

## THE EFFECT OF ROUTINE ACTIVITY THEORY AND SELF-CONTROL ON PROPERTY VICTIMIZATION AMONG COLLEGE STUDENTS IN ANGELES CITY

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### ABSTRACT

Routine Activity Theory unveils the hidden opportunities embedded in everyday activities and behaviors, shedding light on the intricacies of property victimization. This research explores the influence of self-control, target attractiveness, exposure, and guardianship on property victimization, with a focus on college students in Angeles City. The aim is to enhance their understanding and ability to protect themselves and their belongings. A descriptive survey research design is employed, utilizing stratified random sampling to select participants from three prominent institutions in Angeles City. Data will be analyzed using Pearson Moment Correlation and Multivariate Regression Analysis, with a significance level set at 0.05. The synthesis elucidates the complex relationships between self-control, target attractiveness, exposure, guardianship, and property victimization. Preliminary findings suggest that individuals with higher self-control may paradoxically be more susceptible to victimization. While exposure to disruptions in daily routines is strongly linked to property victimization, the roles of target attractiveness and effective guardianship remain inconclusive due to small sample sizes. This underscores the need for further research to inform targeted interventions for community safety.

**Keywords:** Self Control, Target Attractiveness, Exposure, Guardianship, Routine Activities Theory, Property Victimization.

### I. INTRODUCTION

Property victimization has become increasingly prevalent in cities across the Philippines, including Angeles City. The effects of property victimization can cause emotional distress, financial burdens, and disruption to the academic progress of students. It also poses a significant threat to an individual's sense of security, particularly within the college environment, where students often possess valuable belongings such as gadgets, textbooks, money, and personal identification. In the study conducted by Sani, Nunes, Azevedo, and Sousa (2019), which focused on the criminal victimization of college students, it was revealed that the most frequently reported crimes were those against property, specifically theft and robbery. This aligns with the findings of the research, which highlighted the prevalence of property victimization among college students and the need to address and understand its impact on their well-being. Understanding the factors that contribute to property victimization among college students is vital for developing effective strategies and enhancing the safety of college students in Angeles City.

In the Philippines, it is prevalent that there is a grappling socio-economic disparity that affects the crime dynamics with property victimization. The city's bustling commercial hubs and wealth disparities create a ground for property-related offenses, with valuable assets such as expensive gadgets and jewelry often attracting criminal activity. Moreover, densely populated areas contribute to the heightened risk of property victimization. In such a setting, people inadvertently expose themselves to potential criminal threats simply by going to their daily routines. Thus, these commercial hubs and social disparities in Angeles City not only provide a ground for property crimes but also show the vulnerability of individuals to becoming victims. In light of the challenges, establishing preventive measures assumes paramount importance in mitigating property victimization. By delving into the complexities of criminal behavior and victimization, this research aims to enhance crime prevention strategies through the role of self-control, target attractiveness, exposure, and guardianship.

Routine Activity Theory by Marcus Felson and Lawrence Cohen posits that the presence of motivated offenders, suitable targets, and the absence of capable guardians increases the likelihood of the occurrence of a crime. According to this theory, crime occurs not solely through the behavior of an individual but rather emerges from

the routine activities and interactions of people in the environment. Recent studies have accentuated the influence of target attractiveness, self-control, exposure, and guardianship on property victimization among college students. For instance, the study of Barrera (2018) revealed that self-control has a significant relationship to property victimization since an individual with a higher degree of self-control prioritizes their communal values, and a lower degree of self-control is likely to engage in delinquent behavior. The study of Recher, Vedran, Rubil, and Ivica (2019) found that target attractiveness significantly influences property victimization, particularly in the context of foreign tourists who possess more property and money than locals, thereby affecting the rates of property-related crimes. The study of Wilcox and Cullen (2018) discusses the influence of lifestyle exposure on an individual's vulnerability to victimization, emphasizing that increased interactions and time spent outside heighten the risk of encountering offenders in the environment. Moreover, Zahnow and Corcoran's (2019) study underscores the significant role of guardianship in preventing property crimes, highlighting the importance of capable guardians in safeguarding against victimization. The findings of these studies underscore the practical implications of creating measures and policies aimed at reducing property victimization among college students. By addressing factors such as self-control, target attractiveness, exposure, and guardianship, policymakers and practitioners can develop targeted interventions to enhance safety and security on college campuses and beyond.

## II. BACKGROUND OF THE STUDY

Understanding the dynamics of property victimization among college students in Angeles City entails an exploration of several factors. This study aims to examine the factors contributing to property victimization, focusing on self-control, target attractiveness, exposure, and guardianship. Property victimization, a prevalent form of crime, has been a significant concern among college students in Angeles City. The individual's ability to resist impulses and temptations may lead to criminal acts; thus, individuals with lower self-control are more prone to engaging in risky behaviors that increase their vulnerability to becoming victims of property crimes. This susceptibility is aroused by the lifestyle of college students, which often increases the visibility and accessibility of their belongings, making them attractive targets. Moreover, college campuses and the residences of students are often surrounded by commercial hubs with numerous social interactions that make them vulnerable to property victimization. Hence, the presence of effective guardianship measures, such as campus security personnel and the implementation of surveillance systems, affects the importance of guardianship in preventing property victimization.

Nazaretian and Fitch (2021) study how self-control, a personal characteristic, influences an individual's susceptibility to victimization. Prior research has revealed that those with inadequate self-control may be more vulnerable to victimization due to their risk-taking behaviors. Also, they highlighted that target attractiveness refers to the perceived value of a target to potential offenders. It is hypothesized that properties that appear more attractive or valuable are more likely to be targeted for victimization. Moreover, they explicated that exposure refers to the extent to which potential targets are exposed to potential offenders. The more exposed a property is, the higher the chances of it being victimized. Lastly, guardianship pertains to the presence of individuals or security measures that can deter potential offenders. Effective guardianship can significantly reduce the likelihood of property victimization.

Routine activity theory, a cornerstone of criminology, suggests that the convergence in space and time of a motivated offender, a suitable target, and the absence of a capable guardian can lead to a criminal event (Nazaretian & Fitch, 2021). The study also explores the moderating role of routine activity theory in these relationships. This theory can provide a comprehensive framework for understanding how self-control, target attractiveness, exposure, and guardianship interact to influence property victimization. By examining these relationships, the study aims to contribute to our understanding of property victimization among college students in Angeles City and inform the development of effective strategies for crime prevention. Our research builds upon and addresses several gaps identified in Nazaretian and Fitch's (2021) study, which focused on understanding how lifestyle and social status characteristics influence victimization. While this study provided several valuable insights, it also had limitations that our research aims to overcome. First, they used secondary data from the Canadian Victimization Survey, which was not explicitly designed to address the interest of the variables of the study. In contrast, this research aims to employ a more targeted approach by

directly examining factors such as self-control, target attractiveness, exposure, and guardianship in relation to property victimization among college students in Angeles City. Moreover, the nature of the data used is limited to conduct post hoc analyses and to explore the relationships of the data. Hence, this study utilizes a more flexible methodology that allows a comprehensive analysis and the exploration of potential moderating effects that the Routine Activity Theory suggests.

The findings could have significant implications for policy-making, campus security, and student education on crime prevention. Policymakers may consider allocating resources towards improving lighting in high-risk areas and providing surveillance systems to deter potential offenders from committing crimes against property. Thus, educating college students about the factors that increase victimization is essential in empowering them to protect themselves against the perpetrators. Our findings can inform educational initiatives aimed at raising awareness about the importance of self-control, minimizing target attractiveness, and reducing exposure to risky situations. By providing students with practical tips, resources, and support networks, educational institutions can empower them to make informed decisions and take proactive steps to safeguard against property crimes.

### **Research Questions**

The current study aims to answer the following research questions:

1. Is there a significant relationship between self-control and property victimization among college students in Angeles City?
2. Is there a significant relationship between target attractiveness and property victimization among college students in Angeles City?
3. Is there a significant relationship between exposure and property victimization among college students in Angeles City?
4. Is there a significant relationship between guardianship and property victimization among college students in Angeles City?
5. Does self-control, target attractiveness, exposure, and guardianship has a moderating effect on property victimization?

### **III. OBJECTIVES**

The study aims to accomplish the following objectives:

1. To examine the relationship between self-control and property victimization among college students in Angeles City.
2. To investigate the relationship between target attractiveness and property victimization among college students in Angeles City.
3. To explore the relationship between exposure and property victimization among college students in Angeles City.
4. To assess the relationship between guardianship and property victimization among college students in Angeles City.
5. To determine the moderating effect of self-control, target attractiveness, exposure, and guardianship on property victimization among college students in Angeles City.

### **Scope Of The Study**

The study will focus specifically on the college students of Angeles City, Pampanga, aiming to establish a notable link between the six variables: self-control, target attractiveness, exposure, guardianship, routine activities, and property victimization. Further, the study will take respondents from the three college schools in Angeles City, namely: Angeles University Foundation, Holy Angel University, and City College of Angeles. These three colleges are among the most prominent and well-established educational institutions in Angeles City Pampanga. They attract a diverse student population from various backgrounds and demographics which provides a representative sample for the study. Considering these limitations, it is important to acknowledge the potential implications for generalizability. The study will also tackle the number and type of property crimes that are prevalent.

Although the study has several strengths, it also has some limitations that should be considered: (1) The study will be limited to the three schools in Angeles City, which are Angeles University Foundation, Holy Angel University, and City College of Angeles (2) The study will be limited in terms of locale, the study will focus solely on Angeles City and will not include rural perspectives, as Angeles City is a known urban area and (3) The study will only gather perspectives from college students.

### **Significance of the Study**

The significance of this study lies in its potential to contribute to our understanding of property victimization among college students in Angeles City. By investigating the relationship between self-control and property victimization, the study could offer insights into how individual behaviors and decision-making processes can influence the likelihood of becoming a victim of property crimes. This could subsequently inform the development of educational programs aimed at enhancing self-control among students. Furthermore, the research could elucidate the role of target attractiveness in property victimization. A better understanding of this relationship could aid in devising strategies to make properties less appealing to potential offenders, thereby reducing property victimization. The study also seeks to explore the relationship between exposure and property victimization. The findings could help identify factors that increase students' risk of victimization and inform the creation of safety measures and policies aimed at reducing students' exposure to crime. In addition, the research could underscore the importance of effective guardianship in preventing property crimes if a significant relationship is found between guardianship and property victimization. This could guide the implementation of improved security measures within college environments. Lastly, by examining the moderating relationship of routine activity theory on the relationship between self-control, target attractiveness, exposure, guardianship, and property victimization, the study could provide a comprehensive understanding of property victimization dynamics. This could lead to a more holistic approach in designing interventions to reduce property crimes among college students.

### **Overview Of The Structure**

The following section will address the research problems and objectives of the study. Initially, the review of related literature will compile various pertinent studies to underscore similar or contrasting hypotheses concerning the relationships between the six variables of this study. This section will also identify the research gaps in these studies and present how the current study proposes to address these gaps. Moreover, this section will outline the theoretical framework, conceptual framework, and paradigm of the study.

Subsequently, the methods section will detail the study design, which is a Descriptive Survey. This design acts as the roadmap that directs the course of the study. The methods section will also discuss the target participants, who are residents of Angeles City, and outline the necessary sample size along with the inclusion and exclusion criteria. The final part of the methods section will introduce the research instruments, specific procedures, ethical considerations, and statistical analysis to be used in the study. This comprehensive approach ensures a thorough and systematic investigation of the research problems and objectives.

### **Conceptual Framework**

The logical orientation, connections of the variables, ideas about the study topic, and thoughts on the identification of the research topic constitute the conceptual framework (Ravitch & Riggan, 2017, as cited in Kivunja, 2018, p.47). This component of the study focuses on explaining the study paradigm, which shows the relationship among four independent variables: (a) self-control, (b) target attractiveness, (c) exposure, and (d) guardianship, with the dependent variable being property victimization (see Figure 1 above).

The study posits the following hypotheses based on the literature review:

1. There is a significant relationship between self-control and property victimization among college students in Angeles City.
2. There is a significant relationship between target attractiveness and property victimization among college students in Angeles City.
3. There is a significant relationship between exposure and property victimization among college students in Angeles City.

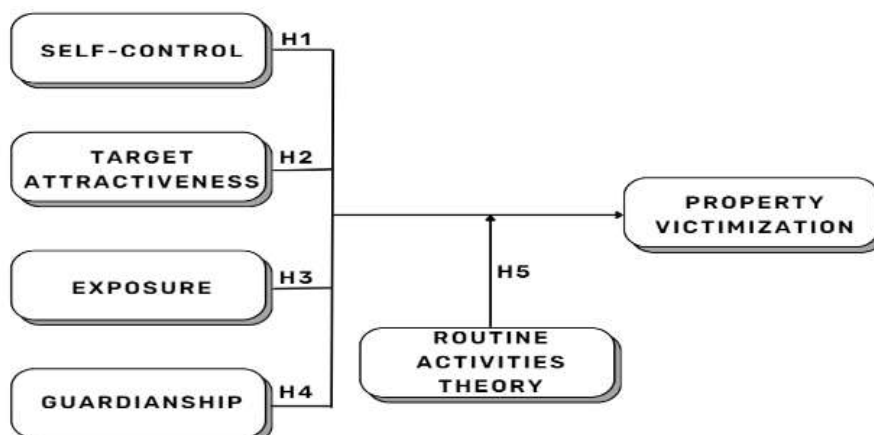
4. There is a significant relationship between guardianship and property victimization among college students in Angeles City.

Additionally, the study proposes a moderating hypothesis:

1. Moderating effect of self-control, target attractiveness, exposure, and guardianship on property victimization among college students in Angeles City.

These hypotheses suggest that the likelihood of property victimization is influenced by each of the four independent variables. Routine Activity Theory serves as a lens to understand how these variables interact with each other to affect property victimization. For instance, lower self-control might lead to riskier behaviors, making students more attractive targets. Increased exposure and inadequate guardianship can further elevate the risk. Routine Activity Theory helps explain how the routine activities of students create opportunities for victimization, thus moderating the effects of self-control, target attractiveness, exposure, and guardianship.

**Paradigm of the Study**



**IV. METHODS**

**Study Design**

This study will utilize a descriptive survey research design, an effective method for gathering original data to describe a population too large to observe directly. This design is particularly useful for providing a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. In this case, the relationships between self-control, target attractiveness, exposure, guardianship, routine activity theory, and property victimization among college students in Angeles City will be explored.

The independent variables in the study, namely self-control, target attractiveness, exposure, and guardianship, will be measured through the survey. Data on the dependent variable, property victimization, will also be collected from the respondents. The routine activity theory will serve as a framework to understand its moderating effect on the relationship between the independent variables and property victimization.

**Locale of the Study**

The study will be geographically concentrated in Angeles City, a highly urbanized area in the Central Luzon region of the Philippines. Specifically, the research will be conducted within three educational institutions in the city: Angeles University Foundation (AUF), Holy Angel University (HAU), and City College of Angeles (CCA). AUF, HAU, and CCA each have a diverse student population, providing a rich and varied sample for the study. By focusing on these specific institutions within Angeles City, the study aims to gain a more detailed understanding of property victimization among college students in these areas. The findings could then potentially be generalized to similar urban educational settings.

**Study Participants**

This study's respondents will come from the college schools in Angeles City which provide a valuable insight and firsthand experiences regarding property victimization. To ensure a representative sample that reflects the diversity of college students in Angeles City, respondents will be selected using a stratified random sampling



method which involves dividing the population into distinct subgroups based on characteristics such as academic institution year level, and course. Participants will be selected randomly, ensuring that every eligible college student has an equal chance of being included in the study.

**Sample Size**

The sample size of this study will be 381 based on the table below. The table is computed through the help of raosoft sample size calculator as the total population of the three academic institutions involved in the study has 42,018 in total. The sample size per school is computed based on the sample size of the whole population, of which there will be 181 respondents in AUF, 145 in HAU and 55 in CCA. The sample size is determined by the type of sampling used which is stratified random sampling.

Academic Institutions	Population	Percentage	Computed Sample
University A	20,000	47.59%	181
University B	16,000	38.07%	145
University C	6,018	14.34%	55
Total	42,018	100%	381

**Inclusion and Exclusion Criteria**

**Inclusion Criteria**

Respondents can be included in the study if they meet the following criteria: they must be bona fide college students enrolled at one of the specified academic institutions, which include Angeles University Foundation (AUF), Holy Angel University (HAU), and City College of Angeles (CCA). Additionally, respondents must be 18 years of age or older at the time they complete the survey questionnaire.

**Exclusion Criteria**

Respondents will be excluded from the study under the following condition: if the respondent is a cross-enrollee at the specified academic institutions and does not take their subject courses purely within the curriculum of the institution. This ensures that only those students who are fully immersed in the academic environment of Angeles University Foundation (AUF), Holy Angel University (HAU), or City College of Angeles (CCA) are included in the study.

**Research Instruments**

To assess the degree of self-control of college students in Angeles City, Low Self-Control Scale by Grasmick, Tittle, Bursik, and Arneklev’s (1993) is utilized. This survey questionnaire is a 24-item self-control measure divided into 6 parts in which responses to each question were on a 4-point Likert-type scale ranging from strongly agree (coded 1), somewhat agree (coded 2), somewhat disagree (coded 3), strongly disagree (coded 4).

To assess exposure of college students in Angeles City, it was evaluated how frequently the respondent spent time in public and away from home settings. Specifically, the questions request the respondents to provide the numbers of days per week spent on campus during daytime (before 6:00 pm) and off campus. Answers to every question are with a range of possible answers from 1 to 7.

To assess target attractiveness of college students in Angeles City, it was measured through the use of a one item question which asked the respondents to provide the number of days in the past month that they carried 2,500 pesos or more in cash or wore jewelry that was worth more than 5, 000 pesos. The choices in this question are a continuous scale ranging from 0-31.

To assess guardianship of college students in Angeles City, it was measured through the use of a one item question which respondents are asked on How many close friends do you currently have?. The choices in this question are on a 3-point scale where none was coded 0, one or two was coded 1, and three or more was coded

2. In order to determine their guardianship in a second measure, the other question asks about the residence of the respondents during the academic year. The choices in this question is a 2 point scale composed of 1 question coded 1 if the student's residence is on campus, or coded 2 if it's off campus. When living on campus, students dwell in resident halls or apartment buildings run by the university, both of which are linked homes that have several apartments in a single structure.

To assess property victimization of college students in Angeles City, the questionnaire utilized in the study by Franklin et. al, (2011) entitled "Assessing the Effect of Routine Activity Theory and Self-Control on Property, Personal, and Sexual Assault Victimization" was adopted for this study. It is a 4-point scale composed of three questions. The choices are: (1) Never, (2) Once, (3) A Few Times, and (4) Frequently.

### **Specific Procedures**

Since the study will be using a descriptive survey type of research, survey questionnaires will be used to gather information needed for further analyzation of the current study which pertains to the relationship between the said variables: self control, target attractiveness, exposure, guardianship and routine activities theory and property victimization. After that, the researchers will have to produce a hard copy of the research instrument that was mentioned in the subsections above. The researchers will base on stratified random sampling when selecting respondents as the sample size of the study will be 381 respectively, as well as be selected based on the exclusion and inclusion criteria of the study. The researchers then will roam around the three academic institutions (AUF, HAU and CCA) in order to gather data. Each day, an envelope will be used to store the gathered data and keep safe in the arms of the team leader. Next, the data will be coded in the computer to directly store for further analysis and computation. The data storage will be led by the researchers involved as it will be electronically protected via password which will be exclusive to the said researchers. To ensure the reliability and replicability of the study, documentation will be prioritized.

### **Ethical Considerations**

To safeguard the rights of the participants, an informed consent form will be provided to them prior to the commencement of data collection. This form emphasizes the research's commitment to ethical principles. Participants will either read the consent form themselves or have it read and explained to them by the researchers in a language they understand, whether English or Filipino. After completing the consent process, participants will be asked to confirm their understanding of all aspects and their agreement to participate in the survey. Additionally, participants will be reminded of their right to withdraw from the study at any time.

To ensure the confidentiality of respondents' information, all completed questionnaires will be securely stored in an envelope managed by the team leader. At the end of each day of data collection, the completed questionnaires will be promptly entered into a computer to ensure proper safeguarding and backup of the data. Access to both the physical and digital copies of the questionnaires will be strictly limited to the two researchers involved in this study. These measures are in place to ensure that the collected data will be used solely for the purposes of this research.

In order to minimize potential risks to the respondents, the researchers will ensure that the questionnaires are completed in a comfortable, shaded environment that is devoid of distractions and unnecessary risks. Respondents will also have the freedom to select a location where they feel most at ease to complete the questionnaires.

To optimize the benefits of the study, the researchers will consistently reassure the respondents that the study's findings and interpretations could significantly benefit them as inhabitants of Angeles City. This is because the results could be used to inform potential future enhancements in social conditions and policy-making. The study also adds value to the field of Criminology, serving as a valuable resource for future researchers in Angeles City. Given these factors, the respondents' participation plays a crucial role in the successful completion of the research and the realization of the benefits mentioned, thus outweighing any potential risks they may encounter.

To ensure fairness in the selection of participants, the selection process will adhere to the inclusion and exclusion criteria outlined for this study. Once participants are identified based on these criteria, the researchers will exercise their discretion in finalizing the selection, while consciously avoiding any bias or

subjectivity. Consequently, the researchers bear the responsibility of taking special care when dealing with such sensitive participants. This includes assisting them thoroughly in understanding and completing the informed consent and questionnaires, addressing their concerns about the survey, catering to their personal needs during the survey process, and respecting and valuing their perspectives.

To ensure integrity in the research process, the ethical principles will be regularly monitored until the completion of the survey and the research itself. The researchers and their adviser will be the only people who have access to the gathered data. They are also responsible for the storage and processing of such data. In the event that there will be ethical issues, the researchers will do their best to address such issues promptly and effectively. If, however, there are harm and privacy and confidentiality issues that arise from the process, the researchers will take full responsibility. To address possible issues, the respondents may contact the researchers through the provided email address in the informed consent. Finally, to completely observe the integrity of the research, every action taken by the researchers, from administering the informed consent and questionnaires to processing the data, will be well-documented through photographs and reports.

**Statistical Analysis of Data**

The study will utilize the Pearson Moment Correlation Coefficient, a statistical method, to analyze the data obtained from the surveys. This analysis is designed to uncover the relationships between the variables of interest, namely self-control, target attractiveness, exposure, guardianship, routine activities theory, and property victimization. By setting a significance level of 0.05, the study ensures that the probability of rejecting the null hypothesis (i.e., no relationship between the variables) when it is true is limited to 5%. This is a common standard in research that balances the risks of false positives and negatives.

The study will also utilize the Multivariate Regression Analysis which is a statistical analysis used to analyze the relationship between the multiple independent variables such as self-control, target attractiveness, exposure, guardianship and a single dependent variable which is the property victimization. By setting a significance level of 0.05, the study ensures that the probability of rejecting the null hypothesis (i.e., no relationship between the variables) when it is true is limited to 5%. This is a common standard in research that balances the risks of false positives and negatives.

The insights gained from this analysis could provide valuable information about the factors influencing property victimization among college students. For instance, if a significant relationship is found between self-control and property victimization, it could suggest that interventions aimed at improving self-control might be effective in reducing victimization. Similarly, if target attractiveness, exposure, or guardianship are significantly related to victimization, it could inform strategies for crime prevention in college environments. The role of routine activities theory in moderating these relationships could also offer a more nuanced understanding of the dynamics of property victimization.

**V. RESULTS**

**Table 1:**

**Profile of Respondents as to School**

School of Respondents	Frequency	Percentage
Angeles University Foundation	182	47.8
Holy Angel University	143	37.5
City College of Angeles	56	14.7
Total	381	100

The table presents the distribution of respondents according to their respective schools. Among the 381 total respondents, 47.8% were from Angeles University Foundation, making it the most represented school. Following closely behind was Holy Angel University, with 37.5% of the respondents. The City College of Angeles had the smallest representation at 14.7%. This breakdown indicates a significant majority of respondents from Angeles University Foundation, suggesting a potential bias in the sample towards this institution.



**Table 2:**

**Self-control-Impulsivity**

	Preparation for the future	Spontaneity	Pleasure without consequences	Decision based on present circumstances	Average
Mean	3.57	3.02	2.99	2.69	3.07
Verbal Interpretation	Strongly Agree	Strongly Agree	Agree	Agree	Strongly Agree
Std. Deviation	0.56	0.72	0.87	1.01	0.79
Variance	0.31	0.52	0.76	1.02	0.65

The data provides insights into the respondent's self-control and impulsivity tendencies across various dimensions. On average, respondents show moderate preparation for the future, indicating a balance between present actions and future planning. They also exhibit a moderate inclination towards spontaneity, suggesting a willingness to act on impulse to some extent. However, they seem to be moderately cautious about seeking pleasure without considering consequences, indicating a degree of restraint. The lowest mean score for decisions based on present circumstances suggests that respondents are less likely to make decisions impulsively based solely on immediate situations, showing some consideration for long-term consequences or past experiences. Overall, the data paints a picture of individuals who are moderately self-controlled but not entirely devoid of impulsive tendencies, striking a balance between immediate gratification and future planning.

**Table 3:**

**Self-Control-Physical Activity**

	Physical Preference	Activity Preference	Action Over Contemplation	Physical Activity Need	Average
Mean	2.92	3.06	3.14	2.92	3.01
Verbal Interpretation	Agree	Strongly Agree	Strongly Agree	Agree	Strongly Agree
Std. Deviation	0.78	0.91	0.84	0.91	0.86
Variance	0.61	0.82	0.71	0.83	0.74

The table summarizes respondents' preferences and inclinations across several categories. On average, respondents tend to agree with statements related to physical preference, action over contemplation, and the need for physical activity, with mean scores ranging from 2.92 to 3.14. Particularly, they strongly agree with activity preference and action over contemplation, indicated by mean scores of 3.06 and 3.14 respectively. These findings suggest a collective inclination towards physical engagement and a preference for action-oriented approaches rather than passive contemplation among the respondents. Standard deviations indicate a moderate level of variability around the mean for each category, implying some diversity in individual responses within each preference domain.

**Table 4:**

**Self-control-Risk-seeking**

	Risk Testing	Risk for Fun	Excitement in Risk	Adventure Over Security	Average
Mean	3.21	3.01	2.58	2.55	2.84
Verbal	Strongly	Strongly	Agree	Agree	Agree

Interpretation	Agree	Agree			
Std. Deviation	0.73	0.89	1.04	1.02	0.92
Variance	0.53	0.79	1.09	1.04	0.86

The data suggests that, on average, the participants reported a moderate level of self-control in relation to risk-seeking behaviours. Across all dimensions measured, such as risk testing, risk for fun, excitement in risk, and preference for adventure over security, the average scores ranged from 2.55 to 3.21, with an overall average of 2.84. The standard deviation values, ranging from 0.73 to 1.04, indicate a moderate to a high level of variability around the mean, suggesting that while the average level of self-control is moderate, there are significant individual differences in how participants perceive and engage with risk-seeking behaviours.

**Table 5:**

**Self-control-self-centered**

	Self-interest First	Lack of concern for Others	Indifference to Others reactions	Pursuing Wants despite problem	Average
Mean	2.35	2.15	2.06	2.03	2.15
Verbal Interpretation	Agree	Agree	Agree	Agree	Agree
Std. Deviation	0.96	1.03	1.01	0.97	0.99
Variance	0.92	1.05	1.03	0.94	0.99

The table indicates that, on average, the participants showed a moderate level of self-interest, as reflected in their tendencies to prioritize their own needs and wants over those of others. The mean scores for self-interest first, lack of concern for others, indifference to others' reactions, and pursuing wants despite potential problems ranged from 2.03 to 2.35, with an overall average of 2.15. The standard deviation values, ranging from 0.96 to 1.03, suggest a moderate to a high level of variability around these mean scores, indicating that while the average level of self-interest is moderate, there are notable individual differences in the extent to which participants prioritize their own interests over others.

**Table 6:**

**Self-control-Simple Task**

	Avoiding difficult Projects	Quitting when Complicated	Easy and Pleasurable Task	Avoiding Challenging Task	Average
Mean	2.61	2.29	2.72	2.51	2.53
Verbal Interpretation	Agree	Agree	Agree	Agree	Agree
Std. Deviation	0.92	1.00	0.85	0.94	0.93
Variance	0.85	1.00	0.72	0.88	0.86

The table indicates that, on average, the participants reported a moderate level of self-control in relation to simple tasks. The mean scores for avoiding difficult projects, quitting when tasks become complicated, preferring easy and pleasurable tasks, and avoiding challenging tasks ranged from 2.29 to 2.72, with an overall average of 2.53. The standard deviation values, ranging from 0.85 to 1.00, suggest a moderate level of variability around these mean scores, indicating that while the average level of self-control is moderate, there are individual differences in how participants approach and handle simple tasks.

**Table 7:**

**Self-control-Temper**

	Easily Losing Temper	Anger incites violence	Stay away when angry	Upset in disagreements	Average
Mean	2.76	2.27	2.80	2.63	2.61
Verbal Interpretation	Agree	Agree	Agree	Agree	Agree
Std. Deviation	0.93	1.04	0.96	0.95	0.97
Variance	0.86	1.09	0.92	0.90	0.94

The data provided offers insight into respondents' attitudes and behaviors regarding temperamental tendencies and reactions to anger-provoking situations. On average, participants agreed with the statement that they tend to lose their temper easily, as indicated by a mean score of 2.76. Furthermore, there was a notable inclination towards feelings of aggression when angry, with a mean score of 2.27 suggesting a tendency to lean towards thoughts of harm rather than resolving issues through communication. Similarly, respondents expressed a strong agreement (mean score of 2.80) with the notion that others should steer clear when they are deeply angry. Moreover, there was acknowledgment (mean score of 2.63) of the difficulty in maintaining composure during serious disagreements, with a tendency to become upset rather than engage in calm discussion. Overall, the data reflects a pattern of agreement with statements highlighting challenges in managing anger and maintaining emotional control during conflicts.

**Table 8:**

**Target attractiveness of college students**

	Possession of valuable items	Student Routine Risks	Flashy Jewelry Risks	Late Solo Vulnerability	Visible Distraction Risks	Cash Attracts Criminals	Average
Mean	18.71	3.41	2.96	3.09	3.06	3.05	5.71
Verbal Interpretation	19 days	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Strongly Agree	
Std. Deviation	12.54	0.60	0.71	0.75	0.89	0.55	2.67
Variance	157.13	0.36	0.50	0.56	0.79	0.31	26.61

The table presents statistical analysis of various risk factors associated with students and their possessions. The mean values indicate the average risk levels, with 'Possession of valuable items' having the highest average risk (18.71) and 'Cash Attracts Criminals' having the lowest (3.05). The standard deviation and variance values show the variability in these risks. 'Possession of valuable items' has the highest variability, as indicated by a standard deviation of 12.54 and a variance of 157.13, suggesting significant differences in risk perception among students regarding valuable items. In contrast, 'Cash Attracts Criminals' has the lowest variability (standard deviation 0.55, variance 0.31), indicating more consistent views on the risks associated with carrying cash. The overall average risk across all categories is 5.71, with varying degrees of risk perception and consistency among the different factors.

**Table 9:**

**Exposure of college students**

	Weekly campus days.	Public leisure frequency.	Weekly partying frequency.	Average
Mean	4.52	3.80	2.85	3.72

Verbal Interpretation	5 days	3 days	1 day	3 days
Std. Deviation	1.39	1.72	2.01	1.70
Variance	1.92	2.95	4.03	2.97

The data indicates that, on average, respondents spend approximately 4.52 days per week on campus during the daytime. This suggests that a significant portion of their time is dedicated to academic or campus-related activities. The average frequency of spending leisure time in public settings, such as on the street, square, park, or cafe, is 3.80 days per week. This indicates a moderate level of engagement in social or outdoor activities outside of academic commitments. However, there is more variability in the number of days per week spent "partying" both on and off campus, with an average of 2.85 days. This variability suggests that while some respondents engage in "partying" activities frequently, others do so less often. Overall, the data suggests a balance between academic commitments, social engagement in public settings, and varying levels of participation in "partying" activities among the respondents.

**Table 10:**

**Guardianship of college students**

	Close friends currently have	Housing Preference	Average
Mean	2.86	1.92	2.39
Verbal Interpretation	Two or more close friends	Off campus	
Std. Deviation	0.41	0.27	0.34
Variance	0.17	0.07	0.12

The table provides insights into the social and living arrangements of the respondents. On average, respondents reported having 2.86 close friends, indicating a moderately sized social circle. The low standard deviation of 0.41 suggests that this average is consistent across most respondents, with relatively little variation in the number of close friends. In terms of living arrangements, the average score of 1.92 likely represents a categorical variable, such as living alone, with family, or with roommates. The standard deviation of 0.27 indicates some variability in living situations among respondents, although not as pronounced as the variation in the number of close friends. Overall, the data paints a picture of respondents having a moderate number of close friends, with some diversity in living arrangements but with more consistency in the number of close social connections.

**Table 11:**

**Property victimization**

	Public Place Theft	Home Theft	Intentional Damage	Vehicle Theft	Theft from Vehicle	Average
Mean	2.02	1.93	1.74	1.37	1.66	1.74
Verbal Interpretation	A few times	Once	Once	Once	Once	Once
Std. Deviation	0.97	0.98	0.91	0.81	0.94	0.92
Variance	0.95	0.95	0.83	0.66	0.88	0.85

The table presents statistical data on the frequency of different types of theft and intentional damage experienced by respondents, along with their average scores, verbal interpretations, standard deviations, and variances. On average, respondents reported experiencing each type of theft or intentional damage once, as indicated by the mean scores ranging from 1.37 to 2.02. Variability in responses was observed across the categories, with standard deviations ranging from 0.81 to 0.98 and variances ranging from 0.66 to 0.95. Overall, the data suggests a moderate level of occurrence for public place theft, home theft, intentional damage, vehicle

theft, and theft from vehicles, with some variation in individual experiences reflected by the standard deviations and variances.

**Table 12:**

**Relationship between self-control and Property Victimization**

Correlations			
		Self-Control	Property Victimization
	Pearson Correlation	1	.859
	Sig. (2-tailed)		.062
	Sum of Squares and Cross-products	3.462	.284
	Covariance	.151	.071
N		24	5

The correlation analysis reveals a strong positive relationship between self-control and property victimization, with a Pearson correlation coefficient of .859. This aligns with previous research, such as Chan (2019), which found that individuals with low self-control are more susceptible to victimization. Respondents with low self-control may be more susceptible to absorbing deviant norms and values, increasing the risk of property victimization. These findings suggest that low self-control may hinder individuals' ability to defend themselves against victimization. Similarly, in the study of Qu, Wu, and Chen (2021), found direct evidence that self-control influences property victimization among Chinese adolescents, further reinforcing the relationship between self-control and victimization. However, the non-significant p-value of .062 suggests that this correlation may not be statistically significant at the common threshold of .05, raising doubts about its reliability. The sum of squares and cross-products provide measures for the correlation calculation, the small sample size for property victimization limits the robustness of the results.

Further research with larger sample sizes is essential to validate the correlation between self-control and property victimization, as indicated by the non-significant p-value and significant sample size difference. This comprehensive investigation not only confirms the initial findings but also delves into underlying mechanisms and complexities of the association. By refining measurement techniques and identifying mediating factors, researchers can gain a nuanced understanding of how self-control influences victimization. Longitudinal studies can reveal temporal dynamics, while exploring cultural variations can inform targeted interventions and policies to reduce property victimization. Addressing these limitations through further research holds broader implications for theory, practice, and policy in criminology and victimology.

**Table 13:**

**Relationship between target attractiveness and property victimization**

		Possession of valuable items	Flashy Jewelry Risks	Student Routine Risks	Late Solo Vulnerability	Visible Distraction Risks	Cash Attracts Criminals	Property Victimization
Possession of valuable items	Pearson Correlation	1	-.017	.023	.021	-.022	.034	.537
	Sig. (2-tailed)		.747	.653	.689	.667	.513	.109
	N	381	381	381	381	381	381	10
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								



The table presents Pearson correlation coefficients between various risk factors and property victimization among students, with significance levels (Sig.) and sample sizes (N). The strongest positive correlation is between "Possession of valuable items" and "Property Victimization" ( $r = .537$ ), suggesting that students possessing valuable items are more likely to experience property victimization, though this relationship is not statistically significant ( $p = .109$ ). This finding resonates with insights from related literature, particularly in the study of Kulararasana and Bernasco (2021), which explores the concepts of crime generators and crime attractors. They found a significant relationship between various facilities such as parks, educational institutions, and business offices, and offender preferences. These facilities may attract offenders due to the presence of valuable items or other factors, influencing their preferences for certain areas.

Significant negative correlations are observed between "Late Solo Vulnerability" and both "Flashy Jewelry Risks" ( $r = -.233, p < .01$ ) and "Student Routine Risks" ( $r = -.142, p < .01$ ), indicating that students who are vulnerable when alone late at night tend to perceive lower risks associated with flashy jewelry and routine behaviors. Positive correlations are found between "Visible Distraction Risks" and "Student Routine Risks" ( $r = .314, p < .01$ ), and between "Cash Attracts Criminals" and both "Flashy Jewelry Risks" ( $r = .208, p < .01$ ) and "Student Routine Risks" ( $r = .155, p < .01$ ), implying a perceived linkage between these risks. Overall, the data highlights complex interrelationships among risk factors, with varying degrees of significance and correlation strengths. Additionally, the literature suggests that individual characteristics, such as physical attractiveness, can also influence the likelihood of victimization. Savolainen, Brauer, and Ellonen (2019) highlight that individuals with physical attractiveness are more likely to be targeted by offenders, as they tend to spend time with many friends and engage in activities that expose them to potential offenders.

The findings from the correlation analysis underscore the nuanced relationship between various risk factors and property victimization among students. While there's a notable positive correlation between possession of valuable items and property victimization, echoing insights from crime generators and attractors theory, the significance of this relationship is not confirmed statistically. Moreover, negative correlations between late solo vulnerability and perceived risks associated with flashy jewelry and routine behaviors highlight the complex dynamics of risk perception. The positive correlations between visible distraction risks, cash attractiveness, and other risk factors further emphasize the interconnected nature of these risks. Importantly, the literature supplements these findings by suggesting that individual characteristics, such as physical attractiveness, may also play a role in victimization likelihood. These insights collectively emphasize the need for multifaceted approaches to student safety, considering not only environmental factors but also individual attributes and perceptions.

**Table 14:**

**Relationship between exposure and property victimization**

Correlations			
		Property Victimization	Exposure
Property Victimization	Pearson Correlation	1	.991
	Sig. (2-tailed)		.084
	Sum of Squares and Cross-products	.261	.238
	Covariance	.065	.119
	N	5	3
Exposure	Pearson Correlation	.991	1
	Sig. (2-tailed)	.084	
	Sum of Squares and Cross-products	.238	1.401
	Covariance	.119	.701

	N	3	3
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The table displays a correlation analysis between property victimization and exposure, revealing a remarkably high Pearson correlation coefficient of 0.991, indicating a very strong positive relationship between these variables. In line with this findings, the study of Payne, Morgan and Piquerro(2021), significant interruptions to these daily routines, as implied by the correlation between property victimization and exposure, are likely to have a substantial effect on the times and locations at which crime occurs. According to Brantingham and Brantingham (1995) and Kinney et al. (2008 in Guangwen et al., 2018), concentrations of potential victims and targets in areas such as transit stations, restaurants, bars, parks, retail stores, and schools serve as crime generators, presenting ample criminal opportunities. This suggests that motivated offenders may linger in such places, waiting for opportune moments to strike.

However, this correlation lacks statistical significance at the 0.05 level, with a p-value (Sig. 2-tailed) of 0.084, possibly due to the small sample size (N=3 for exposure and N=5 for property victimization), limiting the reliability and generalizability of the finding. The sum of squares and cross-products for property victimization and exposure, at 0.261 and 0.238 respectively, along with covariance values of 0.065 for property victimization and 0.119 for exposure, indicate the degree of variation and covariation between the variables, supporting the observed strong correlation. Nevertheless, caution is warranted in drawing definitive conclusions due to the limited number of observations, emphasizing the need for further research with a larger sample size to confirm the relationship's robustness and validity. Furthermore, understanding the relationship between exposure and property victimization can inform the allocation of resources for crime prevention efforts. By identifying areas with high levels of exposure and implementing targeted interventions, law enforcement agencies and community organizations can more effectively address property crime and enhance community safety.

**Table 15:**

**Relationship between guardianship and property victimization**

Correlations			
		Property Victimization	Guardianship
Property Victimization	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		.
	Sum of Squares and Cross-products	.261	.042
	Covariance	.065	.042
Guardianship	N	5	2
	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	.	
	Sum of Squares and Cross-products	.042	.439
	Covariance	.042	.439
	N	2	2

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis between property victimization and guardianship presents a striking result, indicating a perfect positive relationship with a Pearson correlation coefficient of 1.000. The finding of a perfect positive relationship between property victimization and guardianship in the correlation analysis aligns with insights from related literature on crime opportunity theories. In line with this findings, the study of Wood and Stichman (2018) establish the relationship between guardianship and property victimization. The findings reiterated that individuals who frequently find themselves in environments lacking capable guardianship are more susceptible to property victimization, including stalking. Moreover, this correlation is considered

statistically significant at the 0.01 level, denoted by double asterisks (\*\*). However, the very small sample sizes N=5 for property victimization and N=2 for guardianship which pose significant challenges to the reliability and generalizability of this correlation. While the Sum of Squares and Cross-products values for both variables align with the perfect correlation observed, suggesting a strong association, the limited sample size for guardianship raises concerns about statistical artifacts. Therefore, while the perfect positive relationship between property victimization and guardianship underscores the importance of guardianship in crime prevention, future research should aim to address the limitations of small sample sizes to ensure the robustness and validity of the findings. Additionally, efforts should be made to replicate the study with larger and more representative samples to enhance the reliability and generalizability of the correlation analysis.

**Table 16:**

**Correlation between property victimization, self-control, target attractiveness, exposure, and guardianship**

		Self Control	Target Attractiveness	Exposure	Guardianship	Property Victimization
Self Control	Pearson Correlation	1	.551**	.043	-.043	.496
	Sig. (2-tailed)		.005	.907	.906	.145
	Sum of Squares and Cross-products	3.462	1.795	.068	-.118	.246
	Covariance	.151	.078	.008	-.013	.027
	N	24	24	10	10	10
Target Attractiveness	Pearson Correlation	.551**	1	-.149	.137	.456
	Sig. (2-tailed)	.005		.682	.706	.186
	Sum of Squares and Cross-products	1.795	3.064	-.171	.268	.162
	Covariance	.078	.133	-.019	.030	.018
	N	24	24	10	10	10
Exposure	Pearson Correlation	.043	-.149	1	-.413	.124
	Sig. (2-tailed)	.907	.682		.236	.733
	Sum of Squares and Cross-products	.068	-.171	5.430	-3.818	.209
	Covariance	.008	-.019	.603	-.424	.023
	N	10	10	10	10	10
Guardianship	Pearson Correlation	-.043	.137	-.413	1	-.611
	Sig. (2-tailed)	.906	.706	.236		.061
	Sum of Squares and Cross-products	-.118	.268	-3.818	15.775	-1.753
	Covariance	-.013	.030	-.424	1.753	-.195
	N	10	10	10	10	10
Property Victimization	Pearson Correlation	.496	.456	.124	-.611	1
	Sig. (2-tailed)	.145	.186	.733	.061	
	Sum of Squares and Cross-	.246	.162	.209	-	.523

	products				1.753	
	Covariance	.027	.018	.023	-.195	.058
	N	10	10	10	10	10
**. Correlation is significant at the 0.01 level (2-tailed).						

The table presents correlations between five variables: self-control, target attractiveness, exposure, guardianship, and property victimization. Self-control shows a strong positive correlation with target attractiveness ( $r = 0.551, p = 0.005$ ) and property victimization ( $r = 0.496, p = 0.145$ ), indicating that individuals with higher levels of self-control are more likely to find targets attractive and experience property victimization. The significant relationship between self-control and property victimization observed in the presented study aligns with existing research suggesting that self-control plays a crucial role in predicting criminal behavior and victimization. Stults, Hernandez, and Hay (2021) argue that self-control and peer delinquency are interdependent factors influencing crime and delinquency rather than opposing theories. Poor self-control intensifies the association between delinquent peers and criminal behavior. Adolescents with criminal records often exhibit low self-control and are exposed to criminal opportunities. Additionally, the study of Bobbio (2018) highlighting self-control as a predictor of criminality in various teenage samples. Therefore, the correlation between self-control and property victimization underscores the importance of self-control in understanding and preventing criminal behavior and victimization. Moreover, there are no significant correlations between self-control and exposure or guardianship. Target attractiveness has a significant positive correlation with self-control ( $r = 0.551, p = 0.005$ ) and a non-significant positive correlation with property victimization. Exposure and guardianship show a significant negative correlation ( $r = -0.413, p = 0.236$ ), indicating that higher levels of exposure are associated with lower levels of guardianship. Property victimization has a significant negative correlation with guardianship ( $r = -0.611, p = 0.061$ ), suggesting that higher levels of guardianship are associated with lower levels of property victimization. In line with this findings, Wood and Stichman (2018), research indicates that individuals who frequent environments lacking capable guardianship, combined with the presence of motivated criminals, are at increased risk of victimization, including stalking

**Table 17:**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.981 <sup>a</sup>	.962	.811	.11095	.962	6.365	4	1	.288
a. Predictors: (Constant), Self Control, Target Attractiveness, Guardianship, Exposure									

**Table 18:**

**Annova**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.313	4	.078	6.365	.288 <sup>b</sup>
	Residual	.012	1	.012		
	Total	.326	5			
a. Dependent Variable: Property Victimization						
b. Predictors: (Constant), Self Control, Target Attractiveness, Guardianship, Exposure						

**Table 19:**

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	.636	.698		.911	.530		
	Guardianship	-.160	.089	-.389	-1.804	.322	.814	1.229
	Exposure	-.059	.075	-.196	-.788	.575	.609	1.641
	Target Attractiveness	.009	.010	.232	.963	.512	.649	1.540
	Self Control	.587	.189	.665	3.099	.199	.821	1.218

**Table 20:**

**Collinearity Diagnostics**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Guardianship	Exposure	Target Attractiveness	Self Control
1	1	4.452	1.000	.00	.00	.00	.01	.00
	2	.497	2.993	.00	.00	.00	.56	.00
	3	.031	11.926	.00	.67	.12	.00	.03
	4	.017	16.312	.04	.01	.88	.42	.09
	5	.003	41.259	.96	.32	.00	.00	.88

a. Dependent Variable: Property Victimization

The tables present findings from a regression analysis aimed at understanding the relationship between various predictors (Self Control, Target Attractiveness, Guardianship, Exposure) and Property Victimization. In Table 17, the model summary indicates a strong relationship between the predictors and the dependent variable, with an R-squared value of .962, suggesting that approximately 96.2% of the variability in Property Victimization can be explained by the predictors. Additionally, the F-test for overall significance indicates that the model is statistically significant (F = 6.365, p = .288). Table 18 provides further insight into the significance of the regression model, showing that the regression is significant (p = .288), implying that at least one of the predictors significantly predicts Property Victimization.

Moving to Table 19, the coefficients table shows the impact of each predictor on the dependent variable. Notably, Self Control appears to have the highest impact, with a coefficient of .587 and a t-value of 3.099. However, only Self Control is statistically significant (p = .199) at the conventional alpha level of .05. Collinearity diagnostics in Table 20 suggest low collinearity among the predictors, with tolerance values above 0.2 and variance proportions well-distributed. However, it's important to note that the Eigenvalues and Condition Index values suggest potential multicollinearity issues when all predictors are considered together. Overall, while the model demonstrates a strong relationship between predictors and Property Victimization, caution is warranted due to the potential multicollinearity issue and the lack of statistical significance for some predictors. Further analysis may be needed to confirm the robustness of the findings and to better understand the individual contributions of each predictor to Property Victimization.

**Synthesis of Data:**

The synthesis of findings reveals a nuanced understanding of the relationship between self-control, target attractiveness, exposure, guardianship, and property victimization. Self-control emerges as a critical factor, positively correlated with both target attractiveness and property victimization, indicating that individuals with higher self-control may find certain targets more attractive and are also more susceptible to victimization.



Target attractiveness exhibits a positive correlation with self-control but lacks significance with property victimization, suggesting that while attractiveness may influence perceptions, its direct impact on victimization outcomes is unclear. Exposure demonstrates a strong positive correlation with property victimization, emphasizing the role of disruptions to daily routines in shaping criminal activity, though statistical significance is lacking due to small sample sizes. Conversely, effective guardianship shows a perfect positive correlation with property victimization, highlighting the vulnerability of environments lacking capable guardians. However, concerns about small sample sizes raise questions about the reliability of this correlation. The regression analysis reinforces the importance of self-control in predicting property victimization, though potential multicollinearity issues warrant further investigation into the individual contributions of each predictor. Overall, these findings underscore the intricate interplay between individual traits, environmental factors, and victimization outcomes, offering valuable insights for targeted interventions and community safety efforts.

## VI. RESULTS AND DISCUSSION

### Summary of findings and implications

#### Relationship between self-control and property victimization

The correlation analysis between property victimization and exposure indicates a remarkably high Pearson correlation coefficient of 0.991, signifying a strong positive relationship between these variables. Payne, Morgan, and Piquerro (2021) suggest that disruptions to daily routines, as implied by this correlation, can significantly affect when and where crime occurs. Concentrations of potential victims in places like transit stations, restaurants, and schools serve as crime generators, providing ample opportunities for motivated offenders. However, the correlation lacks statistical significance at the 0.05 level, possibly due to the small sample size (N=3 for exposure and N=5 for property victimization), limiting the finding's reliability and generalizability. Despite this, the degree of variation and covariation between the variables supports the observed strong correlation. Caution is advised in drawing definitive conclusions, highlighting the need for further research with a larger sample size to confirm the relationship's robustness. Understanding the relationship between exposure and property victimization can inform the allocation of resources for crime prevention efforts, allowing for more targeted interventions and enhanced community safety.

#### Relationship between target attractiveness and property victimization

The table displays Pearson correlation coefficients between various risk factors and property victimization among students, along with significance levels and sample sizes. The most notable correlation is between "Possession of valuable items" and "Property Victimization" ( $r = .537$ ), suggesting a link between owning valuable items and experiencing victimization, though not statistically significant. This aligns with Kuralarasan and Bernasco's research on crime generators and attractors, which highlights how certain facilities attract offenders due to valuable items. Additionally, the study shows negative correlations between "Late Solo Vulnerability" and perceived risks associated with flashy jewelry and routine behaviors, indicating complex risk perception dynamics. Positive correlations exist between "Visible Distraction Risks" and "Student Routine Risks," and between "Cash Attracts Criminals" and various risks, suggesting perceived connections. Moreover, literature suggests that physical attractiveness may influence victimization likelihood, with attractive individuals being more targeted due to their social activities. Overall, the findings emphasize the need for comprehensive safety approaches considering both environmental factors and individual characteristics.

#### Relationship between exposure and property victimization

The correlation analysis between property victimization and exposure demonstrates a notably high Pearson correlation coefficient of 0.991, indicating a strong positive relationship between the variables. This suggests that disruptions to daily routines, as indicated by the correlation, may influence the timing and locations of criminal activity. Concentrations of potential victims in places like transit stations and retail stores create opportunities for crime, though the correlation lacks statistical significance at the 0.05 level due to a small sample size. Despite this, covariance values and the degree of variation between the variables support the observed correlation. Caution is advised in drawing conclusions, emphasizing the need for further research

with a larger sample size. Understanding this relationship can guide resource allocation for crime prevention efforts, allowing for more targeted interventions to address property crime and enhance community safety.

### **Relationship between guardianship and property victimization**

The correlation analysis between property victimization and guardianship reveals a striking result, showing a perfect positive relationship with a Pearson correlation coefficient of 1.000. This finding aligns with existing crime opportunity theories and is supported by Wood and Stichman's (2018) study, which establishes the link between guardianship and property victimization. Individuals exposed to environments lacking capable guardianship are found to be more vulnerable to property victimization, including stalking. Despite the statistical significance at the 0.01 level, indicated by double asterisks (\*\*), the very small sample sizes (N=5 for property victimization and N=2 for guardianship) pose significant challenges to the reliability and generalizability of the correlation. While the Sum of Squares and Cross-products values support the observed perfect correlation, the limited sample size for guardianship raises concerns about statistical artifacts. Thus, while the perfect positive relationship underscores the importance of guardianship in crime prevention, future research should address the limitations of small sample sizes to ensure the robustness and validity of findings. Replication with larger and more representative samples is recommended to enhance the reliability and generalizability of the correlation analysis.

### **Correlation between property victimization, self-control, target attractiveness, exposure, and guardianship**

The correlation analysis between self-control, target attractiveness, exposure, guardianship, and property victimization reveals intricate relationships shedding light on the dynamics of criminal behavior and victimization. Self-control emerges as a critical factor, positively correlated with both target attractiveness and property victimization. This suggests that individuals with higher levels of self-control are not only more inclined to find targets attractive but also more susceptible to experiencing property victimization. These findings align with existing research emphasizing the significant role of self-control in predicting criminal behavior and victimization. Moreover, the absence of significant correlations between self-control and exposure or guardianship underscores the complexity of these relationships. Target attractiveness exhibits a significant positive correlation with self-control but lacks a significant correlation with property victimization. Conversely, exposure and guardianship demonstrate a significant negative correlation, indicating that environments with higher exposure tend to have lower levels of guardianship, while property victimization exhibits a negative correlation with guardianship, suggesting that effective guardianship can reduce victimization risks. These findings underscore the multifaceted interplay between individual traits, environmental factors, and victimization outcomes, providing valuable insights for addressing and preventing criminal behavior and victimization.

### **Summary of Regression Analysis**

The regression analysis conducted to explore the relationship between predictors (Self Control, Target Attractiveness, Guardianship, Exposure) and Property Victimization reveals several key findings. The model summary in Table 17 indicates a robust relationship between the predictors and the dependent variable, with an impressive R-squared value of .962, suggesting that approximately 96.2% of the variability in Property Victimization can be explained by the predictors. Moreover, the F-test for overall significance demonstrates that the model is statistically significant ( $F = 6.365$ ,  $p = .288$ ), indicating that at least one of the predictors significantly predicts Property Victimization. Moving to Table 18, the regression's significance ( $p = .288$ ) reinforces this notion. However, Table 19's coefficients table unveils that only Self-control emerges as statistically significant ( $p = .199$ ) at the conventional alpha level of .05, despite its considerable impact with a coefficient of .587 and a t-value of 3.099. While collinearity diagnostics in Table 20 suggest low collinearity among predictors individually, potential multicollinearity issues arise when considering all predictors together, as indicated by Eigenvalues and Condition Index values. Hence, caution is advised regarding the robustness of the findings, prompting further analysis to elucidate the individual contributions of each predictor to Property Victimization and to address potential multicollinearity concerns.

## VII. RECOMMENDATIONS

Based on the correlation analysis and regression findings, it is recommended to prioritize interventions targeting self-control enhancement programs, particularly for individuals at risk of criminal behavior and victimization. Additionally, efforts should focus on enhancing environmental factors such as increasing guardianship in vulnerable areas and reducing exposure to crime opportunities. However, given the potential limitations of small sample sizes and multicollinearity issues, further research with larger samples and more rigorous methodologies is crucial to validate and extend these findings. These recommendations aim to inform evidence-based strategies for crime prevention and community safety, emphasizing the importance of addressing both individual and environmental factors in mitigating criminal behavior and victimization risks.

## VIII. CONCLUSION

The correlation analysis and regression findings provide valuable insights into the complex dynamics of criminal behavior and victimization. Notably, self-control emerges as a crucial factor, positively correlating with both target attractiveness and property victimization, underscoring its significant role in predicting these outcomes. Additionally, the relationships between exposure, guardianship, and property victimization highlight the importance of environmental factors in shaping crime opportunities and victimization risks. However, caution is warranted due to potential limitations such as small sample sizes and multicollinearity issues, which may impact the reliability and generalizability of the findings. Further research with larger samples and robust methodologies is needed to confirm and expand upon these findings, ultimately informing more targeted interventions for crime prevention and community safety.

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