

MLS – LAW AND INTERNATIONAL POLITICS (MLSLIP)

https://www.mlsjournals.com/MLS-Law-International-Politics ISSN: 2952-248X



(2025) MLS-Law and International Politics, 4(1), 52-67. doi.org/10.58747/mlslip.v4i1.4121.

THE HIDDEN FIGURE ON CITIZEN SECURITY: IMPACT ON PUBLIC POLICY MANAGEMENT AND CITIZEN SECURITY MODEL IN THE MUNICIPALITY OF COMAYAGUA, HONDURAS LA CIFRA OCULTA EN LA SEGURIDAD CIUDADANA: IMPACTO SOBRE LA GESTIÓN DE POLÍTICAS PÚBLICAS Y MODELO DE SEGURIDAD CIUDADANA EN EL MUNICIPIO DE COMAYAGUA, HONDURAS

Carlos Arturo Barrera Carmona¹

University Benito Juárez of García, Mexico [reyarturo76@yahoo.es] [https://orcid.org/0000-0002-2035-1591]

Jhon Jairo Roncancio

International University of La Rioja, Spain [jhon.roncancio663@casur.gov.co] [https://orcid.org/0009-0007-7446-0789]

Manuscript information:

Recibido/Received:06/04/2025 Revisado/Reviewed: 11/06/2025 Aceptado/Accepted: 23/06/2025

Keywords:

hidden figure, black figure, dark figure, security model, public policy, citizen security.

ABSTRACT

The hidden figure, also known in criminological contexts as the dark figure of crime, statistical underreporting, or unreported criminality, refers to the rate of crime victims who choose not to report the incident to the authorities. In several countries, this phenomenon is used as a critical input in the design and structuring of development plans, public policies, and citizen security strategies. While some efforts aim to estimate the scope of the hidden figure through surveys that address the nature of the crime, the actors involved, and the reasons for non-reporting, others seek to reduce its prevalence by promoting actions that encourage reporting. This article focuses on the municipality of Comayagua (Honduras) and aims to assess the level of awareness regarding the hidden figure among both citizens and institutions—the latter through a literature review. The study includes an analysis of the behavior of the hidden figure and examines how underreporting can negatively affect public safety and social coexistence. It also explores the motivations behind citizens' reluctance to report crimes, highlighting how the lack of public understanding leads to the formulation of public policies that lack clarity and objectivity in addressing issues that impact community safety. The analysis further demonstrates how the mismanagement of the hidden figure hinders the identification of violence-generating actors, whether they be individuals or organized criminal structures.

¹ Corresponding author.

La cifra oculta en la seguridad ciudadana: Impacto sobre la gestión de políticas públicas y modelo de seguridad ciudadana en el municipio de Comayagua, Honduras

	RESUMEN
Palabras clave: cifra oculta, cifra negra, cifra oscura, modelo de seguridad, política pública, seguridad ciudadana.	La cifra oculta, la cifra negra, la cifra oscura o bien llamada e algunos escenarios como el subregistro estadístico o tambié criminalidad no revelada, es un término utilizado en la criminolog para señalar la tasa de no denuncia de personas víctimas de u hecho delictivo. En algunos países la cifra oculta es utilizada para diseño y estructura de planes de desarrollo, política pública estrategias de seguridad ciudadana. Mientras que algunos busca conocerla mediante la aplicación de encuestas contemplando la generalidades sobre el delito, actores y motivos por los que no s denunció; otros buscan su reducción y desarrollan acciones par incentivar a la denuncia. Este artículo se enfocó en el municipio d Comayagua (Honduras) buscando medir el conocimiento tanto e los ciudadanos como de las instituciones, esta última, mediante ur revisión de la literatura, a la vez que se realizó un análisis d comportamiento de la cifra oculta y cómo la no denuncia pued afectar la seguridad y convivencia ciudadana, de igual forma, cuále son las motivaciones de los ciudadanos para no instaurarlas y com su desconocimiento conlleva a la generación de políticas pública con falta de claridad y objetividad para atacar las problemáticas qu afectan la convivencia y seguridad ciudadana. Se direccionó análisis para establecer cómo el manejo de la cifra oculta tambié impide identificar actores generadores de violencia tratándose o individuos o estructuras delincuenciales.

Introduction

The different phenomena that affect citizen security in the countries are delimited by the actions and activities of the authorities. The pressure exerted on criminal acts at the level of prevention, deterrence and crime control, is transversalized by the capacity of police and judicial institutions in technical and operational matters, whose planning is largely given by the statistics obtained from the occurrence of these incidents and their decrease or increase in a given time and place (Norza, Ruiz, Rodriguez and Useche, 2011). Similarly, the UNODC relates its importance, determining that "Crime analysts, in addition to identifying trends and patterns, use data to make recommendations on where and when to place personnel and how best to use resources" (United Nations Office on Drugs and Crime, 2022).

In addition to the above, the community's perception of the capacity of the institutions and their effectiveness in guaranteeing public tranquility is also present in this same context. This subjectivity is framed by the tendency to feel insecure despite the efforts of the police authorities and the results achieved with the deployment of operations and activities related to the police function. According to Pérez Pinzón and Pérez Castro (2009, p. 167) this feeling of insecurity relates to "...an internal state that measures its degree of potential to be a victim of a crime", and is related to the means of attention and access to reporting that are available to citizens; which, in a large percentage of cases of crimes that occur daily, do not come forward to report the incident to the competent authority.

The present study seeks to analyze in the municipality of Comayagua (Honduras) that dark figure of crime (CO hereafter), also known as *cifra negra, cifra oscura*, or hidden criminality; the aim is to capture the balance between objective, subjective and unknown aspects that directly affect citizen security and prevent, by a wide margin, the dynamic work of the police authorities, to the extent that they do not know the causes of the failure to report crime, in addition to the responsibility framed in the construction of an integral security policy that goes beyond the planning of the service based on crime statistics, but that can also focus on other citizen security strategies that improve the perception and take more into account this CO.

The literature review focused on public policies in the area of citizen security built and applied in the municipality of Comayagua in the last five years, as well as on the verification of files generated at the national level that would give an account of the CO and the development of actions to emphasize mitigation or citizen incentive to report acts of violence or crimes. On the other hand, to identify national and international support institutions for the analysis and studies on crime and the crimes of greatest impact that affect public safety and tranquility in the municipality of Comayagua, in order to make a general description of the elements and characterization of the crimes that are most frequent and of most interest to security agencies and law enforcement institutions.

Objectives

General Objective

To analyze how the lack of knowledge of CO affects the design of public policies and how this phenomenon impacts citizen security in the municipality of Comayagua -Honduras. La cifra oculta en la seguridad ciudadana: Impacto sobre la gestión de políticas públicas y modelo de seguridad ciudadana en el municipio de Comayagua, Honduras

Specific Objectives

- Identify what is the CO in Comayagua in the 2019-2024 period and what would be its main motivations.
- Establish if in the municipality of Comayagua there are or have been designed public policies that include CO information.
- To determine if there is recent literature on CO in the municipality of Comayagua.

Method

For the development of this article it was necessary to apply a quantitativequalitative method (Hernández, Fernández and Baptista, 2020) of an exploratory and statistical inference type (González and González, 2020), through access to information obtained from primary sources that would make it possible to establish whether the population of the municipality of Comayagua in Honduras has been consulted by any of the authorities to identify the level of reporting established by its citizens, what could be the motivations for not reporting and the possible repercussions of CO in their community. Likewise, if the authorities in a direct contact (documented), have sought to obtain knowledge of the crimes that most affect citizens in their daily lives and what are the priorities in coexistence and citizen security on which the security agencies should work. Therefore, in order to consolidate information on OC, a primary measurement instrument was designed and applied that included a series of closed questions to reveal data on victimization and state response to crime, in addition to finding out whether the authorities have been made aware of the possible involvement of criminal actors (criminal structures or delinquents) that affect citizen security in this population.

On the other hand, this research also focused on the review and study of recent literature on CO in the country and especially in Comayagua and how the authorities have used this knowledge for the design of strategies and public policies to improve citizen security and the perception of security.

Finally, a random review was conducted of police doctrine on CO in Honduras, regulations, documents, manuals and others that would allow establishing the management of CO as a guiding element for the design of public policies and strategies focused on improving security and coexistence, as well as a review of the existence of methods or mechanisms for measuring the level of reporting, online platforms for reporting, plans or programs to encourage reporting and thus the search for and minimization of the impact of CO.

Results

At a general level in the Latin American and Caribbean region, the improvement of police image and confidence in institutional capacity has a broad influence on the decrease in crime (2%), more than on the increase in the number of police officers (0.3%) (Jatman and Anauati, 2019). This generates an important reflection on the object of scrutinizing the CO, given the institutional capacity not only to address the control of the incidents presented, but also to generate and facilitate channels of proximity to citizens. These channels allow for an accurate knowledge of this situational reality and optimize the operational, investigative and community planning of police institutions. All this, with

the purpose of improving the reporting and accurate follow-up of criminal incidents; both in the prevention of impunity and in the territorial and public administration spheres.

In the case of Honduras, according to Pérez, Pizzolito and Plutowski (2021), citizen security has been affected by the general victimization figures, which have increased since 2010 with 14% and reached 25% by 2021. These figures obtained from the sampling of 1,500 people via cell phone indicate that one out of every four Hondurans was a victim of a crime. This general research evidenced in the "AmericasBarometer Report 2021", shows a panorama that warns about citizen security and possible measures that should be taken in a contingent manner in the face of its increase; however, it does not specify the type of crime and does not report on the jurisdiction in which the survey was conducted, therefore, the determination of the OC is complex in terms of space and modality, being fundamental inputs to determine the circumstances of victimization and the type of victim; a situation that likewise disorients in the good planning and configuration of a much more solid security policy.

This aspect, in the specific case of the city of Comayagua, reflects the paradigm of citizen security, where police service planning is established in compliance with national objectives and policies, although distanced in the particular aspects of each region to articulate much more objective actions in order to really impact the genesis of crime. The victimization surveys carried out correspond to a general but not sectorial sentiment. This makes it difficult to take administrative and security actions to prevent and control crime, whether individual or collective, and to improve citizen confidence in the institutions to report crime, mainly the National Police, and to have more solid tools to focus the service and reduce CO.

On the other hand, the data reflected in the "Citizen Perception Survey on Insecurity and Victimization in Honduras 2019" presented in June 2020 by the National Violence Observatory (ONV), provides interesting data on subjective citizen security, obtained from the application of three thousand questionnaires distributed in the 18 departments that make up Honduras. For the specific case of Comayagua, this sample presents a victimization rate of 10.8%, interpreted as the number of respondents who have claimed to have been victims of a crime during 2019 (Instituto Universitario en Democracia, Paz y Seguridad, 2019). Of this percentage, 89.4% of people did not report the crime, compared to 10.6% who did report it to the authorities. This CO determined for the year 2019 in the city of Comayagua, directly reflects the fragile line that measures the capacity of the institutions to plan strategies that are articulated with the needs of the community, the increase of confidence in the actions for the prevention and prosecution of crime, the management of resources by the public administration, as well as those related to social reintegration processes and legislation.

The data included in this last perception survey, published for the city of Comayagua, have been provided in a broad but not detailed perspective, which makes it difficult to delve into the details of the crimes that were committed and were not reported to the competent authority. In the same way, results point to the economic difficulties and the corruption associated with the bad governance as the main causes of the insecurity phenomenon. However, it would be useful to specify the parameters under which citizens affirm this situation, as well as specific indicators or results regarding the management of those in power and/or authorities with respect to structural aspects that significantly affect the development of the city of Comayagua and have a direct impact on security factors, such as investment in infrastructure, control of public space, land use planning and security management in areas with suburban communities. According to Sanz and San Juan Guillen citing Crowe (2000) and Crowe and Zahm (1994), this approach is known

as Crime Prevention Through Environmental Design, aimed at solving problems related to urban safety, arguing that environmental conditions provide opportunities for the commission of crimes or other undesired behaviors, related to the quality of life (Vozmediano and San Juan, 2010).

It is important to analyze the gap in the way the CO obtained is managed and the approach it is given to determine inter-institutional strategies to minimize it and prevent criminal phenomena, which implies, in the first case, improving the credibility of the institutions in providing timely and effective attention, strengthening the bonds of trust and proximity; and, in the second case, developing planning based on the real needs of the communities and necessarily involving the entire state apparatus, not only in terms of security, but also in social, economic and cultural development.

The point is that in order to improve the planning of the police service, much more exhaustive data is required to align the feelings of the citizens with the distribution of the different administrative and operational actions that are carried out to guarantee better citizen security. Therefore, perception and victimization data are fundamental to plan an effective and close service to the citizen, also facilitating the impact on the reduction of incidents caused by the lack of local or state management due to the lack of an adequate infrastructure. In this regard, a study by Leticia Salomón in four cities in Honduras: La Ceiba, Tegucigalpa, San Pedro Sula and Danlí, mentions that the perception of security is determined by the institutional capacity to resolve the conflict posed by crime at three levels: major, intermediate and minor, the latter being the one that most affects citizens because it is directly linked to the spatial positioning of crime in the streets (Salomón, 2004).

Therefore, the insecurity figures represented in the feelings of citizens (subjective security) and the sectoral approach to the control of the occurrence of cases and incidents in certain jurisdictions (objective security) allow an important alignment in the institutional margin of maneuver to meet citizen demand and contribute to the reduction of the gap that separates reality from perception and its direct impact on the increase or decrease in the CO of crime.

General Analysis of the Instrument

The survey was designed with 16 questions aimed at getting to know different aspects of the respondents and was applied to 90 citizens of the municipality of Comayagua in Honduras. Demographic data, victimization, level of reporting, motivations for reporting or not, level of trust in the authorities and considerations in CO were taken into account in this article, yielding the following results:

Regarding gender, the instrument had a participation of 57% men (51) and 43% women (39), with respect to the age of the respondents, 31 people were between 25 and 35 years old, 25 of them were older than 45 years old, 19 were between 18 and 25 years old, while 15 people were between 35 and 45 years old. The middle socioeconomic stratum was marked by 65 people, 18 people (Table 1) considered themselves to be in the low stratum, while only 7 people indicated belonging to the high stratum. Regarding the activity or occupation of the respondents, 15 indicated that they were students, 15 were employed, 16 were self-employed, 17 were unemployed, 1 was a pensioner and 26 of them indicated that they were engaged in other activities.

Genre	Age	Socioeconomic stratum								
		High		Under		Medium		Total		
Man	18 and 25 years old	0	0,0%	3	3,3%	4	4,4%	7	7,8%	
	25 and 35 years old	1	1,1%	7	7,8%	10	11,1%	18	20,0%	
	35 and 45 years old	1	1,1%	1	1,1%	7	7,8%	9	10,0%	
	Over 45 years old	3	3,3%	2	2,2%	12	13,3%	17	18,9%	
Total		5	5,6%	13	14,4%	33	36,7%	51	56,7%	
Woman	18 and 25 years old	1	1,1%	2	2,2%	9	10,0%	12	13,3%	
	25 and 35 years old	1	1,1%	2	2,2%	10	11,1%	13	14,4%	
	35 and 45 years old	0	0,0%	1	1,1%	5	5,6%	6	6,7%	
	Over 45 years old	0	0,0%	0	0,0%	8	8,9%	8	8,9%	
Total		2	2,2%	5	5,6%	32	35,6%	39	43,3%	
	18 and 25 years old	1	1,1%	5	5,6%	13	14,4%	19	21,1%	
	25 and 35 years old	2	2,2%	9	10,0%	20	22,2%	31	34,4%	
	35 and 45 years old	1	1,1%	2	2,2%	12	13,3%	15	16,7%	
	Over 45 years old	3	3,3%	2	2,2%	20	22,2%	25	27,8%	
Total		7	7,8%	18	20,0%	65	72,2%	90	100,0%	

Table 1Respondents by gender, age, and socioeconomic status

To the question: Have you been a victim of any crime in the last five years? 43 people out of the 90 respondents answered YES while 47 people answered NO. Of the persons who reported having been victims of a crime, 20 indicated that they were affected on one occasion, 17 indicated that they were affected on 2 occasions, 4 persons were victims of a crime on 3 occasions and only 2 persons stated that they were victims of 4 and 5 crimes in the last five years.

With regard to reporting the cases in which they were victims, 55% did not report the events in which they were affected, while only 7 of them reported only one case to the authorities, only 9 people went to the authorities to report the total number of cases in which they were involved and 26 people said they did not report the respective cases to the authorities.

The balance of the number of incidents in which people were victims of crime in the last 5 years in the municipality of Comayagua is 75 in 43 people (*1.7% of cases per person*) who claimed to have been victims of criminals, however, only 9 of them indicated that they reported all cases, equivalent to 14 reports (*8 of a single case, 1 of two cases and 1 of four cases*). Likewise, 8 people indicated that they denounced the event in which they were affected.

Statistical Analysis

The analysis was carried out in a descriptive manner in order to evaluate the expected proportions to identify the level of reporting by their citizens, what could be the motivations for not reporting and possible repercussions of CO in their community. Likewise, to know if the authorities, in a direct (documented) contact, have sought to obtain knowledge of the crimes that most affect citizens. For the treatment of the information, the data were analyzed using the IBM - SPSS version 25 statistical software. The observed frequencies of each respondent's question were established, after which the observed and expected frequencies were used and a significance value of (α =0.05) was used.

	Initial eigenvalues			Extra		of squared	Rotational sums of squared loads				
Component -					loads	<u> </u>					
	Total	% variance	accumulated	Total	% variance	accumulated	Total	% variance	accumulated		
1	4,386	33,736	33,736	4,386	33,736	33,736	4,325	33,268	33,268		
2	1,551	11,932	45,668	1,551	11,932	45,668	1,502	11,554	44,822		
3	1,347	10,358	56,026	1,347	10,358	56,026	1,408	10,828	55,649		
4	1,097	8,435	64,461	1,097	8,435	64,461	1,145	8,811	64,461		
5	,988	7,602	72,063								
6	,929	7,147	79,210								
7	,781	6,007	85,217								
8	,707,	5,435	90,653								
9	,541	4,159	94,812								
10	,425	3,269	98,081								
11	,216	1,664	99,746								
12	,033	,254	100,000								
13	-1.02E- 12	-7.86E- 12	100,000								

Table 2Total variance explained

Note. Extraction method: principal component analysis. Results obtained using IBM-SPSS version 25 software.

The total variance explained measures the proportion of the variability of the data that is captured by the components extracted in a factor analysis (IBM, 2024). In the analysis performed, four principal components were obtained with eigenvalues greater than 1, indicating that these factors explain a significant amount of the variance in the data (Minitab, 2024).

The first component accounted for 33.74% of the total variance. This component reflects the strongest influence on the variables analyzed, implying that there is an underlying pattern that affects a significant portion of the respondents' answers. The second component explains 11.93% of the accumulated variance, which brings the percentage of variance explained to 45.66%. The third component explained 10.35%, accumulating 56.02% of the variance explained. Finally, the fourth component explained 8.43%, raising the accumulated variance to 64.46%.

The result indicates that these four components explain more than 64% of the total variability of the data, which implies a clear and stable factorial structure. This level of explained variance suggests that respondents' answers are influenced by well-defined common factors and that the structure of the data is adequate for factor analysis. The reduction of dimensionality through these components facilitates the interpretation of the underlying patterns and allows us to identify the key factors that explain reporting decisions and the perception of citizen security in Comayagua.

Figure 1 Analysis of the sedimentation graph.



Note: Results of the extracted components. Obtained through DATAtab.

The sedimentation plot is a visual tool to identify the optimal number of factors to extract in a factor analysis, based on the decrease in eigenvalues. In the analysis performed, the sedimentation plot showed a clear "elbow" after the fourth component, suggesting that only four factors have a significant influence on the data (DATAtab, 2025).

The horizontal axis of the graph shows the components, while the vertical axis shows the eigenvalues of each component. The first eigenvalue reflects a steep drop compared to the second component. The third and fourth components also have eigenvalues greater than 1, confirming their relevance to the model. From the fifth component onwards, the eigenvalues are less than 1 and show a gradual decrease, indicating that these factors do not contribute significant variance and are therefore not useful in explaining the data (Floyd and Widaman, 1995).

The interpretation of the sedimentation plot suggests that the first four factors explain a substantial part of the variance and that additional components would only add noise to the model. This pattern indicates that the factor structure is robust and that the model is optimally simplified by retaining four components. The consistency of the drop in the graph also supports the validity of the factor analysis and the stability of the identified patterns. The selection of four components for interpretation ensures a balanced representation of the variability of the data, without over-fitting the model.

Table 3

Component matrix-a.

Component matrix ^a				
	Component			
	1	2	3	4
Did you report or denounce these crimes to the authorities (police, prosecutor's office, etc.)?	,957			
Did you report or denounce these crimes to the authorities (police, prosecutor's office, etc.)?	,957			
Have you been a victim of a crime in the past five years?	,912			
In this period of time, how many times have you been a victim of a crime?	-,884			
How do you consider the level of handling given to your complaint by the authority?	-,640			
Do you consider that the complaint would have had any impact on the resolution of the crime?	,542	,359		
Do you consider that the lack of reporting contributes to impunity in your community?		,716		
Do you think the complaint could have adversely affected your safety or that of your family?		,565		-,438
Do you consider that the lack of reporting affects the management of the police service and other authorities?		,563	,365	
What level of confidence do you have in the authorities to properly handle a crime report?			,736	
Have you ever met someone who decided not to report a crime?	,429		,555	
You reported the crime, what was the main reason?				,675
In your opinion, what are the main barriers that prevent people from reporting crimes?				,516

Note. Extraction method: principal component analysis. a. 4 components extracted.

According to García, Gil and Rodríguez (2000), the component matrix shows the correlations between the variables and each of the factors extracted in the factor analysis. This matrix allows us to identify which variables are most associated with each component, facilitating the interpretation of the underlying patterns in the data. (Ledesma and Valero, 2007).

In the analysis conducted, the first component presented a high loading for the variable "Did you report or denounce these crimes to the authorities?" indicating that this variable is strongly explained by the first factor. The variable "Have you been a victim of any crime in the last five years?" suggests that the first component is related to reporting behavior and victimization experience.

The second component showed a high loading for the variable "What level of trust do you have in the authorities to adequately handle a complaint?". This indicates that this component is associated with trust in institutions.

The third component reflected a high loading for the variable "You reported the crime, what was the main reason?", suggesting that this component is linked to the reasons behind the decision to report or not.

The fourth component showed a high loading for the variable "Do you think that reporting could have negatively affected your or your family's safety?", indicating that this factor is related to the perception of personal risk in reporting.

The structure of the component matrix reveals that reporting decisions, trust in authorities and fear of reprisals are the key factors explaining respondents' answers, highlighting the consistency and relevance of the factor model.

In Rotation are methods to show associations of variables that are not directly clear. (Figure 2)

Figure 2

Analysis of the sedimentation graph.



Note. Results obtained using the Varimax rotation method.

Rotated Component Matrix Analysis

The rotated component matrix is obtained using the Varimax rotation method, one of the most popular, which minimizes the number of variables that have high loadings on each factor and simplifies the interpretation of the factors. (Kaiser, 1958); facilitating the interpretation of the factors by maximizing the loadings of the variables on a single component and minimizing the loadings on others (Kline, 2014). This process clarifies the relationships between variables and underlying factors. (Table 4).

In the analysis, the variable "Did you report or denounce these crimes to the authorities?" in the first component confirms that this factor is strongly associated with reporting behavior. The variable "Have you been a victim of any crime?" also had a high loading on the first component, suggesting that this factor reflects victimization experience and reporting behavior.

The second component showed a strong association with the variable "What level of trust do you have in the authorities?" indicating that this factor is related to the perception of trust in institutions.

The third component reflected a high loading for the variable "You reported the crime, what was the main reason?" implying that this factor is linked to the motivations behind the decision to report or not.

La cifra oculta en la seguridad ciudadana: Impacto sobre la gestión de políticas públicas y modelo de seguridad ciudadana en el municipio de Comayagua, Honduras

The fourth component showed a clear association with the variable "Do you think the whistleblowing could have negatively affected your safety?" indicating that this factor is related to the perceived risk of whistleblowing.

The Varimax rotation allowed a better interpretation of the factors, showing a clear factorial structure where reporting decisions, trust in authorities and perceived risk are the main dimensions explaining the behavior of the respondents.

Table 4

Component matrix-a

Rotated component matrix ^a				
	1	2	3	4
Did you report or denounce these crimes to the authorities (police, prosecutor's office, etc.)?	,957			
Did you report or denounce these crimes to the authorities (police, prosecutor's office, etc.)?	,957			
Have you been a victim of a crime in the last five years?	,905			
In this period of time, how many times have you been a victim of a crime?	-,881			
How do you consider the level of handling given to your complaint by the authority?	-,647			
Do you consider that the complaint would have had any impact on the resolution of the crime?	,564		-,354	
Do you consider that the lack of reporting contributes to impunity in your community?		,842		
Do you consider that the lack of reporting affects the management of the police service and other authorities?		,631		
What level of confidence do you have in the authorities to properly handle a crime report?			,814	
Have you ever met someone who decided not to report a crime?	,358	,360	,495	
Do you think the complaint could have adversely affected your safety or that of your family?		,358		-,576
You reported the crime, what was the main reason?			-,444	,557
In your opinion, what are the main barriers that prevent people from reporting crimes?				,555

Note. Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization. a. The rotation has converged in 7 iterations.

Discussion

Having as reference the results of the Municipal Observatory of Coexistence and Citizen Security of Comayagua, embodied in its bulletin (2017), making the documentation of incidents or occurrence of crimes in this municipality during the years 2016 and 2017 respectively, showing the analysis of results on the reduction or increase of crimes of greater impact such as theft, personal injury and homicide, in addition, it points out the increase in citizen complaints especially in relation to cases of theft with 42.5%. However, its results do not identify the CO of the municipality with which to develop actions to reduce crime problems affecting the community.

For the online platform NUMBEO (2024), which compiles and provides data on different aspects including citizen security, based on results from the last three years, the

municipality of Comayagua has a crime rate of more than 75% and within the parameters studied there is no information on the rate of non-reporting or the aspects that would be generating the lack of reporting.

On the other hand, the local observatory of violence in Comayagua, in the last bulletin published in 2013, studies conducted by the National Autonomous University of Honduras in coordination with the University Institute for Democracy, Peace and Security (IUDPAS), sought through the structuring of information, to improve the characterization of violence in this municipality by generating analysis of crimes of homicide, personal injury, deaths from external causes, traffic accident deaths and sexual violence among others, processed by various official institutions. (UNAH, 2025).

In a more recent study, published in 2019 by the University Institute on Democracy, Peace and Security (IUDPAS) of the National Autonomous University of Honduras (UNAH) articulated with the National Democratic Institute, indicated that at the general level in Honduras for the year 2018 only 22.4% of people who were victims of a crime reported the fact officially to the authorities, which frames a CO of 77.6% for the country in 2018. (UNAH, 2018).

For the case of the present research article, the application of the measurement instrument in the municipality of Comayagua, in a time window between 2019 and 2024, 47.78% of the surveyed population reported having been victims of a crime, while 52.22% reported not having been victimized in this period of time.

Of the 47.78% of the victims who grouped together 75 crimes, only 18.67% took the case to the authorities so that the respective investigations could be carried out and the authorities could structure knowledge to attack the problems occurring in the municipality, registering them for statistical analysis.

For Buendía and Medina (2020), in their indication of how to conclude with an estimate of CO in the municipality of Comayagua, they used their proposed formula accepted and recognized in criminology studies for the rate of reporting and non-reporting and as a result of the survey they took the reported cases subtracted from the estimated cases in the instrument, obtaining a total of 61 non-reported cases that allow concluding that 81.33% of crimes are not reported by citizens to the authorities.

Figure 3

CO calculation for Comayagua



Note. Result hidden figure Comayagua 2019-2024. Formula proposed by Buendía and Medina (2020),

Conclusions

The identification of CO through the application of the proposed methodology yielded 81.33% and, as a result of the statistical inference, citizens consider lack of trust in the authorities, poor response or reaction to reported cases and fear for their personal safety as the main aspects of their non-reporting.

It is important to mention that, in the review of the bibliography in the municipality of Comayagua, it was not possible to establish clear parameters for the inclusion of CO in the development of public policies for citizen security, nor was it possible to obtain information related to strategies to reduce non-reporting rates.

Despite the above, documents were found in the country where actions taken to obtain CO and some studies that have addressed the issue in general, although there are also CO statistics for 2019 showing results that indicate that only 10.6% of the population victims of crimes in Comayagua would be reporting to the authorities. This aspect is outstanding for the alignment of research related to this criminological field, which impacts different perspectives for the construction of multisectoral public policies.

Likewise, it is important that the design and structure of victimization surveys go beyond the general aspects of citizen security in national jurisdictions, and be developed in specific regions to yield particular results and enable assertive decisions to be made regarding crime prevention and the motivation to report crime.

In this process, we must go beyond obtaining figures and percentages on the commission of unreported crimes; in this way, we substantially prevent the bias that distorts the way to obtain relevant information that allows us to really know the circumstances of mode, time and place in which they were committed; in addition to the reason why they were not reported. These parameters are essential for reorienting institutional service planning policies under focused objectives, as well as optimizing citizen service, improving the police image and restoring citizen confidence in the good public administration represented by local authorities and the correct territorial planning that minimizes the risk of crime.

On the other hand, the continuity and periodicity (at least every two years) in the application of victimization and citizen perception surveys are the basis for making the right decisions regarding crime prevention, through local strategies articulated with national objectives, also facilitating control in jurisdictions with higher crime rates.

It is important to highlight that the CO obtained from the application of the "Citizen Perception Survey on Insecurity and Victimization in Honduras 2019", is 89.4% for the city of Comayagua, being coincident with the present study, where the CO during the last five years (2019-2024) is 81.33%.

Therefore, it is necessary to design institutional strategies to strengthen confidence in reporting and improve the credibility of the actions carried out by State security agencies. These strategies require the development of a public policy to encourage reporting in the municipality of Comayagua, generating technological platforms and more dynamic mechanisms for citizen outreach, as well as developing strict protocols within the authorities to respond to cases of crime.

Finally, there is a need to conduct CO-related studies focused on investigating and analyzing violence in Comayagua in depth, indicating the proportion and origin of personal injuries committed and their consequence and impact on the reduction or increase of homicide rates.

References

Boletín Informativo del Observatorio Municipal de Convivencia y Seguridad Ciudadana de Comayagua. (2016). *Boletín informativo del Observatorio Municipal de Convivencia y Seguridad Ciudadana de Comayagua*. Programa de las Naciones Unidas para el Desarrollo (PNUD).

https://www.undp.org/sites/g/files/zskgke326/files/migration/hn/PNUD_HN_B oletin-Comayagua-2017.pdf

- Buendía, A. y Medina, C. (2020). Métodos cuantitativos en criminología: Medición del delito oculto. *Revista de Criminología Aplicada*, *15*(2), 45–60.
- DATAtab. (2025). *Análisis factorial exploratorio Explicación sencilla*. DATAtab Tutorial. <u>https://datatab.de/tutorial/exploratory-factor-analysis</u>
- Estudio Criminal. (s.f.). ¿Qué es la cifra negra? Estudio Criminal. https://www.estudiocriminal.eu/blog/que-es-la-cifra-negra/
- Floyd, F. J. y Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment*, 7(3), 286–299.
- García Jiménez, E., Gil Flores, J. y Rodríguez Gómez, G. (2000). Análisis factorial. La Muralla.
- González, M. y González, M. (2020). Estadística inferencial: Elección de una prueba estadística no paramétrica. *Horizonte de la Ciencia*, *10*(19), 191–208.
- Hernández Sampieri, R., Fernández Collado, C. y Baptista Lucio, P. (2020). *Metodología de la investigación* (7ª ed.). McGraw-Hill.
- IBM. (2024). Varianza total explicada. IBM Knowledge Center. https://www.ibm.com/docs/es/spss-statistics/saas?topic=reduction-totalvariance-explained
- Instituto Universitario en Democracia, Paz y Seguridad (IUDPAS). (2019). *IV Encuesta de percepción ciudadana sobre inseguridad y victimización en Honduras*. Universidad Nacional Autónoma de Honduras (UNAH).
- Jatman, L. y Anauati, V. (2019). The dark figure of crime in Latin America and the Caribbean. Journal of Economics, Race, and Policy. <u>https://www.vanderbilt.edu/lapop/news/081619-latinamerica-journalofeconomics.pdf</u>
- Kaiser, F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, *23*(3), 187–200.
- Kline, P. (2014). *An easy guide to factor analysis*. Routledge.
- Ledesma, R. y Valero, P. (2007). Determinación del número de factores a retener en el análisis factorial: Un programa fácil de usar para el análisis paralelo. *Practical Assessment, Research & Evaluation, 12*(2), 1–11.
- Minitab. (2024). *Interpretar los resultados clave para análisis factorial*. Soporte de Minitab. <u>https://support.minitab.com/es-mx/minitab/help-and-how-to/statistical-</u> modeling/multivariate/how-to/factor-analysis/interpret-the-results/key-results/
- Norza, E., López, W. A. y Peñalosa, P. X. (2011). Exégesis de los delitos en Colombia. *Criminalidad, 4*(1). Policía Nacional de Colombia, Dirección de Investigación Criminal e Interpol. <u>https://www.policia.gov.co/sites/default/files/exegesis de los delitos en colomb</u> <u>ia 2011.html</u>
- Norza, E., Ruiz, P. J., Rodríguez, M. L. y Useche, H. S. (2011). Teorías y modelos explicativos de la criminología. *Revista Investigación Criminológica*, 2(1).
- Oficina de las Naciones Unidas contra la Droga y el Delito (UNODC). (2022). *Lineamientos estadísticos para la producción de datos estadísticos por parte de la policía*.

La cifra oculta en la seguridad ciudadana: Impacto sobre la gestión de políticas públicas y modelo de seguridad ciudadana en el municipio de Comayagua, Honduras

https://www.unodc.org/documents/data-andanalysis/statistics/Statistical guideline Police Forces ES.pdf

- Pérez, O. J., Pizzolitto, G. y Plutowski, L. (Eds.). (2021). *Cultura política de la democracia en Honduras y en las Américas 2021: Tomándole el pulso a la democracia*. LAPOP.
- Pérez Pinzón, Á. O., y Pérez Castro, B. J. (2009). *Curso de criminología* (8ª ed.). Editorial Temis.
- Salomón, L. (2004). El desempeño policial y la satisfacción de la ciudadanía. https://pdba.georgetown.edu/Security/citizensecurity/honduras/documentos/de sempeno.pdf
- Sanz, L., y San Juan, C. (2010). *Criminología ambiental: Ecología del delito y de la seguridad* (Manuales No. 162) [Versión Kindle]. Editorial UOC.
- UNAH. (2018). *Percepción ciudadana sobre inseguridad y victimización en Honduras* (Boletín III). Instituto Universitario en Democracia, Paz y Seguridad (IUDPAS).
- UNAH. (2025). Observatorio local de la violencia en Comayagua. https://iudpas.unah.edu.hn/areas/observatorio-de-la-violencia/boletines-delobservatorio-2/curc/observatorio-local-de-la-violencia-en-comayagua/