INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue IV
May 2026
Available online at https://www.instabrightgazette.com

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STUDENTS' PERCEPTION OF SAFETY INSIDE CAMPUS PREMISES AND ALONG ADJACENT STREETS: BASIS FOR CAMPUS SAFETY AND SECURITY PLANNING

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ABSTRACT

Institutions of higher education play a vital role in promoting not only academic excellence but also the physical, emotional, and psychological well-being of students. In urban campuses where buildings are connected by public streets, safety concerns extend beyond institutional boundaries to adjacent routes frequently used for commuting and inter-building mobility. This study examined students' perception of safety within campus premises and along nearby streets at De La Salle–College of Saint Benilde in Manila City to inform campus safety and security planning.

A descriptive mixed-method research design was employed, integrating quantitative survey data and qualitative thematic analysis. Data were collected through an online questionnaire completed by 293 undergraduate students. The survey captured demographic characteristics, transportation modes, perceived safety inside and outside campus, time-of-day differences, and awareness or experience of unwanted incidents. Quantitative data were analyzed using descriptive statistics and inferential tests, including paired-samples t-tests,

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue IV
May 2026
Available online at https://www.instabrightgazette.com

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repeated measures ANOVA, Mann–Whitney U tests, Kruskal–Wallis tests, and Welch ANOVA, while open-ended responses were examined through thematic coding.

The results indicate that students perceive significantly higher levels of safety within campus premises than along adjacent streets. Perceived safety also varies significantly across different times of the day, with daytime periods associated with higher safety perceptions than evening or midnight hours. However, no significant differences were found in safety perception based on gender, transportation mode, or awareness of incidents. These findings provide evidence-based insights for improving environmental design, mobility systems, and security strategies in urban higher education institutions.

Keywords: *campus safety, safety perception, urban campus environments, adjacent streets, student mobility, environmental design, campus security planning*

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ISSN: 2704-3010
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Available online at https://www.instabrightgazette.com

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INTRODUCTION

Institutions of higher education play an important role in fostering environments that support not only academic achievement but also students' physical, emotional, and psychological well-being. A safe campus environment contributes significantly to students' learning experiences, social participation, and overall sense of belonging. When students perceive their surroundings as safe, they are more likely to remain on campus for academic collaboration, participate in extracurricular activities, and engage more fully in university life.

In many urban universities, however, campus spaces are not confined to enclosed institutional boundaries. Academic buildings are often distributed across public streets, requiring students to regularly navigate adjacent urban environments when commuting, transferring between buildings, or accessing transportation routes. As a result, students' daily mobility frequently extends beyond campus premises into surrounding streets where environmental conditions such as lighting, visibility, pedestrian activity, and security presence may vary. These factors can influence students' perceptions of safety and may shape behaviors such as route selection, transportation choices, and willingness to remain on campus during evening hours.

Perceived safety is therefore a critical variable in campus planning and security management. While institutions often implement safety measures such as guards, surveillance systems, and transport services, these interventions may not fully address students' lived experiences or emotional responses to space. Identifying where students feel safe or unsafe,

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ISSN: 2704-3010
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and understanding the factors that shape these perceptions, can provide valuable insights for improving environmental design, mobility systems, lighting strategies, and security protocols.

Despite the growing body of literature on campus safety and environmental criminology, many studies focus primarily on safety conditions within institutional boundaries, such as dormitories, academic buildings, or enclosed campus spaces. Relatively fewer studies examine students' perceptions of safety in the transitional spaces between campus facilities and the surrounding urban environment, particularly in universities where academic buildings are distributed across public streets. In urban campuses like De La Salle–College of Saint Benilde, students frequently traverse adjacent streets when transferring between buildings or accessing transportation, exposing them to environmental and social conditions beyond institutional control. These areas form an essential part of students' daily mobility routes, yet they are often overlooked in campus safety assessments. Moreover, existing research has tended to examine safety perception in isolation, without simultaneously considering spatial context, time of day, transportation patterns, and exposure to incidents. Consequently, there remains a need for empirical studies that systematically examine students' perception of safety across both campus premises and adjacent urban streets while integrating spatial, temporal, and mobility-related factors. Addressing this gap can provide valuable insights for developing more comprehensive and context-sensitive campus safety and security planning strategies.

Given the complex nature of urban campus environments, a systematic assessment of students' safety perceptions both inside campus premises and along adjacent streets is essential. This study aims to examine students' perception of safety in these settings as a

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ISSN: 2704-3010
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basis for evidence-based campus safety and security planning. Guided by the following research questions:

RQ1: How do students perceive their level of safety within campus premises?

RQ2: How do students perceive their level of safety along streets adjacent to the campus?

RQ3: What environmental and social factors influence students' perceptions of safety and unsafety in campus and surrounding areas?

RQ4: Do students' perceptions of safety significantly differ according to location (within campus premises versus adjacent streets) and time of day?

RQ5: What safety-related improvements and interventions do students recommend to enhance campus safety and security planning?

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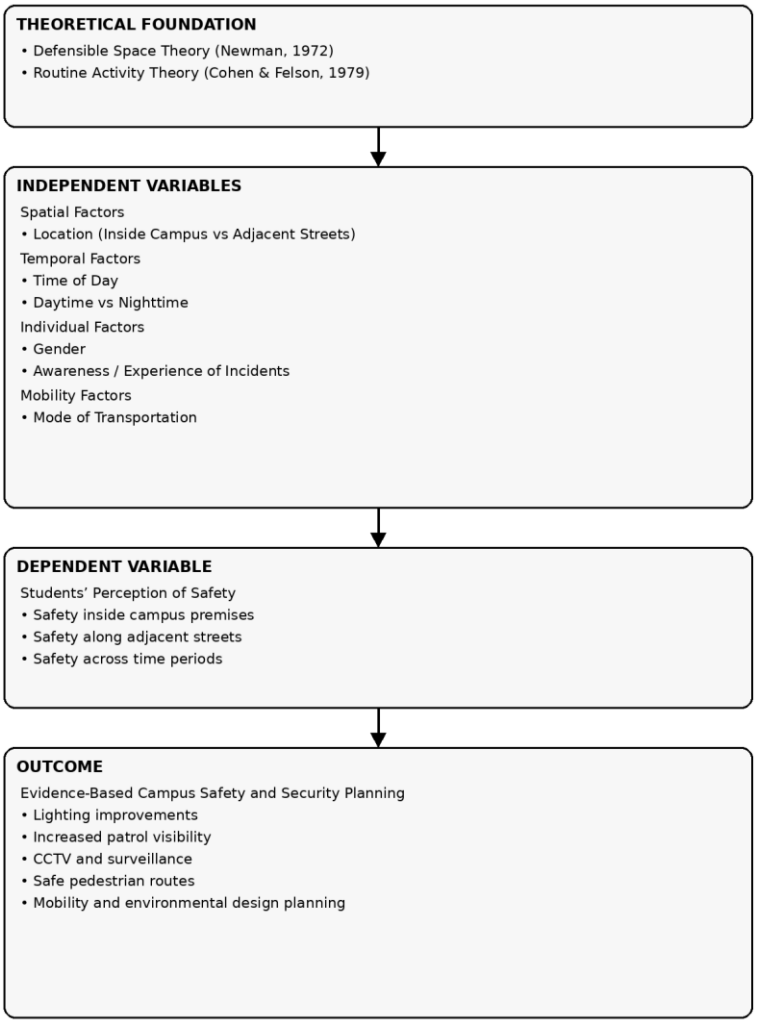

Figure 1. Conceptual Framework

Figure 1 presents the conceptual framework of the study, anchored on Defensible Space Theory (Newman, 1972) and Routine Activity Theory (Cohen & Felson, 1979). These theoretical perspectives explain how environmental conditions, daily mobility patterns, and

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ISSN: 2704-3010
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exposure to potential risks influence students' perception of safety within campus premises and along adjacent streets.

Guided by Defensible Space Theory, the framework emphasizes the importance of spatial context and environmental design in shaping perceptions of security. In this study, spatial factors refer to the location where students move within their daily routines, particularly the distinction between inside campus premises and adjacent streets. According to the theory, environmental features such as lighting, visibility, access control, and surveillance contribute to a sense of territoriality and guardianship, which can strengthen or weaken perceived safety in these areas.

Routine Activity Theory complements this perspective by explaining how individuals' everyday movement patterns influence exposure to risk. Within the framework, temporal and situational conditions including time of day, mode of transportation, and awareness or personal experience of robbery or unwanted incidents are treated as factors that may affect students' perception of safety. As students regularly move between campus buildings and surrounding streets, their routine mobility patterns shape how they evaluate the safety of the environments they encounter.

The independent variables examined in the study include spatial factors (location), temporal factors (time of day and daytime versus nighttime conditions), individual factors (gender and awareness or experience of incidents), and mobility factors (mode of transportation). These variables are hypothesized to influence the dependent variable, which

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is students' perception of safety. This perception is operationalized through students' reported levels of safety inside campus premises, along adjacent streets, and across different time periods.

The findings derived from these relationships are expected to inform the intended outcome of the study, which is evidence-based campus safety and security planning. The results may support practical interventions such as improvements in lighting, enhanced visibility of security patrols, strategic placement of CCTV cameras, safer pedestrian routes, improved signage, and other environmental design strategies aimed at strengthening students' sense of safety within and around the campus environment.

Hypotheses

H_{01}: There is no significant difference in students' perception of safety inside campus premises and along adjacent streets.

H_{02}: Time of day does not significantly affect students' perception of safety.

H_{03}: There is no significant difference in perception of safety when respondents are grouped according to gender.

H_{04}: Mode of transportation has no significant relationship with students' perception of safety.

H_{05}: Experience or awareness of robbery/unwanted incidents does not significantly influence students' perception of safety.

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H_{06}: There is no significant difference between students' perceived safety during daytime (morning and afternoon) and nighttime (evening and midnight).

Literature Review

Understanding students' perception of safety in urban campus environments requires examining how environmental design, spatial context, and daily mobility patterns shape individuals' sense of security. Previous research in environmental criminology and urban planning suggests that both the physical characteristics of the built environment and individuals' routine activities play a critical role in influencing perceived safety. Two theoretical perspectives are particularly relevant in explaining these dynamics: Defensible Space Theory and Routine Activity Theory.

Defensible Space Theory and Environmental Design

Oscar Newman's Defensible Space Theory provides an important framework for understanding how the physical design of environments influences crime prevention and perceptions of safety. Originally introduced in Defensible Space (1972), the theory proposes that architectural and environmental design features can either encourage or discourage criminal behavior by affecting levels of natural surveillance, territorial control, and guardianship (Donnelly, 2016).

The theory identifies several key principles, including territoriality, natural surveillance, and image. Territoriality refers to the clear definition of spaces that fosters a sense of

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ownership among users, encouraging individuals to monitor and protect their surroundings. Natural surveillance emphasizes environmental visibility that allows people to observe activities within public or semi-public spaces, thereby increasing perceived guardianship. The concept of image highlights the importance of well-maintained environments in signaling order and discouraging potential offenders.

Although Defensible Space Theory was initially applied to residential environments, subsequent research has extended its application to urban public spaces and institutional settings. In higher education environments, environmental design elements such as lighting, visibility, controlled access points, and surveillance systems can significantly influence students' perceptions of safety as they move across campus spaces and adjacent streets (Lamoreaux & Sulkowski, 2020). These design features contribute to a sense of guardianship and territorial reinforcement, which may enhance perceived safety and reduce fear of crime within campus environments.

Routine Activity Theory and Daily Mobility

Routine Activity Theory offers a complementary perspective by explaining how individuals' everyday movement patterns influence exposure to potential risks. According to Cohen and Felson (1979), crime occurs when three elements converge in time and space: a motivated offender, a suitable target, and the absence of capable guardianship. Changes in daily routines, mobility patterns, and social activities can therefore create opportunities for crime even without changes in offender motivation.

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In urban environments, routine activities such as commuting, traveling between buildings, or accessing transportation routes may expose individuals to varying levels of risk depending on time of day and environmental conditions. Routine Activity Theory has been widely used in studies examining how temporal factors, spatial movement, and environmental context shape perceptions of safety (Miró, 2014). For university students navigating urban campuses, routine movements between academic buildings, transportation hubs, and surrounding streets may influence how they perceive safety across different locations and times of day.

Spatial Context and Safety Perception

Beyond theoretical explanations of crime opportunity and environmental design, spatial context also plays a crucial role in shaping perceptions of safety. Walker, Mooney, and Pratts (2000) emphasize that geographical location and proximity to potential hazards significantly affect safety outcomes. Historically, safety management strategies have often focused on technical safeguards while overlooking how population distribution and spatial exposure influence vulnerability.

Integrating spatial perspectives into safety planning allows policymakers and planners to better understand how individuals experience safety across different environments. In educational settings, spatial safety involves recognizing how the physical layout of campuses, surrounding streets, and mobility routes may influence students' sense of security. Areas with

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higher pedestrian activity, clear visibility, and accessible support systems may promote feelings of safety, while isolated or poorly maintained spaces may increase perceived risk.

Environmental Design Cues and Perceived Security

Environmental design cues have also been shown to strongly influence individuals' perceptions of safety in urban environments. De Silva, Warusavitharana, and Ratnayake (2017) examined how environmental conditions such as lighting, visibility, maintenance, and spatial organization affect pedestrians' feelings of security. Their findings indicate that well-maintained environments with clear sightlines and adequate illumination are associated with reduced stress responses and increased perceptions of safety.

Conversely, poorly lit or visually obstructed spaces tend to generate discomfort and heightened perceptions of vulnerability. These findings suggest that perceived safety is shaped not only by the presence or absence of crime but also by environmental signals embedded within the built environment. In institutional settings such as university campuses, environmental design therefore plays an important role in influencing how students interpret and navigate surrounding spaces.

Perceived Guardianship in the Built Environment

Recent research further highlights the role of visual characteristics and environmental signals in shaping perceived safety. Abraham et al. (2025) examined the relationship between built environment features and perceived safety using deep learning analysis of street-level

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Volume VII, Issue IV
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imagery combined with crime data in Stockholm. The study developed a Visually Perceived Safety (VPS) measure to capture how environmental aesthetics influence individuals' subjective safety perceptions.

The findings demonstrate that environmental cues such as cleanliness, visibility, architectural order, and the presence of activity contribute significantly to individuals' perception of safety. These visual signals influence whether individuals feel observed, supported, or protected within a given environment. Such perceptions of guardianship are closely related to both Defensible Space Theory and Routine Activity Theory, as they shape individuals' interpretation of risk and security within everyday environments.

Research Gap

Despite the growing body of research on environmental criminology and perceived safety, much of the existing literature focuses on residential neighborhoods or general urban public spaces rather than university environments where institutional and public spaces intersect. Many studies also examine safety perception within campus boundaries without considering the adjacent streets that students frequently traverse during daily mobility.

In urban universities where academic buildings are distributed across public streets, students regularly navigate both institutional spaces and surrounding urban environments. These transitional areas represent important components of students' daily mobility routes yet remain underexamined in campus safety research. Furthermore, previous studies often

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ISSN: 2704-3010
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investigate safety perception in isolation without simultaneously considering spatial context, time of day, transportation patterns, and exposure to incidents.

Therefore, there remains a need for empirical research that systematically examines students' perception of safety across both campus premises and adjacent urban streets, while integrating spatial, temporal, and mobility-related factors. Addressing this gap can provide valuable insights for developing more comprehensive and context-sensitive campus safety and security planning strategies in urban higher education institutions.

METHODS

Research Design

This study employed a descriptive mixed-method research design to examine students' perception of safety inside campus premises and along adjacent streets at De La Salle–College of Saint Benilde in Manila City. The mixed-method approach integrates quantitative and qualitative data to provide a more comprehensive understanding of students' safety perceptions in both institutional and surrounding urban environments (Ahmed et al., 2024).

The quantitative component focused on measuring students' perceived level of safety using structured survey responses. Variables examined included demographic characteristics, transportation modes, perceived safety inside campus premises and along adjacent streets, time-of-day differences, and awareness or experience of robbery or unwanted incidents.

The qualitative component explored students' interpretations of safe spaces, factors influencing feelings of safety or unsafety, and suggested improvements for campus safety.

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Open-ended responses were analyzed using thematic analysis to identify recurring patterns and environmental concerns.

Combining numerical trends with descriptive insights allowed the study to capture both measurable differences in safety perception and the lived experiences that shape those perceptions.

Research Locale

The study was conducted within the campuses of De La Salle–College of Saint Benilde (DLS–CSB) in Manila City, including adjacent streets commonly used by students when transferring between buildings or commuting to and from school.

These areas were selected because they represent the primary environments through which students navigate during their daily academic activities. The research covered both internal campus spaces such as building entrances, walkways, and student areas, and surrounding streets that function as important mobility routes connecting campus facilities to transportation hubs.

Examining both institutional and nearby urban environments allowed the study to capture a more comprehensive picture of how students perceive safety across the spaces they regularly encounter.

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Population and Sampling

The target population consisted of all undergraduate students currently enrolled at De La Salle–College of Saint Benilde during the period of data collection. Based on institutional records, the estimated undergraduate population was approximately 7,000 students.

A non-probability convenience sampling method was used due to practical considerations such as accessibility and voluntary participation (Stratton, 2021). The survey was distributed online, and students who were available and willing to participate during the data collection period were included as respondents.

Using Slovin's formula with a 5% margin of error, the recommended minimum sample size was approximately 290 respondents (Tiara Djati Anugraheni et al., 2023). A total of 293 students completed the survey and were included in the final dataset.

Although convenience sampling limits the generalizability of the findings, it is appropriate for perception-based studies aimed at identifying trends and experiences that can inform campus safety planning.

Data Gathering Procedure

The survey instrument was developed to capture students' perceptions of safety and mobility experiences within and around the campus environment. The questionnaire included both closed-ended items for quantitative analysis and open-ended questions for qualitative insights (Taherdoost, 2016).

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Prior to data collection, the instrument underwent content validation and reliability testing to ensure clarity and relevance of the items (Tubera & Salentes, 2022). Ethical approval was secured from the appropriate academic authority, and participation in the study was voluntary (Vanclay et al., 2013).

The questionnaire was administered through an online survey platform. The survey link was disseminated through institutional communication channels and student networks to reach potential respondents.

Before answering the survey, participants were provided with an informed consent statement outlining the purpose of the study, confidentiality of responses, and their right to withdraw at any time.

Completed responses were screened for completeness before being prepared for quantitative and qualitative analysis.

Data Analysis

Quantitative data were analyzed using descriptive and inferential statistical techniques.

Descriptive statistics including frequencies, percentages, means, and standard deviations were used to summarize respondents' demographic characteristics, transportation modes, and overall perceptions of safety inside campus premises and along adjacent streets.

Inferential statistical tests were conducted to examine differences in safety perception across selected variables. The level of significance for all statistical tests was set at $\alpha = 0.05$.

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To test H_{01}, which examined differences in students' perception of safety between campus premises and adjacent streets, a paired samples t-test was conducted.

To test H_{02}, which examined whether perceived safety differed across four time periods (morning, afternoon, evening, and midnight), a repeated measures analysis of variance (ANOVA) was performed. When the assumption of sphericity was violated, the Greenhouse–Geisser correction was applied.

For H_{03}, which examined gender differences in safety perception, the Mann–Whitney U test was used due to violations of normality assumptions.

For H_{04}, which assessed whether transportation mode influenced perceived safety along adjacent streets, a Kruskal–Wallis H test was conducted.

For H_{05}, which examined whether awareness or personal experience of robbery or unwanted incidents influenced safety perception, a Welch one-way ANOVA was used to account for unequal variances among groups.

Finally, for H_{06}, a paired samples t-test was conducted to compare students' perceived safety during daytime (morning and afternoon) and nighttime (evening and midnight) periods. Composite variables representing daytime and nighttime safety perceptions were computed by averaging the respective time-based safety scores.

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Qualitative responses from open-ended questions were analyzed using thematic analysis, where recurring words, phrases, and patterns were grouped into thematic categories describing factors influencing perceived safety.

The integration of quantitative findings and qualitative themes provided a comprehensive understanding of students' safety perceptions and informed recommendations for campus safety and security planning.

RESULTS

H_{01}: There is no significant difference in students' perception of safety inside campus premises and along adjacent streets.

Paired Samples t-Test Comparing Safety Perception by Location

Location	Mean	SD	t	df	p
Campus Premises	4.53	0.52			
Adjacent Streets	3.07	1.12	21.20	292	< .001

Note. Students reported significantly higher perceived safety within campus premises than along adjacent streets.

A paired samples t-test was conducted to examine whether students' perceived safety differed between campus premises and adjacent streets. The results indicated a statistically significant difference in safety perception between the two locations, $t(292) = 21.2$, $p < .001$. Students reported higher perceived safety within campus premises ($M = 4.53$, $SD = 0.52$)

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than along adjacent streets (M = 3.07, SD = 1.12). This finding suggests that institutional environments provide conditions that enhance students' sense of security compared to surrounding public streets.

H_{02}: Time of day does not significantly affect students' perception of safety.

Repeated Measures ANOVA for Safety Perception Across Time of Day

Source	SS	df	MS	F	p
Time of Day	49.50	3	16.52	19.50	< .001
Error	742.20	876	0.85		

Note. Greenhouse–Geisser correction applied due to violation of sphericity (ε = 0.844).

Post Hoc Pairwise Comparisons for Time of Day (Tukey Adjustment)

Comparison	Mean Difference	SE	t	p
Morning – Afternoon	0.23	0.07	3.22	.008
Morning – Evening	0.51	0.09	5.87	< .001
Morning – Midnight	0.02	0.06	0.39	.980
Afternoon – Evening	0.28	0.09	3.06	.013
Afternoon – Midnight	-0.21	0.06	-3.37	.005
Evening – Midnight	-0.49	0.08	-6.31	< .001

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A repeated measures ANOVA was conducted to examine differences in safety perception across four time periods: morning, afternoon, evening, and midnight. The analysis revealed a significant effect of time of day on perceived safety, $F(3, 876) = 19.50$, $p < .001$. Post hoc comparisons showed significant differences between several time periods, particularly between daytime and evening conditions. These results indicate that students' perception of safety varies across the day, with generally higher safety perceptions during daytime periods.

H_{03}: There is no significant difference in perception of safety when respondents are grouped according to gender

Mann–Whitney U Test for Gender Differences in Safety Perception

Gender	N	Mean	SD
Female	176	2.99	1.02
Male	117	3.19	1.25

Test	Statistic	p
Mann–Whitney U	9284	.111

Note. No statistically significant difference in safety perception between male and female respondents.

A Mann–Whitney U test was performed to determine whether safety perceptions along adjacent streets differed by gender. The results showed no statistically significant difference

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between male and female respondents ($p > .05$). This indicates that gender did not significantly influence students' perception of safety along the streets surrounding the campus.

H_{04}: Mode of transportation has no significant relationship with students' perception of safety.

Kruskal–Wallis Test for Transportation Mode and Safety Perception

Test	Statistic	df	p
Kruskal–Wallis H	—	—	> .05

Note. Safety perception did not significantly differ across transportation modes.

A Kruskal–Wallis test was conducted to examine whether safety perceptions differed according to students' primary mode of transportation. The analysis revealed no statistically significant differences in safety perception across transportation groups ($p > .05$). Students using different modes of transportation reported relatively similar perceptions of safety along adjacent streets.

H_{05}: Experience or awareness of robbery/unwanted incidents does not significantly influence students' perception of safety.

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Welch ANOVA for Awareness or Experience of Incidents

Source	F	df	p
Awareness of Incidents	0.134	2,100	.875

Note. Awareness or personal experience of incidents did not significantly affect perceived safety.

A Welch one-way ANOVA was conducted to examine whether safety perceptions differed based on respondents' awareness or personal experience of robbery or unwanted incidents. The results showed no statistically significant differences among the groups, $F(2,100) = 0.134$, $p = .875$. This suggests that awareness or personal experience of incidents did not significantly influence students' perception of safety along adjacent streets.

H_{06}: There is no significant difference between students' perceived safety during daytime (morning and afternoon) and nighttime (evening and midnight).

Paired Samples t-Test Comparing Daytime and Nighttime Safety

Time Period	Mean	SD
Daytime (Morning & Afternoon)	3.90	1.23
Nighttime (Evening & Midnight)	3.75	1.20

Test	t	df	p
Paired t-test	2.73	292	.007

Note. Students reported significantly higher perceived safety during daytime.

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A paired samples t-test was conducted to compare students' perceived safety during daytime (morning and afternoon) and nighttime (evening and midnight). The results showed a statistically significant difference between the two periods, $t(292) = 2.73$, $p = .007$. Students reported higher perceived safety during daytime ($M = 3.90$, $SD = 1.23$) compared to nighttime ($M = 3.75$, $SD = 1.20$), indicating that temporal conditions influence safety perception within and around campus environments.

Qualitative Findings: Factors Influencing Students' Perception of Safety

To complement the quantitative analysis, responses to the open-ended survey questions were analyzed using thematic analysis. Students described factors that influence their sense of safety when moving within campus premises and along adjacent streets. The analysis identified several recurring themes, including lighting conditions, visibility and spatial layout, presence of security personnel, pedestrian activity, and environmental maintenance.

Lighting conditions emerged as one of the most frequently mentioned factors affecting perceived safety. Students reported feeling safer in areas with well-lit streets, pathways, and building entrances, particularly during evening hours. Adequate lighting improves visibility and allows individuals to better observe their surroundings. Conversely, poorly lit areas were commonly associated with discomfort and heightened perceptions of vulnerability. These responses help explain the quantitative finding that safety perceptions tend to be lower during evening and midnight periods.

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Another important theme concerned visibility and spatial layout. Students noted that environments with clear sightlines and open spaces were generally perceived as safer because they allow individuals to easily monitor surrounding activities. In contrast, areas with visual obstructions, narrow pathways, or hidden corners were sometimes described as uncomfortable or potentially unsafe. These observations align with the principles of Defensible Space Theory, which emphasize the importance of natural surveillance in shaping perceptions of safety.

Students also highlighted the role of security personnel in reinforcing perceived safety. The presence of visible security guards and patrols within campus premises contributed to a stronger sense of guardianship. However, several respondents indicated that security presence appears less noticeable along adjacent streets, which may contribute to lower safety perceptions in those areas.

Finally, pedestrian activity and environmental maintenance were identified as additional factors influencing safety perception. Areas with higher levels of pedestrian movement were perceived as safer due to natural surveillance, while clean and well-maintained environments signaled active management and order.

Together, these qualitative insights complement the quantitative findings by highlighting how environmental conditions and spatial cues influence students' perception of safety in both campus and surrounding urban spaces.

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DISCUSSION

The findings of this study provide important insights into how students perceive safety within campus premises and along adjacent streets in an urban university environment. Overall, the results suggest that spatial and temporal conditions play a more significant role in shaping students' perception of safety than demographic or mobility-related factors. These findings highlight the importance of environmental context in influencing how students evaluate their safety while navigating both institutional and surrounding urban spaces.

One of the most notable findings is the significant difference between students' perceived safety inside campus premises and along adjacent streets. Students reported substantially higher levels of safety within campus environments compared to surrounding public streets. This result aligns with the principles of Defensible Space Theory, which suggests that environmental design feature such as controlled access, visible security personnel, surveillance systems, and clearly defined territorial boundaries, enhance perceptions of guardianship and security (Newman, 1972). Campus environments typically incorporate these protective features, which may contribute to stronger feelings of safety among students. In contrast, adjacent streets are open public spaces where institutional security measures are less visible or consistent, potentially leading to lower perceived safety.

The study also found that time of day significantly influences students' perception of safety. Safety perceptions were generally higher during daytime periods compared to evening or midnight hours. This finding is consistent with previous research on environmental cues and perceived safety, which suggests that visibility, lighting conditions, and pedestrian activity

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strongly influence individuals' sense of security (De Silva et al., 2017). During daytime hours, higher levels of natural surveillance and activity may contribute to increased feelings of safety, while reduced visibility and lower pedestrian presence during nighttime hours may increase perceptions of vulnerability.

In contrast, the analysis found no significant differences in safety perception based on gender, transportation mode, or awareness or experience of robbery or unwanted incidents. These findings suggest that safety perceptions in this context may be shaped more strongly by shared environmental conditions than by individual characteristics. Students navigating the same physical spaces and routes may develop similar perceptions of safety regardless of their demographic background or transportation choices. This observation also reflects the influence of Routine Activity Theory, which emphasizes how everyday movement patterns and environmental exposure shape perceptions of risk and guardianship (Cohen & Felson, 1979).

Taken together, the results highlight the importance of considering both institutional spaces and surrounding urban environments when addressing campus safety. While universities may successfully implement safety measures within their premises, students' experiences often extend beyond these boundaries as they move between buildings and access nearby transportation routes. Ensuring safe mobility across these spaces therefore requires coordinated planning that integrates campus security strategies with broader urban design considerations.

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From a practical perspective, the findings emphasize the value of environmental design interventions that strengthen perceived guardianship and visibility in areas frequently used by students. Improvements in lighting, maintenance of clear sightlines, increased visibility of security personnel, and strategic placement of surveillance systems may contribute to stronger perceptions of safety. Additionally, collaboration between universities and local authorities may help extend safety initiatives beyond campus boundaries, ensuring that surrounding streets and pedestrian routes support a safer and more secure environment for students.

Overall, the study contributes to the growing body of research on campus safety in urban university settings by highlighting the importance of spatial and temporal factors in shaping students' perception of safety. By integrating theoretical insights from environmental criminology with empirical evidence from student experiences, the findings provide a foundation for more comprehensive and context-sensitive campus safety and security planning.

Limitations of the Study

While this study provides valuable insights into students' perception of safety within campus premises and along adjacent streets, several limitations should be acknowledged.

First, the study employed a non-probability convenience sampling method, which may limit the generalizability of the findings. Because respondents participated voluntarily through an online survey, the sample may not fully represent the entire population of undergraduate

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students at De La Salle–College of Saint Benilde. Students who are more active online or more interested in safety-related issues may have been more likely to participate.

Second, the study relied on self-reported perceptions of safety, which are inherently subjective and may be influenced by individual experiences, personal attitudes, or temporary situational factors. Perception-based data may not always correspond directly with actual crime incidents or objectively measured safety conditions.

Third, the research focused on a single higher education institution located in an urban setting, which may limit the applicability of the findings to other universities with different spatial layouts, security systems, or surrounding environments. Safety perceptions may vary across institutions depending on campus design, neighborhood characteristics, and available security resources.

Fourth, although the study examined several important variables—such as location, time of day, gender, transportation mode, and awareness of incidents—other factors that may influence safety perception were not included in the analysis. These may include students' year level, frequency of campus visits, familiarity with specific routes, or prior exposure to safety training and institutional safety programs.

Finally, the study measured perceived safety rather than actual crime occurrence or security incidents. While perception is an important indicator of students' sense of security, future studies may benefit from integrating perception-based surveys with objective safety data such as crime reports, security logs, or environmental assessments.

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Despite these limitations, the study provides meaningful insights into how students experience safety across both institutional and surrounding urban spaces, offering a useful basis for campus safety and security planning.

CONCLUSION AND RECOMMENDATIONS

This study examined students' perception of safety within campus premises and along adjacent streets at De La Salle–College of Saint Benilde in Manila City. The findings reveal that students perceive significantly higher levels of safety inside campus premises compared to the surrounding streets. This difference highlights the influence of institutional security measures, controlled access, and surveillance systems within campus environments, in contrast to the more open and less regulated conditions of adjacent urban streets.

The analysis also demonstrated that students' perception of safety varies significantly across different times of the day. Daytime periods were generally associated with higher perceived safety, while evening and midnight hours were linked to lower safety perceptions. These temporal variations suggest that environmental factors such as lighting conditions, pedestrian activity, and visibility of security personnel play an important role in shaping students' sense of security.

In contrast, the study found no significant differences in safety perception when students were grouped according to gender, mode of transportation, or awareness or personal experience of robbery or unwanted incidents. These findings indicate that environmental and

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spatial conditions surrounding the campus may have a stronger influence on safety perception than individual demographic characteristics or mobility patterns.

Overall, the results emphasize the importance of considering both institutional spaces and surrounding urban environments when planning campus safety initiatives. By examining students' experiences across multiple spatial and temporal contexts, this study provides evidence-based insights that can inform campus safety policies, environmental design improvements, and mobility planning strategies for urban higher education institutions.

Recommendations

Based on the findings of the study, several recommendations are proposed to enhance students' perception of safety within and around the campus environment.

First, improvements in environmental lighting should be prioritized along streets frequently used by students, particularly during evening and nighttime hours. Adequate and well-maintained lighting can significantly improve visibility and reduce feelings of vulnerability when navigating urban spaces.

Second, increasing the visibility and mobility of security personnel along campus perimeters and adjacent streets may strengthen students' perception of guardianship. Coordinated patrols and collaboration with local authorities may help extend safety measures beyond institutional boundaries.

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Third, implementing Crime Prevention Through Environmental Design (CPTED) strategies such as improved sightlines, removal of visual obstructions, and better maintenance of public spaces can contribute to stronger natural surveillance and enhance perceived safety.

Fourth, institutions should consider strengthening safe mobility systems, including clearly marked pedestrian routes, shuttle services between buildings, and signage indicating safe pathways frequently used by students.

Fifth, campus administrators should continue engaging students in participatory safety planning, allowing them to share perceptions, report concerns, and recommend improvements based on their lived experiences in both campus and surrounding urban areas.

Finally, future research should expand the scope of investigation to include multiple campuses or urban university settings to further examine how environmental, social, and spatial factors influence students' perception of safety across different institutional contexts.

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