ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 5| May 2026|| Journal DOI: 10.36713/epra2013 ||SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

SIDEWALK OBSTRUCTION: A GROWING THREAT TO PEDESTRIAN SAFETY IN CALASIAO, PANGASINAN

Ma. Er-Bel Kaye M. Perez
Central Ilocandia College of Science and Technology, Lingsat, City of San Fernando, La Union, Philippines

ABSTRACT

Sidewalk obstructions, such as illegally parked vehicles, street food vendors, signage, and others, poses safety hazards and inconvenience for pedestrians. The objective of this study is to determine the common sidewalk obstructions found in Calasiao, Pangasinan, identify the negative effects of these sidewalk obstructions, and develop intervening measures to minimize the threat of sidewalk obstructions to enhance pedestrian safety. Quantitative approach was used to assess the current status of sidewalk based on the experiences and knowledge of respondents using a survey questionnaire utilizing the percentage formula analyze and interpret the gathered data. The respondents for this study are fourth-year BS Criminology students of Philippine College of Science and Technology in Calasiao, Pangasinan. They were chosen for completing a course on Traffic Management and Accident Investigation with Driving, which the researchers believe provides relevant knowledge about traffic regulations, road safety, and awareness. As a result, the most common sidewalk obstructions found in Calasiao, Pangasinan is illegally parked motorcycles and vehicles. As to its negative effect, it encourages pedestrians to engage in jaywalking. With this, the researchers developed intervening measures to address the negative effects of sidewalk obstructions. One of these measures is for the barangay council to enforce a policy requiring owners of establishment next to the sidewalk to designate an appropriate area for all construction equipment and debris.

KEYWORDS: *Pedestrian, Pedestrian Safety, Safety, Sidewalk Obstruction, Threat*

INTRODUCTION

Sidewalks are often treated as an unused surface which is a convenient place for irresponsible people to put unnecessary things. In most cases, pedestrians do not pay attention to the obstructions anymore, but rather, they just avoid it - a pressing reason why people opt to pass by the main road. In fact, when cleanliness and orderliness of the sidewalk is being maintained it provides a safe, comfortable and accessible space for pedestrians. (Wetmore, 2017). In relation, sidewalk obstruction is any impediment put on a public sidewalk without the consent of the governing body, including any hindrance, obstacle, or barrier that prevents the use of the sidewalk. It shall be an offense for any individual, or corporations to obstruct any city street, alley or sidewalk by placing signs, boxes, goods, tools, vehicles, uprights, fences, gate openings over sidewalks, wooden posts, trash, debris. or other objects of any kind or articles of description intended for display, storage or other purposes, or otherwise, intended only to occupy and obstruct the streets, alleys or sidewalks of any person or city. Obstruction, unreasonably impeding the passage of the public on a street, alley or sidewalk, taking into account the congestion of the street, alley or sidewalk (Leavenworth Municipal Code, 2023). Also, in New York City, it is mandatory for property owners to fix any damaged sidewalk that is close to their properties. This also applies to pedestrian ramps for properties on corner lots and intersection quadrants. Furthermore, property owners are accountable under Section 7-210 of the New York City Administrative Code for harm caused to pedestrians as a result of their neglect to maintain sidewalks safe and clear of obstacles. Property owners who have defective sidewalks may get sidewalk violation warnings from the NYC Department of Transportation; however, plaintiffs who have been injured before to the completion of such repairs may also file a lawsuit against the property owners (Kestenbaum, 2019). In addition, the Metropolitan Manila Development Authority claims that when clearing out illegal vendors the involvement of barangay officials from the relevant areas is also taken into consideration. When MMDA give an area to the local government, the barangay officials are now in charge of keeping the cleared area maintained and informing them if additional provisions are needed. However, in situations where barangay officials neglect to keep the cleared areas maintained, the agency must penalize them. The organization does not impose penalties on illegal vendors. Rather, in order to keep them from returning, they seize the belongings. In West Avenue Jones Street, Calasiao, Pangasinan, pedestrian also have problems with sidewalk obstructions, such as illegally parked motorcycle, fire hydrants, and electric poles, street food vendors, business signages, low-hanging branches of trees, construction debris or materials, garbage bags, and recycle bins. Both temporary and permanent obstructions are the result of thoughtless people who show little respect for pedestrians. Due to these obstructions, it affects the safety of pedestrians and road users.

OBJECTIVES OF THE STUDY

The primary goal of this research is to identify the primary sidewalk obstructions which continuously endanger pedestrian safety and contribute negative effects to the pedestrian. Lastly, to identify what measures can be taken to at least mitigate this threat and will enhance pedestrian safety.

STATEMENT OF THE PROBLEM

This study aims to determine the Sidewalk Obstruction: A Growing Threat to Pedestrian Safety in Calasiao, Pangasinan. Specifically, it sought to answer the following:

1. What are the common sidewalk obstructions found in Calasiao, Pangasinan as perceived by the respondents?
2. What are the negative effects of the sidewalk obstructions as perceived by the respondents?

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 5| May 2026|| Journal DOI: 10.36713/epra2013 ||SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

3. What intervening measures may be proposed to minimize the threat of sidewalk obstructions and enhance pedestrian safety?

DEFINITION OF TERMS

Calasiao, Pangasinan. As used in this study, this refers to the boundaries of the study along West Avenue Jones Street (W.A Jones) also known as "Karsadan Daan" where the sidewalk obstructions are being observed by the respondents.

Pedestrian. As used in this study, it refers to a person who encounters a sidewalk obstruction and perceives adverse effects while crossing the street.

Pedestrian safety. As used in this study, this refers to maintaining and minimizing the accidents between pedestrians and vehicles. It also includes the safety and security of pedestrians, including steps to prevent accidents and injuries. It aims to provide clear and actionable guidelines for implementing safety measures and evaluating their impact.

Safety. As used in this study, it is a precaution taken to protect the road user's from being injured or harm, ensuring that pedestrian pathways remain clear and unobstructed, minimizing risks of accidents or injuries caused by objects, vehicles, or structures impeding the normal flow of foot traffic.

Sidewalk. As used in this study, it will help pedestrians reach their destination safely. It serves as a safe and designated area for individuals to walk, offering a convenient and accessible route for both transportation and recreation.

METHODOLOGY

This study employed a quantitative descriptive research design to assess the current condition of sidewalk obstructions, their negative effects, and possible interventions to improve pedestrian safety along West Avenue Jones Street in Calasiao, Pangasinan. After securing approval from school authorities, the researchers selected 286 fourth-year BS Criminology students using purposive sampling, as they were considered knowledgeable about the study. Consent was obtained from all respondents, and a checklist survey questionnaire was administered at their most convenient time, with data collection completed within two weeks. The study was conducted in the said area due to the presence of sidewalk obstructions and its relevance as a main pathway for students. Primary data were gathered through the survey questionnaire, while secondary data were obtained from books, journals, and online sources. The collected data were analyzed using the percentage formula $P = \frac{f}{N} \times 100$, this formula was used to determine the proportion of responses regarding sidewalk obstructions and their negative effects, and the results were interpreted to develop recommendations for minimizing obstructions and enhancing pedestrian safety. Ethical considerations were strictly observed by ensuring informed consent, maintaining confidentiality, and complying with the Data Privacy Act of 2012.

RESULTS AND DISCUSSION

Common Sidewalk Obstructions found in Calasiao, Pangasinan as Perceived by the Respondent

Common sidewalk obstructions found in Calasiao, Pangasinan	Frequency (f)	Percentage (%)	Rank
A. Illegally parked vehicles, motorcycles, or tricycles that block the way of pedestrian.	239	83.56%	1
B. Post of electricity and internet service providers that are placed on part of the sidewalk.	68	23.77%	5
C. Street food vendors that cause crowded areas and get in the way of sidewalks.	163	56.99%	2
D. Broken sidewalk that leads the pedestrian to use the traffic ways.	79	27.62%	4
E. The sidewalk become unusable because of low-hanging branches of trees or tree roots.	51	17.83%	6
F. Signage placed on sidewalks by business owners that obstruct pedestrian movement.	93	32.51%	3
G. The sidewalk is obstructed by debris or construction materials.	49	17.13%	7
H. Garbage bags that are usually avoided by pedestrians when they pass by the sidewalk.	43	15.03%	8
I. Recycle bins which are usually placed on the part of the sidewalk to be dumped by pedestrians or road users.	37	12.93%	9
J. Fire hydrants that are used by the Bureau of Fire Protection to refill the fire truck, which are placed in the middle of the sidewalk.	22	7.69	10

Table 1 shows the common sidewalk obstructions found in Calasiao, Pangasinan as perceived by the respondents. Accordingly, "Illegally parked vehicles, motorcycles, or tricycles block the way of pedestrian" is the first in rank having 239 responses (83.56%) out of the 286 respondents. This is because the respondents often observed and walked along the sidewalk where numerous illegally parked vehicles were present. In addition, students used to park their vehicles in the sidewalk due to the fact that the allotted parking space is limited which cannot accommodate total number of vehicles or motorcycles present during day-to-day basis. The growing population of the students and the convenience of using motorcycle as the primary mode of transportation plays a huge factor to herein findings. Based on the book authored by Darlito Delizo (2020), in this growing generation, buying motorcycle and using it as a form of transportation is more convenient and comfortable setting aside its pricy cost as desire by the people. It was considered as contributor to student's perspectives in owning a personal vehicle. Additionally, the use of motorcycle becomes dominant due to the fact that it is the most affordable mode of transportation both effective to personal or business purposes. To sum up, this results from increasing number of motorcycles where other motorcyclist used to park their vehicles in the area around the campus where they can easily retrieve it after their class causing pedestrian way to be block and becomes an increasing threat to pedestrian safety (Cynthia, 2020). To support this finding, the Social Comparison Theory proposed that there is a primitive drive within individuals to compare themselves with others in order to evaluate their own opinions and abilities (Festinger, 1954). Their experiences using motorcycle as a mode of transportation compared when commuting made them clarify which is more accessible and convenient. As a result, respondents chose motorcycle as their mode of transportation because it is less costly and it allows them to arrive to their destination on time. In applying such

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 5| May 2026|| Journal DOI: 10.36713/epra2013 ||SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

theory, it answers why students prefer motorcycles as their primary mode of transportation.

Negative Effects of Sidewalk Obstructions to the Pedestrian as Perceived by the Respondents

Negative effects of sidewalk obstructions to the pedestrian as perceived by the respondents.	Frequency (f)	Percentage (%)	Rank
A. Construction waste around sidewalks leads to accidents and encourages pedestrian to engage in jaywalking behaviors.	202	70.62	1
B. It delays pedestrian movement and generates traffic congestion.	135	47.20	2
C. This can lead to difficulties for wheelchair users as well as those using strollers.	86	30.06	4
D. Broken and scattered things on the sidewalk that pose danger to pedestrian.	113	39.51	3
E. Affects the growth of the economy due to the delayed arrival of products and services.	66	23.07	7
F. Inconvenient for senior commuters or those with problems of walking.	38	13.28	9
G. The slow movement of pedestrians onto main roods can prolong their exposure to air pollution, which can negatively impact their respiratory health.	85	29.72	5
H. Maintenance costs may increase for municipalities to deal with damage caused by obstructions	52	18.18	8
I. People passing near the sidewalk experience an unwanted odor due to uncollected garbage bags and recycle bins.	79	27.62	6
J. Pedestrians can trip over fire hydrants if they are not looking on what they are walking on.	37	12.93	10

Table 2 presents the negative effects of sidewalk obstruction encountered by the respondents. It appears that “Construction waste around sidewalks lead to accidents and encourage pedestrian to engage in jaywalking behaviors” resulted as the first in rank, with a total of 202 responses (70.62%) results from the data. Construction waste left on sidewalks can pose various hazards to pedestrians. Items like nails, broken glass, or debris can cause injuries if inappropriately stored, leading to cuts, punctures, or falls. Additionally, large objects obstructing the sidewalk can force pedestrians to walk on the street, increasing the risk of vehicular accidents. Furthermore, construction waste may contain hazardous materials or sharp objects that could cause serious harm upon contact. This is somehow related to Health and Safety Executive (n.d), that construction sites are inherently hazardous environments due to their dynamic nature and the variety of activities and materials involved. Each year, around 1,000 incidents of trips or slips on these sites result in fractures or dislocations, highlighting a significant safety issue. These incidents not only pose immediate physical harm but also carry potential long-term consequences, including permanent dismemberment. The impact of such injuries extends beyond physical pain and medical costs. For affected individuals, there can be substantial disruptions to both their professional and personal lives.

Proposed Intervening Measures to Minimize the Threat of Sidewalk Obstructions and Enhance Pedestrian Safety

The following proposed intervening measures may be helpful in addressing the common negative effects of sidewalk obstructions. These intervening measures may be beneficial to Pedestrians, Local Government Unit, Barangay Council, Department of Public Works and Highways, Municipal Engineer and Civil Volunteer Organization and Contractor.

Key Problems	Objectives	Intervening Measure	People Involved	Expected Outcomes
1. Construction waste around sidewalk leads to accidents and encourages pedestrians to engage in jaywalking behaviors.	To eliminate the construct wastes around sidewalks	The Barangay Council may enforce a policy requiring establishment owners who build next to the sidewalk to designate an appropriate area for construction waste during construction. They must ensure that only a small part of the sidewalk is affected, and all remaining construction waste must be cleaned up once the establishment is built.	• Municipal Engineering • Barangay Council • Contractor	Minimal or no accidents/destructively caused by construction debris.
2. It delays pedestrian movement and generates traffic congestion.	To speed up the flow of vehicles and pedestrians.	The barangay council will assign Civilian Volunteer Organization (CVO) to	• Barangay Council • Civilian Volunteer Organization	Both pedestrians and road users can experience more efficient travel, leading to quicker arrival times at their destinations.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 5| May 2026|| Journal DOI: 10.36713/epra2013 ||SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

CONCLUSION AND RECOMMENDATION

The study aimed to determine the common sidewalk obstructions that pose risks to pedestrian safety and to identify their perceived negative effects. Data were gathered from 286 fourth-year BS Criminology students of the Philippine College of Science and Technology in Calasiao, Pangasinan through a structured survey questionnaire. The results revealed that illegally parked vehicles, motorcycles, and tricycles were the most common sidewalk obstructions, while fire hydrants were the least. In terms of negative effects, construction waste was identified as the leading cause of accidents and jaywalking, whereas tripping over fire hydrants was the least reported concern. Based on these findings, the researchers developed intervening measures intended to reduce sidewalk obstructions and enhance pedestrian safety. It was concluded that limited and inappropriate parking spaces significantly contribute to sidewalk obstruction, and that pedestrians' adaptation to these conditions may increase the risk of accidents and unsafe road behaviors. Furthermore, the proposed interventions are expected to help mitigate these issues and improve safety conditions. In line with these findings, it is recommended that the Local Government Unit (LGU) of Calasiao conduct information campaigns to promote sidewalk discipline, implement stricter enforcement and penalties for violations, and coordinate with relevant agencies for continuous monitoring of sidewalk use. The Barangay Council is also encouraged to adopt the proposed interventions and assign monitoring personnel, such as Civilian Volunteer Organizations (CVOs), to ensure compliance. Lastly, future researchers are encouraged to conduct further studies to expand the understanding of sidewalk obstructions and develop more effective solutions for pedestrian safety.

REFERENCES

Book and Internet Sources

1. *Cynthia, (2020). Why Motorcycle are In-Demand among Filipinos. Retrieved from https://discover.hubpages.com/autos/Why-Motorcycle-Are-In-Demand-Among-Filipinos?fbclid=IwZXh0bgNhZW0CMTAAAR05lNDBu0MKHTvneZGMX9sQl_N1o8qZePCswaC0a74g_HeW2L0KBdNufLE_aem_AeH-rJlfDj06ZiUA5wxrlFJbJweoISzoKS4Oc3MdXR6ts6oZhNYDtKcHs8fesr_FDdK5ToHNQVGOb0pQaQWfcT3U#:~:text=With%20the%20high%20price%20of,even%20in%20an%20installment%20basis*
2. *Darlito, B. G., (2020). Traffic Management and Accident Investigation with Practical Driving (3rd ed.). Wiseman Book's Trading INC.*
3. *Festinger, (1954). Social Comparison Theory. Retrieved from https://link.springer.com/referenceworkentry/10.1007/978-94-007-0753-5_2740*
4. *Kestenbaum, J. (2019). Slip and Fall Accidents Due to Sidewalk Defects. Retrieved from https://www.brooklyn-accidentlaw.com/2019/02/slip-and-fall-sidewalkdefects/?fbclid=IwAR1qzpDKVP1iiShGks7cXWRIAXfoJ1mL5p2AP1jgRnOHyBLAeaRsbzxOUY_aem_Afopc-oOO5FO4Lj3Vrc_kMRlLDhj3mUQgUoqxkrhYRhtHouGSC1gXa8ERC8_VlYG NxvdSSINajr6lJq2yHzU7quT*
5. *Leavenworth Municipal Code, (2023). STREETS, SIDEWALKS AND PUBLIC PLACES.*
6. *Metro Manila Council, (2002). Authorizing The Metropolitan Manila Development Authority and The Local Government Units toClear the Sidewalks, Streets, Avenues, Alleys, Bridges, Parks and Other Public Places in Metro Manila of All Illegal Structures and Obstructions. Retrieved from https://mmda.gov.ph/13-legal- matters/mmc-resolutions/96-mmda-resolution-no02-28*
7. *Metropolitan Manila Development Authority, (2002). Authorizing the Metropolitan Manila Development Authority and the Local Government Units to Clear the Sidewalks, Streets, Avenues, Alleys, Bridges, Parks and Other Public Places In Metro Manila of All Illegal Structures and Obstructions. Retrieved from https://mmda.gov.ph/13-legal-matters/mmc-resolutions/96-mmda-resolution-no02-28*
8. *Wetmore, J. (2017). A television series examining issues affecting people who walk. Retrieved from https://www.pedestrians.org/index.html?fbclid=IwZXh0bgNhZW0CMTAAAR0fKMMzMq6RBHMJZD57phJUVZgfgEmHySxYk7X6tVix1BpwTU1dAVzfvs_aem_ATvQ7wG71yawrMRqp-dUV4RWoeN5z0bppaa_Bypj7Zg4LRVNyrnzQXycRaB_yVL1FeI4GCPaSNPeJuUOqrjw2wU*