

Identity Concealment Through Helmet Use: A Qualitative Exploration of Police Investigative Challenges

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ABSTRACT

This study explores the challenges faced by criminal investigators in handling cases involving helmeted suspects in an urban city in the Philippines. Using a qualitative descriptive approach, the study examined the challenges encountered by the investigators, the strategies they employed, and their aspirations for effective investigation related to helmet-wearing suspects. A purposive sampling technique was utilized to select ten police investigators as participants. Data were obtained using semi-structured interviews grounded in established research ethics protocols. Thematic analysis was employed to identify six emerging themes. Findings revealed two themes under investigative challenges: (1) difficulty in identifying perpetrators and (2) unavailability of potential witnesses. Two themes emerged under strategies and coping mechanisms: (3) backtracking closed-circuit television (CCTV) footage and (4) strengthening inter-agency cooperation and intelligence networks. For aspirations towards police investigative effectiveness, two themes were formulated: (5) utilization of high-resolution CCTV cameras and (6) enhanced training for investigators. In general, helmet use presents an investigative challenge for the authorities in suspect identification, leading to reliance on electronic data and technology-driven practices. The study recommends strengthening the use of surveillance technology and providing continuous professional development to investigators to improve crime detection and resolution.

Keywords: Challenges, Suspect Identification, Criminal Investigation, Helmet Wearing-Suspect, Qualitative Study

INTRODUCTION

Criminality is one of the persistent societal issues that affect public safety and law enforcement's effective functioning. (Weisburd, 2015; D'Orsogna & Perc, 2014). Proper and timely identification of the suspect in a crime is fundamental to criminal investigations. However, environmental and situational factors sometimes hindered its purpose (Giovannini et al., 2024). Crime patterns related to mobility-related crimes indicate that suspects often use motorcycles to escape quickly and conceal their identities by wearing helmets to avoid detection (Soltanikazemi et al., 2023; Lai et al., 2025). Face obstruction devices greatly reduce the ability of surveillance systems and other types of forensic investigation to see clearly and accurately and to identify suspects (Huang et al., 2024; Wei et al., 2024).

Significant problems encountered by law enforcement associated with the use of helmets in criminal activities, particularly in crime identification and resolution, had already been reported (Thaher et al., 2025; Or et al., 2023). In the context of forensic analysis, partial facial covering and inadequate quality of the surveillance footage can significantly reduce and limit the accuracy of the result in facial recognition, which is important in criminal investigation (Norman et al., 2023; Or et al., 2023). For instance, in crimes involving ATM fraud and riding-in-tandem cases, a helmet can be one of the instruments to intentionally conceal the identity of the suspect, which could result in poor surveillance recognition, adding a burden to the investigative process (Ge et al., 2020; Lahasan et al., 2019; Zeng et al., 2020).

In the year 2010, the Philippine government enacted a law through Republic Act 10054, which is otherwise known as the "Motorcycle Helmet Act of 2009." This law was implemented for the public with the purpose of ensuring the safety of the motorcycle drivers as well as their back riders such that it would prevent heads from serious injuries during accidents. However, in many cases, helmets are being used not only for protection but also as a way for an individual to identify when committing crimes. One particular example is Zamboanga City, where there were eleven (11) recorded shooting incidents in which suspects wore full-face helmets to conceal their identities from CCTV footage and eyewitnesses, complicating efforts to identify and track them (Philippine News Agency, 2023). Through helmets, criminals can easily hide their faces while riding a motorcycle, which makes it hard for witnesses, victims, and even CCTV cameras to identify them (Hartatik, 2023). This situation affects the ability of investigators to recognize the suspects and delays the process of solving the crime.

Despite the existing literature about helmet-wearing for facial concealment in crime commission and surveillance limitations, a significant research gap has been identified. First, there is a lack of localized empirical studies in the Philippines, particularly in southern regions such as Pagadian City, that examine how helmet use specifically affects CCTV-based suspect identification and real-world investigative outcomes. Second, limited research has been conducted on police investigative efficiency, including case resolution time and identification success rates, despite the helmet-wearing challenges of the suspect. Lastly, there is insufficient evaluation of how existing forensic technologies and law enforcement practices respond to or mitigate identity concealment involving helmets in actual crime scenarios.

Taking this into account, this study was conducted to examine the challenges of the police investigators in identifying suspects in crimes with helmet use and its implications for suspect identification and crime resolution. The study provides valuable insights to forensic investigation practices, improves surveillance system utilization, and supports law enforcement agencies in developing more effective investigative strategies in cases involving identity obstruction.

Research Questions

1. What were the challenges encountered by the investigators in solving crimes where suspects were wearing helmets?
2. What coping mechanisms or strategies were employed by investigators to address these challenges?
3. What were the aspirations of the police investigators in the improvement of their duties?

METHODOLOGY

Study Design

This study utilized a qualitative descriptive research approach. This method is suitable for this study because the purpose is to systematically describe and analyze the challenges, identify the coping mechanisms, and provide aspirations for improving the investigative process in solving crimes related to helmet-wearing suspects. According to Sandelowski (2000), qualitative descriptive research is appropriate in a study where the purpose is to develop findings that are useful and applicable to the existing field of practice because it focuses directly on the factual presentation of the data, clarifies facts, and simplifies information. Although the study initially intended to employ methodological triangulation through the integration of semi-structured interviews, case document analysis (including CCTV footage), and field observations, this approach was not fully realized due to limitations in data accessibility and availability. Consequently, the analysis in this study is primarily based on interview data gathered from the participants.

Research Setting

This study was conducted in Pagadian City, capital of Zamboanga del Sur, Philippines, and the regional center of the Zamboanga Peninsula. Specifically, the investigation office of the Pagadian City Police Station serves as the research locale. The location is suitable considering the reported crime incidents where the suspects are wearing helmets. Based on the report, there have been cases of shooting incidents involving individuals riding in tandem, as well as robbery and theft, where wearing helmets is a common *modus operandi* among the

perpetrators. This situation drove the local authorities to pass a resolution numbered 2020-0599, which aims to temporarily suspend the wearing of full-face and half-face helmets in the urban barangay of Pagadian City (Inquirer.net, 2020).

Participants and Sampling Procedure

The research participants consisted of ten police investigators assigned to the Pagadian City Police Station. The participants were selected through purposive sampling to ensure the inclusion of individuals who possessed substantial knowledge, professional experience, and direct involvement in investigating crimes committed by helmet-wearing suspects. This sampling technique enabled the researcher to obtain comprehensive, relevant, and experience-based insights aligned with the objectives of the study.

The following inclusion criteria guided the selection of participants: (1) currently assigned to the criminal investigation section for a minimum of one year; and (2) has direct and actual experience in handling investigations involving helmet-wearing suspects. These qualifications ensured that the participants were capable of providing credible, informed, and meaningful perspectives regarding the investigative challenges, strategies, and practices associated with crimes involving identity concealment through helmet use.

Instrumentation

The instrument used in this study was an open-ended interview guide with questions categorized into three parts: the first part focused on the challenges encountered by the investigators in solving crimes where suspects are wearing helmets; the second part dealt with the coping mechanisms or strategies employed by investigators to address the challenges; and the third part identified the aspirations of the police investigators in the improvement of their duties, especially in criminal identification and recognition. To allow varied responses from the participants, semi-structured questions were prepared to capture complete information about the problem using in-depth interviews. The instrument was developed following the standard procedures for qualitative research, ensuring that the questions were clear, relevant, and ethically appropriate. The research instrument was subjected to a validation process by the external panel and field experts to verify the alignment and correctness of the targeted constructs. Informed consent was provided to the participants before proceeding to the actual interview.

Data Analysis

The data obtained from the participants during the in-depth interview was interpreted using a thematic analysis. Through this method, the data were systematically analyzed by identifying patterns of responses, which are useful in developing themes. Some steps in thematic analysis include the following: First, transcription of data: the purpose is to convert recorded information obtained during the interview into written form. During this stage, initial notes were recorded to carefully extract initial patterns and significant responses after readings. Second, initial codes were reviewed for the purpose of identifying the statements and phrases that possibly support the quantitative findings. Third, the codes were categorized to create emerging themes. These themes were reviewed and polished for clarity, uniqueness, and alignment with research problems. Member checking was also employed by presenting selected interpretations and summaries of findings to some participants to verify the accuracy and authenticity of the researchers' interpretations. To avoid researchers' bias and maintain credibility, reflexivity was strictly observed for the entire research duration and precluded initial assumptions and personal interpretations. The purpose is to ensure that the analysis is grounded in the real and authentic responses. An audit trail was maintained to document coding decisions, development of themes, and interpretations. Furthermore, peer consultation among colleagues was used to review the consistency and validity of the themes developed.

Ethical Considerations

Adhering to the ethical rules in research is essential for ensuring that participants' rights are protected. Prior to participating in the research process, an informed consent form was given to every participant, acknowledging their understanding and voluntary participation. The informed consent form stipulates the research purpose, methods, possible risks and benefits, and the participants' rights to withdraw from the study at any time without

facing sanctions.

RESULTS AND DISCUSSION

Data analysis revealed six emergent themes categorized into three major domains: (1) challenges encountered by investigators, (2) coping mechanisms and strategies, and (3) professional aspirations for investigative improvement.

Challenges Encountered by Investigators in Identifying Helmet-Suspects.

In the context of this research, police investigators face challenges in identifying helmet-wearing suspects, including the visual obstruction that witnesses experience regarding suspect identities, which is contributed to by helmets used to conceal facial features during the commission of crimes. Other obstacles include the difficulty of obtaining witnesses, which is due to fear and safety concerns. All these factors contribute to the delay of the investigative process.

Theme 1: Identity Obstruction Due to Helmet Use.

This theme deals with the challenges encountered by the investigators in identifying helmet-wearing suspects in crime incidents. The use of helmets during the commission of a crime can limit the visibility of facial features of the perpetrators, which results in poor eyewitness identification. The participants said:

“There are cases I handled in the investigation section where the suspect is not identified due to helmet-wearing affecting the positive identification and delay in case resolution.” – P1

“As an investigator, you can't just say a helmeted person is the suspect; you can't use that in court if the face isn't visible.” – P3

“Most suspects involved in riding-in-tandem incidents intentionally wear full-face helmets to conceal their identity from witnesses and CCTV cameras.” – P10

“Even if there are witnesses, they usually cannot provide a clear facial description because the helmet completely covers the suspect's face.” – P7

“The investigation becomes more difficult because we need to rely on movements, clothing, and motorcycles instead of facial recognition.” – P5

“Sometimes the body build and motorcycle are visible, but the face cannot be identified because the suspect is wearing a helmet.” – P4

The responses of the participants, revealed a significant challenge in police investigations involving suspects who wear helmets during the commission of crimes. Participants explained that helmets obstruct the clear visibility of the suspect's face, which is a crucial element in achieving positive identification. Investigators face challenges in identifying and confirming the individual responsible for the crime due to the suspect's concealed identity. The informants further emphasized that identity serves as a central component of criminal investigations, as it establishes the connection between the offender and the criminal act committed.

These findings are consistent with existing literature discussing the investigative difficulties associated with facial concealment. The study of Noyes et al. (2021) revealed that helmet-wearing suspects create substantial barriers to perpetrator identification because helmets cover a significant portion of the head, including essential facial features necessary for recognition. Similarly, Thorley et al. (2022) explained that face coverings, such as helmets, reduce the likelihood of positive identification by concealing distinctive facial characteristics.

Moreover, these findings may also be explained through rational choice theory, which suggests that offenders intentionally employ strategies to minimize the risk of detection and apprehension. From this perspective, the

use of helmets functions as a form of risk-management behavior aimed at preventing facial recognition and weakening the possibility of identification by witnesses, investigators, and surveillance systems.

Theme 2: Unavailability of Witnesses

This theme stressed the difficulty experienced by investigators due to the non-availability of the witnesses who could provide valuable information and positive identification of the suspects from the crime incident. There were situations where witnesses were unwilling to cooperate with the law enforcers due to uncertainty, safety concerns and fear. Along with the interview, the participants said:

“If there are no witnesses and the suspect is wearing a helmet, we have very limited information to start with.” – P6

“The absence of witnesses during late-night incidents makes our investigation more complicated.” – P8

“Sometimes even if witnesses had known about the incident and recognized the suspect, they may not cooperate for fear of trouble.” – P2

“I experienced difficulty in finding witnesses, especially in shooting incidents.” – P4

“There were individuals who could be considered potential witnesses but were hesitant to provide information because they were not sure and uncertain of the identity of the suspect.” – P9

This uncertainty leaves the witnesses feeling unsure and confused, particularly when the suspect is wearing a helmet, thereby weakening testimonial credibility. Previous research has found that the degree of confidence in witness memory in recalling the exact details of an incident depends on the variation from low to high, and this phenomenon is observable from the initial to the final stage of the investigation, wherein there are some twists to the details previously given. This phenomenon is because of the extraneous factors that affect the witness's memory and retention (Wixted, 2023). In addition, safety and security appear as one of the factors that hinder the investigation because the witness perceived the risk as outweighing any potential benefits. Research has shown that this perceived risk continues to be one of the major challenges in criminal investigation in extracting complete details of a crime from potential informants (Hershkovitz et al., 2025). This avoidance behavior may contribute to delayed identification and prosecution of suspects. Several research studies support this claim, relating the refusal of witnesses, especially in gun shooting-related incidents, to fear of retaliation, resulting in low rates of crime resolution (White et al., 2021). In addition, due to the witness intimidation and perceived threats, witnesses are less likely to cooperate with the law enforcers, causing difficulty in constructing evidence and delaying suspect identification and prosecution (National Academies of Sciences, 2014).

The rational choice theory of Cornish and Clarke is used in this study to explain how a witness decides and analyzes the pros and cons of actions by weighing the potential danger of retaliation, lack of security, and protection versus the perceived benefits of cooperation, resulting in non-participation and reluctance. The decision-making process of witnesses represents a rational, bounded assessment that evaluates the perceived effects of their cooperation.

Coping Mechanisms and Strategies Employed by the Investigators

The police investigators shared and exposed the coping mechanisms and strategies they employed to address the challenges they faced in identifying and investigating the helmet-wearing suspect. These strategies include backtracking the CCTV footage near the area where the crime happened and intensifying intelligence networking and inter-agency coordination to assist in providing data or information.

Theme 1: Backtracking closed-circuit television camera footage

This theme outlined the strategies applied by the police investigators in tracing and backtracking suspects using closed-circuit television (CCTV) footage installed in areas where crime happened. CCTV records monitor suspects' movements and trace their directions. The footage serves as supplemental validation for identification

or as an alternative method when witnesses are unavailable. Through this process, the investigators may be able to review important details or descriptions that possibly link to the suspects' identities. In a focus group discussion, the participants said:

“As the investigator, I have to backtrack the CCTV and then look for a clue that will be linked to the suspect's general description.” – P3

“I need to review CCTV footage installed in the store or establishment with permission from the owners.” – P6

“Sometimes we coordinate with barangays and private establishments to gather additional CCTV recordings for continuous tracking.” – P9

“Even if the suspect wears a helmet, CCTV footage can still help us trace the motorcycle and direction of escape.” – P2

“We usually check nearby establishments with CCTV cameras to identify where the suspect passed after the incident.” – P5

“By backtracking the CCTV footage, we can compare the suspect's clothing, body build, and vehicle with witness descriptions.” – P8

The responses from participants reflect that the investigators rely heavily on CCTV records as a key tool in investigating and tracing suspects' movement and escape routes before and after the commission of a crime. This emphasizes the value of CCTV as an essential aid in modern surveillance and criminal investigation processes.

Research has found that the installation of the CCTV cameras in malls, department stores, banks, school premises, and both private and public spaces provides support in the monitoring of daily activities while helping local authorities detect, respond to, and investigate incidents more effectively (Katkar & Garge, 2022). Similarly, video recordings serve as supplemental validation on witness testimony for investigators to review and track suspects' movement during criminal investigations (Brookman & Jones, 2022).

The Routine Activity Theory of Cohen and Felson was applied in this theme, explaining that crimes occur when the three elements are present: a suitable target, a motivated offender, and the absence of capable guardians. In this research, the CCTV cameras function as capable guardians because they provide monitoring, recording, and possible identification of the suspects in criminal activities. Having a surveillance video allows the investigator to review suspects' movements before and after the crime occurred. CCTV strengthens the principle of guardianship as one of the key elements of the routine activity theory.

Theme 2: Strengthening inter-agency cooperation and intelligence networks

This theme recognized that inter-agency coordination and intelligence networks are vital tools for criminal investigators in tracing unknown suspects, especially those wearing helmets during the commission of crimes. Collaborations between other line agencies in sharing information are essential practices for the identification and tracking of suspects' routes across different places. In an interview conducted with the participants, collective and common responses emerged:

“Coordination is essential in investigations, especially with agencies like the Philippine Army, DILG, NBI, and others.” – P2

We coordinate with nearby police stations to monitor possible escape routes and movements of the suspects.” – P1

“Information sharing between agencies helps us identify suspects faster, especially when they operate in different areas.” – P4

“Intelligence networks and confidential informants are important sources of information in tracking unidentified suspects.” – P6

"If a plate number is available and captured in the CCTV camera, coordination is made with the Land Transportation Office (LTO) for verification." – P5

"A barangay intelligence network was previously established with trusted informants selected in each village." – P7

"Through coordination with local government units and barangay officials, we can gather additional details about suspicious individuals in the community." – P9

The responses of the participants highlighted the importance of inter-agency cooperation and intelligence networking in strengthening criminal investigations involving helmet-wearing suspects. The participants emphasized that coordination among law enforcement agencies, local government units, barangay officials, and intelligence informants plays a significant role in gathering relevant information and monitoring the possible movements of suspects across different locations. Through information sharing, investigators are able to verify vehicle ownership, identify potential escape routes, and obtain additional leads that may contribute to suspect identification and case development. The findings further suggest that collaborative efforts and intelligence-based approaches enhance the effectiveness of investigations by expanding the sources of information available to investigators, especially in cases where direct identification is difficult due to the concealment of facial features through helmet use.

A study by Pajon and Walsh (2022) emphasized that effective policing requires strong collaboration with partner agencies in various aspects of criminal investigation. These include assisting victims, supporting the planning and execution of police operations, strengthening criminal intelligence gathering, and obtaining relevant information about premises, businesses, and individuals connected to criminal activity. The findings further indicate that police officers recognize their dependence on multiple agencies to provide specialized forms of support, highlighting that no single agency can independently address all investigative demands. This points out the necessity of coordinated efforts among law enforcement and allied institutions in building a complete and more reliable investigative framework.

In addition, Aston et al. (2021) highlighted the critical role of citizen participation in intelligence networks, noting that valuable and often decisive information originates from community members within the crime environment. The study stresses that community engagement and information sharing significantly enhance police responsiveness and effectiveness in resolving criminal cases. The active flow of information between citizens and law enforcement agencies contributes to more accurate situational awareness and strengthens the overall criminal intelligence picture.

Integrating these findings suggests that inter-agency collaboration, combined with community-based intelligence sharing, fosters a more effective and responsive investigative system. This collaborative approach is particularly crucial in cases where suspect identification is hindered by the use of facial coverings such as helmets. In such situations, reliance on coordinated intelligence efforts, shared databases, surveillance systems, and community inputs becomes essential in reconstructing events, tracing suspect movements, and enhancing the likelihood of case resolution.

The social network theory of Mark Granovetter was used to explain the findings, since it emphasized the working relationship between agencies and people in strengthening the ability to acquire information, resources, and support for the attainment of the objectives in the problem-solving and decision-making processes. This theory is significant in understanding the challenges experienced by criminal investigators in identifying helmeted suspects in a crime due to the limited information available from an eyewitness's perspective and electronic-based surveillance data. The theory highlights external collaborations and inter-agency coordination between law enforcement agencies like the Philippine National Police, National Bureau of Investigation, Land Transportation Office, local government units, and the people living in the community for the exchange of information leading to the identification of suspects by supplementing alternative evidence like vehicle information, routes, directions, validated intelligence reports, and informants' tips.

Police Investigators' Aspirations for Investigative Improvement

This category examined the police investigators' aspirations to improve investigative strategies, along with the challenges they faced in identifying suspects wearing helmets. Two themes emerged under this section: Utilization of high-resolution closed-circuit television (CCTV) cameras and enhancement training for investigators. These themes suggest the need for the procurement of a state-of-the-art technology surveillance system and career advancement through periodic training of the investigators to keep abreast of the evolving needs of scientific and criminal detection procedures.

Theme 1: Utilization of high-resolution CCTV cameras

Improvement of technological resources is necessary to support crime investigation, such as high-quality CCTV cameras, electronic records, and forensic tools that can help investigators identify suspects and collect important evidence. In cases where suspects wear helmets to conceal their identities, high-quality CCTV footage and better technology can help investigators study their movements and vehicles used and follow possible clues. In line with the objectives of the study, the participants were asked about their aspirations in criminal investigation practices and said the following:

"High-resolution CCTV cameras can capture details even from a distance, including blurred license plate numbers and small identifying marks such as stickers." – P3

"Clear and strategically positioned CCTV cameras are very helpful in reconstructing the sequence of events during incidents." – P6

"Upgrading CCTV systems with night vision and high-definition capability is important for monitoring criminal activities effectively." – P9

"CCTV coverage should be expanded to all areas to support effective investigation and incident resolution." – P7

"Support from Local Government Units (LGUs) is essential in providing modern surveillance systems." – P4

"Such technological support would greatly improve the efficiency and success of criminal investigations." – P2

"Recorded footage from reliable CCTV systems can serve as strong supporting evidence in court proceedings." – P10

The participants' responses imply that modernized CCTV cameras installed in various locations have improved investigators' effectiveness and increased the capabilities in observing minute details of the crime, including crucial verification of plate numbers, describing the suspects' physical descriptions, and recognizing relevant patterns, which may not be achievable with outdated or low-quality CCTV cameras. It also highlights that high-end cameras provide wider viewing coverage, which reduces blind spots and increases monitoring accuracy. In addition, the procurement and installation of a high-quality CCTV monitoring system in collaboration with the local government units are crucial for the success of the investigation.

Lawrence et al. (2022) stressed that the installation of highly sophisticated CCTV cameras enables criminal investigations to be effective in identifying suspects and reduces obscured spotting. The significant contribution of surveillance cameras has already been proven effective in homicide cases and other related crimes under investigation, as recorded footage has become a vital tool for identifying suspects, tracing vehicle directions, and gathering key evidence for resolving these cases (Brookman & Jones, 2022).

According to Routine Activity Theory, crimes have the potential to happen when a situation reveals the following factors: a strong desire from a motivated offender, the presence of a suitable target, and the absence of a capable guardian. In the context of the study, a high-tech surveillance camera serves as a capable guardian due to the advanced features and modern specifications. High-quality surveillance cameras increase the likelihood of

finding and apprehending suspects. They also scare off potential criminals because they know they are more likely to be caught.

Theme 2: Enhanced training for investigators

In this theme, training is considered a continuous process of developing skills and equipping the individual with the competence necessary for acquiring effective outcomes and enhanced professional knowledge and technical readiness. The knowledge gained from training empowers police investigators to potentially shift practices from traditional to modern that align with the latest strategies embarked upon in a technological context, like practical and hands-on operation of electronic surveillance systems, assessments, and data processing. To align with the aspirations of improving investigative practices, the participants shared their perspectives on the importance of training for investigative development and provided the following responses:

“Police investigators should be provided opportunities to attend specialization training like those offered by the National Forensic Training Institute (NFTI), National Bureau of Investigation (NBI), Criminal Investigation and Detection Group (CIDG), and others.” – P4

“It is beneficial on the part of the police investigator to enroll in a program that promotes innovative strategies in criminal investigation, for example, joining the forensic digital examination course.” – P1

“Several training courses were offered, such as those in computer crime investigation and digital evidence processing, including CCTV footage extraction, that enhanced investigators' competencies.” – P3

“Continuous professional development through advanced training helps investigators adapt to emerging crime trends and technologies.” – P5

“Hands-on training in handling digital evidence and surveillance systems improves accuracy and reduces investigative errors.” – P2

“Regular exposure to modern investigative tools and simulation exercises strengthens the confidence and readiness of investigators in real cases.” – P7

The participants' responses indicate that investigating crime incidents involving helmet-wearing suspects requires specialized knowledge and skills in crime detection and identification. Continuous professional training and real-world experience develop and strengthen such competencies. Training generally offers greater prospects for professional advancement while improving investigative techniques and effective decision-making processes.

Research on police training has shown that an officer who is well-trained and has acquired sufficient skills in their respective fields performs better in their duties and is more confident in performing actual tasks like gathering evidence, investigating witnesses, and enhancing the application of modern investigation techniques (Kleygrewe et al., 2021). Similarly, McLean et al. (2020) found that police officers who underwent a comprehensive and highly structured training exhibit well-improved decision-making and performance in operational duties and investigative practices.

In support of the study's findings, the human capital theory of Theodore Schultz is used to analyze the importance of professional training as a learning process for enhancing knowledge, skills, and competencies vital for effective delivery of police service. In the context of this study, police training functions as a calibrating instrument that augments the capacity of police investigators to investigate crimes, track suspects, and analyze evidence. This theory is appropriate in this study; hence, it recognizes training as a mechanism for improving investigative practices and competence.

CONCLUSION

This study provides a more profound understanding of the challenges encountered by police investigators in addressing crimes involving helmet-wearing suspects, the coping mechanisms they employ, and their aspirations

for improving investigative practices. Findings reveal that helmet use significantly hinders suspect identification by concealing critical facial features needed for accurate recognition and evidentiary validation. Investigators encounter challenges in depending on eyewitness accounts and CCTV footage, especially when surveillance systems suffer from poor image quality and insufficient coverage.

Another major challenge identified is the reluctance and unavailability of witnesses to cooperate due to fear, safety concerns, and uncertainty regarding the suspect's identity. These constraints often contribute to delays in investigation, hinder the collection of reliable evidence, and impede case resolution. Despite these challenges, investigators employ various coping strategies, particularly through the systematic review and backtracking of CCTV footage to trace suspects' movements and generate leads. They also strengthen inter-agency coordination and intelligence-sharing with other law enforcement units, local government agencies, and community informants to enhance information gathering and suspect identification.

The study contributes to the field of criminal investigation by highlighting the increasing impact of identity concealment through helmet use on modern investigative processes in urban settings. It underscores the need to integrate technological advancement, intelligent collaboration, and continuous professional development in contemporary policing. Effective investigation now requires not only traditional skills but also technical competence in surveillance analysis, digital evidence handling, and coordinated intelligence operations.

The findings further suggest the need for institutional support to strengthen investigative capacity. This includes the installation of high-resolution, wide-coverage CCTV systems to improve evidence quality and suspect identification. Continuous specialized training in forensic investigation, cybercrime investigation, digital evidence processing, and CCTV analysis is also essential in enhancing investigator competence and adaptability. Moreover, strengthening collaboration among law enforcement agencies, local government units, and community-based intelligence networks can significantly improve information sharing and crime resolution efficiency.

Future research may explore other forms of identity concealment, the effectiveness of emerging surveillance technologies, and investigative experiences across different locations or crime types. In conclusion, crimes involving helmet-wearing suspects present complex challenges that affect investigative efficiency and case resolution. However, through the strategic use of surveillance technology, strengthened intelligence coordination, community cooperation, and continuous professional development, law enforcement agencies can enhance their investigative capacity and improve public safety outcomes.

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