

2019-2020

# Christmas Criminals: A Routine Activity Approach to Crime on U.S. Holidays

Wyatt Lam

*James Madison University*

Follow this and other works at: <http://commons.lib.jmu.edu/jmurj>

---

## Recommended American Sociological Association Citation

Lam, Wyatt. 2020. "Christmas Criminals: A Routine Activity Approach to Crime on U.S. Holidays." *James Madison Undergraduate Research Journal* 7(1). Retrieved Month Day, Year (<http://commons.lib.jmu.edu/jmurj/vol7/iss1/5>).

This full issue is brought to you for free and open access by JMU Scholarly Commons. It has been accepted for inclusion in *James Madison Undergraduate Research Journal* by an authorized administrator of JMU Scholarly Commons. For more information, please contact [dc\\_admin@jmu.edu](mailto:dc_admin@jmu.edu).



# Christmas Criminals

## A Routine Activity Approach to Crime on U.S. Holidays

Wyatt Lam

Based on Cohen and Felson's 1979 routine activity theory, this study examines crime rates on prominent U.S. holidays. Little research exists that analyzes crime patterns on holidays, despite the mass disruption of routine activities. Using data from the National Incident-Based Reporting System (NIBRS), this study compares the average daily number of offenses per state on 15 holidays with the average daily number of offenses per state on non-holiday weekdays for the 2016 calendar year. The crimes under investigation are economically motivated crimes: burglary, larceny, motor vehicle theft, and robbery. Holidays are divided into groups for analysis based on where activities are generally pursued by the public on each day: private space, public space, and mixed space. The results reveal a distinct pattern in crime rates on holidays: economically motivated crimes tend to occur less frequently on holidays, regardless of space classification. Despite an increased potential for contact between suitable targets and motivated offenders on mixed and public space holidays, an increase in guardianship may be a primary cause of lower economic crime rates on holidays. It is also possible that the increase in residence-based activities on private and mixed space holidays reduces the number of suitable targets.



Despite limited budgets, law enforcement officials are expected to prevent crime, apprehend criminals, maintain public order and safety, investigate criminal activity, and provide services, such as education to the public. One way that police have been able to more effectively utilize their resources is by carrying out predictive policing. Predictive policing is the practice of analyzing crime data to predict and prevent future crimes (Perry et al. 2013). Crime analysts use crime reporting databases such as the National Crime Victimization Survey (NCVS) and the National Incident-Based Reporting System (NIBRS) to illustrate crime tendencies. Often, local police departments utilize these resources to generate crime patterns for their region, including spatial hotspots mapping and temporal trends: hourly, weekly, monthly, seasonal, and annual crime rates.

One promising perspective from criminological theory is routine activity theory. Initially developed by Cohen and Felson (1979), the theory has received broad support in the field of criminology and may be helpful in improving predictive policing. The theory states that crime occurs when three key elements converge spatially and temporally: a motivated offender, a suitable target, and the absence of capable guardians. Cohen and Felson (1979) argue that deviations from routine activities change the probability of the three elements co-occurring.

Holidays, given their potential widespread disruption of daily activities, are a promising cultural arena in which to study Cohen and Felson's theory (1979). For example, holidays may cause many workplaces to close for the day, which affects the daily activities of both their employees and customers/clients. Holidays are especially important because they represent a macro-causal factor for routine activity changes. However, routine activity theory research has tended to focus on small-scale interactions and has left out population-scale ones. While there has been some research on holiday crime patterns, the findings are scarce and need further development. To improve predictive policing practices, a thorough understanding of how holidays affect crime rates is necessary.

## Literature Review

### Routine Activity Theory

Cohen and Felson (1979) developed routine activity theory as an approach to crime analysis focused on the circumstances of an offense as opposed to offender characteristics. The theory focuses primarily on explaining victimization and treats criminals as rational actors who weigh the potential risks and benefits of committing crimes. According to

routine activity theory, crime occurs when three key elements converge spatially and temporally: a motivated offender, a suitable target, and the absence of capable guardians (Cohen and Felson 1979). Motivated offenders include anyone who is capable and willing to commit crime. Suitable targets include people and objects, such as cars, homes, stores, etc. Capable guardians include formal guardians, such as police or security personnel, and informal guardians, such as bystanders, friends, bartenders, etc. Cohen and Felson (1979) argued that the structure of daily activities influences opportunities for victimization. Additionally, they suggested that deviations from routine activities change the likelihood of a motivated offender, a suitable target, and the absence of capable guardians coming together in time and space.

Lynch (1987) provided early evidence in support of the theory finding that victims' workplace activities affect their risk of workplace victimization to a much greater extent than sociodemographic factors. Lynch (1987) found that activities such as handling money and coming into contact with numerous others on a given workday increase the likelihood of workplace victimization. Groff (2007) performed a rigorous multi-model test of routine activity theory in her study of street robbery. She found that increased time spent away from home increased the probability of victimization, providing strong support for the theory.

Since its inception, routine activity theory has been used to test a myriad of criminological phenomena including victimization of teachers (O and Wilcox 2017), stalking (Mustaine and Tewksbury 1999; Reyns et al. 2016; Wood and Stichman 2018), sexual assault (Franklin et al. 2012; Franklin and Menaker 2018), and motor vehicle theft (Badiora 2017) to name a few. This body of research, which examines violent and property crime alike, provides mounting evidence that the types of activities pursued on a regular basis influence individuals' likelihood of victimization. In recent years, research has also found that individuals' activities can predict the likelihood of cyber-crime victimization, including consumer fraud (Pratt, Holtfreter, and Reisig 2010), cyberbullying (Navarro and Jasinski 2011), and identity theft (Williams 2016; Reyns and Henson 2016).

### Holiday Crime Literature

Studies utilizing routine activity theory tend to focus on identifying activities that increase the likelihood of victimization. This study applies a macro-level analysis to the disruption of daily patterned behavior. To identify the general disruption of routine activities, this study examines

events that tend to affect activities on a widespread basis: holidays. Few studies have examined the effect of holidays on crime patterns; however, holidays can have a dramatic impact on daily activities. The mass interruption of activities on holidays such as Christmas Day or New Year's Eve presents an important opportunity to examine how crime rates are affected by the disruption of routine activities.

Early research by Lester (1979) examined homicides in the United States in 1973 and found that their incidence tended to increase on major holidays and weekends, coinciding with increased contact with family, friends, and acquaintances. More recently, de Melo, Pereira, Andresen, and Matias (2018) studied the occurrence of homicide, rape, robbery, burglary, and theft on prominent holidays in Campinas, Brazil, between 2010 and 2013. They found homicides significantly increased during the day, burglaries significantly increased at night, and all other crimes significantly decreased during these holidays. The researchers explained these results in terms of guardianship; people tend to gather in groups on holidays, deterring crime, but empty houses are typically easily detected on holiday nights, leading to an increase in burglaries. They also suggested that alcohol consumption may contribute to the increase in these crimes.

Cohn and Rotton (2003) examined crime on holidays during the years 1985 and 1988 in Minneapolis, Minnesota. They analyzed differences in the following offenses between major (federal) and minor holidays: assault, disorderly conduct, domestic violence, burglary, theft, and robbery. They found that thefts, burglaries, and robberies tended to occur less frequently on major holidays while cases of assault, disorderly conduct, and domestic violence tended to increase on major holidays. In addition, minor holidays had no significant effects on crime frequency. The results of Cohn and Rotton's study (2003) suggest that minor holidays may not dramatically influence routine activities. In addition, the decrease in economically motivated crimes is consistent with the findings of de Melo et al. (2018) and may reflect heightened guardianship on holidays.

## Hypothesis, Data, and Methods

### Offense and Holiday Choices

This study examines economically motivated crimes, which are the crimes most often committed as rational decisions, rather than impulsive actions. Specifically, this includes burglary, larceny, motor vehicle theft, and robbery. Each of these crimes involves the intentional theft of another's property. This study utilizes the official Federal Bureau of Investigation (FBI) definitions for these crimes (Federal

Bureau of Investigation 2010). Burglary is "the unlawful entry of a structure to commit a felony or a theft." Larceny is "the unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another." Motor vehicle theft is "the theft or attempted theft of a motor vehicle." Robbery is "the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear." By examining only economically motivated crimes, this study aims to capture the crimes for which routine activity theory is most applicable.

Fifteen holidays that elicit widespread business closings for the day and/or widespread celebration were chosen for analysis. These holidays are New Year's Day, Super Bowl Sunday, Martin Luther King Jr. Day, President's Day, St. Patrick's Day, Easter Sunday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving, Black Friday, Christmas Eve, Christmas Day, and New Year's Eve. Although they are not recognized as holidays by the federal government, Black Friday and Super Bowl Sunday are celebrated as unofficial holidays in popular culture.

## Holiday Operationalization

Unlike Cohn and Rotton (2003), who organized their analysis of holidays around whether the days were major or minor holidays, this study organizes holidays based on where activities are generally pursued by the public on each day. I organize holidays into three categories: private space, public space, and mixed space. I chose to categorize holidays by space typically occupied because where people gather directly influences the number of motivated offenders, suitable targets, and guardians. Each category reflects space occupation tendencies as compared to the typical workday.

The private space category consists of holidays on which people tend to stay inside their homes more often than a typical workday. The holidays in the private space category include Martin Luther King Jr. Day, President's Day, Memorial Day, Labor Day, Veteran's Day, and Christmas Day. For most of the holidays in this category, work schedules are interrupted but few are celebrating. There may be variation in activities on Memorial Day, on which many people stay indoors as compared to a typical workday, but others may participate in outdoor activities such as going to parks, having picnics, going to lunch, etc. Christmas Day differs from other holidays in the private space category because most people do celebrate throughout the day; however, they tend to do so from the comfort of their own homes or the homes of family.

The public space category consists of holidays on which people typically celebrate in places outside of where their routine activities typically take them. This includes bars, clubs, restaurants, and parties. Holidays in the public space category include St. Patrick's Day, Independence Day, and New Year's Eve. Independence Day and New Year's Eve are federal holidays, so schools, businesses, and organizations are closed, but people still tend to spend large parts of these days in public spaces. Because Independence Day is in the summer, many people spend all day outside, especially at parks, barbecues and parties. On the night of New Year's Eve, many people attend celebrations, which I predict draw a substantial portion of Americans into public spaces for considerable lengths of time. Because St. Patrick's Day fell on a weekday in 2016, I infer that activities on this day followed routines until the late afternoon when many chose to celebrate, often at bars.

The mixed space category consists of days in which many people may be out in public spaces for large parts of the day, but others may spend the majority of the day at home or the home of family. These are days on which most people do not have typical responsibilities like work or school. The holidays in the mixed space category are New Year's Day, Super Bowl Sunday, Easter Sunday, Thanksgiving, Black Friday, and Christmas Eve. On New Year's Day, some people choose to celebrate away from home, some are recovering from the previous night's celebration, and some spend the day at home getting ready for work or school to resume. On Super Bowl Sunday, many people stay home to watch the game, while others watch the game at bars and celebrate afterwards. Easter Sunday traditions may include spending time at home with family, attending church, and participating in Easter-related activities such as egg hunts in outdoor spaces. Similarly, Thanksgiving is often a day spent at home with family or traveling. Many people spend Thanksgiving night shopping, as many stores offer special deals at or before midnight. Black Friday is a day of shopping for many people, but the rise in popularity of online retailers has the potential to keep many shoppers at home. On Christmas Eve, people celebrate at parties, and many go to church, but it is also common for people to spend large portions of the day at home, typically with family.

## Hypothesis

I analyze separate hypotheses for burglary, larceny, motor vehicle theft, and robbery to ascertain whether there is consistency in holiday crime rates across economically motivated crimes. Based on the three holiday categories, and the premise that changes in routine activities have an effect

on how much crime tends to occur, I predict the following for economically motivated crimes on holidays:

**H1:** Compared to the daily average, the number of reported burglaries will be lower on private space holidays and higher on public space holidays.

On private space days, I presume that the number of suitable targets for burglaries (empty homes) decreases, while the amount of guardianship increases because most people are gathered at home on these days. I predict that fewer suitable targets and increased guardianship results in fewer burglaries on private space holidays.

On public space days, I presume that the number of suitable targets increases and the amount of guardianship decreases because more people gather in public on these days than the average day. I presume that a rational offender would anticipate people leaving homes unattended, increasing the number of motivated offenders. I predict that the increase in suitable targets, decrease in guardianship, and increase in motivated offenders results in more burglaries on public space holidays.

**H2:** Compared to the daily average, the number of reported larcenies will be lower on private space holidays and higher on public space holidays.

**H3:** Compared to the daily average, the number of reported motor vehicle thefts will be lower on private space holidays and higher on public space holidays.

**H4:** Compared to the daily average, the number of reported robberies will be lower on private space holidays and higher on public space holidays.

On private space days, I presume that the number of suitable targets for larcenies, motor vehicle thefts, and robberies decreases because all three crimes rely on contact between motivated offenders and targets. I presume that this contact occurs less frequently on private space holidays because many people tend to stay inside residences for most of the day. I presume that the amount of guardianship increases because, compared to the daily average, more people are clustered together at home on these days. I predict that fewer suitable targets and increased guardianship results in fewer larcenies, motor vehicle thefts, and robberies on private space holidays. On public space days, I presume that the number of suitable targets increases because many people are congregating in public places where motivated offenders are likely to be found.

This increases the potential for contact between motivated offenders and suitable targets. I presume that an increased consumption of alcohol creates more suitable targets, more motivated offenders, and less-capable guardians. Intoxication lowers awareness, which may make individuals more suitable targets and less-capable guardians, especially if rational offenders anticipate such an opportunity. Additionally, intoxication lowers inhibitions and reduces judgment, which may increase the number of motivated offenders willing to commit economically motivated crimes. I predict that the increase in suitable targets, increase in motivated offenders, and decrease in capable guardians results in more larcenies, motor vehicle thefts, and robberies on public space holidays.

**H5:** Compared to the daily average, the number of reported burglaries, larcenies, motor vehicle thefts, and robberies will not be notably different on mixed space holidays.

On mixed space holidays, I presume that opportunities for crime both increase and decrease to a similar degree as a result of public and private space activities, respectively. As such, I predict no appreciable change in reported offenses.

## National Incident-Based Reporting System (NIBRS)

NIBRS is an incident-based crime reporting system, which houses data on all instances of crime that law enforcement report across the United States. Included in this data set is criminal and victim information, such as demographics, and crime information, such as when, where, and how the crime occurred. 57 different crimes are captured by NIBRS and broken down into three categories: crimes against persons (of which individuals are victims), crimes against property (of which money or property is the object), and crimes against society (which are actions prohibited by society, such as drug use). Each of the 57 offenses are classified in the NIBRS database according to the official FBI definitions (Federal Bureau of Investigation 2010).

NIBRS is a part of the Uniform Crime Reporting (UCR) program administered by the FBI. City, county, and state officials from 48 states voluntarily collect and report incident-based crime logs on a monthly basis to state or federal UCR programs. Given that the organization of reports from different agencies and states may differ, UCR programs must merge, restructure, and subset the data into yearly, formally structured NIBRS data sets. The data are made public on the National Archive of Criminal Justice Data (NACJD) website, which is a part of the Inter-University Consortium for Political and Social Research at the University of Michigan.

## Procedure and Data Analysis

2016 NIBRS data were downloaded from the NACJD website into SPSS Statistics software. All incidents of crime outside of burglary, larceny, motor vehicle theft, and robbery were removed from the data set. Burglary includes breaking and entering. Larceny includes pocket-picking, purse-snatching, shoplifting, theft from a building, theft from a coin-operated machine or device, theft from a motor vehicle, theft of motor vehicle parts/accessories, and all other larceny. New variables were created to indicate holidays and holiday space groupings. While working with multiple years of data would be ideal, the computer files for any single year are massive and tax the computing power available to the average person. Thus, 2016 data were aggregated by state and incident date with simple counts of offenses. Weekends were omitted from the data set in order to best compare holiday crime rates with crime rates of the typical Monday through Friday “work-week.” Means comparisons were produced to compare the state daily average number of crimes on holidays versus non-holiday weekdays. The comparisons were run on the total of all four economically motivated crimes, and then broken out for each specific crime category. There are five sets of analyses for examining individual holidays and five sets for examining holiday categories.

## Statistical Significance

Statistical significance is not particularly relevant in this study because the NIBRS data set was not acquired through a probability sample. The data can be best described as a convenience sample, given that many police departments choose not to report or are unable to report crime incidents to the UCR. As a result, the data set contains only crimes that are available to the FBI. Additionally, the data are not a sample of available crimes but rather the entirety of those crimes. Therefore, significance has been excluded from the results.

## First of the Month

There is an overrepresentation of crime on the first of each month in the NIBRS data set, meaning there are substantially more economically motivated crimes recorded on the first of the month than any other day. Unfortunately, the cause of this is unknown, and I highly suspect it to be a recording artifact as opposed to a real criminological phenomenon. However, because I do not know the cause for certain, I have chosen to keep these days in the data set. Overall, the daily averages are not noticeably affected, but New Years Day has an unusually high number of reported offenses.



# Results

## All Four Economically Motivated Crimes

Figure 1 illustrates the results of comparing the state daily average number of economically motivated crimes in each holiday category with the state daily average number of economically motivated crimes on non-holiday weekdays. On holidays in all three categories, fewer economically motivated crimes occurred on average per state than the 2016 daily weekday average of 181.39. This finding is inconsistent with H5, in which I predicted that the number of reported burglaries, larcenies, motor vehicle thefts, and robberies would not be notably different on mixed space holidays compared to the daily average.

Figure 1: State Daily Average Economically Motivated Crimes in 2016 by Holiday Category

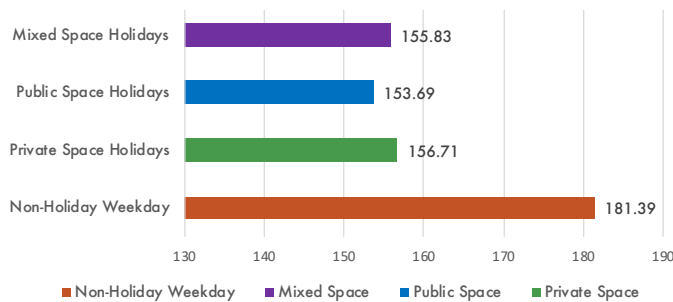
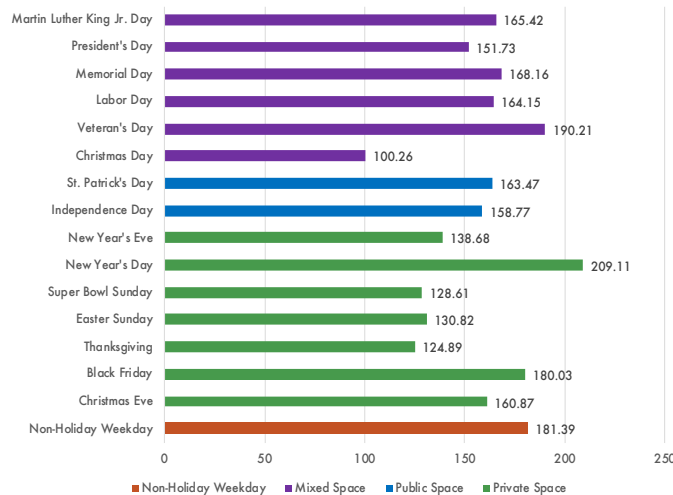


Figure 2 illustrates the results of comparing the state daily average number of economically motivated crimes on each individual holiday with the state daily average number of economically motivated crimes on non-holiday weekdays. On 2 of 15 holidays, more economically motivated crimes occurred on average per state than the 2016 daily weekday average.

Figure 2: State Daily Average Number of Economically Motivated Crimes in 2016 by Individual Holiday



## Burglary

Figure 3 illustrates the results of comparing the state daily average number of burglaries in each holiday category with the state daily average number of burglaries on weekday non-holidays. On holidays in all three categories, fewer burglaries occurred on average per state than the 2016 daily weekday average of 36.18. This finding is inconsistent with H1, in which I predicted that the number of reported burglaries would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 3: State Daily Average Burglaries in 2016 by Holiday Category

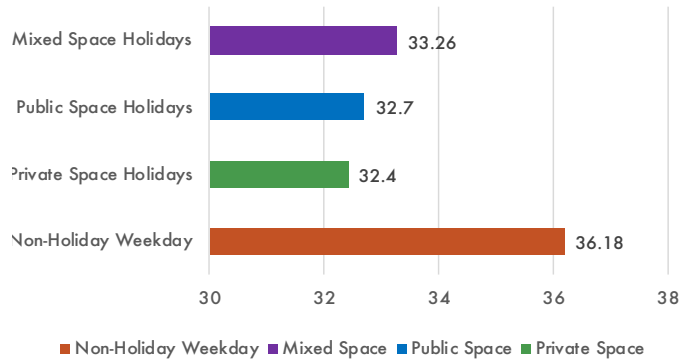
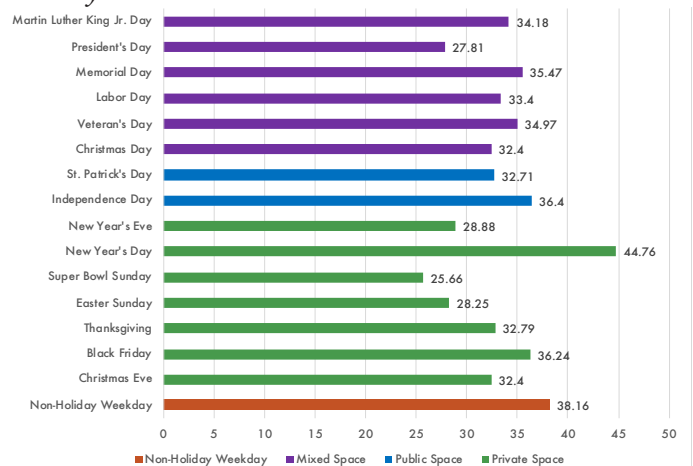


Figure 4 illustrates the results of comparing the state daily average number of burglaries on each individual holiday with the state daily average number of burglaries on non-holiday weekdays. On 3 of 15 holidays, more burglaries occurred on average per state than the 2016 daily weekday average.

Figure 4: State Daily Average Burglaries in 2016 by Individual Holiday



## Larceny

Figure 5 illustrates the results of comparing the state daily average number of larcenies in each holiday category with the state daily average number of larcenies on weekday non-holidays. On holidays in all three categories, fewer larcenies

occurred on average per state than the 2016 daily weekday average of 128.96. This finding is inconsistent with H2, in which I predicted that the number of reported larcenies would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 5: State Daily Average Larcenies in 2016 by Holiday Category

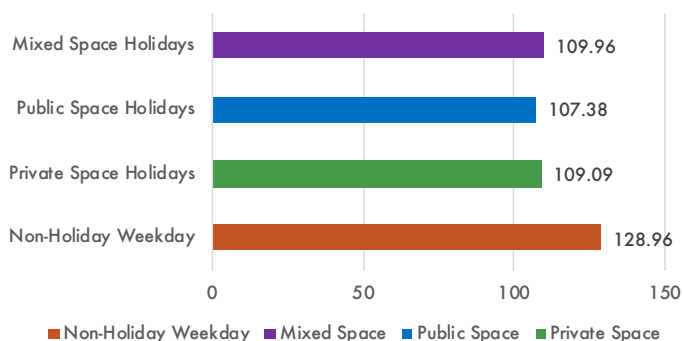
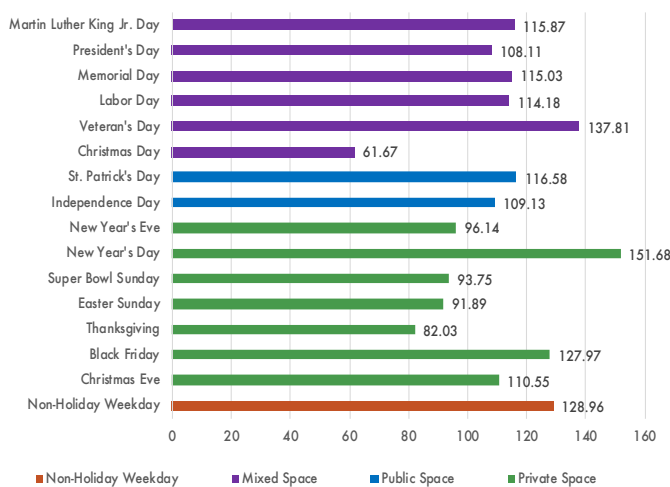


Figure 6 illustrates the results of comparing the state daily average number of larcenies on each individual holiday with the state daily average number of larcenies on non-holiday weekdays. On 2 of 15 holidays, more larcenies occurred on average per state than the 2016 daily weekday average.

Figure 6: State Daily Average Larcenies in 2016 by Individual Holiday



### Motor Vehicle Theft

Figure 7 illustrates the results of comparing the state daily average number of motor vehicle thefts in each holiday category with the state daily average number of motor vehicle thefts on non-holiday weekdays. On holidays in all three categories, fewer motor vehicle thefts occurred on average per state than the 2016 daily weekday average of 17.22. This finding is inconsistent with H3, in which

I predicted that the number of reported motor vehicle thefts would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 7: State Daily Average Motor Vehicle Thefts in 2016 by Holiday Category

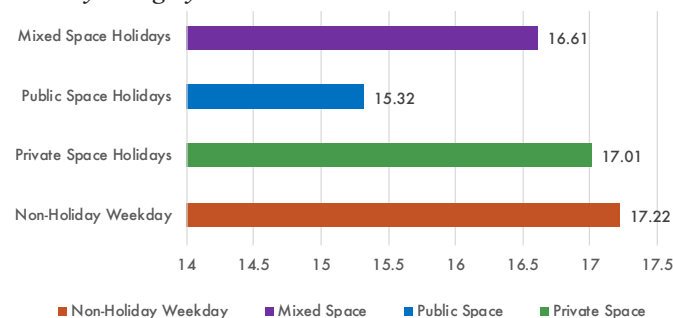
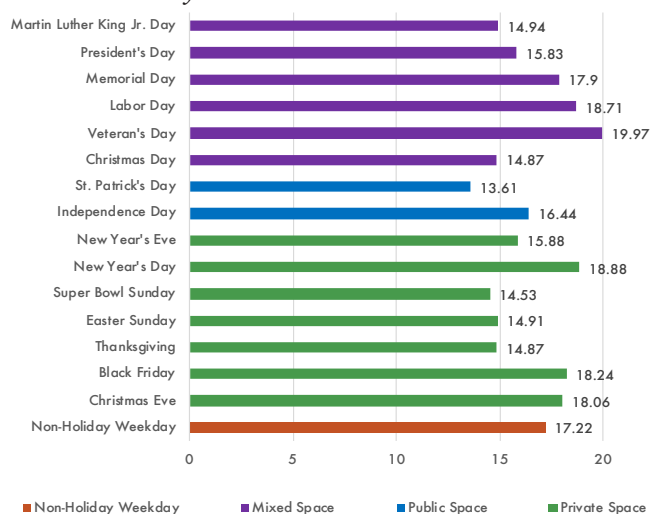


Figure 8 illustrates the results of comparing the state daily average number of motor vehicle thefts on each individual holiday with the state daily average number of motor vehicle thefts on non-holiday weekdays. On 6 of 15 holidays, more motor vehicle thefts occurred on average per state than the 2016 daily weekday average.

Figure 8: State Daily Average Motor Vehicle Thefts in 2016 by Individual Holiday



### Robbery

Figure 9 illustrates the results of comparing the state daily average number of robberies in each holiday category with the state daily average number of robberies on non-holiday weekdays. On private space holidays and mixed space holidays, fewer robberies occurred on average per state than the 2016 daily weekday average of 7.29. On public space holidays, more robberies occurred on average per state than the 2016 daily weekday average. This finding is consistent with H4, in which I predicted that the number of reported



robberies would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 9: State Daily Average Robberies in 2016 by Holiday Category

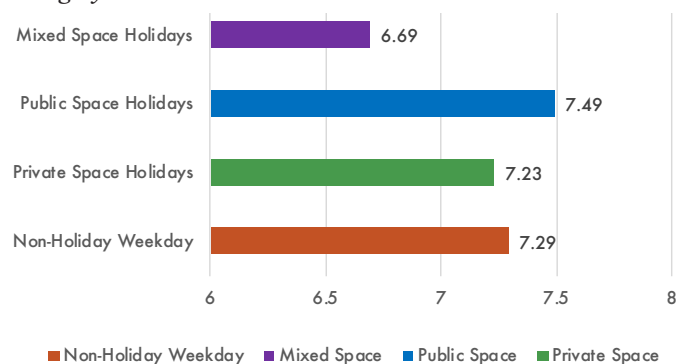
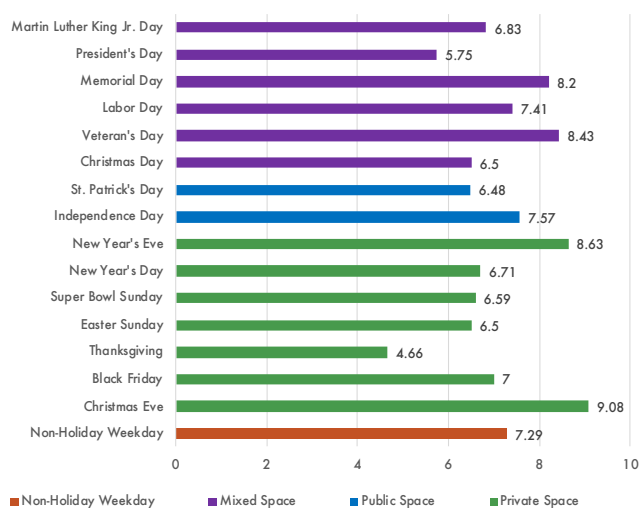


Figure 10 illustrates the results of comparing the state daily average number of robberies on each individual holiday with the state daily average number of robberies on non-holiday weekdays. On 6 of 15 holidays, more robberies occurred on average per state than the 2016 daily weekday average.

Figure 10: State Daily Average Robberies in 2016 by Individual Holiday



## Discussion and Conclusion

This study analyzes crime rates for burglary, larceny, motor vehicle theft, and robbery on prominent U.S. holidays in 2016 from the perspective of routine activity theory. The results reveal a distinct pattern in crime rates on holidays: economically motivated crimes tend to occur less frequently on holidays, regardless of space classification.

For holiday groups, the results consistently indicate (14 out of 15 times across all five sets of holiday group analyses) that economically motivated crimes tend to occur less frequently

on holidays regardless of category. For individual holidays, the pattern is the same: the results consistently indicate (56 out of 75 times across all five sets of individual holiday analyses) that economically motivated crimes tend to occur less frequently on holidays. While robbery and motor vehicle theft show the least consistency, each of the holidays with crime rates higher than the weekday average show only minor elevations over the average.

The consistently lower rates in economically motivated crimes on holidays found in this study mirrors the findings of de Melo et al. (2018) and Cohn and Rotton (2003). Besides an increase in evening burglaries, de Melo et al. (2018) found that fewer economic crimes occurred on holidays. Likewise, Cohn and Rotton (2003) found that fewer economic crimes occurred on major holidays. In my hypotheses, I predicted that this study's results for private space holidays would match these two previous studies, but I did not predict that crime rates on public space holidays or mixed space holidays would also be lower than the weekday average. My hypotheses were based primarily upon the motivated offender and suitable target elements of routine activity theory. On public space days, I presumed that the paths of motivated offenders and suitable targets would cross more frequently due to widespread celebration in and movement through public spaces, leading to higher crime rates. However, this study's results suggest other factors may be associated with the unanticipated lower crime rates observed. One explanation is that potential offenders are preoccupied with holiday activities and celebration such that there are fewer motivated offenders to take advantage of suitable targets. Another explanation is proposed by de Melo et al. (2018) and Cohn and Rotton (2003): guardianship plays a substantial role in deterring crime on holidays.

I presume that on holidays in all three categories, people tend to gather together. On private space holidays, people are off work and children are out of school, so many people tend to gather in private residences for the day. Not only is there little contact with motivated offenders, there is also family nearby. On public space holidays, people tend to stay in groups. People are celebrating together either with family, friends, or large groups of strangers (e.g., at bars, clubs, or parties). While imbibing alcohol may impact guardianship capabilities on these days, guardians may not need to be entirely capable of "guarding" to be effective deterrents. Simply being with other people may deter potential criminals, regardless of the guardians' sobriety. Additionally, police patrol known public events, so truly "capable" guardianship is typically present as well. On mixed space holidays, people

pursue both private and public holiday activities and are subject to the same guardianship tendencies.

## Study Drawbacks

There are four primary drawbacks to this research that should be discussed. First, only 48 states contribute their crime data to NIBRS, and many states have only a few precincts reporting. Therefore, the data do not completely represent all areas of the country, nor the true average number of crimes committed per state. Next, in any given year, a locality, city, or the country as a whole may focus resources on particular types of crime. Policies at each of these administrative levels influence police activity and resource allocation. Therefore, official crime statistics like NIBRS may be a better indicator of police behavior than actual levels of crime. Third, seasonal temperatures may influence the kinds of activities individuals pursue when their routine activities are disrupted. For example, the activities in which people participate on Christmas are different than those on Independence Day. It is likely that different sets of non-routine activities result in different likelihoods of crime occurring. Lastly, this study is only based on one year's worth of data. Adding more years would increase the validity and generalizability of this study's findings.

## Study Implications and Future Research

This study was a worthwhile examination of routine activity theory because it shows that the theory can be applied broadly to generalizable sets of activities to better understand where police resources are best applied. The analysis presented here suggests that maintaining police presence on holidays with large gatherings of people in public spaces is an important deterrent of crime. However, police should be wary not to over-distribute resources on holidays given that friends, family, and nearby others are effective deterrents as well.

I have theorized that, despite an increased potential for contact between suitable targets and motivated offenders on mixed and public space holidays, the increase in guardianship may be a primary cause of lower economic crime rates on holidays. It is also likely that the increase in private space activities on private and mixed space holidays also reduces the number of suitable targets. However, the consistency of lower crime rates across all holiday groups makes certainty about the underlying factors impossible. Future research should aim to identify with more confidence the causes for reduced economic crime rates on holidays. This study could be replicated with more years of NIBRS data so that breaking incidents down by state is no longer necessary. Additionally, I suggest that future studies examine the nature

of guardianship on holidays and how criminals navigate and are deterred by its presence. I would also recommend that weekend routines and crime rates be analyzed and compared to those of holidays. Both weekends and holidays are a departure from weekday "business-as-usual" routines, so one might suppose that weekend crime rates are similar to holiday crime rates. Finally, the rates of other crimes, such as homicide or rape, could be examined on holidays. The results of such an analysis could be vastly different than the one presented here, given that acquaintances are more likely offenders than strangers for those crimes.

## Author's Note



Wyatt Lam ('19) graduated with a bachelor's degree in sociology and minors in criminal justice, biology, Spanish, and interdisciplinary studies. He is interested in pursuing research in criminal victimization at the graduate level. Wyatt enjoys baking cookies, relaxing at the beach, and participating in family game night. For his honors capstone project, he channeled his love for strategy games into an original board game: *World Throne*.

Dr. Joseph Spear was an invaluable guiding hand to the development of this research. Wyatt is incredibly grateful that Dr. Spear lent so much of his time and knowledge to the project. Additionally, Wyatt thanks Dr. Stephen Poulson for inspiring this research and Dr. Peggy Plass for helping navigate criminal victimization databases.

## References

- Badiora, Adewmi I. 2017. "Ecological Theories and Spatial Decision Making of Motor Vehicle Theft (MVT) Offenders in Nigeria." *Journal of Applied Security Research* 12(3):374-391.
- Cohen, Lawrence E., and Marcus Felson. 1979. "Social Change and Crime Rate Trends: A Routine Activity Approach." *American Sociological Review* 44(4):588-608.
- Cohn, Ellen G., and James Rotton. 2003. "Even Criminals Take a Holiday: Instrumental and Expressive Crimes on Major and Minor Holidays." *Journal of Criminal Justice* 31(4):351-360.
- de Melo, Silas N., Débora V. S. Pereira, Martin A. Andresen, and Lindon F. Matias. 2018. "Spatial/Temporal Variations of Crime: A Routine Activity Theory Perspective." *International Journal of Offender Therapy & Comparative Criminology* 62(7):1967-1991.
- Federal Bureau of Investigation. 2010. "Crime in the United States: Offense Definitions." Retrieved February 12, 2020. (<https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/offense-definitions>).
- Franklin, Cortney A., and Tasha A. Menaker. 2018. "Feminist Routine Activity Theory and Sexual Assault Victimization: Estimating Risk by Perpetrator Tactic among Sorority Women." *Victims & Offenders* 13(2):158-178.
- Franklin, Cortney A., Travis W. Franklin, Matt R. Nobles, and Glen A. Kercher. 2012. "Assessing the Effect of Routine Activity Theory and Self-Control on Property, Personal, and Sexual Assault Victimization." *Criminal Justice and Behavior* 39(10):1296-1315.
- Groff, Elizabeth R. 2007. "Simulation for Theory Testing and Experimentation: An Example using Routine Activity Theory and Street Robbery." *Journal of Quantitative Criminology* 23(2):75-103.
- Lester, D. 1979. "Temporal Variation in Suicide and Homicide." *American Journal of Epidemiology* 109(5):517-520.
- Lynch, James P. 1987. "Routine Activity and Victimization at Work." *Journal of Quantitative Criminology* 3(4):283-300.
- Mustaine, Elizabeth E., and Richard Tewksbury. 1999. "A Routine Activity Theory Explanation for Women's Stalking Victimization." *Violence Against Women* 5(1):43-62.
- Navarro, Jordana N., and Jana L. Jasinski. 2012. "Going Cyber: Using Routine Activities Theory to Predict Cyberbullying Experiences." *Sociological Spectrum* 32(1):81-94.
- O, SooHyun, and Pamela Wilcox. 2018. "Routine Activity Theory, Target Congruence, and School Context: A Multi-level Analysis of Teacher Victimization." *Victims & Offenders* 13(3):349-372.
- Perry, Walter L., Brian McInnis, Carter C. Price, Susan C. Smith, and John S. Hollywood. 2013. *Predictive Policing: The Role of Crime Forecasting in Law Enforcement Operations*. Santa Monica, CA: Rand Corporation.
- Pratt, Travis C., Kristy Holtfreter and Michael D. Reisig. 2010. "Routine Online Activity and Internet Fraud Targeting: Extending the Generality of Routine Activity Theory." *Journal of Research in Crime and Delinquency* 47(3):267-296.
- Reyns, Bradford W., and Billy Henson. 2016. "The Thief with a Thousand Faces and the Victim with None." *International Journal of Offender Therapy and Comparative Criminology* 60(10):1119-1139.
- Reyns, Bradford W., Billy Henson, Bonnie S. Fisher, Kathleen A. Fox, and Matt R. Nobles. 2016. "A Gendered Lifestyle-Routine Activity Approach to Explaining Stalking Victimization in Canada." *Journal of Interpersonal Violence* 31(9):1719-1743.
- Williams, Matthew L. 2016. "Guardians upon High: An Application of Routine Activities Theory to Online Identity Theft in Europe at the Country and Individual Level." *The British Journal of Criminology* 56(1):21-48.
- Wood, McKenzie, and Amy Stichman. 2018. "Stalking on the College Campus: The Influence of Suitable Target and Guardianship Variables on Victimization Comparing Male and Female Students." *Victims & Offenders* 13(4):487-503.