largest for Black children, crimes involving drugs or violence between children, and offenders who are acquainted with the victim.

In ongoing work for this project, we are connecting these results to school district- and city-level policies focused on reducing the criminal activity of students. We are collecting data related to city-level and school district-level disciplinary policies and enforcement mechanisms. Our goal is to explore the sources of these sharp changes in criminal activity so that we can better understand the causes and policies which may ameliorate children's interactions with the criminal justice system.

2 Empirical strategy

2.1 Data and Sample Selection

Our data source for crime is the National Incident-Based Reporting System, or NIBRS, for the years 2010-2016.[1] NIBRS is a crime reporting system utilized by many, but not all, police departments across the United States. In 2019, agencies reporting to NIBRS covered around half of the United States, documenting criminal incidents in areas with 147 million U.S. residents and 8,500 law enforcement agencies.[2] NIBRS contains information on the

[1] We download, extract, and standardize the annual extracts from https://www.icpsr.umich.edu/web/NACJD/series/128. We rely on ICPSR series 33601, 34603, 35036, 36121, 36421, 36851, and 37066 in this paper.

[2] See `https://www.fbi.gov/news/pressrel/press-releases/fbi-releases-2019-nibrs-crime-data` for more details.

exact date and hour of each incident, the type of incident, and the age, race, and sex of the victims and offenders. Each incident corresponds to a law enforcement agency (LEA), and we observe the location of each agency using the Law Enforcement Agency Identification Crosswalk, which provides us with the agency's approximate longitude and latitude.[3]

We obtain school district starting dates for the 2019–2020 school year from Pew Research.[4] These include start dates for 509 school districts across the U.S.: the ten largest school districts for each state (the exceptions being Hawaii and Washington, D.C., which have only one school district) as well as several additional large districts. Overall, roughly 36% of U.S. public elementary and secondary school students attend one of the districts in this sample. We assume that school start dates remain roughly constant over time, relying on the 2019–2020 start dates as the start dates for all years from 2010–2016.

We conduct our main analysis at the weekly level. To do so, we assign NIBRS incident date and school starting date into weeks of the year such that the first Monday of the year is in the first week and the next-occurring Sunday is the final day of the first week. Days before the first Monday are considered week 0. The second Monday of the year begins the second week, and so on. It occasionally happens that a school district includes multiple starting dates, for example if some schools open later than the rest. For these cases, we use the first starting date. We aggregate crimes to the LEA-week level. In many cases, we aggregate along additional dimensions, such as the age of the offender or the type of crime.

We link school districts to the NIBRS data using geographical information. To do this, we first assign each school district a latitude-longitude pair obtained from the National Center for Education Statistics Education Demographic and Geographic Estimates using the Public School District file from 2019–2020[5]. We assign to each district the closest LEA using Euclidean distance as determined by the sets of geographical coordinates.

[3]We use the 2012 version of the crosswalk, downloaded via ICPSR survey 35158.
[4]Pew Research collected these data for a 2019 article. See DeSilver (2019).
[5]see `https://nces.ed.gov/programs/edge/Geographic/SchoolLocations`.

Multiple school districts are sometimes mapped to one LEA. This can happen if there are multiple large school districts in a city served by only one agency. In these cases, we keep only law enforcement agencies that map to school districts that all have start dates during the same week.

Because the coverage of NIBRS is not comprehensive, some school districts are clearly not assigned to the correct LEA. We drop districts in states without any LEAs reporting to NIBRS. We further limit based on distance to LEA, requiring that the distance be less than roughly 30 miles (0.5 coordinate points), in order to exclude likely non-matches. Our final sample contains 231 school districts and 176 LEAs.

For some results, we use the newer year(s) of NIBRS data from Kaplan (2021), combined with data from publicholidays.com, which contains a more comprehensive collection of school start dates during the 2019 and later school years, as well as dates for other school breaks, such as the end of school, fall break, Christmas break, and spring break. We are currently working to replicate our main results in this panel.

In addition the NIBRS data, we also analyze data from the 1992-2020 National Crime Victimization Survey (NCVS), a nationally representative survey measuring the number and types of victims of crimes in the U.S. By comparing seasonality for children's criminal behavior in NIBRS and the NCVS, we can explore whether the patterns we focus on are explained by changes in the reporting of crimes surrounding the school year. We find no evidence that our results are explained by reporting bias.

2.2 Specification

Our main results rely on two types of analyses–first, because the results we present below are visually sharp, we focus on raw counts of crimes committed by offenders in different demographic groups over different time periods. These plots of raw outcomes provide convincing evidence of the empirical patterns we study in this paper.

Second, to precisely estimate our statistical claims, we rely on a regression discontinu-

ity design to estimate the effect of children attending school on crime. We present plots in the style of a regression discontinuity design where we stack the set of crimes in even-time surrounding the week when schools first began (or finished) each calendar years. These plots show even sharper empirical results, but are largely consistent with the raw data. In the future we plan to present estimates derived from a standard regression discontinuity design with the inclusion of covariates and a focus on algorithmically-produced optimal bandwidth procedures.

3 Results

We begin by presenting several graphs. First, we plot the number of overall crimes by week in Figure 1. Panels A and B are limited to the sample of incidents where at least one of the first three offenders for each incident is 10-18 years old.[6] Panels C and D (E and F) are similarly limited to 19-24 (25-30) year-olds. Panels A, C, and E show the full sample, while the remaining panels (B, D, and F) limit to agencies belonging to the sample described above of law enforcement agencies we match to school districts (which we call the RD sample). Patterns look similar across the full sample and the RD sample for a given age group. Across all figures, we see an increase in crime between the start of the year and roughly week 20, and a decrease in crime from week 40 to the end of the year. However, patterns diverge between roughly weeks 20 and 40 for 10-18 year-olds versus the other age groups. In particular, we see a dramatic decrease in crime for 10-18 year-olds beginning around week 20 as well as a jump in crime around week 40. This suggests that school, which typically recesses during the summer, may play a role.

We proceed to consider patterns in crime by week relative to estimated school district start date in Figure 2. These figures are limited to the RD sample, and each panel corresponds to a different age group. Patterns for 19-24 and 25-30 year-olds are similar to

[6]NIBRS reports multiple offenders for a given incident, when that distinction is relevant.

each other, while the pattern for 10-18 year-olds looks dramatically different. We observe a large increase in crime for 10-18 year-olds beginning around the school district's start date. This is the case despite the fact that our measure of school start date is an estimate. We observe an even larger decrease in crime between 9 and 12 weeks before the school start date.

We next use a different source for school calendar data (publicholidays.com) to explore additional breaks in schools do to holidays. Figure 3 plots crimes for ages 10-18 relative to the given break. We see the same sharp increase for the start of school. We also see a sharp decline when school ends. This furthers our hypothesis that school causes an increase in reported crime. We further examine additional school breaks and find sharp drops during fall break, Thanksgiving, and Christmas, in contrast to midwinter and Easter breaks.

Below, we focus on school start date to further understand this pattern. We then produce graphs of crime by week relative to estimated school district start date, but present results separately by age. Figure 4 shows that the pattern exists for ages 10-16. Our empirical finding of a stark positive relationship between the school start date and criminal activity is weaker for age 17 and has effectively disappeared by age 18, when many students are no longer enrolled in high school.

We next consider the hour of the day the incident occurred. Figure 5 plots the raw data for ages 17 and younger (similar to Panel A of Figure 1), and splits the data into the 24 hours of the day. The number of incidents between 1-5:59am peaks in the summer, consistent with criminal behavior involving only adults, but then the pattern flips starting at 7am. The summer dip continues until roughly 8pm at which time it reverses. This is consistent with the increase in crime happening during and after the typical school day.

In Figure 6, we recreate the plots of Figure 2, but split the sample by whether the crime occurred out-of-school or in-school. The first thing to note is that crimes committed in school are much less common. Unsurprisingly, for 19-24 and 25-30 year-olds, who are less likely to be enrolled in schools, they are multiple orders of magnitudes less common.

Crimes in school are much more common among 10-18 year-olds, who are typically enrolled in school during the school year. With that being said, crimes committed in school comprise roughly 10% of total crimes among this age group, suggesting that these are not driving the results. For this group, we see roughly similar patterns in crime for students when they are both in school and out of school. While very uncommon, we see a summer dip in crime for in school crimes for ages 19-24 and 25-30.

In Figure 7, we again stack the LEAs in event-time relative to the find the pattern and plot the total number of criminal incidents in these LEAs by week of the year. We find the same pattern both in-school and out-of-school, implying that these trends are not solely driven by publication bias.

We proceed to consider victim age in Figure 8. In particular, we replicate Figure 2, but limit the sample by age of offender and age of victim. We focus on two age ranges: a) 10-18 years old; and b) 19 years and older. The first observation is that it is much more common for offenders and victims to be the same age (Panels A and D) than different ages (Panels B and C). We see a very similar pattern for child offenders and victims in Panel A as in the RD for this age group (Figure 2 Panel A). We do not see this when the offenders and victim ages are mismatched (Panels B and C).

We further probe offender and victim age by presenting offender and victim age pairs for offenders aged 12-14 in Figure 9 and offenders aged 15-17 in Figure 10. Each column corresponds to a given offender age. Each row corresponds to victim ages that are a given age range away from offender age, where the first row is for victims three years younger than the offender and the final row is for victims that are two years older than the offender age. With some exceptions, we find that the lower-crime-in-the-summer pattern holds strongest for offenders who are between one years older and one year younger than their victims. For some ages, we also find this for offenders who are two years older. It is likely that our results are at least in part explained by students who are in the same grade as each other, or at least in the same school. While we do not have data on which grades

tend to be in which school buildings across our districts, we expect that results would be strongest for students who are in the same physical school as each other, and we plan to investigate this going forward given prior evidence on the importance of peers and network effects in criminal behavior (for example, Billings et al. (2019).

In Figure 11, we show that these patterns are explained by several offense categories– we classify UCR codes into eight groups of crimes, and we show that the beginning of the school year causes a sharp uptick in drug crimes and violent crimes (including assaults and robberies), as well as less serious non-violent crimes like intimidation. We do not see this pattern for killings, theft, and property damage or vandalism. Figure 12 splits the sample by the relationship for the first offender to the first victim. The general pattern appears for acquaintances and friends and much less so for family members and romantic relationships. In Figures 13 and 14 we examine these trends separately for men and women, as well as for people split by race. We see the same general patterns across sex-based and race-based groups. Female offenders experience a much larger percent increase in crime surrounding the school year relative to male offenders. The largest percent increase in crime caused by the beginning of the school year comes from Black offenders.

In Figure 15, we show that the previous results (based on NIBRS data) are not solely explained by changes in reporting patterns caused by increased scrutiny on crimes committed during the school year. From August to September, when most schools begin their school year, we see a large spike in reports of victimization among 10–18 year olds. We see the opposite pattern in criminal victimization for 19–30 year olds (in panels B and C). This is consistent with the literature on the seasonality of crime.

We now consider the phenomenon of school districts that have their own LEA. As a case study, we consider the city of Austin, Texas and the Austin Independent School District (ISD). In Figure 16 Panel A, we plot the crimes by week for ages 17 and younger for the Austin ISD We see a sharp drop in crime during the summer weeks, with crimes

during these weeks being zero or close to it. Around week 35, there is a sharp uptick in crime. This is in contrast to the Austin police department (Panel B), which has a relatively uniform rate of crime over the year (though there is a dip at the end of the summer). In Panel C, we show crime for a broader sample of LEAs that include the word ”school”, ”schools”, or ”i.s.d.” in their title. We see the same pattern as in Panel A.

4 Conclusion

In this paper, we document a sharp increase in criminal activity of children as the school year starts. We use a regression discontinuity design to show that this pattern is the result of a causal relationship–as students begin to attend school in the end of summer and early fall, crime rates among children spike. These patterns are not explained by changes in crime reporting patterns during the school year and they are strongest for Black defendants. In ongoing work, we hope to further explore the causes of these patterns, and the factors that may ameliorate these patterns.

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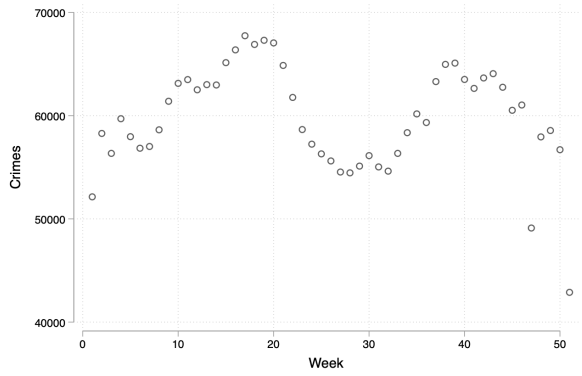
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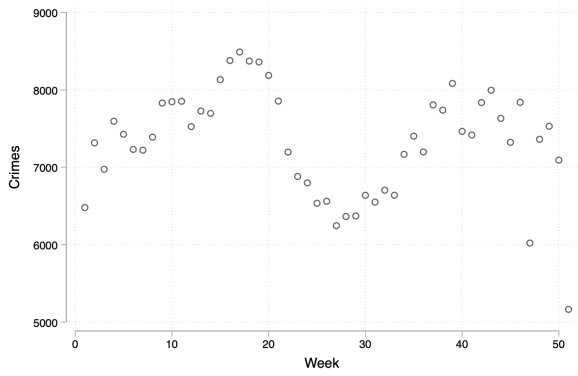
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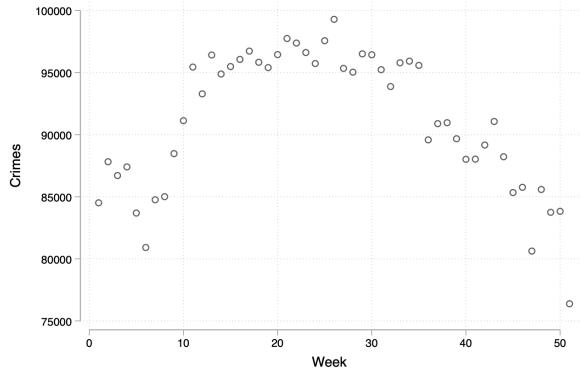
Figure 1: Crimes by Week



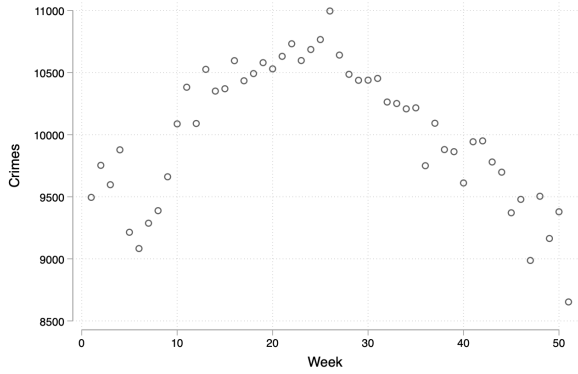
(a) Full Sample; 10-18



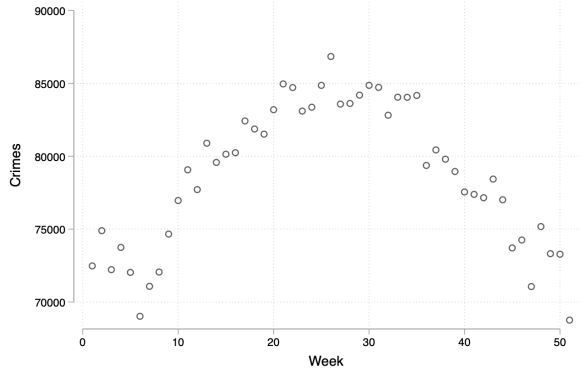
(b) RD Sample; 10-18



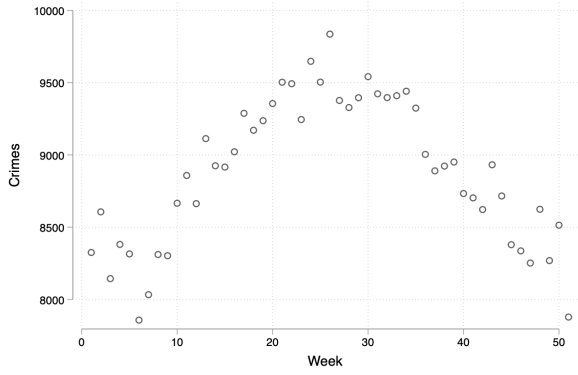
(c) Full Sample; 19-24



(d) RD Sample; 19-24



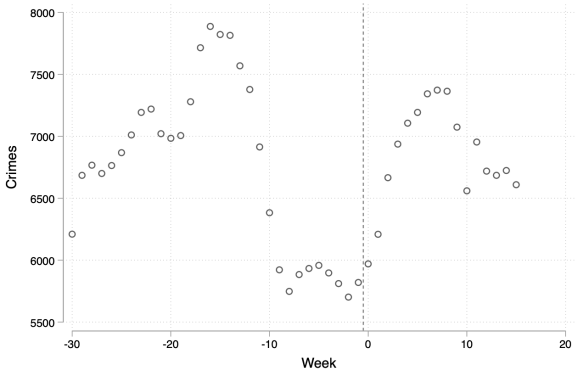
(e) Full Sample; 25-30



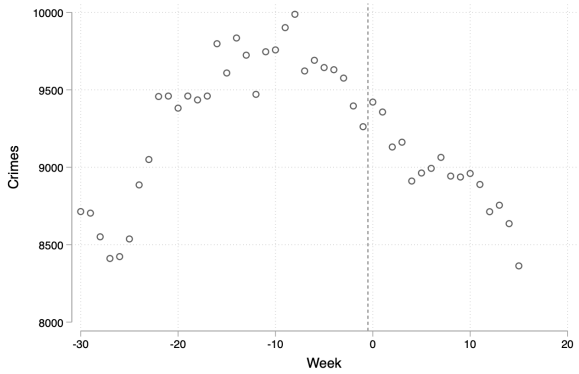
(f) RD Sample; 25-30

Notes: These figures show the number of crimes by week for the entire sample (Panels A, C, and E) and the regression discontinuity sample (Panels B, D, and F). Panels A and B are limited to any of the first three offenders being 10-18 years old; Panels C and D are limited to 19-24 years old; and Panels E and F are limited to 25-30 years old. Week 1 starts on the first Monday of the year. Weeks 0, 52, and 53 are excluded.

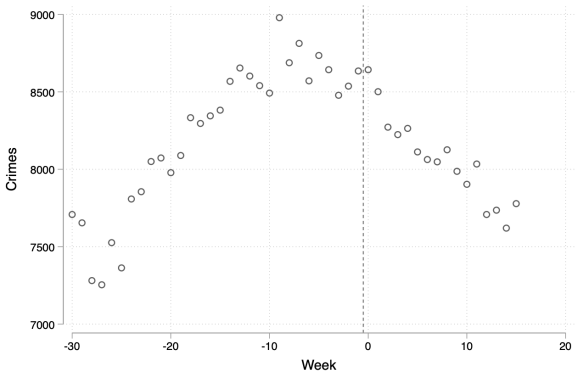
Figure 2: Crimes by Week Relative to School District Start Date



(a) 10-18



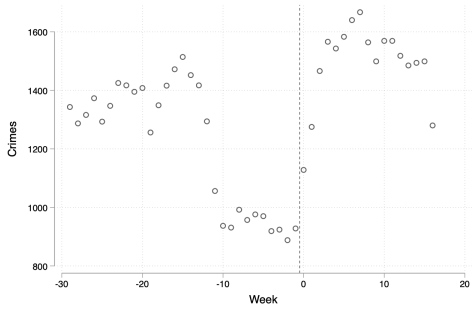
(b) 19-24



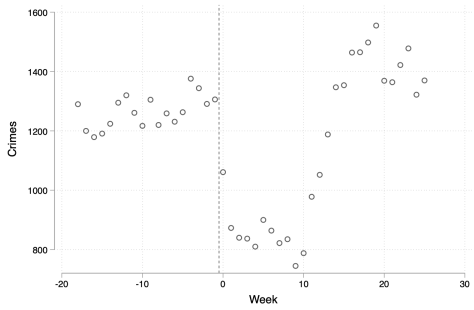
(c) 25-30

Notes: These figures show the number of crimes by week relative to school district start date. Panel A is limited to any of the first three offenders being 10-18 years old; Panels B is limited to 19-24 years old; and Panel C is limited to 25-30 years old. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

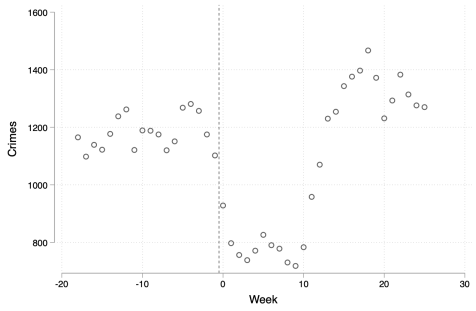
Figure 3: Crimes by Week Relative to School District Start Date, by Type of Break, 10-18 Years



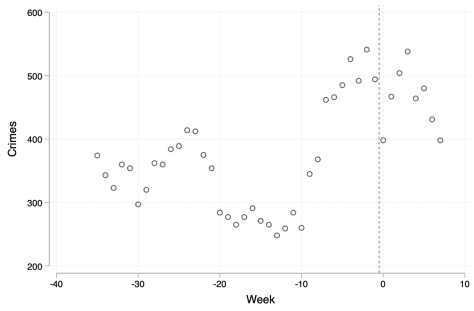
(a) Start of School



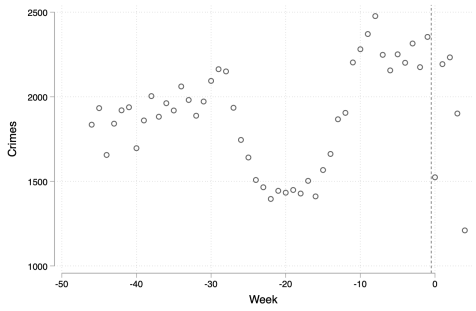
(b) Last Day of School



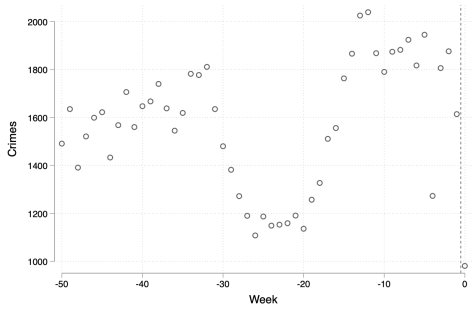
(c) Summer Break



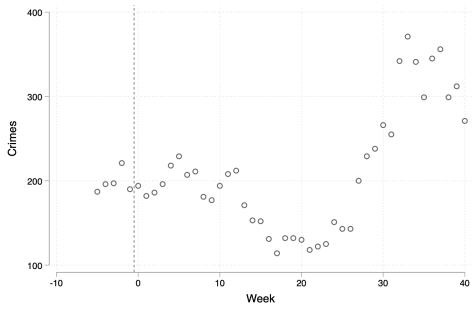
(d) Fall Break



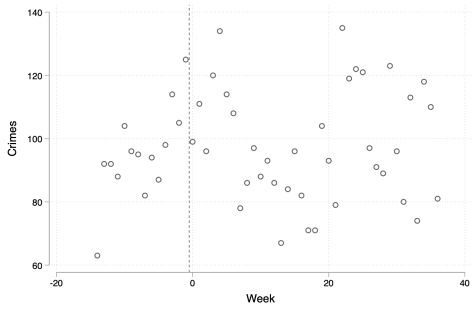
(e) Thanksgiving



(f) Christmas



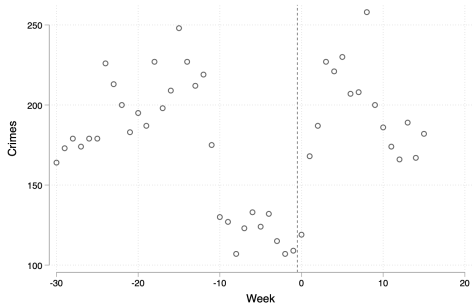
(g) Midwinter



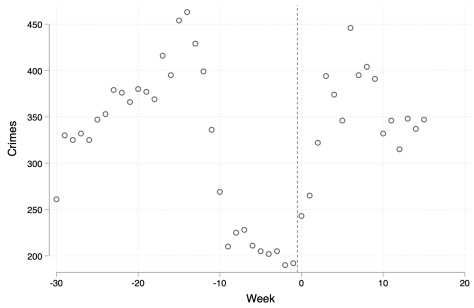
(h) Easter

Notes: These figures show the number of crimes by week relative to a specified holiday for 10-18 year old offenders. The 2019 Kaplan sample is used. Week 0 is the estimated school district starting date. The crime data source is 2019 NIBRS matched to school break data. We include only a balanced panel of weeks. A line is drawn at time -0.5.

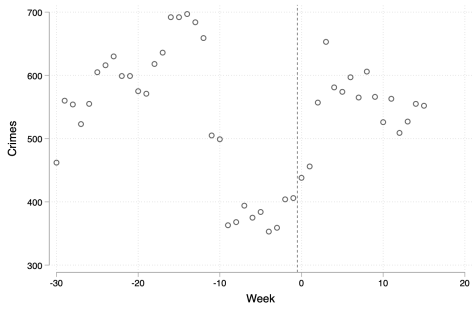
Figure 4: Crimes by Week Relative to School District Start Date, by Age



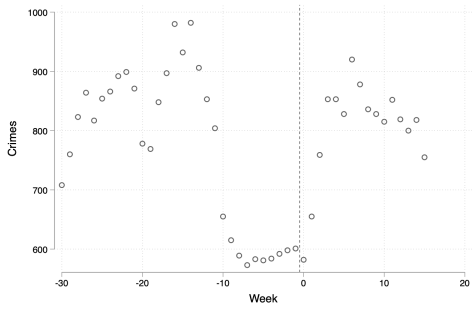
(a) 11



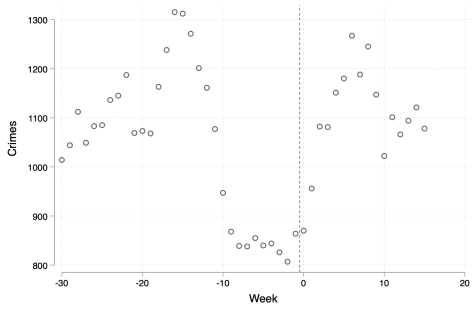
(b) 12



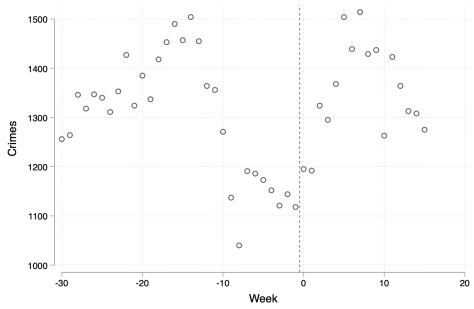
(c) 13



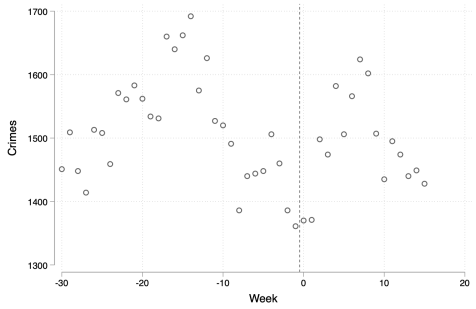
(d) 14



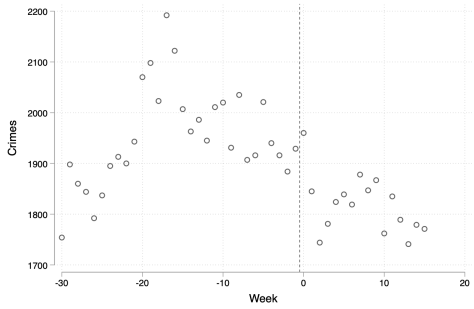
(e) 15



(f) 16



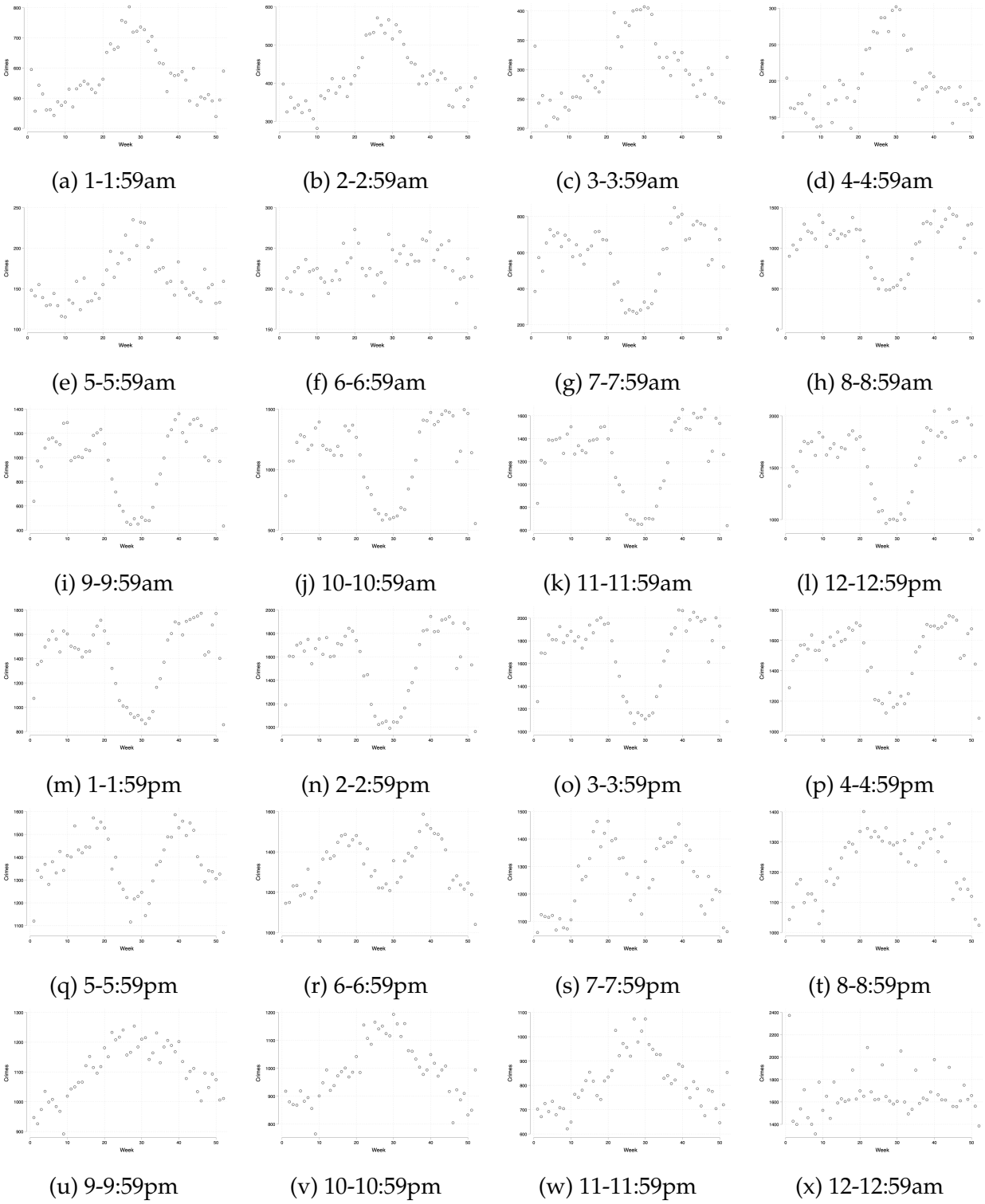
(g) 17



(h) 18

Notes: These figures show the number of crimes by week relative to school district start date. Each panel corresponds to a different age of (one of the first three) offenders. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

Figure 5: Crimes by Week, Age 10-18, by Hour of the Day



(a) 1-1:59am (b) 2-2:59am (c) 3-3:59am (d) 4-4:59am

(e) 5-5:59am (f) 6-6:59am (g) 7-7:59am (h) 8-8:59am

(i) 9-9:59am (j) 10-10:59am (k) 11-11:59am (l) 12-12:59pm

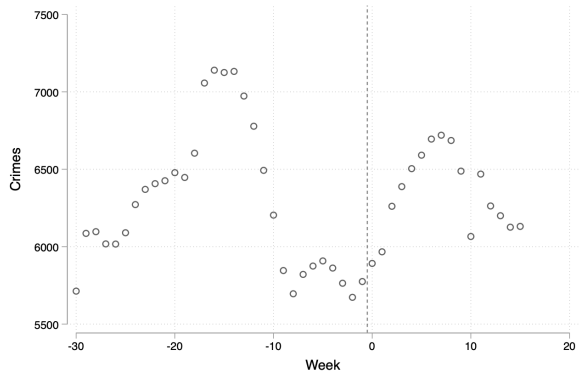
(m) 1-1:59pm (n) 2-2:59pm (o) 3-3:59pm (p) 4-4:59pm

(q) 5-5:59pm (r) 6-6:59pm (s) 7-7:59pm (t) 8-8:59pm

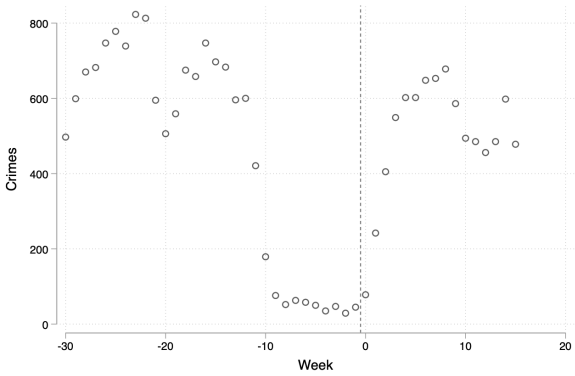
(u) 9-9:59pm (v) 10-10:59pm (w) 11-11:59pm (x) 12-12:59am

Notes: These figures show the number of crimes by week for ages 17 and younger. Each panel corresponds to a different hour of the day. The data source is 2017-2019 NIBRS.

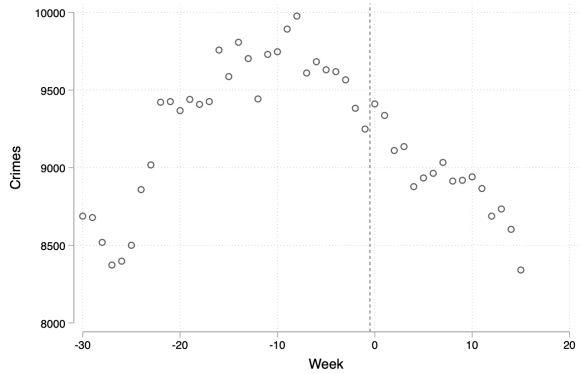
Figure 6: Crimes by Week Relative to School District Start Date, by Crime Location



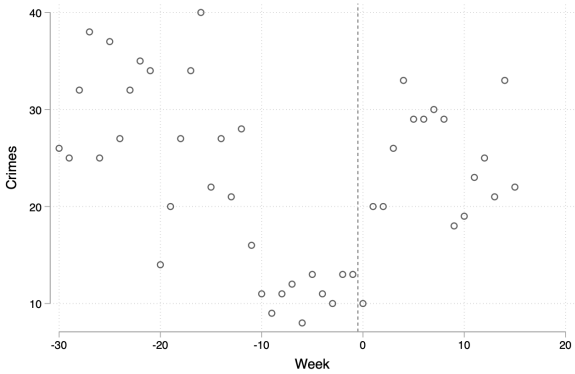
(a) Not in School; 10-18



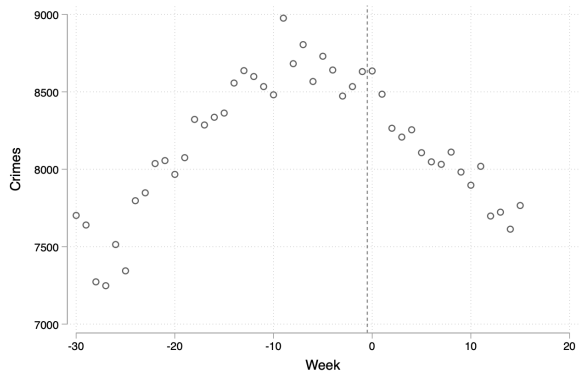
(b) In School; 10-18



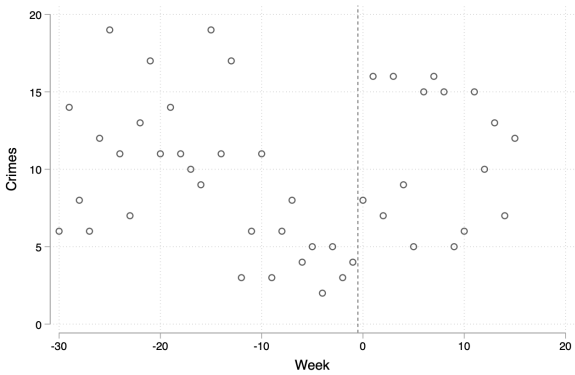
(c) Not in School; 19-24



(d) In School; 19-24



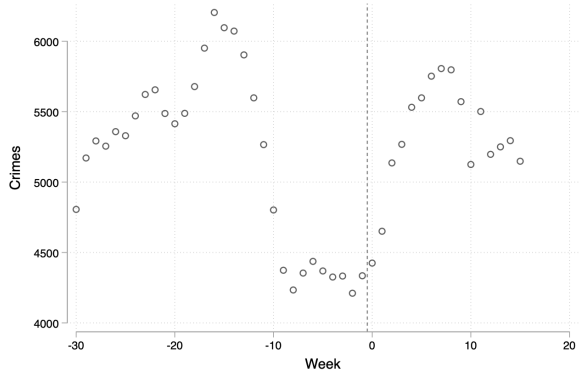
(e) Not in School; 25-30



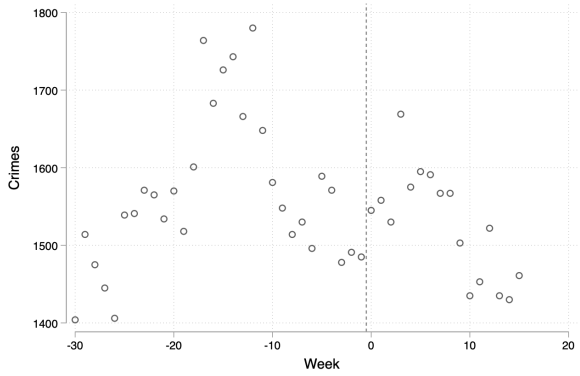
(f) In School; 25-30

Notes: These figures show the number of crimes by week relative to school district start date for crimes not occurring in schools (Panels A, C, and E) and for crimes occurring in schools (Panels B, D, and E). Panels A and B are limited to any of the first three offenders being 10-18 years old; Panels C and D are limited to 19-24 years old; and Panels E and F are limited to 25-30 years old. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

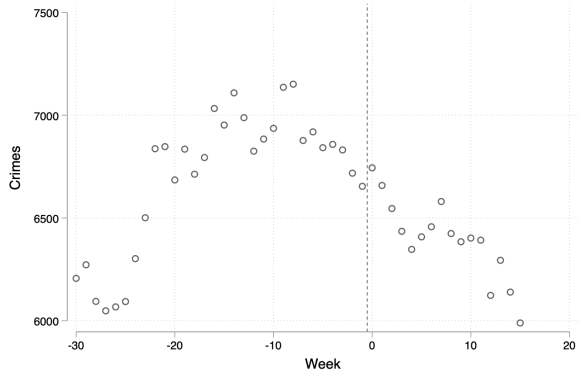
Figure 7: Crimes by Week Relative to School District Start Date, by Weekdays vs. Weekend



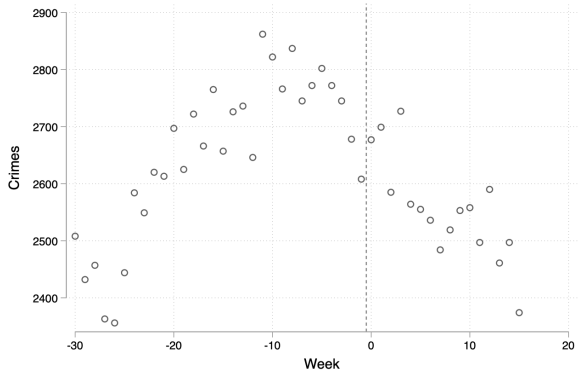
(a) Weekdays; 10-18



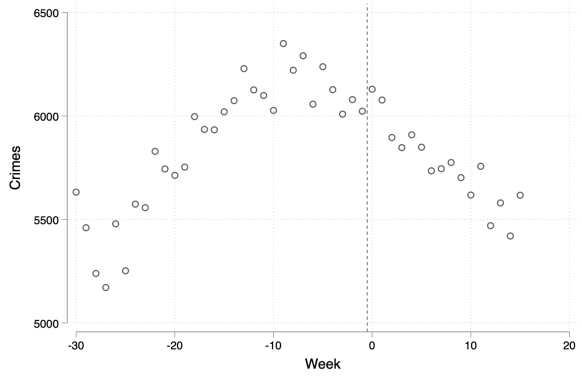
(b) Weekend; 10-18



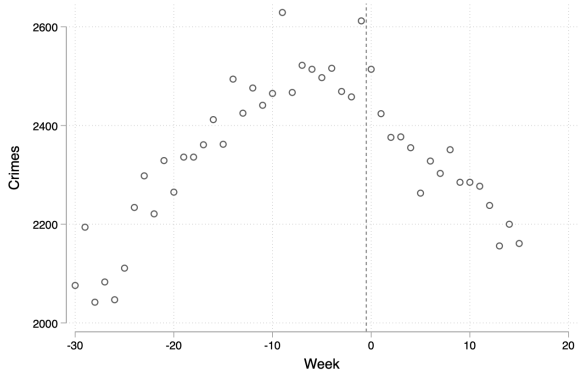
(c) Weekdays; 19-24



(d) Weekend; 19-24



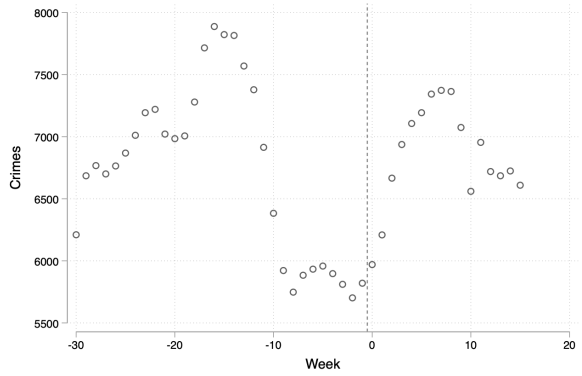
(e) Weekdays; 25-30



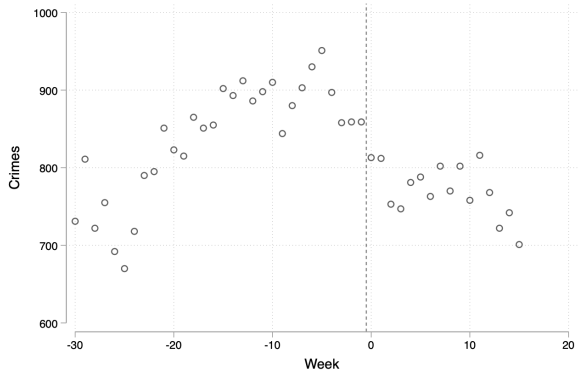
(f) Weekend; 25-30

Notes: These figures show the number of crimes by week relative to school district start date for crimes not occurring on weekdays (Monday through Friday; Panels A, C, and E) and for crimes occurring on weekends (Saturday and Sunday; Panels B, D, and E). Panels A and B are limited to any of the first three offenders being 10-18 years old; Panels C and D are limited to 19-24 years old; and Panels E and F are limited to 25-30 years old. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

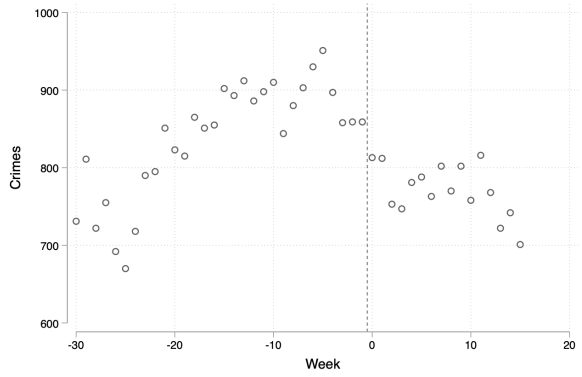
Figure 8: Crimes by Week Relative to School District Start Date, by Offender and Victim Age Categories



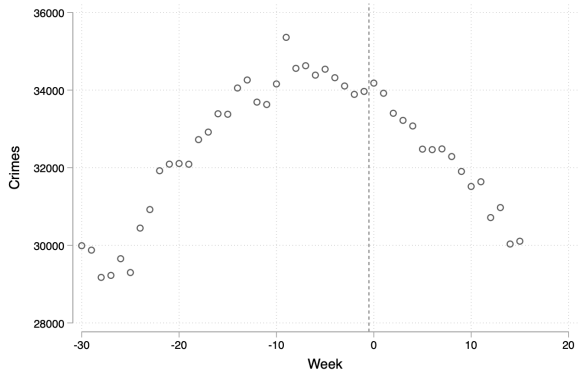
(a) 10-18 Offender; 10-18 Victim



(b) 10-18 Offender; 19+ Victim



(c) 19+ Offender; 10-18 Victim

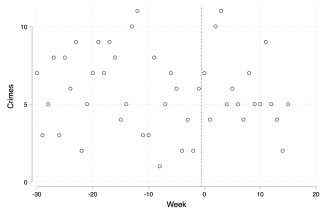


(d) 19+ Offender; 19+ Victim

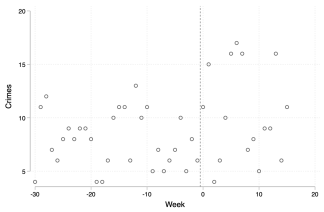
Notes: These figures show the number of crimes by week relative to school district start date for the sample limited to 10-18 year old offender and 10-18 year old victim (Panel A); 10-18 year old offender and 19+ year old victim (Panel B); 19+ year old offender and 10-18 year old victim (Panel C); and 19+ year old offender and 19+ year old victim (Panel D). Offender and victims are defined as any of the first three offenders or victims being in the given age range. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

Figure 9: Crimes by Week, by Age of Offender and Age of Victim, Offenders Aged 12-14

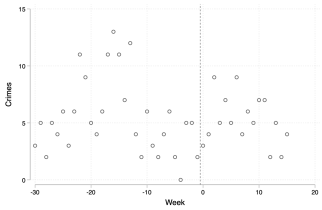
(a) -



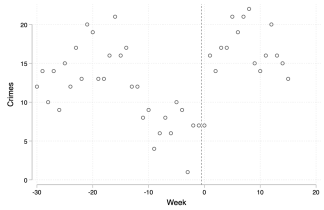
(b) O:13, V:10



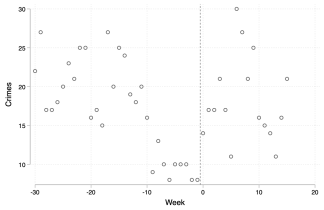
(c) O:14, V:11



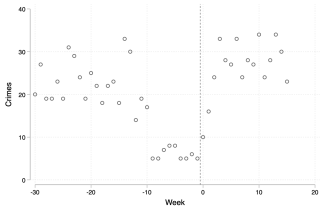
(d) O:12, V:10



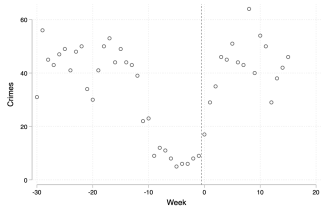
(e) O:13, V:11



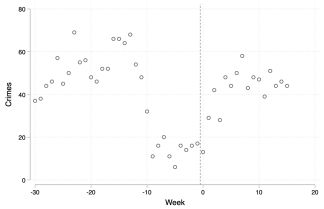
(f) O:14, V:12



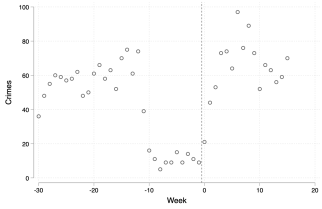
(g) O:12, V:11



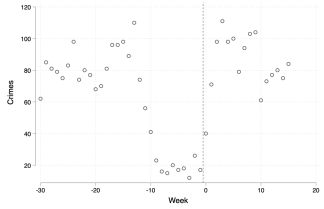
(h) O:13, V:12



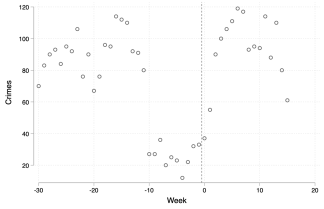
(i) O:14, V:13



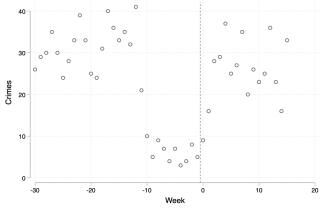
(j) O:12, V:12



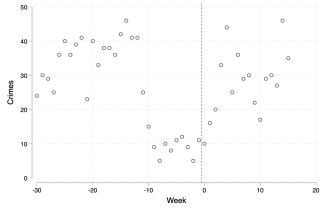
(k) O:13, V:13



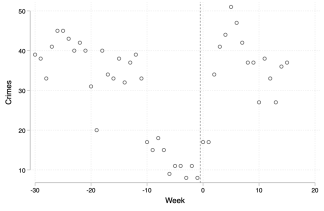
(l) O:14, V:14



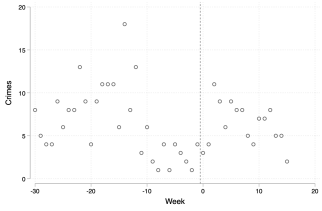
(m) O:12, V:13



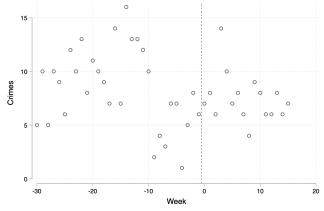
(n) O:13, V:14



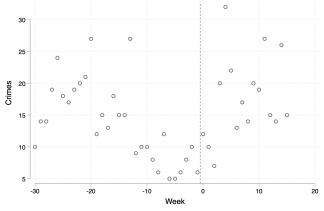
(o) O:14, V:15



(p) O:12, V:14



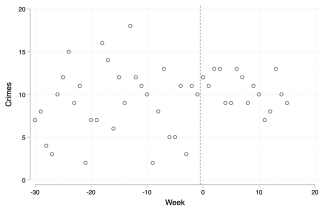
(q) O:13, V:15



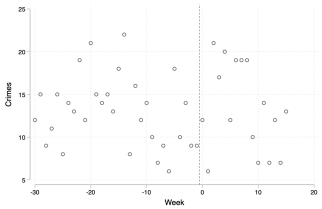
(r) O:14, V:16

Notes: These figures show the number of crimes by week for age of first offender (O) and age of first victim (V) pairs. For example, "O: 13, V: 12" means that the offender was 13 and the victim was 12. Offender ages are 12, 13, and 14.

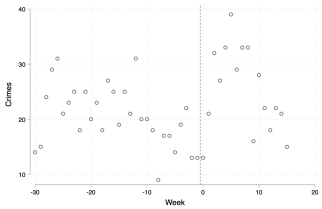
Figure 10: Crimes by Week, by Age of Offender and Age of Victim, Offenders Aged 15-17



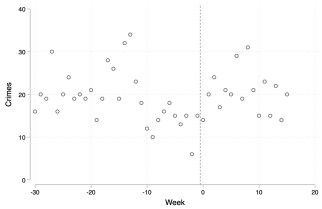
(a) O:15, V:12



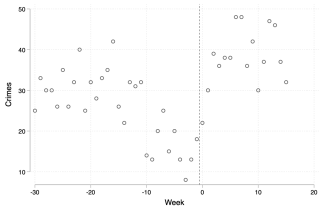
(b) O:16, V:13



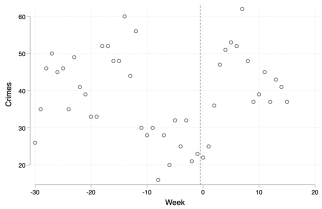
(c) O:17, V:14



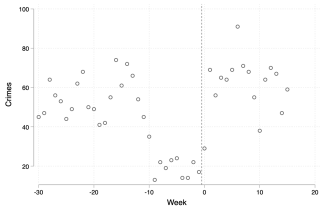
(d) O:15, V:13



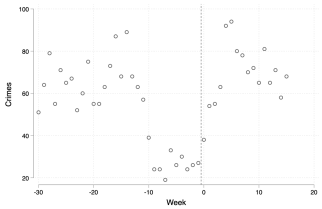
(e) O:16, V:14



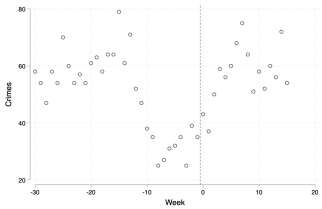
(f) O:17, V:15



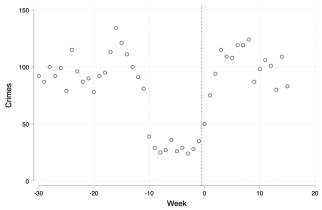
(g) O:15, V:14



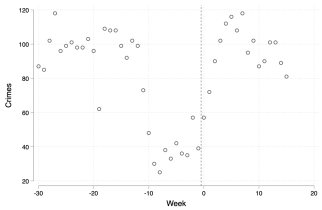
(h) O:16, V:15



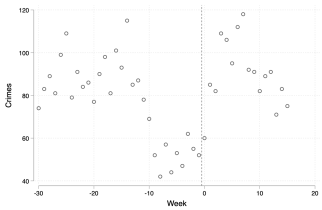
(i) O:17, V:16



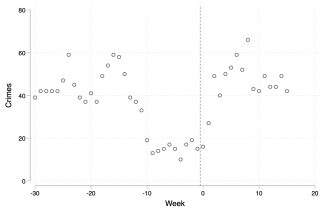
(j) O:15, V:15



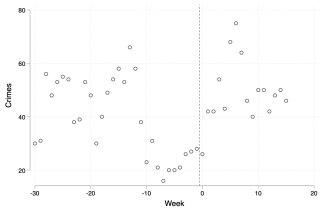
(k) O:16, V:16



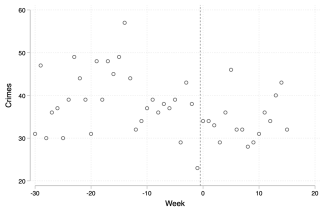
(l) O:17, V:17



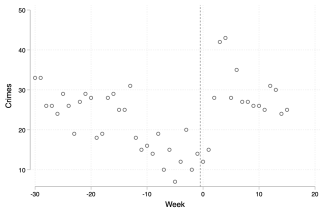
(m) O:15, V:16



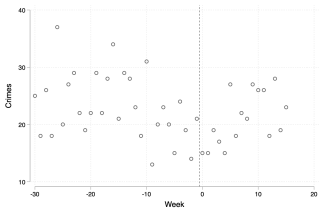
(n) O:16, V:17



(o) O:17, V:18



(p) O:15, V:17

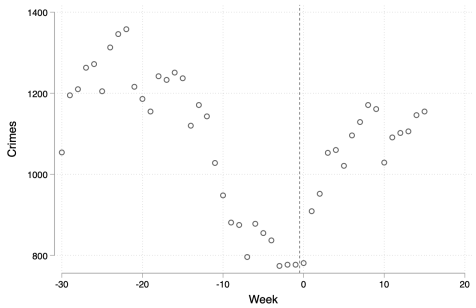


(q) O:16, V:18

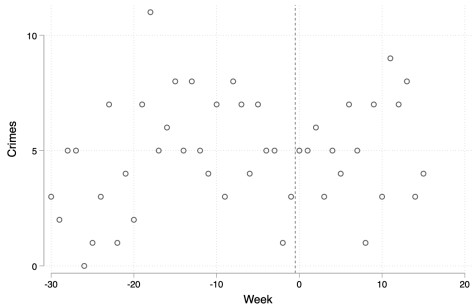
(r) -

Notes: These figures show the number of crimes by week for age of first offender (O) and age of first victim (V) pairs. For example, "O: 15, V: 14" means that the offender was 15 and the victim was 14. Offender ages are 15, 16, and 17. Each panel corresponds to a different hour of the day. The data source is 2017-2019 NIBRS.

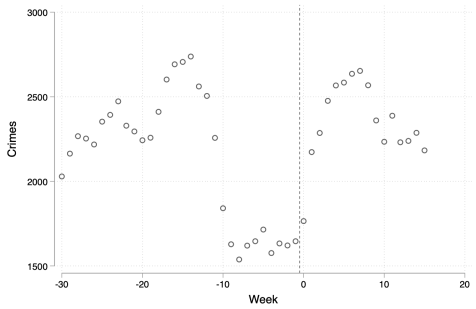
Figure 11: Crimes by Week Relative to School District Start Date, Age 10-18, by Type of Offense



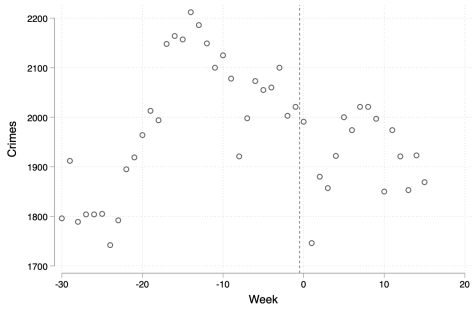
(a) Drug



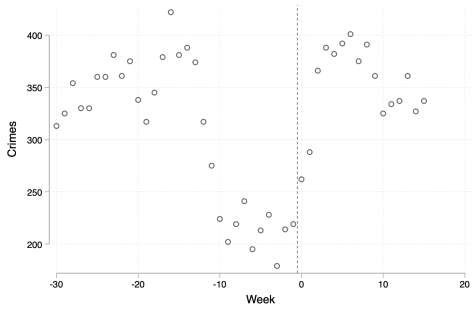
(b) Killing



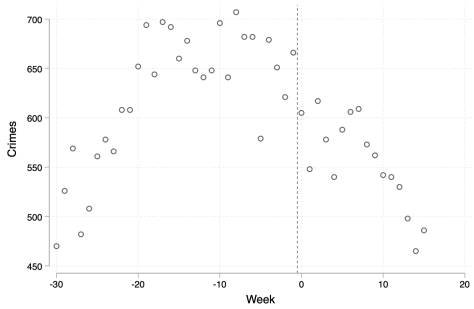
(c) Other Violent



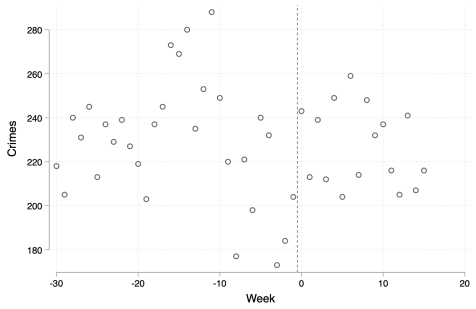
(d) Theft



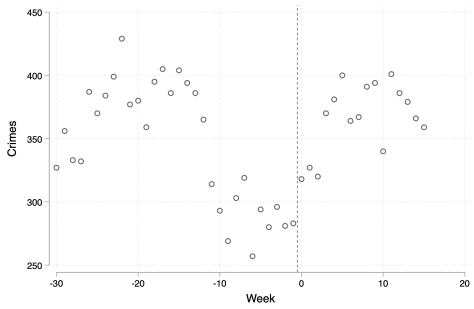
(e) Intimidation



(f) Property Damage/Vandalism



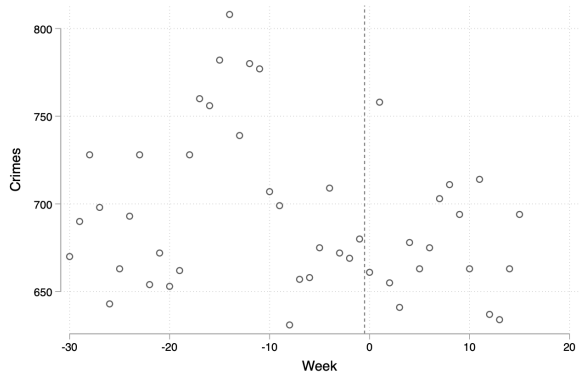
(g) Sexual Assault



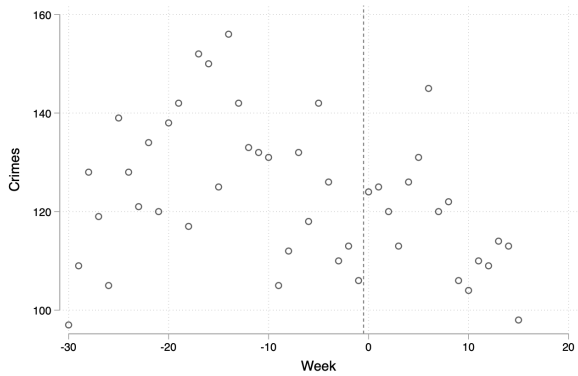
(h) Other Non-violent

Notes: These figures show the number of crimes by week relative to school district start date for 10-18 years olds (defined as one of the first three offenders being in this age range), where each panel corresponds to a different type of crime. XXX [Details about which groups are in which category.] Unknown crime types are omitted. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

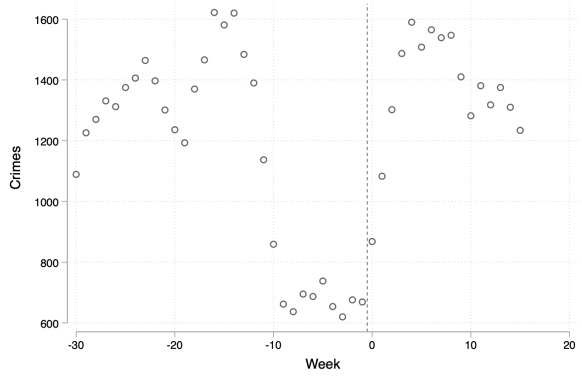
Figure 12: Crimes by Week Relative to School District Start Date, Age 10-18, by Relationship of Offender to Victim



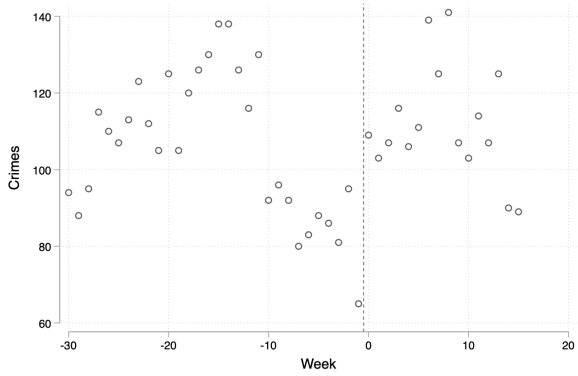
(a) Family



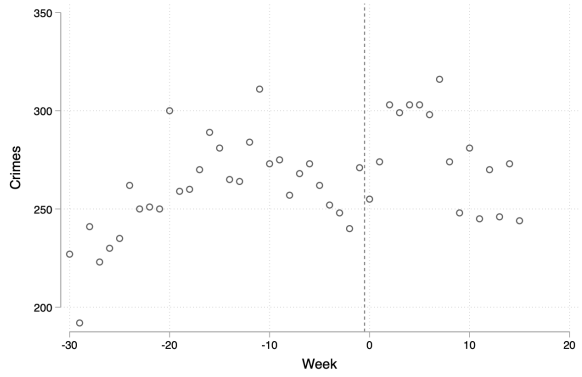
(b) Romantic



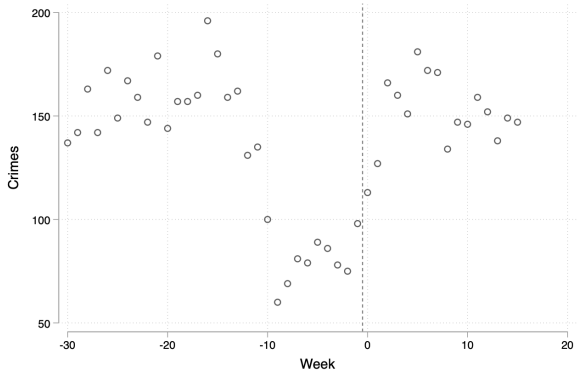
(c) Acquaintance



(d) Friend



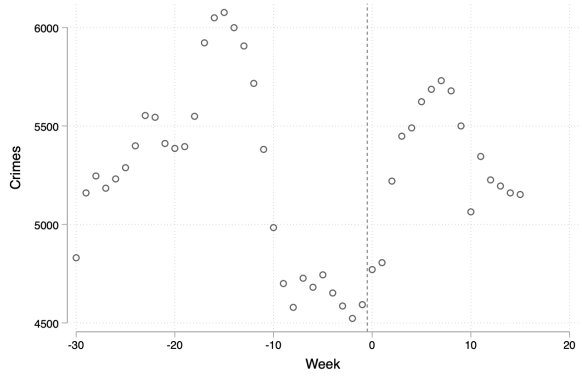
(e) Stranger



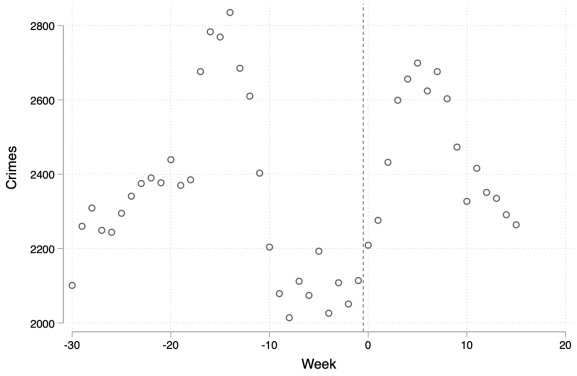
(f) Other

Notes: These figures show the number of crimes by week relative to school district start date for 10-18 years olds (defined as one of the first three offenders being in this age range), where each panel corresponds to the relationship of the first offender to the first victim. Family includes spouse, common-law spouse, parent, sibling, child, grandparent, grandchild, in-law, stepparent, stepchild, stepsibling, and other family member. Romantic includes boyfriend/girlfriend, and homosexual relationship. Acquaintance includes acquaintance, neighbor, babysittee (the baby), child of boyfriend/girlfriend, employee, employer, and otherwise known. Friend includes friend. Stranger includes stranger. Other includes "victim was offender" and ex-spouse. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

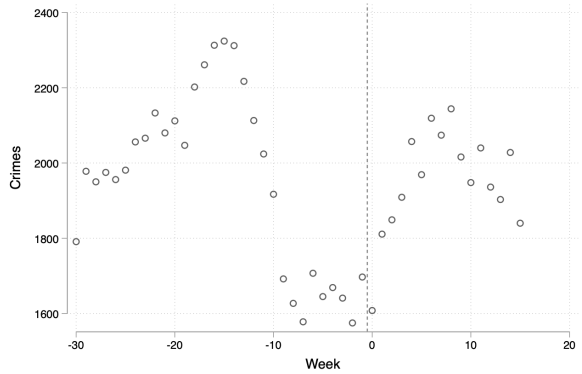
Figure 13: Crimes by Week Relative to School District Start Date, Age 10-18, by Male/Female and Offender/Victim



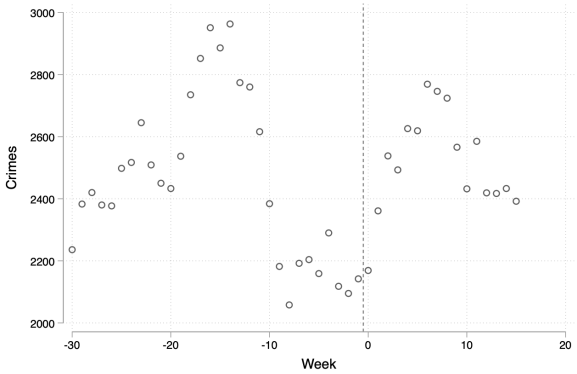
(a) Male, Offender



(b) Male, Victim



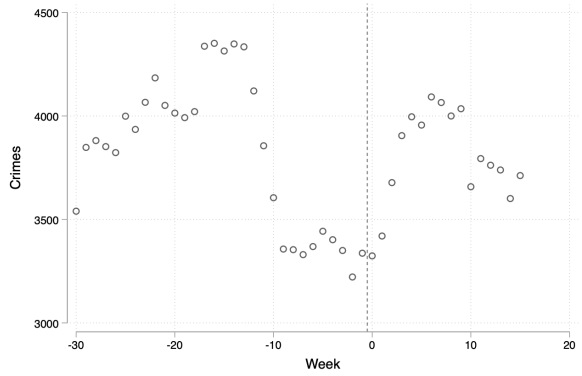
(c) Female, Offender



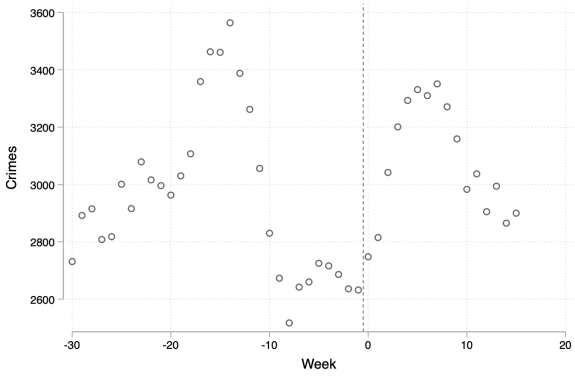
(d) Female, Victim

Notes: These figures show the number of crimes by week relative to school district start date for 10-18 years olds (defined as one of the first three offenders being in this age range), where each panel corresponds to a male/female+offender/victim pair. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

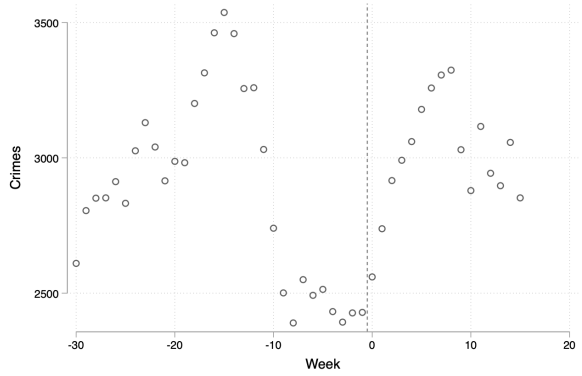
Figure 14: Crimes by Week Relative to School District Start Date, Age 10-18, by Black/White/Other and Offender/Victim



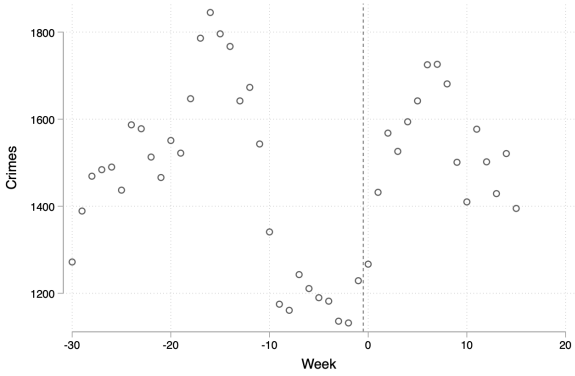
(a) White, Offender



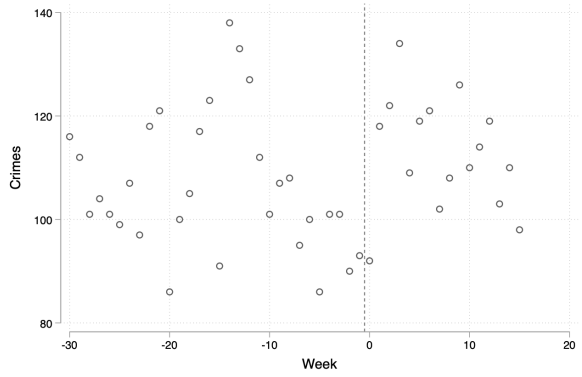
(b) White, Victim



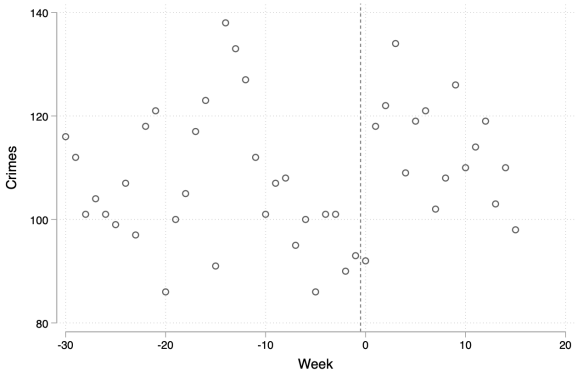
(c) Black, Offender



(d) Black, Victim



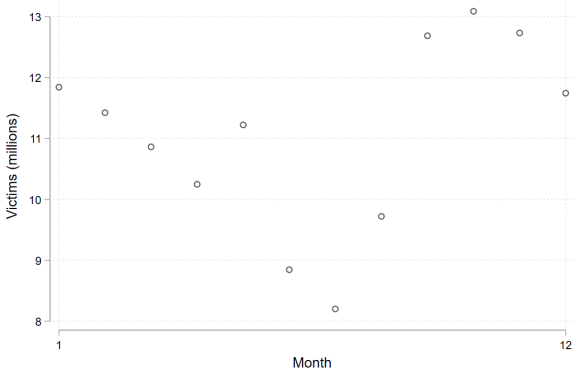
(e) Other Race, Offender



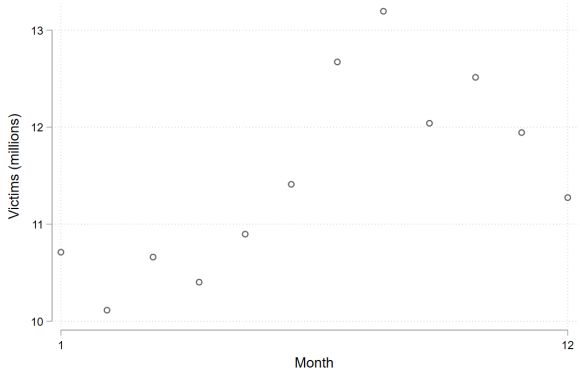
(f) Other Race, Victim

Notes: These figures show the number of crimes by week relative to school district start date for 10-18 years olds (defined as one of the first three offenders being in this age range), where each panel corresponds to a Black/White/Other+offender/victim pair. Other includes American Indian, Alaskan Native, Asian, and Pacific Islander. Week 0 is the estimated school district starting date. Weeks 30 weeks before 15 weeks after week 0 are excluded. A line is drawn at time -0.5.

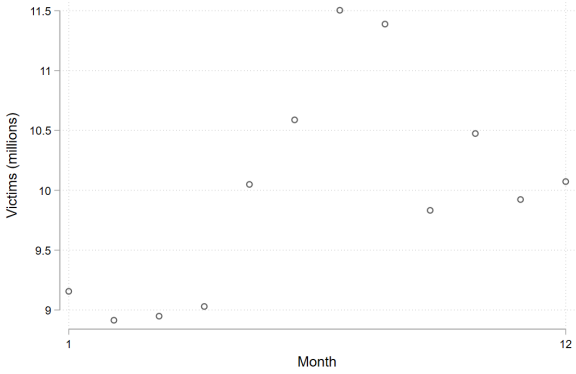
Figure 15: Crimes by Month, National Crime Victimization Survey Data



(a) Ages 10-18



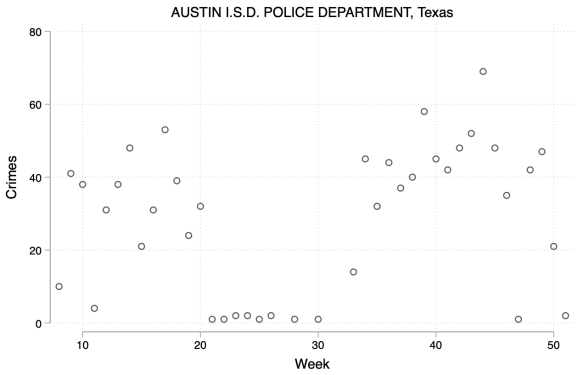
(b) Ages 19-24



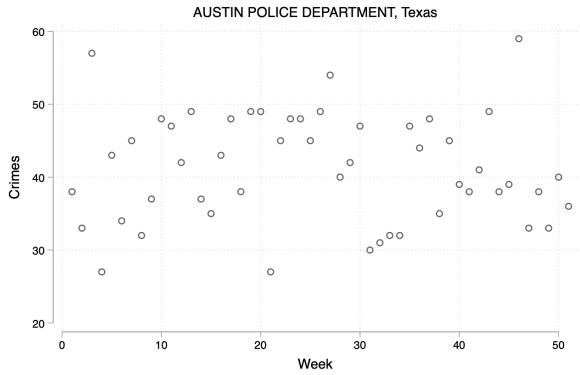
(c) Ages 25-30

Notes: These figures show the number of crimes by month using data from the National Crime Victimization Survey.

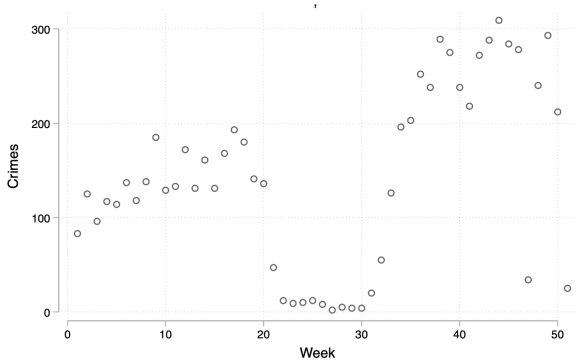
Figure 16: School LEAs



(a) Austin ISD LEA



(b) Austin LEA



(c) School LEAs

Notes: These figures show the number of crimes by week using the 2017-2019 NIBRS data.