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### TABLE OF CONTENTS

<b>Exploring Policy Interventions to Support the Introduction of Autonomous Vehicles in Indonesia</b>	163-176
Sandhi Wiedyanoe, Achille Fonzone, Jonathan Cowie, Dhanan Utomo	
<b>Evidence-Based Policing as a Foundational Policing Model for the INP</b>	177-190
Yobhel Levic de Fretes, Muhammad Krisna Bayunarendro, Hillary Cornelia	
<b>Policy Implementation of The Electronic Traffic Law Enforcement in The Greater Jakarta Metro Area Police Jurisdiction</b>	191-205
Louis Bisma Wicaksana Praharsal, Muh Azis Muslim, Reyhan Kusuma, Azel Arisandi	
<b>Terrorist Attacks in Indonesia: Does Terrorism Work?</b>	206-220
I Gusti Putu Bagus Pradana, Rere Cika Ihza Pamesti	
<b>Researching Behind the Badge: Challenges and Politics for Emerging Scholars in Police Studies</b>	221-233
Hafiz Prasetya Akbar, Rifqy Pratama Nugraha, Bagus Adithya Maha Putra	
<b>Child Sex Tourism: Commercial Sexual Exploitation in Indonesia and Singapore</b>	234-246
Jauhar Rizqullah Sumirat, Mohammad Fatiyo Nadwa Laga	
<b>Shielding Public Health: Indonesian National Police (INP)'s Measure Against COVID-19 Vaccine Certificate Forgery</b>	247-268
Kadek Ari Bayuna, Ni Made Adnya Suasti, Aulia Noprizal Syahputra	
<b>Cyber Fraud with Profile Cloning Mode in The Perspectives of Cyberculture and Space Transition Theory</b>	269-284
Wily Yulistiyo, Firman Fadillah, Andi Gibran	

## Exploring Policy Interventions to Support the Introduction of Autonomous Vehicles in Indonesia

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### Abstract

This paper aims to analyze policy interventions regarding the implementation of autonomous vehicles (AV) in Indonesia. The research takes place in Jakarta due to its unique characteristics and status as one of the most congested cities in the world. The paper employs the qualitative approach to understand policy intervention for AV implementation. The methods used in this research are the combination of Focus Group Discussions (FGDs) and Semi-Structured Interview. This research elaborates that AV implementation in Indonesia should come in the form of AV buses in the initial stage. Thus, it is necessary in the context of AV buses to construct dedicated lanes, provide onboard stewards, and give government incentives in a way that ensures the adoption's success rate. Furthermore, the thematic analysis of the research also emphasizes several themes in the context of AV implementation, such as implementation, accessibility, regulatory framework, sustainability, local characteristics, and annotation. These themes could provide a comprehensive understanding related to the policy intervention that should be taken by the Indonesian government regarding the AV implementation in Indonesia.

**Keywords:** Autonomous Vehicles, Policy Framework, Road Safety, Air Pollution, Emerging Economies

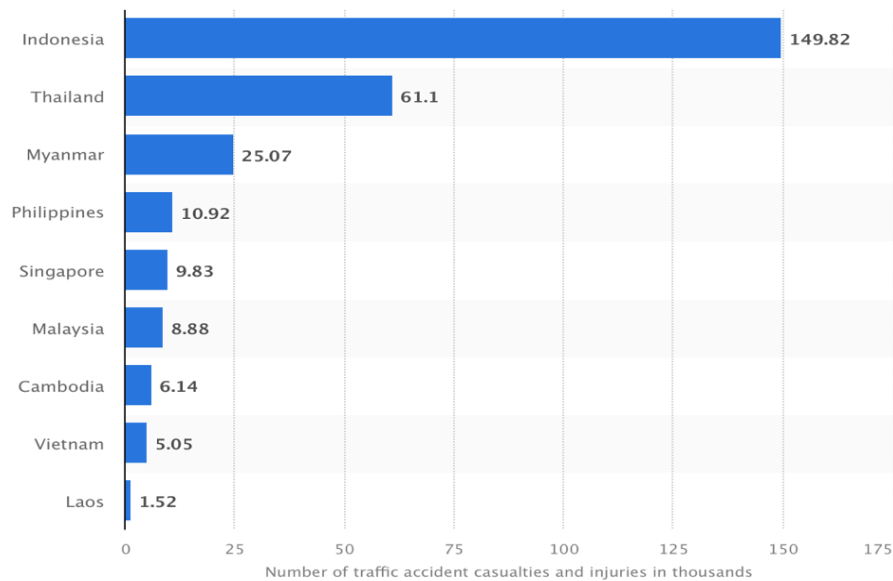
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### INTRODUCTION

According to data released by the Indonesian National Traffic Police, human error is often considered the most likely cause of traffic accidents, with Indonesia leading the ASEAN region in this regard (INTP, 2019; Radam et al., 2022). This alarming trend underscores the urgent need for innovative solutions to improve road safety. Concurrently, Jakarta, the capital city, has been grappling with severe air pollution, ranking among the world's most polluted cities since May 2023 due to chronic traffic congestions (Reuters 2023). The confluence of high accident rates and severe pollution necessitates systemic interventions to address these intertwined challenges.



**Figure 1.** Estimated number of traffic accident casualties in ASEAN in 2019, by country (in 1,000s)

To overcome those problems stated in the previous paragraph, Autonomous vehicles (AVs), particularly those with level 4 and 5 automations, present a promising solution. These advanced vehicles are designed to minimize human errors, which are a significant cause of accidents. Beyond enhancing safety, AVs, especially electric ones, offer substantial environmental benefits. Studies indicate that electric AVs could reduce air pollution by 17-30% (Brown and Dodder 2019; Taiebat et al., 2019). Given Indonesia's high road accident rate, where 13 accidents occur per hour and result in three fatalities nationally between 2019 and 2021 (Statista 2022), the deployment of AVs could significantly improve both road safety and environmental quality.

Day	Pollution level	Weather	Temperature	Wind
Monday, Aug 14	Unhealthy 152 AQI US		31° 25°	▲ 18 km/h
Tuesday, Aug 15	Unhealthy 156 AQI US		32° 25°	▲ 18 km/h
Wednesday, Aug 16	Unhealthy 152 AQI US		32° 26°	▲ 18 km/h
<b>Today</b>	Moderate 59 AQI US		32° 26°	▲ 21.6 km/h
Friday, Aug 18	Unhealthy 151 AQI US	40%	32° 26°	▲ 18 km/h
Saturday, Aug 19	Unhealthy for sensitive groups 137 AQI US	40%	32° 25°	▲ 18 km/h
Sunday, Aug 20	Unhealthy for sensitive groups 147 AQI US	80%	32° 26°	▲ 14.4 km/h

**Figure 2.** Air pollution in Jakarta between 14 and 20 August 2023 (Source: IQAir)

Despite these potential benefits, the introduction of AVs in Indonesia presents considerable challenges. Unlike the United Kingdom and the United States, where AVs have been integrated into various forms such as buses, delivery vehicles, and robot taxis (Figliozi 2020; Fonzone et al., 2023), there is limited research on AV adoption in Asian emerging economies. Studies related to measuring the effectiveness and efficiency of AV policy implementation are predominantly conducted in Europe and the United States, thus creating a gap of understanding in different socioeconomic and cultural contexts (Carrone et al., 2021, Kapser et al., 2021). In an attempt to understand about socioeconomic and cultural contexts of AV implementation, it is crucial to experiment with relevant policies in Indonesia.

Past literature has undressed the dynamics of AV implementation, which consists of several factors, such as public perception, technological infrastructure, and the readiness of regulatory framework. The studies of Bosch et al., (2018) and Wadud and Mattioli (2021) have emphasized the necessity of incentives to improve the AV adoption in Europe and the United States. However, the unique socio-economic variables of Jakarta and its driver behavior which could pose a hindrance in implementing AV policy are not covered specifically in these studies. In addition, the study of Aarhaug and Olsen (2018) explains the need to adapt regulations in the dawn of emerging technologies, in which their findings primarily draw on the case of more developed regions, leaving a gap in the applicability of AV implementation for developing countries, such as Indonesia.

The pursuit of AV implementation requires an understanding of the factors that underpin policy implementation. These factors, which include local conditions, traffic patterns, the regulatory environment, and public attitudes toward new technologies, are classified in a comprehensive policy framework. These aspects, when properly combined, have the potential to improve AV implementation in Indonesia. By examining the Indonesia's early AV implementation policy from the viewpoint of experts and policymakers, this study seeks to comprehend and close the gaps. This study will attempt to provide comprehensive insight into the adoption of AVs in Indonesia by employing the qualitative approach. In addition, the choice of nation, which is Indonesia might address the issues that cannot be resolved in a Western setting.

This study aims to identify the obstacles that the implementation of autonomous vehicles in Indonesia presents. Since there is still no academic literature suggesting that Indonesia and other emerging economy countries should implement the AVs, this research could prove its significance in the academic literature on AV implementation. Thus, this research might help the implementation of AVs which in the long run might reduce the number of casualties in road accidents thus creating a safer transportation means in Indonesia. Furthermore, the AV implementation could reduce the pollution created by fuel vehicle transportation, thus increasing the public health level in Indonesia. This claim is supported by research by Mayastinasari & Lufpi (2022), which shows that technology implementation plays a significant role in enhancing road safety measures. For instance, the

Indonesian police's Electronic Traffic Law Enforcement (ETLE), which tracks drivers' actions, is effective in lowering the number of traffic accidents. As a result, the introduction of autonomous vehicles (AVs), the next technological advancement in road transportation, will undoubtedly increase road safety and security (Mayastinasari and Lufpi, 2022).

## METHOD

This study employs the qualitative approach to elaborate policy intervention in early-stage implementation of AVs. The use of the qualitative approach is meant to explore a deeper understanding from the source (Yadav, 2022) which is the arguments of the experts and policymakers that are encapsulated during FGDs and interview. This research then combines the data which are gathered from focus group discussions (FGDs) and semi-structured interviews. This combination allows a better triangulation, furthermore enhancing the reliability and validity of the results (Braun and Clarke, 2021).

The following paragraph is an explanation of the steps involved in the research procedure. Firstly, the authors conduct a focus group discussion with a group of experts which are selected based on their capabilities in the field of transport and policy making, the selection of the experts is based on the PESTLE framework (Political, Economic, Social, Technical, and Environmental). The PESTLE framework is prominent in ensuring a diverse source of argument from different experts in transport and policy-making fields (Tagesse et al., 2024). Due to the geographical boundaries, the FGDs are done by using virtual meeting platforms, such as Ms. Teams, Zooms, and Miro Board.

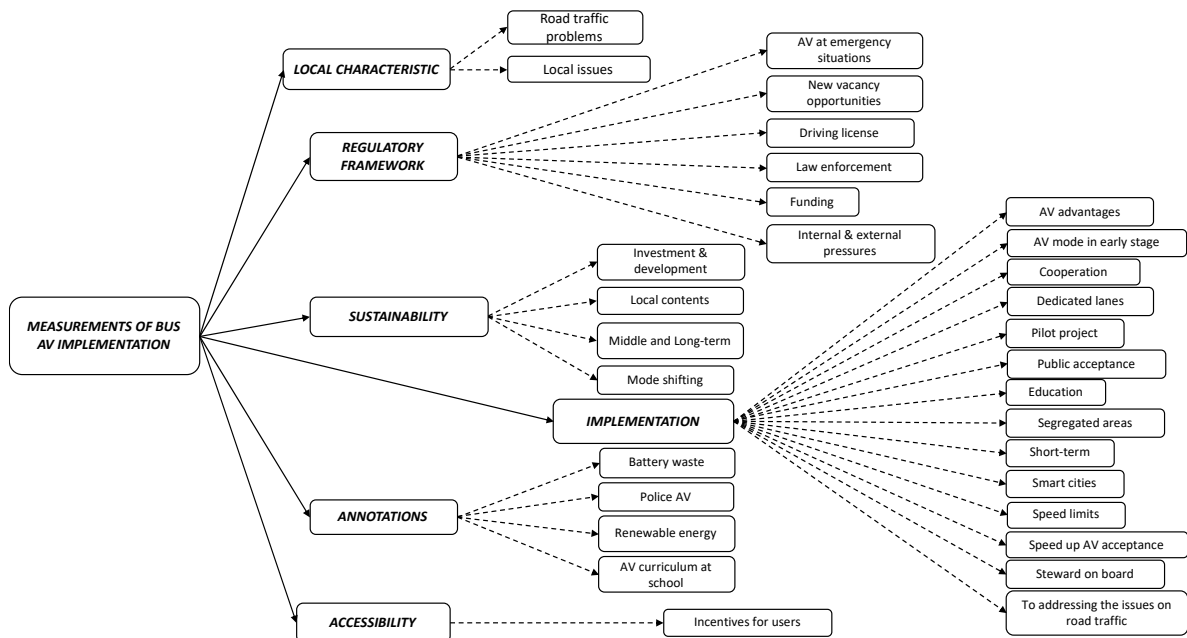
The FGDs are conducted with several topics including the SWOT (strength, weakness, opportunities, and threats) analysis of AV implementation in Indonesia, the challenges of public, private, and shared transportation in AVs, and lastly, the early-stage steps which should be taken to address the AV implementation in Indonesia. The selection of topics is based on the aims of the study which is to elaborate the policy intervention that is needed in employing AV in Indonesia. After conducting FGDs, the next step is gathering answers from the experts and policymakers in the form of semi-structured interviews. The use of semi-structured interviews is prominent to further elaborate and produce relevant data which could be triangulated in the analysis to gain an depth analysis regarding the policy intervention to implement AV in Indonesia.

The results of the FGDs and interviews are recorded with the permission of the participants. The recording is further transformed into a dataset using the help of NVivo, and then systematically constructed by using thematic analysis. The use of thematic analysis to construct the result of this research is prominent to gain an understanding by making several recurring themes, patterns, and narration (Braun and Clarke, 2021). Regarding the AV implementation in Indonesia, the ethical approval of this study was gained from the relevant institutional review board to ensure the ethics protocols are followed in this research. The participants were informed regarding the purpose and



aims of the study. Moreover, their rights were also told before the process of FGDs and interviews. This step ensures the confidentiality and anonymity of the research.

## RESULTS AND DISCUSSION



**Figure 3.** Measures to Support Automated Buses Deployment in Jakarta

This section provides the results and discussions regarding the research that has been conducted using FGDs and interviews with Indonesian experts and policymakers in the field of transportation. The results are then classified into six sub-themes which consist of implementation, accessibility, regulatory framework, sustainability, local characteristics, and annotation. These sub-themes are generated using thematic analysis which triangulates the data extracted from the FGDs and interviews. Furthermore, each of the sub-themes will be elaborated in the paragraph as follows:

### Implementation

According to the FGDs and interviews with experts and policymakers in Indonesia, it can be understood that the early application of AVs in Indonesia should be done in the form of AV buses. These results align with the statement of Fonzone et al. (2023) and Iclodean et al. (2020) which stated that autonomous buses are preferred for the initial implementation of autonomous vehicles. The use of AV buses will be a relevant solution in the implementation of AVs in Indonesia. However, two factors need to be addressed in implementing AV buses in Indonesia. The first is the construction of dedicated lanes, and the second is the presence of human stewards or stewardesses inside the AV

buses. These two factors are highly important. The use of dedicated lanes is important for a reason: one of the reasons is that dedicated lanes will set boundaries between traditional vehicles and autonomous vehicles (AVs) because a combination of autonomous buses and non-autonomous vehicles on an open road may increase the likelihood of accidents and congestion (Loder et al., 2019). Furthermore, a dedicated lane will also decrease the likelihood of road accidents, because it could gatekeep the AV buses from the erratic behavior of Indonesian drivers. In addition, the use of dedicated lane will increase the efficiency of AV buses. These statements regarding the importance of dedicated lanes are implied by the experts as “dedicated lanes are needed to ensure AV buses could operate safely and efficiently given the characteristics of the traffic environment, including driving behaviors in Jakarta” (FGD-4, 2024).

The next factor is the presence of a steward or stewardess inside the AV buses. The steward could become a human bridge that connects the traditional means of transportation, such as the manual vehicle with an autonomous vehicle. This statement aligns with the results of the FGD which connotes that “a steward could help bridge the gap between traditional and autonomous system; provide reassurance to passengers; and address pressing issues inside the AV buses” (INT-3, 2024). Furthermore, the presence of a steward will ensure the regulations inside the bus are properly implied by the passengers, thus increasing the security of the AV buses (FGD-1, 2024).

### Accessibility

Theme focuses on emphasizing the efforts to increase the access of AV buses to all roads in Jakarta, and encourage the use of AV buses compared to private vehicles. From the FGDs and interviews, both experts and policymakers agree that to increase the use of AV buses certain policies include giving incentives in the form of ticket discounts, tax benefits, and subsidies for the AV bus providers. This statement is further elaborated as “incentives for AV bus users and disincentives for private vehicle users are predicted to be very effective in changing public transport preferences” (INT-2, 2024).

Giving incentives is arguably profound and efficient in increasing the number of passengers, this could happen by making the economic rational choice much easier for people (FGD-2, 2024). Aside from giving incentives, it is also a proponent of public awareness campaigns about the benefits of AV buses. The campaign's importance is described as “Public campaigns should focus on the tangible benefits of AV buses, such as increased safety and reduced emissions. This will help in garnering public support and acceptance,” (FGD-2, 2024).

Experts and policymakers believe that including the narration of EVs inside school curriculum will play a bigger factor in increasing the awareness of EV importance in reducing congestion and air pollution. These findings are aligned with the research of Bösch et al. (2018) and Wadud and Mattioli (2021). Furthermore, the example from cities like Los Angeles and London

proves that a good incentives strategy bonded with an effective public awareness campaign could alternate the public transport preferences and shift the public away from private transportation into public transportation (Smith & Jones, 2021; Brown & Thomas, 2019).

### **Regulatory Framework**

Based on the findings of the FGDs and interviews, legislation to enable its implementation addresses several critical issues, such as responsibility, financing, and new job prospects. According to one respondent, several clear regulations are necessary to determine the responsibility for accidents. This demonstrates that when an accident occurs, the person in charge has a problem of accountability. A clear responsibility is also required to improve the trust of the people who will utilize autonomous vehicles as well as developers who will invest in Indonesia. Then, financing is critical in creating this technology. An expert stated that, "Funding from the private sector is important and effective in making this program a success in the long term" (FGD, 2024). A policymaker also mentioned that, "Here it is not only the private sector that plays an important role, with government policies on tax relief and subsidies, this technology will also be successful" (FGD, 2024). This conversation emphasizes the importance of collaboration between the government and the business sector in the process of implementing this technology. Several countries have successfully implemented this collaboration, including Germany (Müller & Schneider, 2020). Furthermore, the presence of AVs will create several new job opportunities in a variety of industries, some of which require as the expert says, "There will be job opportunities that are very specific to certain areas so that skills are also needed that can meet the challenges of the job. The need for training to hone the abilities of job seekers so that they can compete globally"(FGD, 2024). Moreover, this statement is emphasized by the argument of the policymakers which stated that, "We already understand very well that this is something new so that new or special skills are needed so that it has implications for new training too"(FGD-3, 2024). With a well-planned training, job seekers will be able to meet the demands of work that will be available later. The government needs to collaborate with both domestic and foreign campuses to provide training or even create new majors to meet this challenge. New job opportunities will also appear alongside the implementation of AVs which is aligned with the research of Emory et al., (2022) and Hilgarter and Granig (2020). Moreover, with the increasing establishment of vocational training centers due to the implementation of the AV industry, Indonesia could increase the workforce which is in correspondence with the rise of the AV industry (Kim and Lee, 2021).

### **Sustainability**

The term sustainability, as used in this research, refers to an effort to comprehend and control the effects of AV adoption. Williams et al. (2020) stated that the environmental, social, and economic



aspects of AV sustainability can be covered. As a result, this part will attempt to explore sustainability issues from the viewpoint of Indonesian experts and policymakers. The first topic to be covered here is the environmental sustainability of AV buses. While it is stated explicitly that using AV buses will benefit the environment, improper use of AV buses could result in even more harmful environmental disasters. This might occur in a situation where individuals in Jakarta cannot easily use the AV buses, which would lead to a new issue where people would prefer to utilize private vehicles instead of the AV buses (FGD-2, 2024).

The second aspect of sustainability that will be discussed is the social aspect which covers the social impact of AV bus implementation in Jakarta, as we discussed earlier in the Local Context section Jakarta's social condition could be defined as a unique social condition which includes a seemingly erratic behavior of the driver, and low effectivity of transportation modes which are provided by the government (FGD-2, 2024). This unique social condition could hinder the development of AV buses in Jakarta if not handled and compromised correctly. According to Williams et al., (2020), autonomous vehicles should be incorporated into people's social lives to foster long-term sustainability in the context of autonomous vehicle development.

The final component of sustainability to be covered is the economic component, which consists of both public and private sector investment. One pertinent example of this is the Japanese government's consistent investment in the development of autonomous vehicles (AVs), which includes funding for infrastructure development and research (Tanaka & Ito, 2020). The Japanese government investment program could become a model for Indonesia. This argument is emphasized in the FGD (2024) as "Indonesian government must create a systematic investment program of AV implementation. This could manifest in the form of research fund and infrastructure development." However, investment alone would not be sufficient; another important factor that should be addressed which is economic regulation. Economic regulation could appear in the form of policy that impacts the economic condition, one such is the policy that should be taken to prioritize the employment of local human resources (INT-1, 2024). This policy will eventually strengthen the local economy and in the long run will become beneficial for the nation economy (FGD-1, 2024).

### Local Characteristics

The local characteristics theme focuses on the unique behaviors which are shown by Jakarta's Road users and how these unique behaviors impact AV implementation. Experts and policymakers from Indonesia argue that *"The driving behavior in Jakarta is unpredictable, which can hinder AV operations. Dedicated lanes and driver education programs are necessary to mitigate these challenges"* (FGD-4, 2024). Thus, it is important to address this problem by increasing the regulatory framework through the implementation of stricter laws. This stricter law could also benefit the application of dedicated lanes.

The discussion also highlighted the need to understand the importance of addressing the travel behaviors of Jakarta's residents to design effective AV policies. The expert suggests that *"Understanding the travel behavior of Jakarta's residents is essential for designing AVS policies that meet their needs and preferences. This includes factors such as travel patterns, mode choices, and preferences for public transport"* (FGD-1, 2024).

### Annotation

The theme "annotation" refers to the fresh ideas and concepts that are being recorded through the FGDs and interviews. These fresh ideas are meant to increase the likelihood of implementation regarding the AV buses in Jakarta. These ideas were sculpted by the experts and policymakers in Indonesia and its consists of battery waste, Police AVs, and AV curriculum at school. Furthermore, this section will try to elaborate each of these ideas.

One of the issues that emerged in the FGD was battery waste. As we all know, autonomous vehicles (AVs) run on electricity, which makes them more environmentally friendly than fossil fuel-powered vehicles. However, the electricity required to power AVs requires a reservoir called a battery, and these batteries are becoming problematic due to their non-recyclable nature (Bellekom et al., 2012). Though some experts argue that the issue of battery waste will eventually resolve itself (FGD-5, 2024), both academics and policymakers are optimistic that advancements in the technology supporting battery cells will occur in the future.

The next subtheme is police in AVS. This concept arose around the discussion of the regulatory framework in which some experts argue that "the implementation of AV buses will inevitably need the assistance from police as a physical embodiment of law in the context of AV implementation" (FGD, 2024). This argument is relevant to the positive law theory which states that law exists as a tool of the government that protects and safeguards the nation's interest (Kelsen, 2017). Moreover, Hutapea's research (2023) demonstrates that police should leverage technology to thwart the creation of safety measures, as big data has the potential to spur police innovation (Hutapea, 2023).

The last subtheme is AV curriculum at school. Some experts argue that the need to add AVs to school curriculum could boost the development of AVs in Indonesia. This argument is elaborated by the experts as "We need to add AVS into the school curriculum. This steps will indirectly boost the development of AVs in Indonesia by nurturing future generation about the needs of AVs in Indonesia for a better and safer means of transportation" (FGD-5, 2024).

### CONCLUSION

From the findings of this research, it is prominent to notice that there are several options of steps that could be taken to ensure early-stage implementation of AVs in Indonesia. The research has

stated that the first form of AVs that should be used in Indonesia is AV buses. Expert from the transport and policymakers in Indonesia argues that the use of AV buses is necessary in the early development of AVs in Indonesia. However, it should be understood that two complementary factors should be considered: the first factor is the need for dedicated lanes and the second factor is the need of attendant inside the AV buses to help people and to make sure the AV buses are operated in a safe secure condition. The attendant presence should also fill in the gap in the transition process from the traditional means of vehicle and autonomous vehicle system.

From the accessibility and regulatory framework themes, it can be concluded that the AV buses should be accessible on all roads in Jakarta and distinct and clear law regulations should be provided by the government. The clear and distinct law regulations are needed due to the unique behavior of Indonesian people which are quite erratic compared to the developed country. Furthermore, superficial to give incentives in the forms of reduced ticket prices, tax reductions, and subsidiaries for the AV buses operator. These incentives are important to increase the awareness and provoke society to try AV buses. However, the need to raise public awareness should not be taken for granted; the need to monitor and adapt the needs of the public is important to increase and maintain public awareness.

In the long term the development of AV transportation in the form of AV buses could address the congestion and pollution problems in Jakarta. These findings are aligned with the 'Sustainability' themes. The 'Local Characteristics' themes connote that there is the need to understand the local context which includes the driving culture of Indonesian people which is often described as quite erratic. This should be taken for the measure to reduce the risk of malfunctions and accidents which could happen due to the erratic driving behavior in Indonesia. Furthermore, there is a need to address the erratic driving behaviors in Indonesia. This should be done in the form of crafting an AV curriculum in the school. This development of this AV curriculum in the long run should increase the understanding of Indonesian people regarding the AVs and its development.

The next stage of the research is to conduct an online survey to investigate the AV buses acceptance if the government implemented dedicated lanes, stewards on board, and price incentives. The survey deployment will be in December 2023, with a target of 1000 respondents. Qualtrics is the survey data entry platform, and the results will be analyzed using SPSS statistics software. This survey will provide quantitative data to complement the qualitative findings of this study, offering a more comprehensive understanding of public acceptance and refining future AV policies for optimal implementation, as implementing efficient methods for data recording and analysis is crucial for monitoring and improving AV operations, which was highlighted by Waspada, Hamid, & Syafruddin (2023).



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## Evidence-Based Policing as a Foundational Policing Model for the INP

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### Abstract

This study aims to analyze whether the implementation of Evidence-Based Policing as a Foundational Policing Model for the INP can bring positive changes to police culture. Furthermore, this study tries to provide more effective and comprehensive solutions based on data and scientific studies in dealing with crime and social problems in society. During various challenges of policing and its consequences on public trust, a number of studies have examined the duties of the Police, especially the Republic of Indonesia National Police (INP), in maintaining security and public order, enforcing the law, protecting the public, and serving the community. Several contemporary policing models, such as Community Policing or Problem-Oriented Policing, have been suggested and implemented by the INP, although the parameters of its successful implementation continue to be a questionable issue. This article discusses how the concept of Evidence-Based Policing (EBP) – a new paradigm in policing – can better serve as a foundation for the Police in dealing with societal and criminal issues. EBP emphasizes scientific and evidence-based decision-making, enabling officers to avoid the biases that are frequently criticized in policing practices. By utilizing literature review and document analysis methods, this article examines existing policing models and demonstrates the importance of evidence-based approaches in improving INP performance. It also highlights the importance of consulting and collaborating with academics and international institutions that have successfully implemented EBP. The implementation of EBP is expected to lead to positive changes in policing culture – providing more effective and comprehensive solutions based on data and scientific studies to address crime and social problems in the community.

Keywords: Evidence-based, Policing, Indonesia, Police

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## INTRODUCTION

Entering an era where there are lots of research done by many scholars surely support the police (Trojanowicz and Carter, 1988) conducting their work force especially the Indonesian National Police (INP) in maintaining public order, enforcing the law, protecting and serving the community (Republik Indonesia, 2002). In this modern time, the police become the focus on many reform efforts on how the police should do their work (Willis, 2014). Beginning from the development of modern policing model such as Community Policing up to this time where research and police practice exist to respond social, economic, and political powers (Willis, 2014). Those

developments on research and practice of policing caused emergence on discourses regarding accountability from policing itself as an activity in which it is utilized to preserve social order (Lister dan Rowe, 2016).

On the side of policing accountability, it surely depicts the police as a power that cannot be owned nor accessed by civilians (Lister dan Rowe, 2016). In such situation, it obliges the police to be able to raise the public confidence and trust to its organization (Lister dan Rowe, 2016). In order to raise the public trust, the INP must own a certain mechanism to raise its accountability by switching their reactive paradigm, especially in combating many misconducts in the community to instead, becoming more proactive in developing their protective strategies to protect the public from the existing misconducts (Ivković, 2014). Such strategies must be reliable and held responsible scientifically in order to integrate the process of policing done by the INP with the existing scientific research findings which can be very helpful to the police in making evidence-based decisions on the field (Ratcliffe, 2023; Cherney, 2019).

### **Models of Policing: *Community Policing, Problem-Oriented Policing dan Evidence-Based Policing***

Community Policing according to COPS office (2009) is a philosophy of policing which promotes various organizational strategies that supports the systematic utilization on partnership and proactive techniques of problem-solving aimed at circumstances related to public security and safety such as crime, public or social disorder, and the fear of crime. However, the community policing up to this moment becomes a problematic model of policing because as a nature, its success indicators are difficult and rough to evaluate because the needs of community that dynamically changes over time (Ratcliffe, 2008).

Community Policing has a very broad implementation that makes the police personnel struggle in difficulties of prioritizing which problems that must be solved, and which ones are the real problems that the police must focus on (Ratcliffe, 2008). Although the implementation of this model of policing looks simple and easy to practice, the implementation itself becomes significantly challenging for the police (Ratcliffe, 2008). The main focus of community policing is to raise the police legitimacy in the community that have lost its trust in the police as a whole (Ratcliffe, 2016). By having a very broad success indicator, then the designed and constructed programs related to this model keeps on changing depends on what interest the community has (Skogan, 2006).

The situation above makes the Community Policing model becomes an easy to plan but difficult to be done model (Ratcliffe, 2016). Many methods conducted with Community Policing model are executed without any detailed and obvious indicators of its goals (Ratcliffe, 2016). Even though according to the existing research state that the programs run under the Community Policing



model shows positive responds from the community (Purba et al., 2021), Community Policing itself has very limited impacts on the crime phenomenon and the “fear of crime” (Gill et al., 2014).

A policing model which conceptually attached altogether with Community Policing is Problem-Oriented Policing (Goldstein, 1990). The concept of Problem-Oriented Policing as explained further by Goldstein (1990) where the police focus on solving the existing problems in the community and synergically utilizes the role of the community as well. The community also able to assess the participation of the police in solving the existing problems revolving them (Goldstein, 1990). In that case, the police personnel which is task as a Community Policing officer is responsible for solving the problems that existed in the community (Ratcliffe, 2008).

In its implementation, Problem-Oriented Policing analyses, assesses and reviews problems by using the SARA model which consists of Scanning, Analysis, Response, Assessment (Eck and Spelman, 1987). Braga and Weisburd (2006) describe the SARA model as follows:

- a. Scanning as a stage where the identification of existing problems.
- b. Analysis serves as a stage that obliges and challenges the police personnel to be able to analyze the source or cause of the existing problems.
- c. Responses is a stage where after problems are defined and analyzed, police personnel that face new challenges must be able to design and develop effective responses towards those problems.
- d. Assessment becomes the final stage of the model which assesses the impacts from the designed responses from the police to solve problems.

Beginning from the stages of Scanning until Assessment, the police is demanded to perform accountably to utilize the existing resources and forces the police to study and learn which methods are effective to face certain problems (Braga and Weisburd, 2006). But, from these steps, especially assessment, it is found that the assessment on the designed and conducted responses are only produced data that characteristically anecdotal or impressionistic (generally and less detailed) (Scott dan Clarke). This matter also supported by Collier (2001) who argued that in the police, trainings that have been undertaken are mostly based on an individual experience where police personnel only learn with critical analysis on their own experience and others.

Making decision by using opinion or individual experience is called as confirmation bias. According to Ratcliffe (2023), confirmation bias is a tendency of humans to interpret evidence and information by using a method that is supported by what they personally believe. Such decision-making action will possibly own development and expansion if the conduct is evidence-based. Relatable to the police work, Evidence-Based Policing becomes the policing model that is able to help and support every decision-making in conducting policing. This is quite similar to what existed in medicine research in which a police service needs to evolve their “body of evidence-based knowledge” to support and strengthen its profession (Pepper et al., 2020).

The concept of Evidence-Based Policing started from the emergence of evidence-based practice in the field of health and medic in the 1990s (Trinder, 2000). Trinder (2000) also added that the concept of evidence-based practice stands as an endless progress, and it does not stop nor limited in the field of medic but also adoptable in other professional fields. The emergence of this concept is caused by the gap between research and practice (Lumsden, 2016; Lumsden and Goode, 2018) where Trinder (2000) described the business-as-usual practice is based on:

- a. Basic knowledge that is gained from the primary training.
- b. Personal experience, opinion and prejudice.
- c. Results from previous cases that are faced and handled personally.
- d. The trend at that time.
- e. Senior and colleagues' recommendation.

Apart from research-practice gap, the emergence of evidence-based practice is also caused by the practice which was not juga evidence-based (Trinder, 2000). Such practice, that also included in the context of policing, is possible to be adopted and finally gave birth to the concept of Evidence-Based policing itself. As stated by Sherman (2013), to be able to target harm caused by crime, police should do good research on predictable elements of crime and disorder. Sherman (2013) further explained that by reviewing and testing police methods to reduce harm helps the police to use research to focus on tracking the effects of policing practices and "public perceptions of police legitimacy". Hence, Sherman (2013) called those explained principles of Evidence-Based Policing as the triple-T strategy (targeting, testing, and tracking).

Evidence-Based Policing is a policing model that resists and challenges the basic of decision-making which is based on a personal / bias experience and intuition because both of them will not be enough to design a project in order to improve policing (Ratcliffe, 2023). The "early adopters" of Evidence-Based Policing face many challenges such as their colleagues opposing their practice (Sherman, 2015). Evidence here is defined as scientific evidence which in contrast to what people usually known as crime evidence that is gathered by the police to conduct investigation and bring them to the court (Ratcliffe, 2023). Therefore, Evidence-Based Policing can also be defined as a utilization of data, analysis, and research to complete experience and professional decision-making to prepare the best possible policing method to the public (Cordner 2020).

This article is written to hold a discourse on how the concept of Evidence-Based Policing becomes a good foundation alongside a better alternative for the INP to conduct its policing in order to handle social or criminal problems in this modern era. With the previous existing models of policing such as Community Policing and Problem-Oriented Policing, the suggested model (Evidence-Based Policing) will stand as a comparison to those models. Particularly in terms of decision-making on handling and preventing crime, the INP's dependency on an evidence-based decisions up to this point will be discussed in this article. The first chapter holds a discussion on a

background of this written article with the topic above, the second chapter explains the author's method to write this article, the third chapter holds a discourse on theories and concepts from models of policing that the INP tried to implement as well as the existence of the focused model of policing in this article (Evidence-Based Policing), the third chapter discusses on why Evidence-Based Policing serves as suggested model to support others, and lastly, the fourth chapter as a conclusion. Based on the background, the study aims to enlighten the importance and necessity of Evidence-Based Policing in the INP.

## METHOD

This article's collection of data on the discourses on Evidence-Based Policing uses literature review and document analysis. The author uses this method to synthesize research founding to show evidence and reveal areas that are necessary for conducting research (Snyder, 2019). Snyder (2019) also added that literature review is helpful on a condition when a researcher wishes to evaluate a certain theory or checking its validity or accuracy with other theories (Tranfield et al., 2003). Literature review also holds an important role as a basic and foundation of most conducted research because it provides the principles of the development of science and can also build new ideas and direction in a certain field of study (Snyder, 2019). Document analysis explores official documents from the government or state, digital media, and so on (Clark et al. 2021). Document analysis in this written article is briefly to discuss about the practice of the current policing models done by the INP. The documents that are analyzed in this article consists of the INP rule, Chief of the INP rule, the Constitution Law of Indonesian Republic, and the Indonesian Republic law that regulates the main tasks and responsibilities of the INP. The brief discourse on those documents is due to the limitation in research on the field of Evidence-Based Policing in Indonesia by the INP.

## RESULTS AND DISCUSSION

Based on the existing literatures (Marwiyah, 2014; Rifai, 2018; Koni, 2019; dan Verjenia, 2020), by far, the INP has tried to implement one of the policing models discussed above which is community policing. Community Policing in which up to this moment is understood by the INP based on the INP Rule (*Peraturan Polri or Perpol*) Number 1 Year 2021 on Community Policing is considered crucial to solve variety of problems including crime in the community (Kepolisian Negara Republik Indonesia, 2021). However, this model of Community Policing must be able to be realized in an evidence-based practice in order to be produce Evidence-Based Policing.

Until now, the implementation of Community Policing and Problem-Oriented Policing by the INP which is embodied in certain activities are not yet discovered using a scientific cycle method. This is due to the lack of literatures which recorded policing practices which conducted based on such cycle. This scientific cycle method consists of identification of a specific problem, conducting

research on what serves as the background of the problem, developing hypotheses and research questions, undertaking experiment or learning, analysis on existing research results and drawing conclusions, conducting peer review and publications of research findings, as well as replicating and developing research on that problem (Ratcliffe, 2023). This method is empowered because until now there has not been any research in Indonesia that held discourses on the implementation of Community Policing and Problem-Oriented Policing by the INP which is based on Evidence-Based Policing. Then, the non-existent of research or documents of the INP on the utilization of evidence-based policing matrix to do policing also proves that those two models still need more space for improvements in the future for development with a strong foundation on Evidence-Based Policing.

With basics of the two models of policing (Community Policing and Problem-Oriented Policing) which have constantly changing targets or goals depending on the community's circumstance will of course need a strong research foundation. In order to conduct strong research to succeed the implementation of Evidence-Based Policing, the police in this case the INP, can also receive and consult the problems with scholars or academics (practitioner and academic) can be very useful to produce solutions (Ratcliffe, 2023). Related to the element of Problem-Oriented Policing within Community Policing itself, by far, the INP personnel only know how to do that policing model based on *Perpol* Number 1 Year 2021 (which was previously regulated in the Rule of Chief of The INP / *Perkap* Number 3 Year 2015) on Community Policing (Koni, 2019) and was found that it has no basic scientific guidance on how to identify and analyze root causes of problems. There are lots of systematic errors that can be reduced if an organization can learn not only from small existing incidents but also other small and big yet detailed incidents which are almost missed by the organization (Ratcliffe, 2023).

Evidence-Based Policing serves as a brand-new paradigm in policing conceptually how that doing research on a certain problem is inefficient but there also must be proactive efforts to push the accumulated research findings and evidence through national and community guidelines (Sherman, 1998). At this point, there has not been any evidence that the conduct of Community Policing in Indonesia done by the INP uses or based on scientific research. Some of the scholars of Community Policing who wrote about Community Policing only discuss about a technical conduct of Community Policing (Saputra et al., 2023) without any comprehensive and supporting research data. A common obstacle in adopting this new paradigm in policing is due to the resistance of the police themselves in depending on academic research (Canter, 2000; Thacher, 2008).

Practices of policing remains highly cost and untested (Sherman, 2013). Sherman (2013) also pointed that usage of evidence by police, if enhanced, it can increase police legitimacy both internally and externally which also in-line with the nature of Community Policing (Ratcliffe, 2016). Sherman (2013) also suggested that the creation of faculties of policing should be embodied in universities in order for evidence-based practice to be fully operational just as medical schools. This will further



rise the number of academics to support and conduct high standard experiments for the contribution to the improvement of Evidence-Based Policing (Sherman, 2013).

Aside from support of research data, the utilization of the INP's database (Hamid, 2023). to solve a problem through existing policing models is not effective due to the nature of Community Policing concept which has a vast field of problem-solving. Information and data can be used as a foundation to develop the quality of the decisions that are made (Ratcliffe, 2023) by the INP. The policies or decisions that are made based on data and information with a strong foundation of scientific method surely produce better solution for scientific practice that should be done better than before (Ratcliffe, 2023). This is due to the very advantageous science that contributed to humans' achievements and developments that are difficult to measure (Ratcliffe, 2023).

Evidence-Based Policing is also underestimated by practitioners of policing in the field because generally, they have this sense of by doing their daily and basic work is considered enough to create ideas and curiosity (Ratcliffe, 2023). But there are positive things that if the police personnel engage integrated research with their field of work, then they tend to use that research to create better decisions (Fleming, 2015). Hence, the INP can utilise various research findings on policing that have been vastly developed exponentially for the last two decades (Ratcliffe, 2023).

The policing that is not implementing research foundation on the decisions that are made by the INP's superiors will make the police trapped in stagnant awe because they are not learning to answer the questions related to the best method that they should follow (Ratcliffe, 2023). If by focusing on the issue of database as a foundation of research that can be done for the contribution on the INP's Policing, by far, the INP still not have a centralized and integrated database, for example related to the data on crime problems that are centralized and integrated from the level of Sub-district Police to the INP Headquarters, even if it exists, the INP's database is only integrated to several parts according to its purpose (Fitriana, 2020; Handoko, 2017). Therefore, the implementation of the existing policing models by the INP until now have no basics of research that can give useful and helpful contribution to the practice of Community Policing and Problem-Oriented Policing that are Evidence-Based. With the widespread of confirmation bias that can possibly take place due to the absence of research, then there will be certain risks that may create negative results in policing (Ratcliffe, 2023).

The prioritization of Evidence-Based Policing has been called by many officers to be accepted by the "frontline practitioners" (Telep: 2016). The main and basic principles on evidence-based approach includes (*Evidence-Based Policymaking Collaborative*, 2016):

- a. Building strong basic evidence on what can be done in success and what cannot be done.
- b. Considering the cost-benefit aspect and its negative effects or impacts.
- c. Slipping and attaching research evidence in every policy or decision.

- d. Monitoring programs to confirm whether those programs are implemented according to the plan and continuous.
- e. Evaluate and track the results of those existing programs to confirm whether those programs have reached to a demanded and aimed result.

Based on the main principles of Evidence-Based Policing above, the implementation of Community Policing and Problem-Oriented Policing should ideally be conducted in order, structured, and scientific. Scientific evidence that are gathered from research that conducted structurally clear will support the enforcement of Evidence-Based Policing as a model of policing that become a foundation for other INP's models of policing. Ratcliffe (2023) defined that research evidence which is obtained from research as evidence which generally can be found on journal articles or books, now can also be searched through studies that conducted in the level of government. The most important part from Evidence-Based Policing, if it is seen from a point of view of evidence-based policy will focus on whether the ongoing programs have reached the target according to the fixed results (Ratcliffe, 2023).

The concept of Evidence-Based Policing according to Telep and Weisburd (2016) is a policing method which determines how should policing stand. In Evidence-Based Policing, a senior police manager reviews external research or conduct his/her own study and then applied "the best available evidence" to inform their adopted policies and implemented practices (McGuire et al. 2021). Based on that statement, scientific evidence which are found can support the potency on policing activities that are conducted (McGuire et al. 2021). Though reality and facts on the practice, which is based on science turns to be messy, it is gradually improving and evolving because it can reach other disciplines and other scholars (Ratcliffe, 2023). The culture of curiosity's existence may help the police personnel to identify specific problem through observation and research where it needs data management, tactic, tools, documentation, recruitment, leadership, community and public relations (Ratcliffe, 2023). The importance of Evidence-Based Policing to be implemented by the INP personnel is that the INP personnel can develop research attitude which means that the wish to improve policing with different approaches, asking questions, evaluating information and data, challenging the existing tradition, and open to many new ideas and various values from examination on different experiences (Ratcliffe, 2023).

In the context of crime prevention, Evidence-Based Policing improves crime analysis done by the police (Keay and Kirby, 2018). Not only limited to the use of crime analysis, but also the use of Evidence-Based Policing contributes to the crime analysts' improvement (Keay and Kirby, 2018). To show its form of contribution, it requires the analysts to have their job based on "knowledge of appropriate theory" in order to elaborate the data combination into scientific "inferences and conclusions" (Townesley et al., 2011). This also requires the analysts' status of being previously

trained in Evidence-Based Policing to improve their analysis products (Townesley et al., 2011; Chainey, 2012; Keay and Kirby, 2018).

The emphasize on the utilization of crime analysis must be supported by research process (Santos, 2014). Keay and Kirby (2018: 9d) also asserted that the use of EBP needs qualified personnel to conduct this crime analysis based on scientific methodology. This takes to the step where the police must invest their use of resources appropriately (Evans, 2008) as well as concerning on how they develop their analysis using scientific research (Dawson and Williams, 2009). This might give upgrade the police analysts' role to pracademics (practitioner-academics) (Keay and Kirby, 2018: 9e; Braga, 2016). Despite many alternatives on perspectives of the acceptance of using Evidence-Based Policing as foundational model for policing, on the whole, there are growing interests on using this model of policing (Keay and Kirby, 2018).

## CONCLUSION

Based on literatures on Evidence-Based Policing perspectives on its usage, it can be summarized that this is a preferable model for INP's policing in the present and the future. The necessity for analysts to understand the importance of using research exposed the negative quality of analysts' role (Keay and Kirby, 2018). Keay and Kirby (2018) suggested that analysts should be given extra time to be able to collect, analyze data as well as testing their "hypotheses" to understand crime and social problems in the society. The conduct of Evidence-Based Practice in which started from its use on medicine and medical field (Lumsden, 2016) pushed its development to be utilized in the field of policing (Sherman, 1999; Sherman, 2013) shows positive signs of contribution for the police forces in the world, especially the INP.

One of the police forces that are seen to be potential in its policing reform is India, in which it has capable Indian Police Service (IPS) officers in terms of knowledge to adopt Evidence-Based Policing (Neyroud, 2021). The IPS officers' capability to adopt Evidence-Based Policing also pushed by the existing development of crime data availability and pressure to improve from the society (Neyroud, 2021). Neyroud (2017) also noted that Evidence-Based Policing may potentially fail if the manager in the police has no knowledge of testing this policing model. Another evidence of the gap in Evidence-Based Policing and Problem-Oriented Policing is found in the UK which these policing methods are not organizationally connected as well as in each personnel's minds (Bullock et al, 2022). In addition to that, by asserting the role of pracademics to implement the model of Evidence-Based Policing, this might be the grand opportunity for the INP to expand their knowledge and practice of policing as well as the emergence of a necessity to study and conduct comprehensive research on Evidence-Based Policing's implementation by the INP.

The police especially the INP in this era still have lots of room that can be filled through research which is done with procedure and methodology correctly in order to enforce policing which

is based on concept and philosophy of Evidence-Based Policing. There has not been documents and scientific journal articles regarding the implementation of this policing model which acts as a foundation to other policing methods which are currently in a progress of implementation by the INP. It is necessary to conduct research in the future comprehensively on the practice of the INP's policing which is evidence-based so that it can contribute to the advancement of policing scientifically and practically. By far the key institutions that has been capable of making substantial and organizational changes in the policing culture are the College of Policing in the United Kingdom, the Australian Institute for Police Management, the state Police Officer Standards and Training Boards in the United States, and the Australia New Zealand Policing Advisory Agency (Sherman, 2013: 439; Palmer et al., 2019). Also, the UK has established the National Intelligence Model (NIM) since 2000 in which it greatly settled a strong foundation for police reform agenda (Keay and Kirby, 2017).

Hence, by collaborating with those institutions, the implementation and practice of Evidence-Based Policing will of course, enhances the INP's policing performance to a step that is more accountable, responsible, and scientifically directed. This practice will empower this policing by strengthening the professional judgment of practitioners that is also fit the "community values, preferences and circumstances" (Klose, 2024). The key is that to enhance Evidence-Based Policing to the next level, it needs scholars and practitioners that are able to translate police evaluation research into digestible forms that are applicable in the field of policing practice (Lum et al., 2011).



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## **Policy Implementation of The Electronic Traffic Law Enforcement in The Greater Jakarta Metro Area Police Jurisdiction**

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### **Abstract**

The aim of this study is to investigate the implementation of the ETLE policy in the Greater Jakarta Metro Area Police Jurisdiction. Data has shown that there have been fluctuations in the trend of traffic violations in the Greater Jakarta Metro Area Police Jurisdiction from 2018-2023. This research examines further the implementation of the Electronic Traffic Law Enforcement (ETLE) policy to realize an orderly traffic area in the Greater Jakarta Metro Area Police Jurisdiction. Researchers use Grindle's policy implementation model to look at policy implementation. The researchers used a post-positivist approach by conducting data analysis techniques using illustrative methods on primary data in the form of in-depth interviews. In-depth interviews were conducted with several crucial policymakers, including the Traffic Director at the Greater Jakarta Metro Area Police, who led the ETLE policy in its jurisdiction. The results showed that implementation of the ETLE policy in the Greater Jakarta Metro Area Police jurisdiction has not run optimally in establish an orderly traffic area. Although there is progress in implementation, there are several critical notes that must be addressed to achieve policy objectives.

**Keywords:** Electronic Traffic Law Enforcement (ETLE), Policy Implementation, Public Policy

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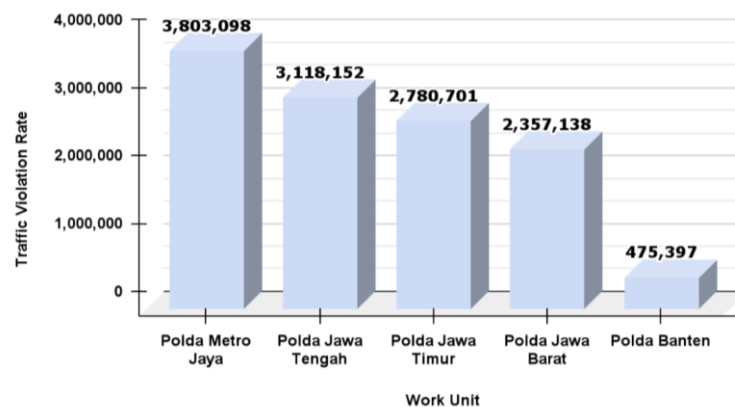
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### **INTRODUCTION**

Public policy in the realm of policing is fundamental and crucial in realizing an orderly and lawful society, as it underscores the link between policy objectives and the concrete results of government activities in the implementation process. According to Grindle (1980), policy implementation in developing countries is often colored by various factors that affect the success or failure of the policy. Grindle emphasizes that the content of policy is fundamental in determining how policy is implemented and the resulting impact. Macro policy content includes goals, objectives and means used to achieve these goals. Grindle points out that policy content reflects the strategic choices made by policymakers, which ultimately affect how the policy is implemented and how likely

it is to succeed. Policy content is one of the dimensions that influence the success of policy implementation. Clear objectives, equitable distribution of benefits, and adequate means are important elements of policy content that policymakers must consider. Political context, bureaucratic capacity, and public participation are also crucial factors that influence implementation. By understanding and managing related matters, policymakers can increase the likelihood of successful policy implementation.

The police have implemented various policies to address issues related to public order and law enforcement, especially in matters directly related to the community's daily activities. One of the related policies is a policy in the traffic sector such as the Electronic Traffic Law Enforcement policy or what is often referred to by the public as ETLE. The implementation of ETLE in the Greater Jakarta Metro Area Police jurisdiction has not effectively addressed the high number of traffic violations. This is evident from the increase in recorded violations when manual ticketing stops are applied (Sari, 2023). The introduction of ETLE Mobile at various road points has also failed to significantly reduce the number of violations. From 2018 to 2023, the Greater Jakarta Metro Area Police consistently recorded the highest number of traffic violations among regional police forces. The statistics shown on Figure 1. highlight the complexity of the problems associated with the ETLE policy, indicating that its implementation has not yet resulted in a more orderly traffic system in the region (Pusiknas Polri, 2024).



**Figure 1.** Regional Police with the Highest Number of Traffic Violations 2018-2023 (National Criminal Information Centre of the Indonesian National Police, 2024)

Figure 1. shows that the Greater Jakarta Metro Area Police recorded 3,803,098 traffic violations, the highest among all regional police jurisdictions. This is followed by Central Java Regional Police with 3,118,152 violations, East Java Regional Police with 2,780,701 violations, West Java Regional Police with 2,357,138 violations, and Banten Regional Police with 475,397 violations.

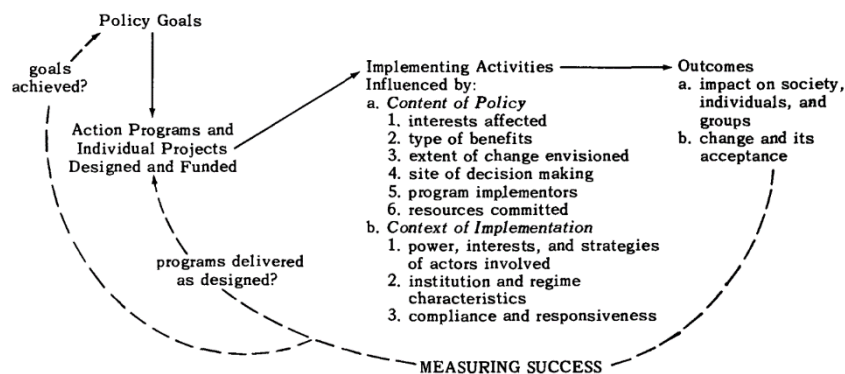
These statistics highlight the complexity of the problems associated with the ETLE policy, indicating that its implementation has not yet resulted in a more orderly traffic system in the region. The chart signifies that despite the deployment of ETLE technology, the Greater Jakarta Metro Area continues to struggle with a high incidence of traffic violations. This raises questions about the effectiveness of the ETLE policy and suggests that additional measures or improvements are needed to achieve better traffic law enforcement and compliance.

Act No. 22/2009 has strongly mandated the authorized agency, in this case, the National Police, to realize traffic and road transport services that are safe and orderly traffic systems. This topic is considered important to be researched further and in-depth because the data has shown that the implementation of ETLE in the Greater Jakarta Metro Area Police jurisdiction from the time it was implemented until now has not been able to reduce the number of traffic violations effectively and tends to increase. This needs to be examined more comprehensively from a policy implementation perspective so that in the end, problems in implementation can be identified that hinder the goals to be achieved.

In recent years, there has been a surge in research on the implementation of ETLE. This research primarily focuses on the direct effects of ETLE implementation, namely in improving traffic compliance and lowering traffic accidents. For instance, Dandebo et al. (2021) examine the impact of ETLE, with a particular focus on its effectiveness, collaborative governance in its implementation, and the execution of road safety policies. Sajid & Nuharjadmo (2023) also conducted a study on the performance of Electronic Traffic Law Enforcement (ETLE) and collaborative governance in the implementation of ETLE policy in Surakarta City. They also examined the impact of road safety policy in an international organization, the odd-even system policy in Jakarta, and the effectiveness of ETLE policy in the Greater Jakarta Metro Area. These studies yielded valuable insights into the immediate effects of ETLE on traffic compliance and safety. However, they have not analyzed the implementation method and how the policy implementation system could impact the overall success and sustainability of ETLE. Particularly, the dynamic relationship among various stakeholders, the structure of governance, and the intricate procedures involved in policy formulation and implementation.

Therefore, this study seeks to address this deficiency by performing a thorough analysis of the execution of the ETLE policy under the jurisdiction of the Greater Jakarta Metro Area Police. Using Grindle's (1980) policy implementation model theory (see Figure 2) which sees policy implementation as a process carried out by politics and government, the discussion in this study focuses on the execution of ETLE policy. The Grindle model is only used in this study's evaluation of the ETLE policy's ability to maintain an orderly traffic situation. Furthermore, the application of

the Merilee S. Grindle model aims to assess the degree of policy implementation. Because it illustrates how policy actors contribute to the realization of an ordered traffic area, this study improves our comprehension of the idea of ETLE policy implementation. The policy implementation model utilized in this study is based on the framework created by Merilee S. Grindle. The framework examines policy implementation from the standpoint of implementation, taking into account two aspects: the content of the policy and the context of its execution. Specific policy goals and resources, for instance, may go under the content dimension, whilst the sociopolitical climate and the administration's capacity for implementation may fall under the context dimension.



**Figure 2.** The Policy Implementation Model (Grindle, 1980)

The Grindle rule implementation type documents the implementation's sustainability based on two key components: (a) verifying that the implementation is proceeding in accordance with the established factors; and (b) offering an evaluation of whether the intended expectations have been met. The evaluation considers the consequences on citizens either separately or collectively, as well as the degree of agreement and difference within the target group. The Grindle model looks at two dimensions and their subdimensions to determine how well the level of implementation is being implemented.

Subdimensions inside the substantive dimension of the decision include the decisions carried by the effect are subdimensions that, via influencing the process of policy implementation, check on multiple decisions either directly or indirectly. The subdimension considers how decision implementers are involved and how their policies affect the state of affairs at the moment. Then there are the benefit types, which are the subdimensions are predicated on several intended advantages, each of which necessitates successful outcomes. Evaluate the advantages that the target audience anticipates. Furthermore, the Extent of Change Envisioned assesses the degree of change a policy



aims to achieve, which is inherently tied to the policy's goals. It involves explaining the desired changes with clear scales and indicators.

The Resources Committed indicates the success of a program's implementation heavily depends on the resources allocated, such as adequate facilities and infrastructure. This sub-dimension examines whether the policy is supported by sufficient resources. While the Programme Implementors is a sub-dimension focuses on the competence and capability of the implementers. It evaluates how effectively the program implementors support the policy's implementation through their skills and expertise. Lastly, the Site of Decision Making relates to the location where decisions are made by stakeholders. It highlights the importance of the decision-making process and evaluates whether the decisions are made in the appropriate locations for effective policy implementation.

The other dimension is the context of implementation; that dimension consists of three sub-dimensions. The first one is the power, interests, and strategies of the actors involved. In a policy, some things need to be considered such as the power, interests, and strategies of policy actors. This sub-dimension will explain how these three components can work together with each other directly or indirectly to support the course of policy implementation. Then, the second sub-dimension is institution and regime characteristics, the ruling government greatly affects the course of policy implementation. This sub-dimension will explain how the current institutions and regimes will affect the policy. The last sub-dimension is compliance and responsiveness. This sub-dimension will describe the extent to which the level of compliance and responsiveness of programme implementors in the context of responding to the dynamics that occur in policy implementation. Based on the background, the study aims to examine further the implementation of the Electronic Traffic Law Enforcement (ETLE) policy to realize an orderly traffic area in the Greater Jakarta Metro Area Police Jurisdiction.

## **METHOD**

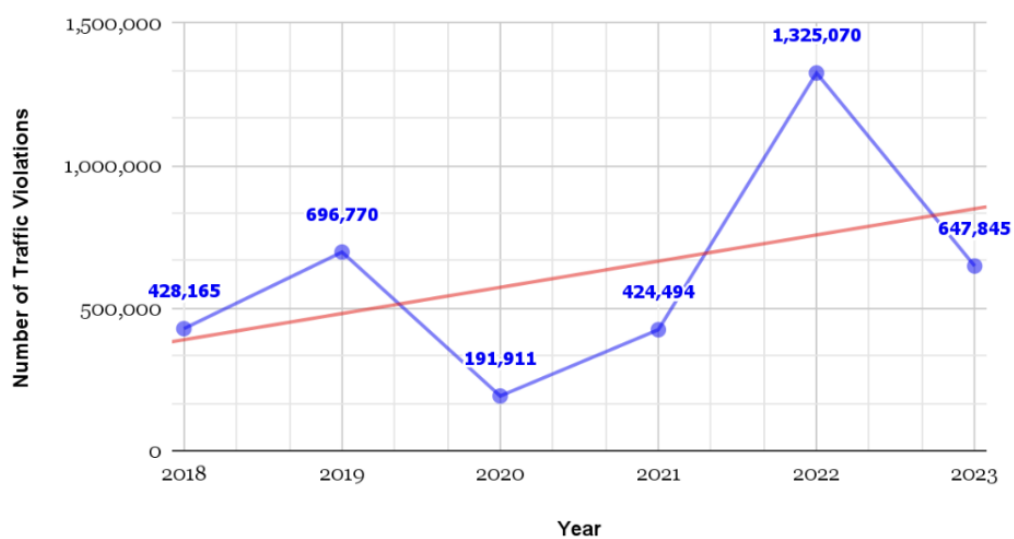
This research employs a qualitative approach within a post-positivist paradigm. The post-positivist approach recognizes the value of established theories but also allows for the emergence of new understandings through research (Creswell & Creswell, 2018). This framework enables the author to investigate various factors that influence the topic under study without being constrained by pre-existing theories. In collecting data and information, the author conducted in-depth interviews and literature reviews to determine whether the data supports or challenges existing theories. The in-depth interviews will be analyzed using thematic analysis to identify key patterns and insights. observer implementers include officials who are directly involved in the implementation of the ETLE strategy from the level of the Metro Jaya regional police, including several actors involved such as

several scientists and other Indonesian citizens (Fauzi, 2021). The author determines respondents by purposive sampling, where this technique is based on certain assessments, such as examples of unique views or greatness, in order to ensure that the collected data is significant and useful by Neuman (2014). correspondents include the director of the Metro Jaya regional police traffic division, implementers in the sub-directorate of law enforcement, students at the police science college, public observers and other Indonesian citizens.

## **RESULTS AND DISCUSSION**

### **Policy Dynamics of Electronic Traffic Law Enforcement in the Greater Jakarta Metro Area Police**

The dynamics of traffic problems since the ETLE method's implementation show how the procedure has been implemented in the Polda Metro Jaya jurisdiction (see Figure 3). According to data gathered by experts at the Indonesian National Police's National Criminal Law Information Centre, there seems to be a significant annual fluctuation in the overall number of traffic irregularities under Polda Metro Jaya's jurisdiction.



**Figure 3.** Number of Traffic Violations in the Greater Jakarta Metro Area Police 2018-2023 (National Criminal Information Centre of the Indonesian National Police, 2024)

There were a lot of high-level traffic deviations in the early ETLE stages. This rise in the deviation level could be brought on by community worries and ignorance of a specific choice. According to news from Antara News, during the first nine days of the ETLE camera's deployment, there were over 1,134 deviations. This indicates that some inhabitants were not aware of the new regulation, as reported by Antara News in 2019. When it is put into practice, awareness of the ETLE

camera's presence can rise rather quickly, leading to a reduction in the quantity of traffic deviations. Better driving conduct results from newcomers realizing that every infraction will be noted and dealt with. Still, this period of comprehension is fleeting, where the number of deviations started to rise again following the period of drop at the start of implementation, indicating variables that potentially affect these variations. While there is a chance that rising deviations will make the program less effective overall, the benefits outweigh the drawbacks. Two very significant factors that contribute to the storage are the uneven application of the legislation and the inadequate transit infrastructure. Despite the fact that ETLE is offered to raise the degree of effectiveness Even though ETLE was created to improve law enforcement's efficiency, its scope is still somewhat narrow. based on information from WRI Indonesia (2018), only 19.8% of Jakarta's population really uses public transportation; yet, some individuals choose to drive their own cars. Due to the large volume of traffic and the dearth of public transportation, drivers frequently search for the side of the road for traffic laws in an effort to avoid traffic bottlenecks. By conducting in-depth interviews with the relevant parties, this study seeks to get a full understanding of the issues that could impact the ETLE policy.

In order to educate the public, the execution of this traffic decision is frequently balanced with the delivery. Nevertheless, this education's efficacy is not operating at optimal capacity. For instance, the community is confused by the constant changes made to laws and practices. Unintentional deviations are caused by the inconsistent socialization of this knowledge, which influences the fluctuating level of deviations (Mayastinasari & Lufpi, 2022). The state of the economy and all kinds of communal activities have an impact on this inconsistency. Modifications to government policies that impact transportation, including the financial sector's actions during the COVID-19 epidemic, which resulted in traffic diversions, as stated by the Ministry of Transportation (2020). The social and cultural factors present in a community have an impact on the variations in traffic deviations. For example, the strong cultural association of owning a private vehicle as a symbol of social status persists in Jakarta, partly due to a development pattern that remains car-oriented (CNN Indonesia, 2021). Many individuals prefer using private vehicles over public transport, despite inadequate road infrastructure to accommodate the growing number of vehicles. Consequently, there has been an increase in traffic violations as people seek to avoid traffic jams or find faster alternative routes. Overall, fluctuations in traffic violation numbers within the Greater Jakarta Metro Area Police jurisdiction result from various interacting factors, including the initial implementation of ETLE, infrastructure limitations, changing policies, economic conditions, and social and cultural changes, particularly those related to community attitudes toward traffic orderliness. Interviews with stakeholders can shed light on how cultural attitudes toward traffic rules impact policy effectiveness, offering deeper insights into these social and cultural aspects.

## **Analysis of ETLE Policy Implementation in the Greater Jakarta Metro Area Police Based on Grindle's Policy Implementation Model**

### *Interests Affected*

This sub-dimension addresses the agendas or interests that drive the implementation of a given policy. In policy analysis, identifying the stakeholders involved—whether they support or oppose the policy—is crucial. This includes agendas from various sectors such as government, civil society, non-governmental organizations, and the private sector. Understanding these agendas is key to grasping the power dynamics and their influence on policy implementation (Grindle, 1980). The execution of this traffic decision is often balanced with the delivery in order to educate the public. However, the effectiveness of this education is not working to its full potential. For example, the community finds it confusing that rules and procedures are changed on a regular basis. The uneven socialization of this knowledge leads to unintentional deviations, which in turn affects the varying degree of deviations. This discrepancy is influenced by various societal activities as well as the status of the economy. Government policy changes that affect transportation, such as the actions of the banking sector during the COVID-19 pandemic that caused traffic diversions (Ministry of Transportation, 2020). The variances in traffic diversions are influenced by the social and cultural characteristics that exist within a community.

### *Type of Benefits*

The subdimension evaluates the different benefits received, such as who will gain from it and whether this aim may be attained directly or indirectly as well as in the medium and long terms. in order to comprehend the laws and how they affect society. Grindle (1980) cites the advantages of the ETLE-related strategy, including less traffic congestion, improved air quality, and better pedestrian safety. Grindle's theory of policy implementation places a strong emphasis on the crucial aspect of making decisions actionable. Under the Metro Jaya regional police's jurisdiction, policies and regulations pertaining to ETLE are displayed through sub-dimension considerations, which can facilitate decision-making (Hidayat, 2022). Offer long-term guarantees and significant immediate benefits in the traffic culture system. Nevertheless, a lot of material concentrates on a variety of issues, including a lack of public awareness and several infrastructure-related barriers.

### *Extent of Change Envisioned*

The degree of change that must be expected determines the degree of change that is taken into account when putting this policy into practice. this progresses from little tweaks to significant

redesigns. In this instance, it is crucial to concentrate on policies that are in line with and accomplished within the allotted time frame. Quoting Sutrisno (2019), it is crucial to provide an assessment of the degree of change in order to ascertain whether or not the community can accept the policy. For instance, the ETLE policy in the Greater Jakarta Metro Area aims to achieve significant reductions in traffic violations and substantial improvements in traffic flow. However, based on the analysis of in-depth interviews, it is evident that the sub-dimensional indicators for the desired degree of change have not been fully met. Specific goals, such as comprehensive ETLE camera coverage, the development of an online notification system, and the integration of handheld technology, remain incomplete. The current implementation shows progress but highlights significant gaps, such as limited ETLE camera deployment and an underdeveloped online notification system (Wayne, 2020). This indicates that, while the policy's direction is clear and initial steps have been taken, achieving the ultimate goal of the desired transformation is ongoing and requires additional time and continuous effort.

#### *Site of Decision-Making*

Policy implementation often encounters a range of challenges that can impact its effectiveness and efficiency. Grindle's policy implementation theory highlights that this process involves not only the formulation and execution of decisions but also their adaptation and response at various levels. In the case of the ETLE policy, decision-making occurs at multiple levels: the national government, Jakarta local government, and Jakarta Metro Police. One crucial aspect of policy implementation is the site of decision-making, which encompasses where decisions are made and how decentralization affects their success (Grindle, 1980). Analysis of the interview transcripts indicates that the sub-dimensional indicators of decision-making location in the ETLE policy implementation within the Greater Jakarta Metro Area Police jurisdiction have been addressed, particularly regarding stakeholder involvement and decentralization. However, there are significant issues related to coordination between the local government and the police. For instance, conflicting priorities and communication gaps have been identified as barriers that may impede effective policy implementation. While cross-agency involvement and good internal socialization are positive factors, there is a need for enhanced coordination and unified intentions. Improving these aspects is essential for the ETLE policy to be executed in a more structured and effective manner (Aprillia, 2020). Specific examples, such as instances of miscommunication or coordination failures, could further illustrate how these decision-making processes have influenced the policy's implementation.



### *Program Implementors*

Program implementers, including government officials, non-governmental organizations, and private sector actors, play a crucial role in the successful execution of policies. Their capacity and competence are pivotal for effective policy implementation (Grindle, 1980). Evaluation of these implementers involves assessing human resources, infrastructure, and coordination mechanisms. In the context of the ETLE policy implementation within the Greater Jakarta Metro Area Police jurisdiction, it can be affirmed that the sub-dimension indicators related to implementer competence are generally met. Officers have undergone specialized training and obtained relevant certifications, which have notably enhanced their technical skills and enforcement capabilities. This training has contributed to more efficient and effective policy enforcement. However, challenges remain. Regulatory barriers, such as ambiguous legal provisions and difficulties in accessing relevant data from other agencies, hinder the implementation process (Nugroho, 2022). Although training programs have proven to be beneficial, a thorough assessment of these procedures is required to identify potential areas for enhancement. Enhancements to the current cross-agency coordination procedures are also necessary to facilitate more effective ETLE implementation.

### *Resources Committed*

Allotted funds, personnel, equipment, and supplies are used to carry out the ETLE policy within Polda Metro Jaya's purview. For example, a specific budget is set aside for the installation of security personnel and surveillance cameras to keep an eye on moving infractions. The *Cakra Presisi* application and the back-office system are examples of technological resources. Through the facilitation of data management and the increase of violations, the *Cakra Presisi* application boosts efficiency. Additionally, the back-office technology facilitates more effective data handling and reporting. Even with advancements, a number of problems persist, including insufficient funding for camera upkeep and antiquated equipment that makes data processing difficult. The funding is insufficient to pay ongoing operating expenditures, which makes successful implementation more challenging in addition to the loss of agency integration. Therefore, while resources have been allocated and utilized, they are not yet adequate or efficiently used to fully support policy implementation. Further improvements and enhancements are necessary to meet the policy goals effectively.

### *Power, Interests, and Strategies of Actors Involved*

The context of power and interests refers to the various actors involved in policy implementation and how their power and interests shape the process. These actors can include politicians, bureaucrats, community groups, and the private sector. Their strategies to either support or hinder policies are crucial to understanding the political and power dynamics that influence successful implementation (Zulfan, 2022). This sub-dimension provides insight into how these dynamics impact policy outcomes. In the case of the ETLE policy implementation, power indicators have been largely met. Interviews with stakeholders reveal that strong support from the Chief of Police significantly contributes to the successful implementation of ETLE, as it grants the Director of Traffic substantial authority and legitimacy. However, there is concern that frequent changes in leadership within the Traffic Corps might undermine the stability of power necessary for sustained policy implementation. Furthermore, the interests of various actors in the ETLE policy have been addressed. The emphasis on ethical considerations in the use of information technology reflects a commitment to maintaining integrity in policy execution. While the Director of Traffic has demonstrated technological innovation with the *Cakra Presisi* application, which aims to enhance law enforcement effectiveness, feedback indicates the need for a more nuanced approach (Dunn, 2017). Respondents have highlighted the importance of integrating technological solutions with ethical considerations to ensure fair and effective policy implementation and to sustain the ETLE system in the long term.

### *Institution and Regime Characteristics*

The characteristics of institutions and regimes encompass the structure and functions of government institutions, political stability, regulations, and the policy orientation of the ruling regime. Political stability and institutional strength play a crucial role in policy implementation. Strong and stable institutions are generally more effective in executing policies, while weak and unstable ones may encounter significant obstacles (Grindle, 1980). The criteria pertaining to the institutional nature and governance system have been fully satisfied, as per the in-depth interview analysis. For instance, the grant given by the DKI Jakarta Provincial Government to install surveillance cameras and create a legislative framework to enforce the ETLE policy is evidence of the support that government institutions have shown (Marfiando, 2021). Additionally, the central and regional governments' continuous and unwavering backing of the strong government institutions was a major factor in the execution of ETLE's success (Aziz & Windiyastuti, 2022). This assistance consists of the issuance of rules and the distribution of funds that Consequently, the efficiency of

implementing ETLE policy is greatly enhanced by the political stability and institutional strength that are present in this setting.

#### *Compliance and Responsiveness*

Response to policy changes and stakeholder needs is referred to as responsiveness, whereas compliance measures how much stakeholders follow rules and regulations. Evaluating the degree of compliance and responsiveness is one approach to determine whether or not a policy has been implemented successfully. A policy's effectiveness can be determined by how well implementers adhere to set protocols and rules and by how well they adapt to changing conditions on the ground (Grindle, 1980). The majority of stakeholders under the Jakarta Metropolitan Police's authority adhere to the established protocols, and there is a comparatively high degree of compliance with the Electronic Traffic Law Enforcement (ETLE) policy. However, issues including insufficient traffic violation data and uneven enforcement in various locations have surfaced. Because there aren't enough cameras in some places, for instance, more offenses are reportedly being overlooked. Furthermore, while the answer has largely complied with the requirements, system performance can still be enhanced. For instance, there is a lack of public awareness of the penalty system, which leaves individuals perplexed and disengaged. System responsiveness can be increased by combining public awareness initiatives with improved manual system coordination. Even though the majority of the compliance and responsiveness metrics are met, fixing this specific problem is essential to enhancing the ETLE policy's execution (Arjuna, 2020).

#### **CONCLUSION**

According to the data analysis conducted to assess the implementation of the ETLE policy in the jurisdiction of the Jakarta Metropolitan Police, several subdimensions of the policy have not been met. This analysis is based on the Grindle policy implementation model. Two main components of the study, the expected level of change and the resources committed, specifically indicate important problems. According to the analysis, the current use of the ETLE policy has not fully optimized traffic resolution, and there are several important areas that need improvement to achieve the policy objectives.

#### **SUGGESTION**

First, the writers suggest enhancing Monitoring Infrastructure by installing more ETLE cameras in key places and upgrade current ones to enhance monitoring and recording precision. Public-private partnerships may be a preferable option for allocating funds for camera installation

and upkeep. Boost the Integration of Data: Build a more robust system for integrating data and enforcing violations that connects ETLE data to vehicle ownership records and other pertinent agency data. This will lessen irregularities and make it easier to identify those who violate traffic laws. Second, we recommend extending the campaign for public education beyond social media. Public education campaigns are required to create a broader revolution in transportation behavior. Launch a comprehensive public education campaign regarding ETLE methods, benefits, and presentations across a variety of media platforms. Lastly as a suggestion for the general public, they need to make use of the offered application or platform to keep track of ticket status updates and make sure that car ownership information is up to current. The emphasis is on the application of data analytics and artificial intelligence (AI) to the prevention and deterrent of traffic infractions.

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## Terrorist Attacks in Indonesia: Does Terrorism Work?

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### Abstract

This article aims to conduct an analytical examination of the terrorist attacks in Indonesia to assess the success of terrorism. The analysis uses a framework to evaluate the success and inherent advantages from a tactical, organizational, and strategic perspective. Notable cases analyzed include the Bali Bombings in 2002 and 2005; the Australia Embassy Bombing in 2004; the Jakarta Marriot and Ritz-Carlton Bombings in 2009; and the Jakarta assaults in 2016. These instances were selected based on their substantial influence on Indonesian culture and their portrayal of various terrorist strategies and goals. The implication indicates that although certain tactical objectives may be accomplished, there are typically restrictions on achieving strategic and organizational aims. This study explains tactical successes implied by immediate casualties and economic disruption. The study gives some recommendations to enhance intelligence efforts in counterterrorism, cooperation and collaboration with international efforts, and improving the deradicalization program. This insight can be used by policymakers and law enforcers who work with counter-terrorism efforts to make the efforts in Indonesia more effective.

**Keywords:** Indonesia, Terrorism, Tactical, Organizational, Strategic, Effectiveness.

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## INTRODUCTION

A study undertaken by Djumantara et al. (2021) reveals that Indonesia suffered a total of 751 bombings between the years 1977 and 2018. The attacks were conducted by religious extremists based in Indonesia; they claimed to be a Muslim extremist group who wanted to change an incumbent government into an Islamist-based country (Abuza, 2023). Responsible for a significant number of high-profile bombings in Indonesia and Southeast Asia, Jemaah Islamiyah (JI) remains a substantial threat despite extensive efforts to combat terrorism (Abuza, 2023). The group was established to establish an Islamic state in Southeast Asia, encompassing Indonesia, Malaysia, the southern Philippines, Singapore, and Brunei.

The impact of jihadist movements on Indonesian terrorism has been substantial, particularly during the 2002 and 2005 Bali bombings. These attacks represented a change in strategy, focusing

on attacking Western interests and destabilizing the tourism economy (Counter Extremism Project, 2023). The Indonesian government responded to these attacks by enhancing its counter-terrorism policies, which involved the creation of Detachment 88 anti-terror, operated by the Indonesia National Police, an elite unit specialized in counter-terrorism operations (Middle East Institute, 2014). Implementing these enhanced measures has had a wide-ranging impact, resulting in the immediate reduction of threats and the establishment of comprehensive programs to counter radicalization.

Jackson (2007) emphasizes that terrorism is a strategic approach to achieving political objectives intentionally and deliberately. This study seeks to investigate the efficacy of terrorism in attaining political, ideological, and organizational goals, specifically in democratic settings. Pape (2003) and Abraham (2006) have constructed the theory and concept to assess the efficacy of terrorism. These theories offer differing viewpoints on 'how terrorism impacts society' and 'does terrorism work?' by analyzing the aftermath of each terrorist attack. Indonesia has performed a variety of strategies to dismantle terrorism, including making changes to its regulations, improving its intelligence capabilities, and cooperating with other countries, notably the United Kingdom, the United States, and Australia. The 9/11 attacks on the United States serve as a global context for understanding the motivations behind targeting Western interests, demonstrating the impact of terrorism on a nation's security policies and economic stability (Bergen, 2021). The Middle East Institute (2014) states that these flexible tactics have effectively reduced immediate risks and tackled the underlying factors of radicalization, hence fostering a feeling of security and trust among the population. Notable achievements include the substantial decrease in major terrorist attacks after 2009, the dismantling of terrorist networks, and the establishment of comprehensive deradicalization programs that aim to combat the dissemination of extremist ideologies among the prison population and the wider community (Crisis Group, 2023). The study of the efficacy of terrorist attacks and counter-terrorism efforts has become a central subject in global security studies. The studies by Krause (2018) and Pape (2003) provide a framework for assessing the effectiveness of terrorist attacks from tactical, organizational, and strategic perspectives. The previous studies on the effectiveness of terrorist attacks did not include Indonesia as an area of research. This study will analyze terrorist attacks that occurred in Indonesia. This research presents a comprehensive analysis of multiple theoretical frameworks from prior studies, utilizing a comparative methodology. It aims to provide practical recommendations for improving counter-terrorism efforts and developing successful law enforcement strategies for future terrorism prevention in Indonesia.

## METHOD

In this study, the author utilizes essential variables, including the number of assaults, deaths, injuries, financial impact, and political reactions, to assess the effectiveness of terrorist attacks in Indonesia. This article utilizes the effectiveness framework established by Krause (2018). This framework consists of three levels: the tactical, the organizational, and the strategic levels. Furthermore, it employs the notion of intrinsic motivations, as suggested by English (2016), to examine each situation. In addition, the author incorporates elements from Pape's (2003) strategic rationale for suicide terrorism. According to Pape (2003), the increase in suicide terrorism indicates that terrorist organizations have recognized the effectiveness of their activities in achieving their goals. The significant increase in suicide terrorism shows this phenomenon. In addition, terrorist groups use violence as a means of intimidating and spreading fear throughout the broader populace.

The efficacy of terrorism, however, cannot be shown by any actions that include the use of violence, threats, intimidation, or instilling fear among different segments of society. Hoffman's (2017) paper explores the broader ramifications of terrorist activities and examines the perspectives of other scholars about the success and ineffectiveness of such acts. In assessing the success of terrorist activities, it is crucial to evaluate whether they have achieved a comprehensive strategic triumph, a partial strategic victory, a tactical victory, or the inherent advantages of the conflict.

Insurgent and terrorist activities rely on individuals who possess a high level of organization and are part of established organizations to accomplish their goals. An instance of success in an organizational context is a primary kind of success. The vast majority of terrorist actions and almost all campaigns have been perpetrated by a group driven by its self-interest. The Government may face a situation where a significant percentage of the population harboring distrust towards them creates favorable conditions for terrorists to gain momentum. Supporters may use this distrust to accomplish their goals by creating divisions among the political opposition. A collective will initiate an assault to develop and maintain its reinforced base, demonstrating readiness to sacrifice and kill the foe. Furthermore, this approach enhances the organization's financial resources, personnel, supporters, and influence and facilitates sustainability. Blomberg (2011) states that terrorist organizations gauge their effectiveness by assessing many factors, such as their duration of existence, membership size, sponsorship, network connections, and alliances.

When addressing terrorism, "strategic efficacy" refers to the capacity to influence a country's fundamental character, governing principles, and inhabitants (Pape, 2003). Terrorist groups use acts of violence to pressure governments into halting military activities and to compel those who do not adhere to their ideology to leave (Krause, 2018). This action aims to establish an autonomous political entity or authoritarian regime within the targeted area (Hoffman, 2017). Terrorism may be strategically advantageous as a prerequisite for gaining organizational success through acts of terrorism, as it can inflict deaths and effectively convey opinions while also creating

divisions throughout society due to its dual capability for both actions (Abraham, 2006). In terrorism, the efficacy of tactical movements cannot be overstated. Using it makes it possible to succeed in either the organizational or strategic domain (English, 2016).

Tactical effectiveness refers to the capability to execute an assault with the precise amount and kind of violence at the designated place, against the intended target, and at the scheduled time. This study will use the theoretical analysis employed by English (2016) to assess the efficacy of terrorism. Specifically, the focus will be on analyzing all terrorist incidents in Indonesia since the nation's proclamation of independence. According to Oyewole (2021), it is unusual for terrorist organizations to achieve strategic success. This is because only a tiny proportion of terrorist groups have completed their ambitious goals, which are often based on ideology and require the government's consent. Indonesia has several terrorist organizations that have carried out acts of violence and instilled fear within its territory (Oyewole, 2021).

An examination of terrorism attacks in Indonesia and other nations reveals clear trends and consequences. For instance, the Bali bombings (2002-2005) had considerable global consequences and prompted a significant restructuring of Indonesia's counter-terrorism tactics. However, the outcomes of similar assaults in different nations have been diverse and influenced by specific political and socioeconomic circumstances. By utilizing the theoretical frameworks stated by Krause (2018) and Pape (2003), a comparative analysis of the tactical and strategic results of these terrorist attacks in Indonesia was conducted. The study highlights the unique difficulties and responses encountered in different circumstances. Indonesia's efforts in countering terrorism have been marked by notable progress, achieved via legislation reforms and active engagement in international cooperation. Nevertheless, the terrorist organizations in Indonesia continue to face limitations in their strategic accomplishments. This is consistent with global trends, where terrorist groups rarely achieve long-term ideological goals (Abrahms, 2006; English, 2016).

This study highlights the need to understand the tactical effectiveness of terrorist operations in achieving short-term objectives while recognizing the broader strategic limitations these groups face. The knowledge obtained from the comparative research provides valuable insights for enhancing counter-terrorism efforts in Indonesia and other areas.

## **DISCUSSION**

### **Analysis of Key Terrorist Events:**

#### *Bali Bombings: 2002 and 2005*

The Bali bombings were the most disastrous terrorist attacks in Indonesian history, which were executed by Jemaah Islamiyah (JI), a terrorist group affiliated with Al-Qaeda. Both bombings were tactically successful, causing significant casualties and economic disruption. The 2002 bombing killed 202 people and injured 209; a car bomb exploded outside the Sari Club in Kuta, Bali, followed



by a suicide bombing at Paddy's Pub. The attack targeted Western tourists, aiming to disrupt Indonesia's tourism industry, significantly contributing to the economy. The bombing resulted in a temporary decline in tourism, but the long-term impact on political goals was minimal. In the years after Osama bin Laden's declaration of war against the United States in 1996, suicide bombing became more popular as a form of self-sacrifice. This caused terrorist organizations that shared similar ideas to assume that attaching explosives to the bodies of non-believers was the most efficient approach to remove those who did not believe in their ideals (Moghadam, 2008). Specifically, Nasir and Putra (2023) highlight that this technique is consistent with the broader tendencies observed in other worldwide jihadist movements. To instill panic, generate media coverage, and disrupt economies, the spotlight is placed on major attacks that have caused significant damage.

A total of twenty people lost their lives, and an additional 129 individuals sustained injuries because of the explosion that took place in 2005. Three suicide bombers detonated their explosives in two restaurants situated at Jimbaran Beach Resort and Kuta (Jones, 2005). The assault strategy was indistinguishable from the terrorist incident that took place in 2002 (Crisis Group, 2005). While this attack was not as deadly as the bombing that took place in 2002, its purpose was still to cause more disruption to the tourism economy (Jones, 2005). Although the initial economic impact was significant, the strategic political objectives were not accomplished (Crisis Group, 2005).

The choice of high-profile tourist areas maximized media coverage and psychological impact. As Crenshaw (2000) notes, the tactical success of such attacks lies in their ability to generate immediate fear and widespread attention. Krause (2018) also emphasizes that tactical success is achieved when attacks are executed at the right time and place to maximize their impact. Hoffman (2006) also stated that the use of terrorism is more successful than any other kind of political struggle in terms of causing fear and attracting the attention of the public. J.I. achieved increased recruitment and funding following these attacks. The bombings demonstrated the group's operational capabilities and ideological commitment, enhancing its reputation among extremist circles. Blomberg et al. (2011) argue that such incidents can bolster organizational cohesion and attract recruits. Krause (2018) further argues that organizational success can be measured by the group's ability to maintain its operations and expand its influence.

The bombings have failed to achieve their political objectives, such as implementing Sharia law in Indonesia or deterring U.S. military involvement in Muslim countries. Instead, they prompted a robust counter-terrorism response from both Indonesian and international authorities, strengthening international cooperation against terrorism. Rabasa et al. (2004) note that the attacks led to significant international support for Indonesia's counter-terrorism efforts. The establishment of Detachment 88 anti-terror was one of the instances on the brace of counter-terrorism effort cooperation with the US government. Krause (2018) suggests that strategic success is achieved when the political goals of the terrorists are realized, which was not the case in these incidents. The bombers and supporters gained

prestige and a sense of martyrdom within their extremist networks, believing their actions were secured with spiritual rewards (Jihad Fii Sabillillah). This is, along with the concept of martyrdom, a powerful motivational tool for terrorist organizations (Moghadam, 2009). Houmanfar and Ward (2012) discuss how the promise of eternal rewards can sustain terrorist motivations despite strategic failures.

The long-term impact of these bombings on Indonesia's tourism sector was significant. Mawdsley et al. (2004) highlight that the bombings severely disrupted Indonesia's tourism sector, a critical component of the Indonesian economy. The initial sharp decline in tourist arrivals following the attacks had long-lasting effects on local businesses and employment, and some countries declared tourism travel banned in Indonesia after the attacks. Whenever the two Bali bombings, 2002 and 2005, were tactically successful in causing immediate casualties and economic disruption, they failed to achieve their broader strategic objectives. The attacks highlighted the need for comprehensive counter-terrorism strategies that address immediate threats and long-term prevention, including economic resilience and recovery efforts.

#### *2004 Australian Embassy Bombing*

On September 9, 2004, a suicide bomber detonated a car bomb outside the Australian Embassy in Jakarta, killing nine and injuring over 150. The car bomb was detonated during the morning rush hour, maximizing the number of casualties and the psychological impact. The embassy, representing Australian interests, was a symbolic target, emphasizing J.I.'s opposition to Western influence in Indonesia. Despite the tactical success, the attack did not result in any policy changes by Australia, reinforcing the notion that such attacks are strategically ineffective—unfortunately, immediate casualties and extensive damage to the embassy and surrounding areas. Hoffman (2017) emphasizes that such high-profile attacks are designed to maximize media attention and spread fear.

Krause (2018) points out that tactical effectiveness can also be judged by the ability of the attackers to reach their intended targets and cause significant disruption. For J.I., the attack demonstrated its capability to target foreign interests in Indonesia, reinforcing its operational presence and attracting media attention. The incident underscored the group's ability to disrupt diplomatic relations and create international headlines.

As Bloomberg, Gaibullov and Sandler (2011) note, the attack galvanized the group's base and showcased its operational capabilities. Krause (2018) also argues that organizational success can be seen in maintaining operational capacity and resilience in the face of counter-terrorism measures. Strategically, the bombing failed to alter Australian or Indonesian foreign policies. Instead, it led to increased security measures and counter-terrorism efforts. Fortna (2015) suggests that such failures are common, as governments often respond to terrorism with heightened security rather than policy changes. Krause (2018) emphasizes that strategic success requires achieving political concessions,

which was not realized in this case. Participants in the attack were celebrated within JI as martyrs, enhancing their posthumous status. Houmanfar and Ward (2012) discuss how the promise of eternal rewards can sustain terrorist motivations despite strategic failures.

Powell (2004) explores the impact of terrorist attacks on political decision-making and public sentiment. Considering the Australian Embassy bombing, Powell's analysis provides valuable insights into why the attack did not result in policy changes but instead strengthened the determination of both the Australian and Indonesian governments to combat terrorism. The bombing highlighted the strength of governmental policies in the face of terrorism and the tendency of such attacks to foster unity rather than division.

#### *2009 Jakarta Marriott and Ritz-Carlton Bombings*

The coordinated bombings that occurred on July 17, 2009, at two luxury hotels in Jakarta resulted in nine deaths and over fifty injuries. According to the research conducted by Jones (2005) and Smith (2010), the explosions were targeted explicitly against multinational business executives who were attending hotel meetings. The assaults were intended to disrupt the economic stability of Indonesia and deter international investment. Due to meticulous preparation, the attackers used sophisticated measures to bypass hotel security. Despite the initial chaos and media coverage of the attacks, they had little long-term political impact, and there were no significant policy changes resulting from them, according to the Indonesian Police Report in 2009. The attention from global media has measured this attack as a tactical success. The high-profile nature of the targets ensured they got significant media coverage and instilled widespread dread as Ritz-Carlton is one of the most Five-Star popular hotels in the world. Crenshaw (2000) states that high-profile targets are chosen to optimize the psychological impact of the attack. According to Krause (2018), keeping the momentum of terrorists depends on their effective tactical operation. It is Similar to the statement by Rose et al. (2007), which discovered that by generating significant casualties and media attention, coordinated bombings, such as the Madrid train bombings in 2004, struggled to achieve their political goals. Pape (2003) argues that achieving operational success is crucial for sustaining the organization's momentum. Furthermore, Krause (2018) emphasizes that an organization's performance is shown by its ability to maintain operations and preserve group cohesion (Krause, 2018).

Despite the extensive media coverage, the attacks failed to secure significant political concessions. Conversely, the Indonesian Government intensified its efforts to counter terrorism, including enhanced cooperation with surrounding nations and expanded information sharing. According to Cronin (2011), the main reason such attacks fail to bring about political change is that they cannot do so. According to Krause (2018), achieving strategic success becomes challenging due to significant policy changes or political surrender, which must be evident in this context. The individuals responsible for the assaults were praised within their networks, enabling them to sustain

the ideological war regardless of the outcomes of the operations.

### *2016 Jakarta Attacks*

On January 14, 2016, terrorists linked with ISIS carried out a series of explosives and shootings in Jakarta. This resulted in the deaths of four innocent individuals and caused injuries to 23 others. The militants used a combination of suicide bombers and firearm assaults, with a particular focus on a Starbucks café and a police outpost located near the Sarinah shopping center (Jones, 2016). The attacks were carefully orchestrated to cause substantial disruption and induce fear, using social media intentionally to amplify their impact (Smith, 2017). The immediate and efficient response by Indonesian law enforcement authorities, highlighting the need for swift police intervention, effectively reduced the duration and scale of the attack (Indonesian Police Report, 2016). The attack was tactically effective, resulting in a disturbance of normalcy and inciting fear among the community. Choosing a vibrant commercial area maximized the impact. Hoffman (2017) suggests that directing attention toward public spaces might heighten the perceived threat of terrorism across the broader population (Hoffman 2017).

Krause (2018) emphasizes that tactical success is achieved by executing well-coordinated and forceful attacks that disrupt daily routines and garner significant media attention (Krause, 2018). The attacks showcased ISIS's strategic expansion into Southeast Asia, bolstering its efforts in propaganda dissemination and recruitment inside the region. Hoffman (2017) noted that this expansion was vital for ISIS in demonstrating its global influence (Hoffman, 2017). Krause (2018) argues that attaining organizational success depends on the enlargement of the operating range and the ongoing execution of recruitment efforts (Krause, 2018).

The strategic impact was limited. The Indonesian Government enforced stricter counter-terrorism measures, thereby intensifying the isolation of extremist formations. This significant response corroborates Frontera's (2015) assertion that acts of terrorism often result in a heightened resolve by the victimized state to counteract the perpetrators or organizations behind the assaults (Frontera, 2015). Krause (2018) notes that strategic success becomes challenging when attacks fail to bring about the desired political changes (Krause, 2018). The National Consortium for the Study of Terrorism and Response to Terrorism analyses the influence of terrorist attacks, such as the 2016 Jakarta event, on the formulation of national security policies. The report on the 9/11 attacks emphasizes the long-lasting impact of terrorism on global security plans and underscores the necessity for comprehensive measures to combat it.

### *The 2018 Surabaya Bombings*

The Indonesian government has implemented a comprehensive strategy to combat terrorism effectively. Enhanced authority was bestowed upon security forces by implementing new legislation,

complemented by heightened community vigilance initiatives. This response aligns with the pattern observed in other countries, where significant acts of terrorism have led to the adoption of heightened security measures rather than political concessions.

Hwang (2023) stated that Jemaah Islamiyah (JI) has presented an important insight into evolving operational strategies and how they threaten society. JI has proven to be remarkably resilient, constantly changing its strategy and unwavering in its ideological dedication to its strategies for facing the counter-terrorism effort. The group's unwavering adaptability and flexibility in operation pose a persistent threat in Indonesia and the broader Southeast Asian region. It is noteworthy to see how certain groups, like JAD, continue to carry out sophisticated attacks despite increased security measures, showcasing their resilience and adaptability.

The consequences of the Surabaya bombings highlighted the strategic constraints. Despite facing initial challenges, JAD managed to achieve its long-term goals. In contrast, the Indonesian government's response showcased the resilience and efficiency of state institutions in their fight against terrorism. This response supports the findings by Rose et al. (2007), which stated that the 2004 Madrid train bombings failed. Despite that, they play a role in intensifying counter-terrorism efforts and fostering cooperation between countries.

*The Oikumene Church Attack in Samarinda occurred in 2016.*

The Oikumene Church in Samarinda, East Kalimantan, was targeted by a member of Jamaah Ansharud Daulah (JAD), an organization associated with ISIS, on November 13, 2016. The assailant launched a Molotov cocktail at the church when a service was taking place, causing the demise of a two-year-old girl and inflicting injuries on three other children. The assault generated substantial public indignation, primarily as a result of the deliberate victimization of minors and the desecration of a religious sanctuary, so accentuating the savagery of the assailants.

Pape (2003) indicates that the attack was strategically successful, employing a straightforward yet efficient approach to inflict casualties and instill fear (Pape, 2003). The strike showcased JAD's operational range and capacity to carry out attacks despite continuous counter-terrorism endeavors. Nevertheless, according to Krause's theory, the onslaught failed to accomplish substantial political or ideological objectives. However, it resulted in heightened security protocols at places of worship and an enhanced counter-terrorism reaction, indicating a strategic inadequacy in attaining broader political goals (Krause, 2018). The attack emphasized the significance of community monitoring and collaboration with authorities to prevent such attacks.

*The Makassar Cathedral Bombing occurred in 2021.*

On March 28, 2021, the Sacred Heart of Jesus Cathedral in Makassar, South Sulawesi, was subjected to a suicide bombing carried out by two individuals affiliated with Jamaah Ansharud



Daulah (JAD), an organization associated with ISIS. The assailants made an effort to gain access to the cathedral during a Palm Sunday service. However, they were thwarted by the security personnel, prompting them to trigger their explosives at the entryway. The explosion resulted in the deaths of the two individuals who carried out the bombing and caused injuries to 20 other individuals, including church attendees and security staff. This incident caused considerable disturbance and instilled terror within the local community.

The Makassar Cathedral bombing was strategically successful, as it adhered to attacking symbolic locations to cause the most casualties and attract media coverage (Pape, 2003). The strike demonstrated JAD's operations proficiency and intense dedication to its mission. Nevertheless, as per Krause's theory, the bombing failed to accomplish broader strategic goals. The attack prompted a heightened counter-terrorism reaction, which involved apprehending additional members of JAD. However, it did not lead to political compromises or substantial policy changes (Krause, 2018). This exemplifies the broader trend of terrorism having minimal strategic efficacy, emphasizing the necessity for solid counter-terrorism policies and community resilience to reduce the impact of such acts.

### **Comparative Analysis with Other Countries:**

#### *United States: 9/11 Attacks*

The terrorist attacks that occurred on September 11, 2001, targeting the World Trade Centre and the Pentagon, had a profound impact on the formulation of national security policies in the United States. The 9/11 attacks orchestrated by Al-Qaeda led to a substantial loss of life and inflicted severe economic harm. The attacks also demonstrated Al-Qaeda's proficiency in orchestrating extensive operations, further enhancing its standing as a skilled practitioner of organizational strategies. Krause (2018) emphasizes the significance of thorough planning and accurate implementation to attain tactical success through a powerful attack.

Strategically, the attacks did not accomplish their intended goal of compelling the United States to retreat from the Middle East. Instead, the United States launched the War on Terror, which entailed military interventions in Afghanistan and Iraq, leading to substantial harm to Al-Qaeda's operational infrastructure. Krause (2018) argues that the interpretation emphasizes the strategic failure of 9/11, attributing it to the U.S. government's strong military and political response that effectively prevented Al-Qaeda from achieving its goals.

In response to the devastating events of 9/11, the United States implemented a variety of counter-terrorism measures to strengthen its security significantly. These actions involved establishing the Department of Homeland Security and implementing the USA PATRIOT Act. Engaging in vigilant surveillance, exchanging intelligence, and coordinating with various law enforcement agencies prevented other large-scale attacks. The U.S. Department of State (2010)

provides a thorough examination of the evolution of U.S. counter-terrorism strategies following the devastating events of 9/11. It highlights the increasing focus on international cooperation and the gathering of intelligence.

#### *Spain: Madrid Train Bombings*

The tragic events that unfolded on March 11, 2004, saw the loss of 191 innocent lives and left more than 2,000 individuals injured. The bombings proved to be highly impactful, causing a substantial number of casualties and creating widespread disruption in the capital of Spain. The bombings highlighted the operational capabilities of Islamist militants in Europe. In his analysis, Krause (2018) highlights the importance of strategically coordinating time and positioning to achieve tactical success, particularly during peak traffic hours.

The bombings had a profound effect on Spain's national elections, leading to the choice of withdrawing Spanish troops from Iraq. This event was a rare instance where terrorism achieved a significant political outcome. In a scholarly analysis, Krause (2018) suggests that the timing of the Madrid bombs played a crucial role in their strategic success. By strategically scheduling the attacks before the elections, they could effectively shape public opinion and ultimately change policy. The Spanish Government has implemented measures to enhance its counter-terrorism infrastructure, focusing on intelligence gathering and fostering international collaboration. Establishing the National Centre for the Coordination of Counterterrorism (CNCA) has significantly improved various agencies' coordination and response capabilities.

Chari's (2004) analysis focuses on the political ramifications of the Madrid bombings, highlighting how acts of terrorism can significantly influence election outcomes and shape policy decisions. Jordán (2006) explores the investigative findings and policy adjustments that followed the bombings, emphasizing the importance of effective tactics in countering terrorism.

#### *United Kingdom: 7/7 London Bombings*

On 7 July 2005, a suicide bomber struck London's public transport system, wounding more than 700 people and killing 52. Significant casualties and widespread anxiety were caused by the attacks, which were tactically effective. The blasts highlighted the danger that domestic terrorists represent. According to Krause (2018), the coordinated assaults on public transport that maximized disruption and casualties were the key to tactical success.

Regarding strategy, the bombs still needed to change Britain's stance on global affairs. Public resistance against terrorism and more counter-terrorism measures were the results, rather than vice versa. Because the assaults failed to bring about the intended policy shifts, according to Krause (2018), the strategic failure was apparent. By establishing the Office for Security and Counterterrorism (OSCT) and putting the CONTEST strategy into action, the United Kingdom

fortified its approach against terrorism. The decrease in the impact of terrorist threats can be initiated by increasing monitoring, community policing, and international collaborations with other countries. London bombings have brought massive attention to strengthen counter-terrorism efforts and global cooperation by comparing the results of investigations and policy shifts in the aftermath of significant terrorist acts (Jordán, 2006)

This research has found that terrorist attacks have had significant global repercussions, influencing the development of security policies and strategies to combat terrorism. In Indonesia, there have been several notable attacks that have underscored the ongoing struggle against terrorism. The attacks have varied in terms of their tactics, organization, and overall strategic impact. This evaluation aims to thoroughly analyze these significant events, using the frameworks of Pape (2003) and Krause (2018) to assess their effectiveness from different perspectives. The table below is a comprehensive analysis of major terrorist attacks in Indonesia, examining their tactical outcomes, organizational consequences, and strategic impacts.

Attacks	Target	Perpetrators	Casualties	Method	Tactical Effectiveness (Pape, 2003)	Organizational Effectiveness (Pape, 2003)	Strategic Effectiveness (Pape, 2003)	Tactical Effectiveness (Krause, 2018)	Organizational Effectiveness (Krause, 2018)	Strategic Effectiveness (Krause, 2018)
<b>2002 And 2005 Bali Bombings</b>	Tourist Areas in Bali	Jemaah Islamiyah (JI), Linked to Al Qaeda	2002: 202 Killed, 209 Injured; 2005: 20 Killed, 129 Injured	Car Bomb and Suicide Bombers	High-Profile, Maximum Casualties, Significant Media Attention	Showcased Operational Capabilities, Attracted New Recruits	No Political Concessions, Stronger Counter-Terrorism Response	Timing And Location Maximised Impact	Maintained Operations, Reinforced Reputation	No Political Concessions, Enhanced Security Measures
<b>2004 Australian Embassy Bombing</b>	Luxury Hotels in Jakarta	Jemaah Islamiyah (JI)	9 Killed, over 150 Injured	Car Bomb	High-Profile, Maximum Casualties, Significant Media Attention	Demonstrated Capability to Target Foreign Interests	No Policy Changes, Increased Security Measures	Timing And Location Maximised Impact	Maintained Operational Capacity And Resilience	No Political Concessions, Enhanced Security Measures
<b>2009 Jakarta Marriott and Ritz-Carlton Bombings</b>	Tourist Areas in Bali	Jemaah Islamiyah (JI), Linked to Al Qaeda	9 Killed, over 50 Injured	Suicide Bombers	Significant Casualties, Global Media Attention	Maintained Operational Momentum Despite Crackdowns	No Significant Political Impact, Stronger Counter-Terrorism	High-Profile Targets, Significant Media Coverage	Showcased Ability to Maintain Operations	No Significant Political Shifts, Stronger Counter-Terrorism
<b>2016 Jakarta Attacks</b>	Starbucks Café and Police Outpost in Jakarta	Isis-Linked Terrorists	4 Killed, 23 Injured	Suicide Bombers and Firearms	Significant Casualties, Disruption of Normalcy	Showcased Strategic Expansion into Southeast Asia	Limited Strategic Impact, Stronger Counter-Terrorism	Well-Coordinated Attacks, Significant Media Attention	Boistered Efforts in Propaganda and Recruitment	Limited Strategic Success, Stronger Counter-Terrorism
<b>2016 Oikumene Church Attack</b>	Oikumene Church in Samarinda	Jamaah Ansharud Daulah (Jad), Linked to Isis	1 Child Killed, 3 Children Injured	Molotov Cocktail	Simple Yet Effective, Caused Casualties and Generated Fear	Demonstrated Operational Reach Despite Counter-Terrorism Efforts	No Significant Political Changes, Increased Security Measures	Selected Vulnerable Target, Significant Media Attention	Maintained Presence Despite Counter-Terrorism Efforts	No Significant Political Goals Achieved, Increased Security
<b>2018 Surabaya Bombings</b>	Three Churches and Police Headquarters in Surabaya	Jamaah Ansharud Daulah (Jad), Linked to Isis	28 Killed (Including Attackers), Over 50 Injured	Suicide Bombings	High-Profile, Maximum Casualties, Significant Media Attention	Showcased Operational Capabilities, Attracted New Recruits	No Political Concessions, Stronger Counter-Terrorism Response	Timing And Location Maximised Impact	Maintained Operations, Reinforced Reputation	No Political Concessions, Enhanced Security Measures
<b>2021 Makassar Cathedral Bombing</b>	Sacred Heart of Jesus Cathedral in Makassar	Jamaah Ansharud Daulah (Jad), Linked to Isis	Two Attackers Killed, 20 Injured	Suicide Bombing	Targeted Symbolic Site, Maximised Casualties and Media Attention	Highlighted Operational Capability and Commitment to Cause	No Political Concessions, Intensified Counter-Terrorism Response	Targeted Symbolic Site, Maximised Impact	Demonstrated Operational Proficiency	No Political Shifts, Stronger Counter-Terrorism Measures
<b>United States Of America 911 WTC Attacks</b>	World Trade Centre in New York	Al Qaeda	2997 killed, 6000 Injured	Hijacked Airplane	High-profile, maximum casualties, significant media attention, with a meticulously planned and executed attack	Showcased Al-Qaeda's operational capabilities and attracted new recruits	No political concessions but led to a global War on Terror and extensive counter-terrorism measures	Timing and location maximized impact, causing extensive damage and casualties	Maintained Operations, Reinforced Reputation	No Political Shifts, Stronger Counter-Terrorism Measures
<b>Spain Madrid Bombings</b>	Commuter Trains in Madrid	Al Qaeda	193 Killed, 2050 Injured	Backpack Bombs	High-Profile, Maximum Casualties, Significant Media Attention	Showcased Operational Capabilities, Attracted New Recruits	No political concessions, but increased counter-terrorism efforts	Timing and Location Maximised impact	Maintained Operations, Reinforced Reputation	No Political Shifts, Stronger Counter-Terrorism Measures
<b>London Bombings</b>	Public Transport in London	Al Qaeda	52 Killed, over 700 Injured	Suicide Bombers	High-Profile, Maximum Casualties, Significant Media Attention	Showcased Operational Capabilities, Attracted New Recruits	No political concessions, but increased counter-terrorism efforts	Timing and Location Maximised impact	Maintained Operations, Reinforced Reputation	No Political Shifts, Stronger Counter-Terrorism Measures

**Table 1.** Comparative Analyses of Terrorist Attacks in Indonesia and Other Terrorist Attacks

## CONCLUSION

According to the analysis of this study, although finally failing to reach their strategic goals, terrorist acts in Indonesia have shown notable tactical and organizational gains. The tactical victories attained—marked by significant casualties, extensive media coverage, and disturbance of normal conditions—showcase the operational knowledge of some companies. These strikes have greatly improved the groups' standing, focused their recruiting efforts, and increased their financial resources, underscoring their outstanding organizational skills.

A comparative study with other nations, like the United States, Spain, and the United Kingdom, highlights the crucial role of police and counter-terrorism policies in reducing the influence of terrorism more and more. Reaction to major terrorist events in these nations has underlined the need for more intelligence collecting, community involvement, and interagency coordination. Strong counter-terrorism policies can destroy terrorist networks, stop the next strikes, and hence lower the general potency of terrorism as a tool for political transformation. This underlines the need for world unity in this struggle and the significant part of international collaboration in combating terrorism.

In summary, most terrorist acts in Indonesia have been unsuccessful in achieving their political objectives. Their primary aim is to gain recognition for their ideology as the nation's foundation, not only from the government but also from society. By that means, terrorist attacks in Indonesia cannot fulfil their goals in terms of changing the incumbent government ideology with the Islamist government. There is only ten per cent of terrorist attacks in the world can achieve their goals. They are only counterproductive by self-proclaimed based on their religious belief, which is Jihad Fi Sabillilah as their standard (Abrahms, 2018).

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## Researching Behind the Badge: Challenges and Politics for Emerging Scholars in Police Studies

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### Abstract

This study aims to find that the organizational structure and culture of the police have a significant impact particularly in terms of facilitating access, ensuring research independence, and developing long-term relationships. Police research has enabled the integration of grounded theoretical findings with the practical application of police strategies. However, scholars in police studies, especially those new to research, often face intricate dynamics and limitations, particularly concerning police culture and organizational obstacles. This paper seeks to examine the challenges and political barriers that new researchers have when studying the police. Employing an empirical qualitative approach, this study combines semi-structured interviews with six researchers who have different levels of expertise in police research. Additionally, auto-ethnographic reflections offer a thorough understanding of the subject matter. The research findings suggest that the organizational structure and culture of the police have a significant impact on research, particularly in terms of facilitating access, ensuring research independence, and developing long-lasting connections. We conclude by proposing that establishing an effective research collaboration with the police necessitates finding a balance between the interests of academics and the police institution. To achieve this, we advocate implementing mentorship programs that pair experienced researchers with junior researchers and create collaborative infrastructure to help new scholars.

**Keywords:** Institutional Barrier, Organizational Dynamics, Police Culture, Police Research, Research Partnership

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### INTRODUCTION

In the twentieth century, there needed to be more understanding between academics and the police. The researchers' theoretical conclusions did not have an impact on police tactics. The police culture of secrecy and isolation made them resistant to giving researchers access (Brown, 2017). Over the past few years, collaborative initiatives between police and researchers have diminished mutual suspicion and led to more productive research endeavors (Henry and Mackenzie, 2012). However, Rojek et al. (2015) noted that due to the effectiveness of the cooperation program, they could only accommodate a limited number of researchers, which implies that new researchers will

have a difficult time breaking into the police research barrier. Studies have yet to address junior researchers' difficulties when researching a political entity like the police. This is significant because an increasing number of academics must enter the police research field to enhance the relevance and advancement of police science discourse, ultimately leading to improved policing (Mayastinasari et al., 2024).

Nevertheless, Rojek et al. (2015) observed that the cooperation program's effectiveness necessitated a restriction on the number of researchers it could accommodate. Consequently, new researchers may need help accessing the field of police research. These issues involve managing the intricacies of the distinct culture within police organization (Kuntjak Ivković et al., 2020), overcoming cultural barriers and forming a collaboration with the police (Hoggett et al., 2020), and overseeing the impact of the researcher's engagement with the research on both the researcher and the research itself (McCandless and Vogler, 2018). Moreover, entry-level researchers often encounter situations where they aspire to establish a research portfolio but face hindrances due to their insufficient qualifications, credibility, and professional connections, which are essential for securing research projects or even gaining access to a police institution (Davies and Biddle, 2018).

It should be noted that experienced researchers also face difficulties. Both research partnerships and established connections with police institutions, although enhancing research, nonetheless require careful management of competing interests to foster an effective relationship (Nix et al., 2017). This is evident when the police institution exerts pressure to influence the research results to get a favorable outcome that contradicts the actual findings (Davies, 2016). In a study conducted by Sausdal (2020), it was asserted that experienced scholars have consistently underscored the significance of autonomy in research and the ability to resist institutional influence. However, when considering junior academics, they may need more self-assurance and backing to maintain their position.

Karagiannopoulos and Winstone (2019) have emphasized the necessity of adopting a more comprehensive approach that caters to the needs of both junior and senior researchers. However, he still needs to provide a solution that is targeted explicitly towards junior researchers. The partnership program, as described by Brown (2017) and Rojek et al. (2015), has been found to mitigate researchers' difficulties. However, these studies should have specifically addressed the issues faced by new researchers or guided how they can acquire entry into the partnership program. The studies conducted by Coxhead (2020) provided valuable insights and advice for conducting research with the police. He emphasized the significance of establishing trust and developing formal and informal connections with the police institution to facilitate the research process. However, the studies should have elaborated on specific strategies for building connections within an institution as rigid and feared as the police. By addressing these gaps, we aim to create a more inclusive and supportive environment for new researchers interested in pursuing a career in police research.

Thus, this research seeks to bridge the gap in the literature using empirical research, which aims to explore the challenges and politics emerging researchers face when researching the police. First, this paper will assess the impact of the organizational structure of the police on research. Subsequently, an analysis will be conducted on the obstacles that newly established researchers encounter while establishing a link with the police. Finally, we will discover the impact of a research relationship with the police on the research process.

## METHOD

The researchers opted for the qualitative research approach for this study, as its objective is to comprehend the structure of the detective's process in investigation prioritization (Boddy, 2016). This study commenced with a comprehensive review of existing literature on police initiations, police-research collaboration, and the impact of such cooperation on the overall process. After acquiring substantial knowledge, the researchers semi-structured interviews with six academics previously engaged in police research. Given the ongoing presence of COVID-19 and limitations in terms of time and location, all interviews were conducted through video conferences using Microsoft Teams, each lasting approximately 45 minutes. A collection of questions was established as a reference for the interview; yet, the interview did not strictly follow the script and deviated from the predetermined list of questions if intriguing discoveries were made that could potentially yield fresh perspectives.

The six interviewees were selected using purposive sampling based on recommendations from links within the researchers' faculty. These individuals were chosen from a list of academics who have expertise in studying the police and possess diverse levels of experience in their respective fields. This selection was made to ensure alignment with the focus of our work. In this paper, their name will be pseudonymized as Andrew, Betty, David, Emily, Lucy and John to protect participants' anonymity and confidentiality (Jensen and Laurie, 2016). Andrew is a highly accomplished researcher who occupies a prominent position at a top British university. Betty is a renowned researcher in the country. David and Emily are both experienced researchers who work in a well-established center for police research partnership. Lucy is an emerging researcher who has achieved acclaim for her groundbreaking doctoral studies on the police, while John is a novice academic in this particular area of study. The researcher has included an auto-ethnography of his own and a classmate's experiences as entry-level researchers to enhance these findings (Adams et al., 2017).

## DISCUSSION

### The politics of the police and its impact on the research

The police are a highly hierarchical organization with a distinct command structure where each officer performs a particular role (Campeau, 2017). As a result, before going into the field to conduct empirical research on the police, official access must be obtained. Every police institution has its gatekeeper; for example, Police Scotland implements a single-entry research access request handled by the Academic Research Team (Police Scotland, 2021). Although this process has advantages, it also poses several obstacles. The critical factor is that the gatekeeper and potential study subjects are distinct individuals, which may result in contrasting willingness to engage, especially if the police institution lacks effective internal communication. For example, when the police academic board grants approval for the research but after that mandates a constable's participation solely based on a superior's directive, questions about their voluntary agreement arise (Belur, 2014). David and Emily observed that this process has led to a certain level of hesitancy from the participants, leading to a low turnover of questionnaires and a lack of engagement during the interview.

It could also suggest the opposite, where the gatekeeper, an authoritative decision-maker for police research, has concluded that the project is not advantageous for the institution, even though the police officers, who are the subjects, are genuinely willing to participate. This decision effectively stops the potentially beneficial research (Rubio et al., 2021). The first writer faced this limitation when conducting a previous study on officers' perspectives of policing during the pandemic. Nevertheless, the academic board of the police considered the project unsuitable because the institution believed that externally analyzing organizational strategy and effectiveness was not appropriate. In the end, the organization concluded that the primary duty of its officials is to carry out strategy rather than assess it. Lucy, a mid-career researcher, offered her experience in addressing a similar situation with the researcher:

*"The police didn't accept my proposal since it was deemed too political and could spark a heated debate amongst staff. So, what I did was instead use the Police Federation as gatekeeper, and thus, I did not fall short of willing participants."*

Academics aspiring to join the research sector may face difficulties in dealing with such rejections, feeling irritated due to the lack of support for their noble mission of developing the subject of police studies, which could benefit both the police and society in general (Baker, 2016). In line with this, we will narrate the first author's experience with the rejection of his research project by a police organization in the United Kingdom:

*"I have some experience with police research, but this is my first time conducting it in a foreign country. Accessing the police institution here was quite challenging for me. At first, they sounded welcome to research from our university and especially welcomed research on policing during the pandemic, so I focused my research project assignment around the topic. However, it's been quite a frustrating experience for me. I've had months of unanswered emails, and unfortunately, I haven't been able to visit the police*

*station in person to inquire about it due to the COVID-19 restrictions. Finally, I received a response to my research after sending multiple emails per day. Unfortunately, it was a rejection. I felt incredibly disappointed and stressed. I had dedicated weeks to perfecting my research proposal, and to make matters worse, I only had a month left until my project deadline. Before this experience, I had planned to write my dissertation on the police institution in this country. However, after reflecting on what I have learned, I now believe it is best to avoid the disappointment and time constraints that come with the possibility of another rejection."*

Another problem with a single-entry mechanism is that Lucy discussed her early-career experience of being confrontational with the police following the release of her controversial research finding: *"For months the police just won't talk to me, all my inquiries for future research rejected."* Lucy finally stated that her adverse treatment from the police had improved after a change in chief constable, transforming the institution's stance on research from unfavorable to accepting. In Indonesia, the police culture has become less hostile and accessible to the people regarding service and overall relationships. However, the idea of conducting research on the institution is still unfamiliar and likely to be met with resistance (Kurniawan, 2021).

As a hierarchical institution, the research environment for each police organization is ultimately determined by the leadership's mandate (Hartmann et al., 2018). Lucy mentioned that the institution's leadership may be the most influential factor in determining the organizational research atmosphere. Andrew and David recounted their years of experience working with numerous police organizations across England, Wales, and Scotland. Betty further stated that the United Kingdom's research environment is improving yearly as *"more and more Chief Constables are moving towards an evidence-based, research-led approach in improving policing."* Thus, when researchers study the police, they need to consider the organizational factors that affect police work and the broader political agendas that limit it. In addition, they should examine how the implementation of evidence-based policing and the evaluation of research using the "gold standard" influence and control the nature of policing and research (Lumsden and Goode, 2016).

### **Building research connections with the police**

A hierarchical structure is advantageous for researchers who have established a solid rapport with the institution's leadership (Fekjær, 2018). Andrew and Betty, as senior researchers, have proven that establishing connections with influential police people can mitigate bureaucratic obstacles and enhance the institution's willingness to embrace research. Regrettably, access to a government institution is not equally available to all individuals, which can pose challenges for novice researchers who lack prior connections with the institution (Stevens et al., 2024). It gets very troublesome if the researcher's initial studies are controversial. As Lucy has stated, *"This country is a small world; bad words quickly travel from institution to institution. The next thing you know, most criminal justice institutions were reluctant to accept my research proposal."*

Lucy's experience reveals a significant challenge researchers confront when they publish a

provocative result, not only in terms of policing research projects but also potentially undermining a researcher's career (Starheim, 2019). During the interview, Lucy offered a bit of advice to researchers considering a future academic career:

*"You know, researching was never my career option, so if I continued with these (controversial) findings, I would have nothing to lose. The same cannot be said though if you want an academic future, you cannot get on their bad side this early on your career."*

Therefore, building trust is critical for academics seeking to establish a profile in police research. During one of his earliest research studies, John, an emerging researcher, learned a technique for creating trust:

*"During research design and data collection phases, I make sure to involve the officers and their superiors in charge of research. I want to make sure they feel a sense of ownership over the research, with the hope of them truly appreciating the study's value and becoming more personally invested in its success."*

John's concept aligns with the conclusions of Huey et al. (2021), which suggest that establishing a formal or informal connection between police and researchers could effectively address conflicts of interest and overcome obstacles by clearly defining the roles, duties, and expectations of both parties.

However, this still raises the paradoxical question: how can junior researchers gain trust if the entry process precludes them from participating in the first place? David proposed several solutions to increase the police's trust in a researcher. These include becoming a co-researcher on a study with an established researcher and participating in projects with a 'shared academic-practitioner infrastructure,' such as the Scottish Centre for Crime and Justice Research (SCCJR) and the Scottish Institute of Policing Research (SIPR). These infrastructures have been shown to transform a researcher's role in researching police from a passing observer to an engaged partner seeking to contribute to better policing (Fyfe and Wilson, 2012). In response to the conditions in Indonesia, several think tanks have emerged to support police research. These include the *Pusat Studi Pengembangan Perpolisian Masyarakat* (Center for Community Policing Development Studies) and the Center of Terrorism and Radicalism Studies (CTRS), both located in the Indonesian Police Science College (Gani et al., 2023). Building a research relationship can then be represented as a phase. The first is an entry-level researcher with no prior connection with the institution, followed by gradually building trust as the researcher's profile increases, and lastly, earning an established research partnership with the police.

### **The politics of the police and its impact on the research**

Building effective research partnerships with police organizations requires a careful balance between academic interests and the practical needs of the police. As David aptly put it:

*"Partnership works both ways; you need to ask yourself your motivation for doing the*



*research as part of an assignment. Or do you want to make better policing? If it's the latter, then you'd have no problem building a partnership because it's what they (police) want too."*

By engaging in research, police institutions are committing valuable time and resources to accommodate the project, which can be particularly burdensome during periods of uncertainty, such as the COVID-19 pandemic. While police organizations may be enthusiastic about research to improve policing, they can only accommodate some projects due to resource constraints (Davies et al., 2020). Reflecting on the first writer's own experience, he encountered resistance from the police when attempting to conduct research on policing during the pandemic. The police believed that an internal assessment of strategy and officer experiences during the pandemic was more appropriate, as they planned to conduct their review once the public health risk had subsided. This rationale appeared contradictory, given that a classmate managed to research the same topic, albeit with significantly reduced participation.

However, because only mutually beneficial research is likely to be undertaken, the issue became apparent that potentially sensitive research may not emerge, given the lower likelihood of finding interested institutions for contentious or sensitive projects (Murray, 2019). The course of action is to stop ruminating on what could have been and start thinking about what other valuable research we can undertake. I took this course of action when the first writer's police research was initially rejected, and I adapted the rejection into this rather exciting project. In retrospect, if the communication channel between the first writer and the police institution had been established more effectively and not hindered by factors such as COVID-19, which ultimately prevented face-to-face meetings, the rapport between the writer and the police could have been improved, resulting in a more thorough explanation of the research project.

The degree of partnership also poses the question of how much control the researcher has over their study. Betty noted that a researcher must discern between criticism and pressure: *"In partnership project, I will not accept dictation from them. I will address any fair critics, but I will not be pressured into changing the findings"*. However, junior researchers may lack experience in dealing with such pressure; Lucy related her own experience of feeling pressure from the police because her findings heavily scrutinize the institution: *"For months it felt like I was against the world. I would just go on long runs to escape from everything"*. Emerald and Carpenter (2015: 187) points out that part of the research process may cause harm to the well-being and mental health of early-career academics; in Lucy's case, this appears to be a significant issue because it emerges from her findings that significantly affects something big and powerful as a government institution.

Andrew highlights that communication is crucial when undertaking very critical research to minimize sudden pressure arising from an unfavorable report; he related his experience when he published significant issues on a recent Police Reform: *"(that research) was indeed very critical; however, during the research process, I was always updating the result with the police. As a result,*

*they know what to do when the critical findings go public."* Working collaboratively with the police does not imply that the researcher will be wholly dictated. This means that the researcher should 'encourage' the police to continuously discuss the findings throughout the research process, giving them a 'voice' during the research. While the power struggle between collaboration or control of the study will occur, early-career researchers will need to be tutored to deal with the pressure.

### **Challenges and politics researchers faced when researching the police**

The police institution has unique difficulties for novice and seasoned researchers, influenced by their background and relationship with the police. Figure 1 (see p. 185) illustrates the comparison between the problems encountered by junior and senior researchers when doing police research.

Emerging researchers often need help acquiring access to police institutions, primarily due to institutional barriers and a lack of experience. This issue is exacerbated by the pressure they have to maintain control over the research in the face of police involvement. Moreover, dealing with the consequences of their contentious research discovery, which can provoke the ire of law enforcement agencies and hinder their access and career progression, could also adversely affect their emotional well-being.



**Figure 1.** Comparison of the Challenges Faced by Junior and Senior Researchers When Conducting Police Research (Compiled by the Researchers)

On the other hand, the main problem for senior researchers in police research is managing organizational changes within the police force that may affect the leadership's attitude towards research, either becoming more or less supportive. In addition, established researchers must navigate

the delicate balance between being critical of the police institution that grants them access, as this is crucial for maintaining trust and upholding research integrity and credibility. Fortunately, there is a positive development in police leadership as they are increasingly adopting evidence-based policing and making policies based on research. Therefore, although a change in leadership may impact their attitude towards research, it should not be a significant problem since the police are inherently moving towards a more positive course.

Overall, every researcher must confront a similar-themed challenge firmly ingrained in the organizational culture of the police. Officers exhibit a cautious approach towards research due to concerns about critically examining their institutions. This creates an atmosphere of skepticism and resistance, hindering access to datasets and data collection. However, regarding their expertise, acquiring sensitive information, regardless of its level of confidentiality, continues to take a lot of work. This difficulty could be mitigated by engaging the police institution right from the initial stages of designing the research project. Yet, the issue is aggravated by the internal bureaucracy and hierarchical structure of the police, which makes it difficult for researchers to meet their deadlines while navigating the process of granting or denying access. Therefore, these everyday challenges are the focal point of the intricate dynamics that all researchers must confront to carry out significant and exceptional studies within police organizations.

## **CONCLUSION**

The results of this study shed light on the challenges that academics encounter, which vary in nature depending on whether they are in the junior or senior stages of their careers. First, the approach that the police take to research is influenced by the fact that they are a bureaucratic and hierarchical institution with an inherent police culture. The second aspect is the significance of the researcher's interpersonal connection and the establishment of trust with the police, both in junior researchers. Lastly, junior researchers must create a research profile while learning to cope with pressure and maintaining connections with law enforcement professionals throughout the research process. By demonstrating an understanding of junior researchers' challenges, this empirical research helps to fill a gap in the existing body of literature on police research.

An issue that the writer was experiencing was transformed into a very intriguing project addressing the challenges experienced by every academic at his level due to the research conducted because the study process itself was successful. All of the participants who were contacted expressed great enthusiasm about participating in the study. All six of them were so satisfied with the interview that they decided to plan more time to discuss this matter with the researchers after the experiment was finished. This study is subject to several restrictions, such as the researchers' time constraints and the possibility that the problem under investigation is already widely recognized or not unique. Conducting a focus group discussion can effectively draw a more

significant number of participants in a shorter amount of time. Thus, conducting a focus group discussion can efficiently attract more participants within a shorter duration. Integrating qualitative data with a quantitative survey using a mixed methods technique could also significantly improve the study's content analysis. Additional studies in this area can gain advantages by assessing the success of research collaboration initiatives, such as the SIPR and SCCJR, in training new scholars to enhance their police research.

## **SUGGESTION**

Based on the findings of this study, we suggest that future research on police institutions should be undertaken more comprehensively and collaboratively. A practical approach for novice researchers is to create partnerships with experienced academics with a strong connection with the police. These collaborations can potentially lessen the gap between junior researchers and the rigorous bureaucratic nature of police institutions while also offering mentorship and valuable insights. In addition, institutions that facilitate police-research partnerships, such as the Scottish Institute of Policing Research (SIPR) in the United Kingdom and *Pusat Studi Pengembangan Perpolisian Masyarakat* (Center for Community Policing Development Studies) in Indonesia, should enhance their collaborative endeavors by providing opportunities for aspiring researchers to participate in small-scale projects and engage in joint research with seasoned academics in the field. This initiative seeks to enhance the calibre of research on police and policing. Furthermore, it has the potential to entice a more significant number of scholars to engage in research and advance the field of police science, particularly in regions such as Indonesia, where research undertaken by non-officer academics is still lacking in number.

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## Child Sex Tourism: Commercial Sexual Exploitation in Indonesia and Singapore

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### Abstract

This paper aims to elucidate the mechanisms through which this crime occurs and persists. This research employs an analysis of Political Economy and Market Analysis, focusing on the impacts of the crime. This study originates from the issue of Commercial Sexual Exploitation of Children (Sex Tourism) between Indonesia and Singapore. This research is a qualitative study that emphasizes a literature review. It employs Political Economic Analysis (PEA) theory and Theories of Change as analytical tools. The findings of this research indicate that the crime discussed in this study is caused by multidimensional factors, including political, economic, and market-driven aspects. Additionally, the impacts of this crime result in damage to institutions, particularly in the political aspects, as well as to individuals and society, affecting social, economic, and physical dimensions. Child sexual tourism crime is a part of CSEC, which is a crime against human rights and human exploitation. There is a need for serious collaboration to address and mitigate this issue.

**Keywords:** Children, Exploitation, Sex

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## INTRODUCTION

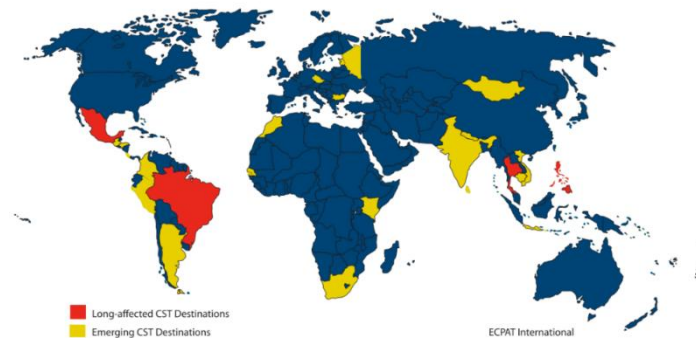
Recently, commercial sex exploitation of children (CSEC) has caused much unrest. The international community has recognized and become concerned about this type of crime since the declaration of resistance to CSEC (ECPAT International, 2008). Due to their vulnerable nature, sexual exploitation of women and children happens in many forms, such as human trafficking, modern slavery, sex tourism, and organ trafficking (Paoli, 2014). It has been identified that there are several risk factors for CSEC, such as demographics, criminal activity, poverty, and parental influence (Franchino-Olsen, 2021). In other words, they can be classified into two big groups: economic and non-economic. Poverty contributes to most cases, while the non-economic factor can be identified as the escape from path dependency (Ehrenreich & Hochschild, 2003).

The nature of CSEC varies depending on the specific type of crime under discussion. Sex tourism is a relatively straightforward example of CSEC. Human trafficking involves a more complex pattern of crime due to the crossing of national boundaries by both perpetrators and victims. Sex tourism can ultimately evolve into human trafficking. The formation of sexual tourism itself is

shaped in some particular ways. As discussed earlier, economic and non-economic factors trigger CSEC. In the case of sex tourism, a part of CSEC, the market is driven by the same motives that led to the formation of CSEC. Vulnerability to women and children, especially in low or poor economic conditions, can turn them into exploitation commodities (Brooks & Heaslip, 2019b). This results in a transactional flow that facilitates the exploitation of children and women by sex tourists, both local and foreign (Oppermann, 1999). In the context of sex tourism, travelers act as the primary perpetrators and brokers, while women and children are the victims of the human trafficking crime known as sex tourism.

### **Global Trends of Commercial Sexual Exploitation (Sex Tourism) of Children**

This section will highlight the global trend of a type of CSEC: child sexual tourism. Child sexual tourism is a worldwide phenomenon. The illustration of the international trends in sexual tourism can be seen in Figure 1.



**Figure 1.** International trends in sexual tourism (ECPAT International, 2008)

Based on Figure 1, it is evident that the incidence of child sexual exploitation is still on the rise. Globally, women and children are the primary victims of exploitation. Based on ECPAT International (2008), the Asian continent, especially Southeast Asia, has a high rate of growth in sex tourism, especially in children.

The distribution of sex tourism victims varies, ranging from low-income to high-income or more prosperous areas (Brooks & Heaslip, 2019b). It has a reverse trend compared to the perpetrators and brokers looking for ‘customers’ from regions that are said to have lower market prices than their home regions (Oppermann, 1999). A notable incident occurred in Aceh post-tsunami in 2005. The traffickers had successfully brought an opportunity to sexually exploit children even though the Indonesian government had tried to prevent it (Cotter, 2009).

The growth of the child exploitation sex industry is exceptionally high in countries like Cambodia and Thailand, which are considered to have the most favorable prices in the ASEAN region (Cotter, 2009). For example, in the ASEAN region, poor women and children in northern

Thailand are moving to more economically promising areas, such as Bangkok or Pattaya (Oppermann, 1999). Some of these migrants volunteer as commercial sex workers, but most of them are unaware of being exploited sexually (Ehrenreich & Hochschild, 2003). Against this case, the ASEAN region, in particular, continues to improve its performance in battling CESC by creating regulations that aim to stop and deter the growing trend of sex tourism (ASEAN, 2015).

### **Indonesia–Singapore Commercial Sexual Exploitation of Children Case**

Child sexual tourism occurs in several areas of Indonesia. The most famous child sexual tourism is in Bali and Batam (Sakulpitakphon et al., 2011). Batam is an island located at the border between Indonesia and Singapore, as seen in Figure 2.



**Figure 2.** Map of the island of Batam (Studies, 2016)

Figure 2 shows Batam at the forefront line of Indonesia from Singapore's standpoint. This region experiences the most formidable challenge of International criminal cases, such as child sexual tourism. Data shows that almost 3000 tourists from Singapore and Malaysia travel to Batam every week for sexual tourism. Interestingly, children are the preferred demographic of sex workers for these travelers (Sakulpitakphon et al., 2011). Singaporeans prefer sex tourism in Batam for its cheaper price compared to prostitution in Singapore. The Singaporeans who visit Batam are mostly middle-class workers with average incomes seeking an escape from reality (Lyons & Ford, 2008).

Child sex tourism is also linked to trafficking and sexual exploitation. Based on the Indonesian regulation of Child Protection Act Number 61 in 2016, children are defined as "...someone who is under 18 years old, including children who are still in the womb..." (Presiden Republik Indonesia, 2016). The incidence of child sexual tourism in Indonesia fluctuates. Children Trafficking and Children Sexual Exploitation 2011-2016 can be seen in Figure 3.

Figure 3 (see p.193) shows the varying trends each year. The declining number of crimes involving children in 2016 is thought of as an effect of the tight enforcement of the regulation on women and children protection at both national and regional levels. Since its establishment as an autonomous region in 2002, Batam has been known as the hotspot for the sex industry in Indonesia (Bah, 2022). The victims of sexual exploitation originate not only from Batam but also from other

provinces in Indonesia (Sakulpitakphon et al., 2011). Combined with the flow of sex travelers from abroad, especially Malaysia and Singapore, this is seen by the brokers as an opportunity to run their illegal business by exploiting children and becoming traffickers. The growth of the internet also brings a new *modus operandi* in child sex exploitation; for example, sex travelers from Singapore use the keyword ‘*Sammyboy*’ to look for the ‘*Batamnese*’ children for sex before their arrival to Batam (Williams et al., 2008). Due to the evolving pattern of *modus operandi*, child sex tourism can now be divided into online and offline categories.



**Figure 3.** Children Trafficking and Children Sexual Exploitation 2011-2016 (National Commission for Women and Children Protection, 2016)

The previous study conducted by Tanielian (2013) explored the sexual exploitation of children in ASEAN, including Thailand, Philippines, Vietnam, Cambodia, and Indonesia. However, there is no review or research to compare the sexual exploitation of children in Indonesia and Singapore. Therefore, based on the background, this review aims to explore the transactional sexual exploitation of children between Indonesia and Singapore.

## **DISCUSSION**

### **Indonesia–Singapore Children Sexual Tourism**

#### *Political and Economic Analysis*

Political and economic factors are crucial in analyzing sex tourism cases in Indonesia. Strategically, political and economic analysis examines how an event or phenomenon can occur. In practice, there are three stages of analysis. It consists of the analysis of the macro-level or country scale, followed by sectoral analysis, and the smallest study is the analysis of the problem itself.

Indonesia’s economic growth has been rising spectacularly. Since 1999, Indonesia has been nominated as a member of the G20 (Samosir, 2024). However, this contrasts with the economic disparities among Indonesian provinces due to the differences in resources owned by each region. For example, the wealth of the wealthiest area can be up to ten times that of the poorest province (Resosudarmo & Vidyattama, 2006). Given this inequality, Batam, one of the leading industrial

regions in Indonesia due to its strategic location near Singapore (the Golden Triangle), has attracted people from other provinces to migrate to this city (Hewat, 2010). However, the victims of sex exploitation originate not only from different regions but also from Batam itself. Another factor is the low education level of the victims.

Furthermore, some victims live in displaced communities, which shape their values differently from their original society (ECPAT International, 2008). Perpetrators, who mostly come from Singapore, choose Batam as their primary destination for sex tourism because the value of the Singaporean Dollar (SGD) has strengthened almost five times compared to the Indonesian Rupiah since the 1997 monetary crisis (Hewat, 2010). Therefore, spending money in Indonesia is more cost-effective (Lyons & Ford, 2008). In addition to these factors, the geographical position and the ease of travel between countries, including transportation and visa-free policies, facilitate these ongoing transactions.

At the regional level, ASEAN has enacted a law to prevent child sexual exploitation (ASEAN, 2015). Indonesia has implemented several laws to combat this issue, including the National Child Protection Act Number 61 of 2016. At the local level, the municipality has also enacted laws to prevent human trafficking and sexual exploitation (Studies, 2016). The main challenge for the Indonesian government is the lack of officials' ability to enforce the law. Furthermore, the laws enacted by municipalities often fail to respond promptly to the actual situation on the ground and lack enforcement, resulting in ineffective implementation of the rules (Studies, 2016).

### *Market Analysis*

Market analysis should describe the market's maturity, cost, international possibilities, and development implications, focusing on five key areas. It consists of price, ease of market entry, level of violence, the extent of protection, and the legitimacy of the criminal market (Shaw et al., 2016). The demand and supply of the service determine the market price of sex tourism in Batam City. The average cost the perpetrators spend to look for victims is around \$42 (Rp 250,000) per night (SonicGear as Cited in Williams et al., 2008). Compared to the cost of sex tourism in Singapore, there is a significant price difference, with Singapore costing \$445 (S\$650) per night (South China Morning Post, 2017). The considerable price disparity is a significant factor in why perpetrators choose Batam for sex tourism over Singapore.

In the market entry analysis, it is apparent that victims can quickly become entangled in this market. Due to a lack of education and the need for income, victims can easily fall into the vicious cycle of sexual exploitation. It is also supported by networks such as 'Sammyboy' or online sex service provider websites (Lyons & Ford, 2008). These factors, coupled with weak regulation enforcement, contribute to the stability and growth of the child sex tourism market in Batam as the demand from Singaporean foreigners and the supply of Indonesian children increase.



The low level of violence that perpetrators use against authorities indicates that the level of violence associated with sex tourism is low. This is because the perpetrators operate on a 'one-stop service' basis, making a single visit and stopping without forming a robust criminal network (Williams et al., 2008). Moreover, the perpetrators use the system to share information on the website and never directly meet the perpetrators and 'potential perpetrators'. From the victims' perspective, they rely solely on their intuition and stories from previous migrants who had been to Batam or intentionally ignored the actual situation in Batam (Hewat, 2010).

Violence, the lowest form of protection, is a factor in this crime (Shaw et al., 2016). Thus, it is evident that state oversight of this crime is still low. Although local and regional policies have been enacted to minimize the incidence, bilateral agreements are needed to strengthen prevention efforts. Until now, there is no specific bilateral agreement related to the exploitation of children between Indonesia and Singapore (Kafrawy, 2014). Furthermore, it is widely known that some law enforcement, particularly in the criminal justice system, helps these illegal businesses by hindering proper victim protection, case prosecution, and investigation (Moses, 2022). With those two factors, illicit activities can continue to increase. Sex tourism is considered deviant by local communities in Indonesia. This is reflected in a recent incident where the local community, in collaboration with the government, attempted to dismantle a notorious sex tourism area in Batam (Batam Pos, 2020).

### *Doctrinal Analysis*

Doctrinal analysis is a legal research method focused on existing legal rules and how these rules are interpreted and applied by courts (Pradeep, 2019). Doctrinal research shows the gaps and ambiguities in the law and provides the foundation for legal reform and policy development (Hutchinson, T. & Duncan, N., 2012). It thoroughly examines statutes, case law, regulations, and other legal sources to understand how the law operates. This type of analysis seeks to clarify the meaning of legal texts, identify principles and doctrines, and assess how these legal elements are implemented and enforced by judicial and administrative bodies.

### **National Laws**

Both Indonesia and Singapore have a national law to prevent and combat child sexual exploitation. Indonesia has Child Protection Law No. 35 of 2014 (Republic of Indonesia, 2014) and Presidential Regulation No. 61 of 2016 (President Republic of Indonesia, 2016), while Singapore has Penal Code (Amendment) Act 2019 (President of Singapore, 2019).

## **Implementation and challenges**

### *Indonesia*

Child Protection Law No. 35 of 2014 (Republic of Indonesia, 2014) and Presidential Regulation No. 61 of 2016 (President Republic of Indonesia, 2016) collectively enhance child protection in Indonesia. However, the challenges related to the need for coordination between government agencies and non-governmental organizations (Kosandi et al., 2017).

### *Singapore*

The law enforcement in Singapore is more effective. However, the main challenge is solid bilateral cooperation with neighboring countries like Indonesia (Windari, 2019).

## **The Child Sexual Exploitation in Indonesia and Singapore Detrimental Effects**

The crime of child sexual exploitation can be analyzed from the perspective of the perpetrators and its impact at the state, community, and individual levels. The harm factors under examination include political, social, economic, and physical harm (Shaw et al., 2016).

### *Political Harm*

Child sexual tourism has prompted the establishment of various international, regional, and local-level legislations. The bilateral relationship between Indonesia and Singapore, particularly in resolving this issue, is complex. Indonesia has implemented municipal and national laws (Kosandi et al., 2017). The Indonesian and Singaporean governments have adopted international and regional policies ratified and agreed upon by ASEAN countries. However, differing views between Singapore and Indonesia on this issue suggest a lack of trust from Singapore in Indonesia's ability to collaborate effectively to resolve this issue (Kafrawy, 2014). This mistrust has led to suspicion from the Indonesian government towards Singapore. As a result, the Indonesian government has postponed every bilateral Defence Security Act (DSA) cooperation proposal submitted by Singapore in the last decade, as they believe the contents to be more beneficial to Singapore (Kafrawy, 2014). These circumstances have hindered the enforcement of laws against child sex tourism crimes and human trafficking.

### *Social Harm*

The social impact of child sexual exploitation manifests as a negative stigma towards the child victims (ECPAT International, 2008). Children victimized by sex tourism risk developing deviant behavior (Greenbaum et al., 2018), which could potentially lead them to become perpetrators of exploitation crimes. The community or the surrounding environment can also marginalize these victims (ECPAT International, 2008). On the perpetrator's side, exposure to their crime can change social status, resulting in societal ostracization (Lyons & Ford, 2008). This can also negatively impact the reputation of those in the 'Sammyboy' community, who provide information about sex tourism

in Batam (Williams et al., 2008).

### *Economic Harm*

The economic impact on the destination country of the crime includes the creation of economic distortion (Shaw et al., 2016). The presence of an illegal market for sex tourism makes it challenging for the government to measure the success of development in Batam due to the distorted underground economy (Simon et al., 1982). However, it is worth noting that the economic losses incurred in the effort to eradicate sex tourism are relatively minor compared to other crimes, given its classification as a crime against humanity.

### *Physical Harm*

This crime inflicts significant physical and mental harm on its victims. Sex tourism is a traumatic experience for children, leading to depression, suicidal ideation, discomfort, and anxiety. These experiences can result in future behavioral changes. Additionally, the emotional manipulation by the offender can create a complex bond that allows the offender to control the victim (Greenbaum et al., 2018). Victims of sexual exploitation also face an increased risk of contracting sexually transmitted diseases such as HIV/AIDS (ECPAT International, 2008).

### **Response to the Issue and Theories of Change**

Three stages can be employed in responding to direct, indirect, and mitigating responses (Shaw et al., 2016). Both the Indonesian and Singaporean governments have responded by bolstering legislation related to human trafficking and child exploitation. This direct response to the existing sex tourism crime involves the establishment of an Intergovernmental Commission on Human Rights (AICHR) collaboration, which forms direct regulations for the prevention and enforcement of child sexual exploitation crimes (Sakulpitakphon et al., 2011). The primary aim of this collaboration between countries is to minimize the risk of such crimes occurring in the future and reduce the harm caused by ongoing ones. Indonesia has taken stringent steps by creating preventive regulations from the municipal to the national level.

In contrast, Singapore, which has better control of exploitation crime (State, 2019), did not participate in ratifying the UN agreement on human trafficking and human exploitation protocols. However, a specific bill has been prepared and passed since 2014 to strengthen the existing penal code in Singapore to suppress existing sex tourism offenders (Yea, 2015). With the application of BFWI, the activities of foreign travelers visiting the destination country can be quickly recorded and supervised.

An indirect approach to preventing crime is strengthening ASEANAPOL, the inter-state police organization in the ASEAN region, to exchange data and information through the Treaty on

Mutual Legal Assistance in Criminal Matters (Sakulpitakphon et al., 2011). There are also education centers for law enforcement apparatuses that aim to understand the modes of transnational crime, namely schools for law enforcement in ILEA Bangkok and JCLEC Semarang (Gordon, 2019).

In the mitigation phase, the response must involve policies that educate the public, such as education or counselling by the Indonesian Ministry of Social Affairs targeting vulnerable segments of society. The activity aims to prevent events leading to sexual exploitation that target children and women (Probosiwi and Bahransyaf, 2015). Thus, focusing on cutting off the supply in the community will be more effective by directly involving the community and increasing the society's knowledge and awareness about this matter.

Cases of child sexual exploitation crimes have spurred the government and society to collaborate to prevent this crime. Two main programs can be implemented. The first is to minimize the potential for crimes and reduce harm by establishing regional agreements, national regulations, joint work units, and Joint Educational Institutions. The second is to minimize supply channels for these crimes by using education and counselling for society, especially women and children from low socio-economic backgrounds. Besides that, awareness campaigns and school programs can be established to equip children with knowledge about their rights and how to protect themselves.

The sex tourism market, which has generated financial benefits, is suitable for dealing with theories of change deterrence. The increased surveillance of these crimes will raise the costs of these crimes, so the offenders will no longer benefit (Midgley et al., 2014). The deterrence method is expected to identify possibilities or assumptions (hypotheses) (Midgley et al., 2014). This method begins by identifying the perpetrators of this crime. Knowing that most of the offenders are Singaporean males and the victims are Indonesian, a transnational law enforcement approach is needed. The formation of legislation at the regional level, such as ASEAN and the bilateral cooperation between Indonesia and Singapore, which has yet to be agreed upon, will significantly influence the decline in CESC rates. Declined demand due to border controls through BFWI will also reduce market value and automatically reduce the supply of victims from regions in Indonesia. In the next sector, criminal justice reforms such as education, training, and cooperation in JCLEC and ILEA will significantly accelerate the paradigm shift in the government apparatuses combating this crime. The essential point of deterrence is the emergence of a sense of vigilance in every community where the law is present (Midgley et al., 2014). Thus, this collaboration is expected to increase the deterring effect on offenders, minimize supply, and decrease CESC rates.

### **Child Sexual Tourism: A Global Issue**

Addressing child sex tourism is not confined to internal problems in Indonesia or Singapore alone. It has evolved into a bilateral, regional, and even global issue. The process of child sexual tourism involves multiple layers of organizations and society, necessitating a collective effort to

combat this problem (ECPAT International, 2008). International ratification by the UN, regional agreement by ASEAN, and support from transnational NGOs such as ECPAT and other organizations have significantly contributed to raising awareness and creating a deterrence effect for child sexual tourism cases. The anticipated outcome is a reduction in child sexual tourism cases in Indonesia (Batam).

Key initiatives, including direct, indirect, or mitigating responses to criminal activities and their projections in deterrence theories of change, will be highly effective if they are proportionately combined and implemented. The complexity of child sexual tourism demands a comprehensive response that will be highly effective if applied at any level and type of crime related to child sexual tourism, such as forced labor and human trafficking. The methods and theories used in enforcing the laws can also be applied to similar types of criminals worldwide. Essentially, the more complex the crime, the greater the need for strength and cooperation between institutions and countries to eradicate it (Shaw et al., 2016). In other words, cooperation, coordination, and problem analysis are at the heart of identifying and resolving these issues. The practical arguments supporting combating the issues are Strengthening Bilateral Cooperation, Increasing Law Enforcement Capacity, Public Education and Awareness, and Support for Victims.

## CONCLUSION

Child sexual tourism is a part of Commercial Sexual Exploitation of Children (CSEC), which is a crime against human rights and constitutes human exploitation. The growing trend of child sexual tourism in Indonesia and Singapore has experienced a setback, particularly following several international and regional conferences. Consequently, the number of child sexual tourism crimes has decreased since 2016.

Responses such as coordination in ratifying international, regional, and national regulations must be optimized to achieve the best results in directly addressing these issues. Similarly, the coordination of the regional police and Joint Educational Institutions can expedite the reform of law enforcement apparatuses in Southeast Asia and support the projections of the deterrence effect to minimize existing CST crime. Moreover, the theory used to analyse this problem is applied at multiple levels. It can also be applied to issues directly related to child sexual tourism crimes as long as they fall within the CSEC domain.

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**Shielding Public Health:  
Indonesian National Police (INP)'s Measure Against COVID-19  
Vaccine Certificate Forgery**

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**Abstract**

The purpose of this study is to discuss the benefits of implementing several strategies carried out during the COVID-19 period. COVID-19 vaccine certificate forgery has posed a threat to public health. The Indonesian National Police (INP) has implemented various strategies to overcome this crime. The intervention strategies involve early detection and prevention, such as cyber patrol, border control, public involvement, and strict law enforcement. Other countries have also carried out similar measures; however, there are several additional strategies, such as the formation of a special force as well as utilizing blockchain technology for a more secure digital vaccine certificate system. These strategies could be a benchmark for the INP in handling cases of letter forgery.

**Keywords:** COVID-19 Vaccine Certificate Forgery, Global Comparison, Indonesian National Police

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**INTRODUCTION**

The severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) was first identified in China in December 2019. The virus swiftly spread worldwide, prompting the World Health Organization (WHO) to declare a Public Health Emergency of International Concern (PHEIC) on January 30, 2020. The situation escalated, hence the WHO officially classified it as a pandemic on March 11, 2020 (WHO, 2020). On 22 May 2020, SARS-CoV-2 infected approximately 4,995,996 individuals with confirmed cases and deaths of about 327,821 people in 216 countries (WHO, 2020), and the number is increasing worldwide. Indonesia reported its first confirmed case of COVID-19 on March 2, 2020. This marked the beginning of the pandemic within the country (Rozalini et al., 2020). The epidemiological landscape in Indonesia has been profoundly affected by the COVID-19 pandemic. As of August 9, 2023, the nationwide transmission has been indicated by the country's report of over 6.8 million confirmed cases and more than 161,900 deaths (Worldometer, 2023).

However, the actual numbers of cases and deaths are suspected to be significantly higher due to many unconfirmed cases (Megasari et al., 2021).

The primary modes of SARS-CoV-2 transmission include respiratory droplets generated by coughing, sneezing, talking, and contact with contaminated surfaces (Punn et al., 2020; Rauf et al., 2021). The transmission of COVID-19 via international travel poses a significant concern; therefore, various countries have been implementing diverse control measures (Petersen et al., 2021). Primary public health strategies have emphasized non-pharmaceutical interventions (NPIs) in the early stages of addressing the COVID-19 pandemic. This has involved the strict implementation of physical distancing protocols, movement limitations, and lockdowns. In response to the pandemic, the Indonesian government has immediately implemented these social distancing protocols, extensive testing, and contact tracing to control the virus's transmission. However, these travel restrictions have had notable social and economic implications (OECD, 2020; Correia et al., 2020; Kimberly, 2020), particularly in low- and middle-income countries (LMICs). They have disproportionately affected vulnerable populations, causing job losses, disrupted education, economic shutdowns, hindered access to essential health and public services, and increased food insecurity (Kimberly, 2020). WHO has criticized blanket travel bans that impose significant hardships on both lives and livelihoods more than preventing the international spread of the virus. All countries are encouraged to reassess and revise their measures regularly (WHO, 2021). Policymakers are exploring alternative strategies to lockdown as they consider easing current restrictions.

Immunization has effectively controlled outbreaks of diseases throughout history, such as smallpox and yellow fever (compulsory for travelers to and from endemic areas) (Wagner et al., 2019). Hence, international efforts have been established to distribute vaccines to combat SARS-CoV-2 (Petersen et al., 2021). As of April 14, 2021, vaccination is underway in at least 171 countries despite the challenges (Eisenstadt et al., 2020). The Indonesian government took proactive steps to secure vaccines early, finalizing procurement in 2020. By January 2022, the goal was to administer 426 million doses from various suppliers. This effort aimed to vaccinate over 181 million citizens to achieve herd immunity (Arifin et al., 2021; Fuady et al., 2021). By November 21, 2021, 32.2% of Indonesia's general population had been fully vaccinated (Marzo et al., 2022). Global efforts to distribute COVID-19 vaccines have prompted implementation of novel public health strategies, such as vaccine mandates and certification systems (Hall and Studdert, 2021). To enhance vaccination rates, proposals for COVID-19 immunity certificates have been advanced for individuals who are fully vaccinated or have recovered from the virus. These certificates contain personal details, vaccination dates, and dosage information (Eisenstadt et al., 2020). Beyond providing proof for accessing public events and air travel (Khan et al., 2022), these certificates also serve as incentives to bolster public participation in vaccination campaigns (Hu et al., 2021).

Traditional immunization certificates or cards rollout, however, face considerable challenges such as vulnerability to forgery (Marhold et al., 2021), corruption, alterations, readability issues for non-health professionals, prone to being misplaced and susceptible to damage from rain (Wagner et al., 2019). During the pandemic, a hidden marketplace promoting counterfeit COVID-19 test, and vaccine certificates has rapidly expanded, involving over 1,200 vendors worldwide, including in the UK (BBC, 2021). The forgery of vaccination certificates is extremely dangerous and harms not only the individual but also others. Unvaccinated individuals with forged certificates face a heightened risk of contracting COVID-19 and, if infected, are more likely to experience severe symptoms. When such individuals become infected, it poses a significant risk to those around them (Kemenkes, 2021; Aisyah et al., 2022). Therefore, researching COVID-19 certificate forgery is crucial to ensuring public health safety. Counterfeit vaccine certificates have gained media attention in Europe (Ambrose, 2022; Euractive, 2021), the United Kingdom (Raj 2021), the United States (Department of State, 2021), Africa (Mawa Foundation, 2022), Australia and New Zealand (Arnold 2022), and Asia including various cities in Indonesia (Pengadilan Negeri Klaten, 2021; Pengadilan Negeri Makassar, 2022). Although there is some literature discussing COVID-19 certificate forgery (Heghes, 2021; Nasution, 2022; Georgoulis et al., 2023; Kotian et al., 2023), there are still limited studies that specifically address the police strategy to intervene in this crime, particularly in the Indonesian context.

The INP has implemented proactive measures to address the threat of COVID-19 vaccine certificate forgery, emphasizing the importance of ensuring the authenticity of vaccination documentation. This study thoroughly reviews the INP's strategy against vaccine certificate fraud by analyzing domestic case studies and comparing global approaches to provide insights for guiding future policies and supporting public health efforts.

## METHOD

This study employs a document analysis to discuss the domestic case studies and a literature review to compare global strategies. Document analysis is a qualitative method used to examine and interpret data to extract meaning, gain insights, and generate empirical knowledge (Bowen, 2009; Nasri, 2023; Dalgish et al., 2020). Meanwhile, the literature review is characterized as a comprehensive evaluation of existing knowledge on a specific research topic, encompassing the associated themes and the diverse viewpoints articulated (Psarommantis and May, 2023).

We developed a comprehensive search strategy for the literature review using academic databases (e.g., PubMed, ScienceDirect, Google Scholar), institutional repositories, government publications, and grey literature. The keywords used include: "COVID-19 vaccine certificate", "COVID-19 vaccine pass" or "COVID-19 vaccine passport", "COVID-19 immunity certificate", and "forgery" or "fake" or "counterfeit" or "falsified" or "falsification" or "fabricated", and "law

enforcer" or "police officer" or "police". Initially, our search strategy yielded 5,490 articles. Due to duplication, 855 articles were excluded, 3,681 studies with inappropriate titles and abstracts were excluded, 302 were excluded due to unavailable full text, and 174 studies with inappropriate methods and outcomes were excluded. After a thorough and detailed review of 478 studies, irrelevant studies or those lacking empirical data or critical analysis were excluded. Finally, data extraction was done for the three articles and four news. The essential data elements, including author, year, location, detail of forgery, and police officer strategy, were extracted from selected studies. Then, we synthesized findings to identify common themes, trends, and gaps related to COVID-19 vaccine certificate forgery and law enforcement responses.

We collected publicly available documents from the INP and other relevant sources about their measures against COVID-19 vaccine certificate forgery for the document analysis. We analyzed policy documents, reports, official statements, and case studies to understand the INP's strategies, challenges faced, and outcomes achieved. We compared findings from the national case studies gained from the document analysis of the INP's measures with the literature review of global comparison insights to identify lessons learned and best practices for enhancing strategies against vaccine certificate forgery.

## **RESULTS AND DISCUSSION**

### **Domestic Case Studies**

<b>No</b>	<b>Location</b>	<b>Detail of forgery</b>	<b>Legal Basis</b>	<b>Strategy</b>
1	East Java (Malang District Court, 2021)	COVID-19 vaccine certificates were promoted through social media and then edited using editing apps (e.g., CorelDraw and Photoshop) to make a fake certificate and alter the data based on the buyer's request.  Outreach: 23 vaccine certificates Profit: IDR 5.000.000	Article 263 paragraph (1) of the Criminal Code Jo Article 55 Paragraph (1) to 1 KUHP.	Cyber Patrol on Facebook by INPs.
2	Jakarta (North Jakarta District Court, 2021)	COVID-19 vaccine certificates were promoted through Facebook. Then, he downloaded the vaccine certificate online and edited it through CorelDraw apps to fit the buyer data. After everything was finished, he sent it on an expedition.	Article 263 paragraph (1) of the Criminal Code Jo Article 55 Paragraph (1) to 1 KUHP.	Expedition screening and checking.



3	East Java (Surabaya District Court, 2022)	The defendant produced fake COVID-19 vaccine certificates for between IDR 150,000 and IDR 325,000, depending on the dose and speed of production. The defendant made the certificates without administering the vaccine, only by sending ID cards and phone numbers. The information was then published to the website <a href="https://Pcare.bpjs-kesehatan.go.id">https://Pcare.bpjs-kesehatan.go.id</a> .	Article 35 Jo. Article 51 of the Law No. 11 of 2008 Jo Article 55 Paragraph (1) to 1 Criminal Code or Article 263 paragraph (1) of the Criminal Code Jo Article 55 Paragraph (1) to 1 Criminal Code.	The audit results show that the number of vaccine certificates and the number of vaccines administere d do not match.
4	Riau Islands (Batam District Court, 2021)	A promotional video for fake COVID-19 vaccine certificates is advertised on social media. Orders are placed online, and the counterfeit certificates are delivered to the orderer and submitted to the government website. One vaccination certificate costs IDR 1,200,000.	Article 263 paragraph (1) of the Criminal Code Jo Article 55 Paragraph (1) to 1 Criminal Code.	Audit report on vaccine implementa tion at TAJ Sports Hall, Batam.
5	South Sulawesi (Makassar District Court, 2021)	Fatma (offender) started working at the Paccarakang Health Centre in Makassar as a volunteer without being registered as a vaccination officer. She used PCare access to create fake certificates. She used other people's ID cards and phone number data, fabricated information, and sent counterfeit certificates via PCare. She received payments ranging from Rp 50,000 to Rp 100,000 per certificate.  Outreach: 179 vaccine certificates	Article 35 Jo. Article 51 of the Law No. 11 of 2008.	Community report and audit results between the number of vaccinated people and the number of vaccine certificates.
6	Central Java (Klaten	COVID-19 vaccine certificates were promoted through Facebook. Then,	Article 263 paragraph (1) of	Community report.

District	offenders downloaded the vaccine	the Criminal
Court, 2021)	certificate online, edited it through PicCart	Code Jo Article
	apps to fit the buyer data, and sent it to the	55 Paragraph (1)
	buyers.	to 1 Criminal
		Code.

**Table 1.** Analyses of domestic case studies on COVID-19 vaccine certificate forgeries

Based on Table 1, the case studies are spread across various locations in Indonesia, including Sumatra, Java, and Sulawesi islands. The majority of the modus operandi of this crime is promoted through online media (e.g., Facebook) and then edited using editing applications (e.g., Photoshop, CorelDraw, and PicCart) (Pengadilan Negeri Malang, 2021; Pengadilan Negeri Jakarta Utara, 2021; Pengadilan Negeri Klaten, 2021). Financial transactions are conducted with varying profits, and communication is done online, although some cases are still promoted conventionally. The case in Batam was carried out by an individual who had access to the national vaccine data center, originating from healthcare workers themselves, by uploading the fake vaccine certificates to official government applications and websites (Pengadilan Negeri Batam, 2021). This abuse of power poses a significant danger, especially with the potential for citizens' privacy data leaks.

### Global Comparative Analysis

No	Country	Detail of forgery	Strategy
1	Australia (Childs, 2023)	Alt-tech platform Gab online illicit networks and the development of illegal markets on the Internet.	Exploration of online distribution.
2	Nigeria (Ali et al., 2024)	An undercover investigation conducted by the Media Advocacy West Africa Foundation (MAWA-FOUNDATION) in three states of Nigeria Plateau, Ebonyi, and Gombe states and the Federal Capital Territory uncovered how Nigerian Health workers accept bribes to issue COVID-19 cards without administering the vaccine.	Involvement of local foundation, where they visited some of the Primary Health Care Centers, pretending to need COVID-19 certification cards.

3	Philippines (Calunsag et al., 2022)	The police detected non-compliance with border entry regulations, where travelers submitted falsified documents.	Border control and the use of the S-Pass, a travel management system, enable travelers to be monitored within their jurisdictions and verify the authenticity of presented travel documents with the assistance of local government units (LGUs).
4	Italy (Euractive, 2021)	The police have taken over ten Telegram accounts associated with anonymous dark web marketplaces. These channels facilitated contact with sellers who demanded cryptocurrency payments, with prices ranging from €110 to €130 for an “all-inclusive” package of fake passes and purported vaccine vials. About a hundred of approximately 250,000 registered users, including some from outside the EU, attempted to interact with the sellers.	They seized control of telegram and the dark web.
5	France (The Guardian, 2021)	Fraudsters were reported to have hacked the accounts of doctors across the country to obtain false documents.	Report from doctors (society).
6	Germany (BBC, 2021)	1) Telegram has become a central platform for anti-vaxxers, with blank certificates and doctors' stamps readily available online. 2) A Munich doctor is suspected of vaccine certificate fraud. 3) Fake certificates are being offered at vaccination centers. Some people are deceived into paying approximately €100 (£86; \$122) but receive	A special task force has been set up to counter the black market. They enforce strict penalties, including potential prison terms

		nothing in return. Fraudsters often use cryptocurrency and an encrypted messenger service, complicating investigations.	for convicted fraudsters. The police searched a doctor's clinic suspected of selling fake certificates.
7	United States (US Department of State, 2021)	A California-licensed naturopathic doctor engaged in a scheme to sell fake healthcare records to her customers.	Complaints from members of society.

**Table 2.** Analyses of global case studies on COVID-19 vaccine certificate forgeries

Table 2 shows the dark web, Telegram, and some unethical doctors who sell fake certificates contribute to the issue. The price of these counterfeit certificate's ranges from €100 to €130 in Germany (BBC, 2021). Global comparative analysis indicates countries are implementing similar strategies, including cyber control, border control, and legal actions against offenders. However, some countries are progressing further by establishing special task forces, developing digital identification systems, and using blockchain technology to prevent and detect vaccine forgery.

### **Indonesian National Police (INP)'s Measures**

The INPs have implemented strategies and actions to tackle this crime, such as detection and prevention, prosecution, and cooperation with multiple stakeholders.

### **Detection and Prevention**

#### *Monitoring*

The INPs have intensified surveillance to detect forged vaccine certificates through regular monitoring and on-site inspections (e.g., border control) and cyber patrol.

#### *Cyber patrol*

According to the Regulation of the National Police of the Republic of Indonesia Number 3 of 2024, the Indonesian National Police (INP) has established a specialized organizational structure to address cybercrimes. The INP is tasked with maintaining the security of netizens in cyberspace through supervision, prevention, and enforcement of various forms of cybercrime. Additionally, the institution plays an active role in educating the public about implementing the Information and Electronic Transactions Act (ITE) to prevent netizens from becoming victims or perpetrators of

cybercrime. Through this collaboration, Indonesia can achieve secure and trustworthy digital sovereignty (Patrolisiber, 2024).

The forgery of COVID-19 vaccination certificates in Indonesia has extended into cybercrime, as exemplified by several cases promoted through Facebook and other applications involving online transactions. Cyber patrols have proven to be an effective strategy for the INP to tackle this issue. Through the Ministry of Health (Kemenkes), the government has appreciated the INP for uncovering cases of forged COVID-19 vaccination certificates in West Java (Kemenkes, 2021). Furthermore, the cyber patrol conducted by the INP in Yogyakarta has shown positive results in detecting the forgery of COVID-19 vaccination certificates (Erlin, 2023).

### *Border control*

Indonesia's archipelagic nature provides multiple access points for entering an area, such as by land, sea, and air. The INP conducts screenings for various possible crimes distributed through the movement of people and goods between districts and cities in Indonesia. This strategy involves collaboration with relevant parties, such as the Ministry of Transportation of the Republic of Indonesia. Anggraini et al. (2022) revealed a circular from the Ministry of Transportation strengthening the penalties for using forged vaccination certificates. This indicates that the INP works with others in this strategy but is supported by relevant ministries. The police monitor not only the movement of people but also the movement of goods between districts and cities. For instance, in the case of certificate forgery in North Jakarta, falsified COVID-19 vaccination certificates sent via delivery services were detected and identified due to the strategy of inspecting goods shipped by these services (Pengadilan Negeri Jakarta Utara, 2021). The Bali Regional Police also employed this strategy. In eastern Bali, bordering West Nusa Tenggara, they successfully uncovered cases of forged vaccination certificates through border checks in sea transportation routes (Fawaidi and Agriesta, 2021).

## **Public Awareness and Community Involvement**

### *Public awareness campaign*

Public cooperation was vital for the success of INP's measures. Ensuring citizens knew the legal and health implications of using fake vaccine certificates was essential to the strategy. INP conducted extensive public awareness campaigns, utilizing social media, traditional media, and community outreach programs to educate the public about the dangers and consequences of vaccine certificate forgery (Patrolisiber, 2024a; Jumady, 2022). Through the "*Bimbingan masyarakat*" programme, the INP, in this case, *Bhabinkamtibmas* (*Bhayangkara Pembina Keamanan dan Ketertiban Masyarakat*) educated the public about crime prevention related to COVID-19 (Krisnawan and Lubis, 2024; Jumady, 2022; Kurnianto, 2021).

### *Community involvement*

Furthermore, the community can also be involved in cyber patrols. Cyber patrols are conducted proactively by the INP and through a strategy that opens a community reporting portal for potential cybercrimes, particularly the forgery of COVID-19 vaccination certificates (Patrolisiber, 2024b). This collaboration with the community provides the INP with information to quickly identify targets for detection, thereby preventing more widespread damage or losses. Community reports have proven effective in assisting the INP to detect the forgery of COVID-19 vaccination certificates on several occasions (Pengadilan Negeri Klaten, 2021; Pengadilan Negeri Makasar, 2022).

The government has taken proactive steps to address the growing problem of vaccine certificate forgery by embedding a unique QR code on each original certificate provided to vaccine recipients. It makes it easy to distinguish between legitimate and counterfeit certificates. In addition, to combat the sale of fraudulent vaccine certificates, the government has set up a service called “Lapor Pak Kapolres” or “*Lapor Pak Kapolres*” or “Report to the Chief of Police,” which allows the public to report any suspected illegal activities related to vaccine certificate fraud (Hafizh et al., 2022). For instance, The “Report to the Chief of Police Program” was launched in June 2021 at the Karawang Police Department, where residents of Karawang who witness or experience legal issues can now report directly to the Karawang Police Chief via the WhatsApp application. These reports are ensured to be promptly addressed by the relevant authorities. This program is open to any legal difficulties (Humaspolri, 2021). The police officers also socialize the “Report to the Police Chief” service to residents.

Through this program, INP has succeeded in investigating the COVID-19 certificate forgery-related cases. Hafizh et al. (2022) also shared a success story about this program; for instance, a university student in Karawang sold fake COVID-19 vaccine certificates without actual vaccination for IDR 5.000-100.000 via social media to friends seeking employment. Exploiting his access to the health department's website during an internship, he covertly offered fake certificates. A resident discovered his actions and reported them to the authorities through the “Lapor Pak Kapolres” program. This program serves as a trigger for involving the community and increasing public awareness of any dangerous and illegal activity. This initiative is crucial given the extensive responsibilities of the police and the existing staff shortages. Therefore, community engagement will facilitate, expedite, and make police preventive strategies, interventions, or repressive actions more effective and efficient.

### **Prosecution**

The INP has implemented stringent measures to address and penalize criminal activities, including the forgery of COVID-19 vaccine certificates. Idham Azis, the chief of the INP, took



decisive action, as evidenced by a signed telegram letter ST/3220/XI/KES.7/ 2020 on November 16, 2020. This telegram urged the INP to take serious action against COVID-19-related crimes. As previously stated, forgery of the COVID-19 vaccine certificate is a crime related to COVID-19. Since the beginning of 2021, the INP has reported actions taken to prosecute 2,466 cases of document fraud, including COVID-19 vaccine certificate forgery (Pusiknas, 2021). This data shows that the INP has thoughtfully responded to address COVID-19-related crime. This repressive strategy must be connected to the aims of sentencing itself. The objectives of sentencing are the following: punishment of offenders, crime reduction, deterrence, reform and rehabilitation, and public safety (Gormley et al., 2023). Law enforcement efforts carried out by the INP are expected to ensure public safety, including mitigating health threats, by creating a deterrent effect for perpetrators and serving as a warning to those who intend to commit similar acts.

### **Multi-stakeholders' Approach in the Technological Solution**

Given the digital nature of many forgeries, INP adopted various technological measures to prevent and detect fraudulent vaccine certificates. Collaboration with other relevant agencies was essential to ensure vaccine certificates were secure and tamper-proof. Implementing QR codes on certificates was a significant step in this direction. These QR codes could be scanned and verified against a central database, making it more difficult for forgers to create convincing counterfeit documents. This QR code feature is integrated into the PeduliLindungi application, conceived by the Ministry of Communication and Information Technology (Kominfo) and the COVID-19 Task Force through the collaboration of INP with the Ministry of State-Owned Enterprises (BUMN), National Disaster Management Authority (BNPB), Ministry of Health (Kemenkes), Indonesian National Armed Forces (TNI), and the Ministry of Administrative and Bureaucratic Reform. This initiative is based on the Decree of the Minister of Communication and Information Technology Number 171 of 2020 (Keputusan Menteri Kominfo Nomor 171 Tahun 2020), which establishes the PeduliLindungi application to conduct health surveillance in the management of COVID-19 (Fastyaningsih et al., 2021).

Indonesian citizens receive vaccination certificates after the COVID-19 vaccination, a government health facilities issue. These certificates, containing the National Identification Number (NIK), are sent via text message and can be printed by recipients. Additionally, certificates are now available for direct download from the PeduliLindungi app for easier access (Wibowo, 2021). One of the roles of the PeduliLindungi application is to facilitate public access to public facilities. The QR Code scanning feature is used to access public facilities, making it easier for people as they do not need to present a vaccination certificate (Fastyaningsih et al., 2021).

### **Global Comparison**

The prevention of COVID-19 vaccine certificates has become a critical focus for police forces worldwide. The New York State Police have highlighted the severity of these crimes, underscoring the significant legal consequences for offenders (Department of State, 2021). Agencies like the Federal Trade Commission (FTC) and the Federal Bureau of Investigation (FBI) have proactively warned the public about the dangers and legal repercussions of using or distributing fake vaccine cards. They emphasize the risk to public safety and encourage reporting such frauds to various authorities, including the Office of the Inspector General of the Department of Health and Human Services and the FBI's Internet Crime Complaint Center (Smith, 2021). In France, the health authority has reported a surge in forged certificates, leading to multiple police investigations and arrests of healthcare workers involved in issuing fake documents (The Guardian, 2021). Public awareness campaigns and media investigations play a significant role in their efforts to reduce the demand for forged documents (Pasyeka et al., 2022).

The repression of vaccine card fraud is also a priority in other countries. In Brazil, for example, police officers actively pursue charges in cases involving high-profile individuals. The National Police of Ukraine also considered this case a serious criminal act (Pasyeka et al., 2022). They detected a website that sells fake vaccine certificates, immediately shut it down, arrested the suspect, and collaborated with medical institutions and international bodies (Pasyeka et al., 2022).

Some countries have also taken serious action against this crime. In Brazil, law enforcement is actively pursuing charges in cases involving high-profile individuals, demonstrating a rigorous approach to combating this issue. The National Police of Ukraine classify the sale and distribution of fake COVID-19 vaccine certificates as a criminal act. They have implemented strategies to identify and shut down websites selling these forgeries, conducted arrests, and collaborated with medical institutions and international bodies (Pasyeka et al., 2022). However, some countries implemented additional strategies, such as creating a special force and applying blockchain technology.

### **Special Task Force Formation**

Germany has established a special force to combat this crime, especially in the black market (BBC, 2021). The government aims to deter individuals and groups from engaging in such illegal activities by imposing severe punishments. In addition, the proactive police searches and investigations, including the recent raid on a doctor's clinic suspected of selling fake certificates (BBC, 2021), demonstrate Germany's serious commitment to tackling this issue, that no individual, regardless of their professional status, is above the law and that the authorities are committed to rooting out fraudulent activities at all levels.

### **Digital Identification System**

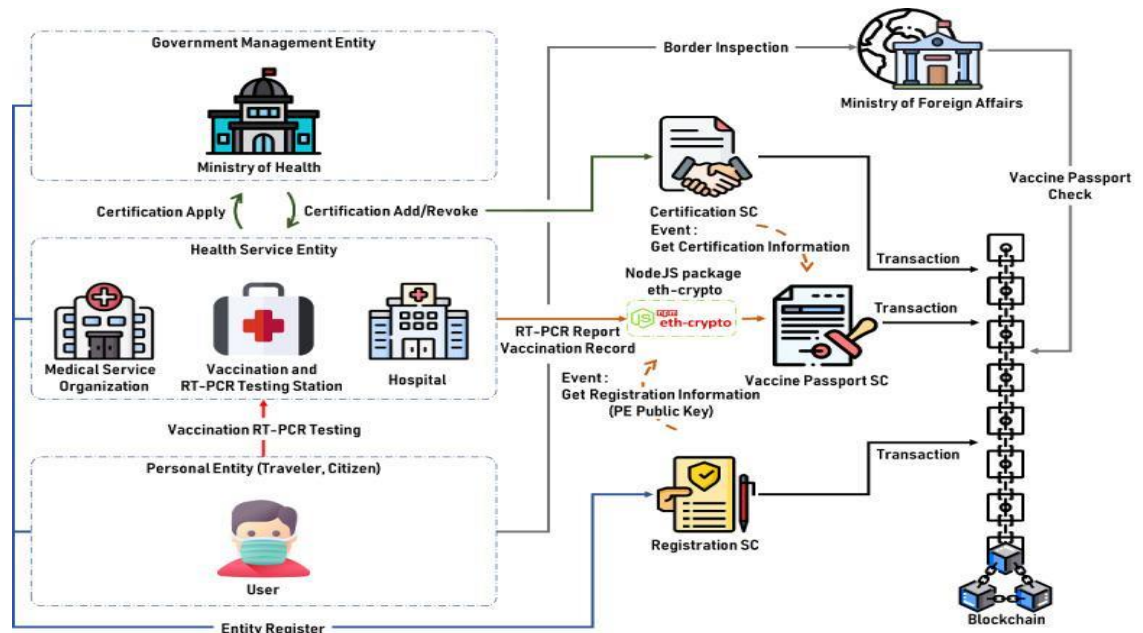
To address the shortcomings of traditional vaccination cards, it is essential to create secure, electronic-based COVID-19 vaccination certificates or passports. These digital certificates must be tamper-proof, easily accessible, safe, and designed to protect individuals' privacy (design-by-ethics). This can be achieved by integrating emerging technologies to combat COVID-19 across various fields. Such technologies include artificial intelligence, geographical information systems, the Internet of Things, Medical Things, 5G technology, Blockchain, additive manufacturing, robotics, and virtual reality (Whitelaw et al., 2021; Mbunge et al., 2020). These innovations have been employed to develop advanced applications like contact tracing apps (Mbunge et al., 2020), social distancing tools, and intelligent wearable devices.

Many countries and regions, including Australia, India, Ireland, Canada, and the European Union, are initially implementing digital identification systems, including trials (Sheth and De Alcaraz-Fossoul, 2024). These systems typically involve digitalizing identities and centralized access to government services (Childs, 2023). This technology uses a QR code to verify the certificate (Sheth & De Alcaraz-Fossoul, 2024). Tamper-proof verification methods and encrypted databases might prevent certificate forgery and personal data leakage.

In Africa, the Africa Centers for Disease Control and Prevention launched Trusted Travel, a tool to simplify verifying public health documentation for travelers during exit and entry across borders (Mbunge et al., 2021). A comparable approach was adopted in the Philippines, where a visitor movement tracking system was implemented through the S-Pass. This system monitors travel to local destinations via a unique S-Pass QR code. The S-Pass is a travel management tool that provides the public with information on travel restrictions imposed by various Local Government Units (LGUs) due to the COVID-19 pandemic. It also aids the Philippine National Police (PNP) direct residents to other LGUs for travel document applications. It assists LGUs in monitoring travelers and verifying the authenticity of their travel documents (Nicole et al., 2021).

### **Blockchain Technology**

Lackerbauer et al. (2018) proposed a Vaccine Passport validation system using Blockchain-based Architecture.



**Figure 1.** Overview of the blockchain architecture for VPs (Kissi et al., 2022).

PE: personal entity; RT-PCR: reverse transcription polymerase chain reaction; SC: smart contract;  
VP: vaccine passport

Artificial intelligence (AI) can effectively detect fake COVID-19 vaccination certificates when they are in digital format. It can also help identify and map non-vaccinated regions, aiding in strategic planning, provided digital COVID-19 vaccination certification systems are in place. Furthermore, AI can organize migration patterns based on data stored in verification applications and assist in contact tracing. Blockchain (BC) technology, with its immutable, transparent, and decentralized nature, offers a secure way to transmit information, ensuring the confidentiality of patients' data (Shah et al., 2021).

One instance of the utilization of Blockchain technology is NovidChain. The evaluation reveals that NovidChain outperforms other solutions regarding financial cost and scalability. Specifically, it demonstrates a significant improvement in operational time, with differences ranging from 46% to 56%. The assessment verifies that NovidChain maintains robust security features, including data integrity, forgery resistance, binding, uniqueness, peer-indistinguishability, and revocation (Abid et al., 2021).

To be effective, a certificate or passport must integrate two key components: access to a country's official vaccination records and a secure means of linking individuals to their health records. Many policymakers advocate for blockchain technology as a solution to address these requirements. Even though literature reviews and case studies support the suitability of blockchain for vaccine passport programs, some ethical issues arise in its implementation. Therefore,

policymakers must address these challenges to ensure the effectiveness of such programs (Mishra, 2022).

## CONCLUSION

In conclusion, the INP has implemented a comprehensive strategy to combat COVID-19 vaccine certificate forgery. This strategy encompasses three key components: early detection, prevention, and prosecution. For detection and prevention, cyber patrols are continuously conducted to identify fake COVID-19 vaccine certificates promoted on online platforms. In addition, the INP monitors the flow of people and goods crossing the border. Campaigns to raise awareness about the consequences of counterfeiting COVID-19 vaccine certificates are regularly carried out, and the public is encouraged to participate through the "Report to the Police Chief" program for prevention and public involvement. Strict legal processes are enforced to address these crimes and deter violators. A multi-stakeholder approach has also been adopted, collaborating with the Ministry of Communication and Information and the Ministry of Health to enhance certificate verification via QR codes on the *pedulilindungi* application.

Similar strategies have been employed globally, such as cyber patrols, border control, and prosecution. Several police forces have established special task forces to handle these cases particularly. Furthermore, many countries have also integrated QR codes into their verification systems, and some have enhanced their systems with blockchain technology. The INP and relevant stakeholders might also consider implementing these measures to strengthen public health safety.

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## **Cyber Fraud with Profile Cloning Mode in The Perspectives of Cyberculture and Space Transition Theory**

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### **Abstract**

This study aims to investigate whether there are still any society who do not understand cyber culture on social media which then has the potential to become victims of cyber fraud crimes. In the digitalization era 4.0, people tend to use technology to do various activities and meet their needs, including online transactions for goods and services using various digital platforms and social media. The high activity on the Internet is also accompanied by opportunities for crimes by utilizing the internet media. One of the cases that is increasingly occurring in the digitalization era is cyber fraud with profile cloning mode. The author is interested in studying cyber fraud in Wajo Police because the mode used was profile cloning, which used the profile of a law enforcer to make fictitious buying and selling. This study used a qualitative approach and a case study method to conduct an in-depth analysis of cyber fraud cases with profile cloning mode. The results of the study show that there are still people who do not understand cyberculture on social media, so they have the potential to be victims of cyber fraud crimes. Moreover, the results of the study also show that perpetrators commit cyber fraud with profile cloning mode due to the pressure in real life and the ease of cloning accounts on social media. Thus, such circumstances provoke perpetrators to shift their evil deeds to cyberspace.

**Keywords:** Cyber Crime, Cyber Fraud, Profile Cloning

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### **INTRODUCTION**

Cyber technology-based crimes are increasing along with the development of technology in the digitalization era 4.0 in Indonesia. The use of communication and information technology is increasingly becoming a trend in society in line with the increasing development of human life and is able to issue ideas that can help many people (Syarief et al., 2016). Among the ideas that emerged from the development of communication and information technology is the transaction of goods and services using Internet media to make the transaction process easier and more efficient (Setiawan, 2018). With this convenience and efficiency, online buying and selling are currently widely used, especially by urban communities and the young generation. The tendency of Indonesians to make online goods and services transactions with the persuasion of lower prices has caused many victims

of fraud (Sari et al., 2022). Moreover, various modes have begun to develop, such as inviting collaboration on behalf of a well-known company, online store sales with lower prices, offering assurance or investment, fictitious promotion, winning the lottery, and so on. These modes will continue to develop because the perpetrators will continue to find ways various to deceive victims.

The rapid development of digital media in Indonesia has created challenges in the form of increasing rates of legal violations (Siboro & Hadiningrum, 2024). Like a double-edged sword, besides providing positive contributions, technology development also has a bad or negative impact. The appropriate use of information technology will provide advancement for society's quality of life and the advancement of human civilization (Munti & Syaifuddin, 2020). On the other hand, information technology also provides opportunities for more complex crimes using internet networks (Hamid, 2023). The level of cybercrime in Indonesia is second place in the world. In a work meeting with the Ministry of Communication and Information of the Republic of Indonesia, Rudiantara Akhmad stated that Indonesia is in second place in cybercrime after Ukraine. Cyber crimes increased significantly in 2022 compared to the same period in 2021. The number of cyber crimes has increased 14 times, with 612 cases in 2021 and 8,831 cases in 2022. Data from e-MP Robinopsnal (Electronic Investigation Management of the Bureau of Development and Operation) of the Criminal Investigation Agency show that police have taken action against 8,831 cyber crime cases from January 1 to December 22, 2022. All work units at the Criminal Investigation Agency and regional police in Indonesia have taken massive action against cybercrime cases. Polda Metro Jaya (Greater Jakarta Metropolitan Regional Police) is the work unit with the highest number of prosecutions for cybercrime cases, which is 3,709 cases. Meanwhile, in the same period in 2021, the number of prosecutions was 612 cases around Indonesia; only 26 work units took prosecutions (Pusiknas Polri, 2022).

The high number of cyber crimes in Indonesia is also influenced by the limited knowledge about the use of information technology in society. A study by Supardi Hamid and Rodon Pedrason (2023) concluded that knowledge about communication and information technology is important in society, so it can provide positive things and avoid criminal deviations through social media. Looking at the high number of cyber crimes in Indonesia shows that the level of knowledge about communication and information technology in Indonesian society still must be improved so the community can avoid becoming victims of cyber fraud or even committing crimes using cyber media (Handoko, 2021).

W. Steve Albrecht and Chad D Albert explained that cyber fraud is a crime committed within an internet network-based system to deceive or manipulate information to gain as much profit as possible (Karyono, 2013: 3). From the concept of cyber fraud explained, there are several elements for an act to be categorized as cyber fraud, where the act must use internet network, commit deception, and aim to gain a profit (Prabhaswara, 2023). Cyber frauds that occur along with the

development of information and communication technology tend to continue transforming from time to time from cyber frauds with simple modes to using complex and complicated modes. All of these actions are committed only to avoid suspicion from potential victims of cyber fraud. One of the various modes of cyber fraud that commonly occur currently is cyber fraud mode by profile cloning.

Profile cloning is one of the modes of cyber fraud, where the perpetrators attempt to steal or fake their identity on the Internet or social media to commit fraud or other crimes (Esfandari, 2019). The perpetrators usually will use names, photos, or other identities from someone cloned on an internet or social media account to make it look like the real one. After successfully having a fake social media account, perpetrators commit fraud or other crimes on behalf of someone whose identity was previously cloned. Generally, the identities cloned are social media accounts of public figures, law enforcement officers, online sellers, and banking institution accounts. These profiles are often cloned because they are more convincing to potential victims when committing cyber fraud (Bernoza et al., 2020).

In social media that developed in Indonesia, public figures, such as political figures or artists, tend to have many followers or account visitors. In recent years, even ordinary people who have the ability to create content (content creators) on social media have also become the center of attention on social media. People who are not public figures but have appearances that attract public attention usually become the center of attention on social media with a large number of followers. The existence of accounts with many followers, both public and non-public figures, attracts the attention of goods and services owners to promote their goods and services to the public through these accounts. These account owners will be endorsed with certain agreements or contracts to increase sales, especially to followers of certain accounts, according to their market characteristics. This way of advertising goods and services is considered more effective than advertising them on other electronic media, such as television and radio, because nowadays, almost everyone looks at their gadget all the time. Meanwhile, watching television or listening to the radio might only be done at certain times, and the audience is not as large as on social media.

The phenomenon of accounts with large followers is one factor that leads to cyber fraud with profile cloning mode (Bhariatta et al., 2019). From the perspective of cyber fraud perpetrators, if they clone a social media account of a public figure, the possibility of gaining profits will be greater, mainly if potential victims are not careful in differentiating which accounts are real and which accounts are fake. There are many cases where fake accounts clone public figure accounts. Then, they successfully cheat by selling fictitious goods or fictitious lotteries. In several cases, the perpetrators of cyber fraud are able to manipulate fake messages to deceive potential victims (Sabilah, 2023). For example, when perpetrators pretend to buy an item, they send fake transfer receipts as they have paid by transfer. The sellers who receive the transfer receipt then send the item to the perpetrators. Usually, the new victims will realize that the transfer made is fictitious when they

will recap sales at the end of the month or the end of the week. When victims realize there is a difference, they will check transaction data one by one. Then, the victims realized that the transfer receipt sent was fake.

From the explanation above, it can be seen that the nature of criminals is to continue to try to commit crimes in cyberspace, both through cyber fraud and hacking. When one mode is successfully revealed, the criminals will innovate to find other modes, even the most complicated and complex mode, to gain profits (Mudjiyanto & Roring, 2024). In the future, old modes that have been forgotten by the public will possibly be used again by cyber fraud perpetrators. Not only cloning accounts, criminals can even hack or log in to a real account illegally, only by sending an application file wrapped like a wedding invitation or other invitations (Sahabuddin & Andrizki, 2024). Therefore, people in the digital era must increase their awareness so as not to avoid becoming victims of social media crimes.

Previous research has explored several facets of cyber fraud, such as the technological techniques employed by criminals, the psychological and social consequences for victims, and the wider implications for digital security policy. Unfortunately, we have not come across a thorough investigation about the particular occurrence of a case where clonings profiles is used in order to commit fraudulent activities. Therefore, we will address this gap by conducting a comprehensive analysis of this unique *modus operandi* used in cyber fraud cases. We aim to thoroughly examine the strategies employed by cyber fraudsters in profile cloning schemes, utilizing relevant theories and concepts from the fields of criminology, cybersecurity, and social psychology.

The case analyzed in this study is cyber fraud committed by Mr. Abdullah, a resident of Wajo Regency, South Sulawesi, who cloned the Facebook account of a policewoman named "Kiki Widya S." Through the cloned account, the perpetrator succeeded in deceiving victims by selling motorbike auctioned from crime cases at low prices. This case is one of the cyber fraud cases that use profile cloning of law enforcement officers' social media accounts in Indonesia so that in-depth analysis can be carried out. Based on the background, this study aims to analyze how cyber fraud crimes can occur, mainly using profile cloning mode. By using relevant theories and concepts, this study is expected to analyze how cyber fraud perpetrators commit their crimes and how the internet or social media users can be victims of cyber fraud using the profile cloning mode.

## METHOD

In this study, the author employs the qualitative approach. According to Bogdan and Taylor, qualitative is associated with research procedures that result in descriptive data in the form of written or spoken words from people or observed behavior (Moleong, 2020). A qualitative study is used because there is a problem that must be explored. In this study, cyber fraud cases using profile cloning mode must be explored in depth and analyzed using relevant theories and concepts. The research

method used was the case study method, where the focus of the case study method is on the specification of the case in an incident, either involving individuals, groups, or a portrait of life (Creswell, 1998).

The case study method was used in this study because, when analyzing a case, the author can focus on an in-depth study and analyze a cyber fraud case with profile cloning mode in Wajo regency, South Sulawesi. The case study allowed the author to investigate cyber fraud so that the author could investigate problems more focused with clear scope boundaries. Therefore, the author obtained a comprehensive description of a cyber fraud case with profile cloning mode to be further studied using cyberculture and space transition theory.

## RESULTS AND DISCUSSION

### Results

#### *Cyber Fraud Case in Wajo*

A case that became the object of the study was a cyber fraud case with profile cloning mode in the jurisdiction of the Wajo Police, South Sulawesi. On March 18, 2021, the Criminal Investigation Unit of Wajo Police, through the Specific Crimes Unit (Tipidter), raided a house in Kec. Maniangpajo, Wajo Regency. The raid began with information from the public reporting a house suspected of being a place where cyber fraud perpetrators (in the Bugis community known as Pasobis) committed crimes. People were suspicious because many people often gathered and committed close activities in the house for a long time. In the raid, a man named Mr. Abdullah (22 years old, resident of Lakadaung, Kecamatan Maniangpajo, Wajo Regency, South Sulawesi), who was committing cyber fraud activity using several laptops and mobile devices, was arrested. After carrying out an investigation, facts were obtained that the person was a cyber fraud perpetrator with profile cloning mode who claimed to be a law enforcement officer to make fictitious buying and selling transactions.

After this arrest, a cyber fraud case in 2020 was finally revealed. The chronology of the cyber fraud case began in December 2020, when a victim, Mr. Olfan Mundok (36 years old, resident of Malinow, Kotamobagu, North Sulawesi), was using the social media application Facebook. Then, he saw a post from a Facebook account named "Kiki Widya S," based on the profile, was a policewoman at National Police Headquarters, Jakarta. This policewoman account sold several used motor vehicles, mainly motorbikes, at a very low price and under the market price. The post mentioned that the vehicles sold were the auction of the proceeds of crime, so the price was really low. The victim was increasingly convinced due to many comments reviewing that they had a transaction with the perpetrator and the vehicle purchased was in good condition. However, the comments were fictitious and were made by the perpetrator using different accounts. The victim is finally interested and bought 1 (one) unit of motorbike. After negotiation via chatting in Facebook Messenger and WhatsApp, it

was agreed that the victim would buy 1 (one) unit of Yamaha N-Max for 8 (eight) million rupiahs. The victim then paid a down payment via transfer to the account provided by the perpetrator. The perpetrator also asked the victim to pay a vehicle transfer fee and shipping cost of 6 (six) million rupiahs. After the down payment, vehicle transfer fee, and shipping cost were transferred by the victim, the perpetrator could not be contacted, both via WhatsApp and Facebook account. The item purchased was 1 (one) unit of motorbike that never arrived at the victim's address in Kotamobagu, North Sulawesi.

From the description above, it can be seen how cyber fraud case with profile cloning mode, where the perpetrator created a fake account in a Facebook application using the profile of a policewoman named "Kiki Widya S." It can be known that the policewoman does have social media account and has a relatively large number of followers, thus making her one of the policewomen whose profile is often faked by cyber fraud perpetrators. The profile of a policewoman also provoked the perpetrator to clone the profile to commit cyber fraud that sold the auctioned motor vehicles from crimes handled by the police.

#### *Space Transition Theory*

This theory is developed by Karuppannan Jaishankar (2008) to observe crimes in cyberspace. Space Transition Theory attempts to explain how someone commits cyber crimes. Moreover, this theory also explains natural human behavior, taking conformity and non-conformity behavior in real life and cyberspace. Transition, in this theory, means the shift of a person from one world to another. In other words, this theory sees that an individual can have different behavior when they move to another space, for example, from physical space to cyberspace or vice versa. An individual who behaves well in a social environment (physical space) will not always behave well in cyberspace. Several factors can influence an individual to do the opposite in cyberspace.

This theory has become a reference for various studies that examine crimes in cyberspace. Cyberspace has become a new locus for criminal activities, making this an interesting topic of discussion for study in various sciences. Criminal activity has increasingly occurred in recent years, making cyberspace a new space for criminals. Various kinds of conventional crimes in real life are currently starting to transition to cyberspace; one of the most frequent is fraud. Fraud that previously occurred in physical space has currently transitioned to cyberspace. This is one of the impacts of the development of communication technology, the Internet, and new media (Sari et al., 2022).

To analyze empirical problems with space transition theory, an analysis of case facts using the postulates that build this theory is required. The postulates of this theory are as follows:

1. A person with evil behavior who is depressed in real life tends to commit crimes in cyberspace.



2. The flexibility of identity, anonymous disassociation, and limited deterrent factors in cyberspace provoke perpetrators to commit crimes in cyberspace.
3. Evil behavior of someone in real life can shift to cyberspace, and vice versa; evil behavior in cyberspace can also shift to real life.
4. Intermittent attempts of criminals in cyberspace accompanied with the natural nature of space and time in cyberspace, give opportunities for criminals to escape.
5. Criminals who do not know each other tend to meet in cyberspace and then commit crimes in real life.
6. The association of criminals in real life tends to unite perpetrators to commit criminal acts together in cyberspace.
7. Someone from a closed society has a greater tendency to commit crimes in cyberspace than someone from an open society.
8. Conflicts between norms and values from real life and cyberspace can cause crimes in cyberspace.

Several postulates in space transition theory will be closely associated with cyber fraud, which is currently widespread on social media. Thus, cyber fraud will become a suitable analysis tool for analyzing how someone can commit cyber fraud on the Internet.

#### *The Concept of Cyber Culture*

Cyberculture is a study of culture in cyberspace (Bell in Suseno, 2019). Since the Internet was founded, human activities have slowly shifted from real life to utilizing the Internet to do their activities. The use of the Internet, which allows humans not to interact with each other directly, certainly forms new patterns of human behavior in cyberspace (Rafiq, 2020). Thus, cyberculture can briefly be explained as certain habits or values developed in cyberspace so they become a culture in cyberspace. In other words, cyberculture emerges from the use of computer networks for communication, entertainment, and business (Rachman, 2017).

When seen from history, cyberculture initially developed to exchange ideas and promote ideas related to the development of information and communication technology (Kautsarina, 2018). In its development in the contemporary era, cyberculture has increasingly influenced human life, including cultural dynamics and social relations. Therefore, it is important to understand and study cyberculture in the digital era to adapt to developing cultural dynamics, especially in cyberspace or the Internet. An adequate understanding of cyberculture will help someone to do activities in cyberspace and prevent them from undesirable things, such as being a victim of a crime or experiencing losses when doing activities in cyberspace (Azzani et al., 2023).

In this study, the concept of cyberculture explained how cyber fraud in Wajo Regency, South Sulawesi, from the cultural aspects that are currently developing on social media. The characteristics of the perpetrator and victim, as well as the case description described in this study, were enough to analyze how the victim understands the culture developing on social media.

## Discussion

The development of the use of information technology in each line of human life has entered an era where the Internet is used for various political, economic, social, and cultural activities (Indrawan, 2019). In the economic aspect, the Internet is used to carry out various activities, which previously could only be carried out by direct interaction in real life; for example, buying and selling goods in shopping centers has shifted to buying and selling using the Internet in cyberspace. These activities continue to develop until various online platforms for buying and selling goods and services are created in cyberspace.

Buying and selling activities in cyberspace are currently becoming an alternative to effective and efficient trading (Susanto & Pangesti, 2021). Prospective buyers can see various products without going to the sellers' places. The prospective buyer can also compare the price of a product quickly because there is a certain algorithm that can filter and sort certain products according to certain prices or categories. This algorithm will really help consumers find products according to their desired criteria.

Currently, several buying and selling platforms in cyberspace are increasing and developing, such as Tokopedia, Lazada, Shopee, and Blibli. Online buying and selling platforms compete to dominate online buying and selling markets with various attractive features and promos. Moreover, there are buying and selling platforms that specifically become a forum for buying and selling used goods, such as OLX and the Marketplace feature in the Facebook application that sells various used goods, from vehicles to electronics. In its development, social media applications have also been used for buying and selling activities. Social media accounts, such as Instagram, TikTok, Facebook, and Twitter, with many followers, are often used to make online buying and selling activities or as promotional media that effectively reach social media users.

From the explanation above, in principle, communication using the Internet via any media can be used to make economic activities. The use of internet media for economic activities really helps effectiveness because social media can reach all levels of society (Harahap & Adeni, 2020). In this digital era, almost all people have digital devices and social media accounts, encouraging people to have economic activities via social media. Moreover, the use of Internet media also increases efficiency. Sellers and buyers no longer have to go to shopping places to make transactions; sellers no longer have to rent a shophouse and other conveniences that can increase the efficiency of time and cost.

In the context of a case study in this study, the author intends to analyze what and how cyberculture in cyber fraud in Wajo Police, South Sulawesi, to obtain a comprehensive understanding regarding how the perpetrator commits cyber fraud and how the victims can be deceived to make online buying and selling transaction in this case. According to the explanation of the incident explained at the beginning of this study, it can be analyzed how the study of cyberculture in this case can be explained as follows:

Facebook application, one of Indonesia's most mainstream social media applications, has been widely used by its users to make online trading activities. Over time, opportunities for crime arise from online buying and selling activities. This can be understood because of the ease of creating a Facebook account that allows for fake accounts (for example, through profile cloning), so criminals can fake their identity on social media. Therefore, criminals can commit various illegal acts, including cyber fraud.

Cyber fraud using social media, such as Facebook, has been occurring in various modes for a long time. Many cyber fraud cases have been revealed, and law enforcement officers have been putting in the effort to solve them. In fact, the phenomenon of cyber fraud continues to occur and cannot be removed from cyberspace. In order to understand this, it can be seen in real life where crimes also cannot just be removed even though law enforcement continues to run because criminals will also develop to find new ways and modes of committing criminal acts. Likewise, in cyberspace, when a cyber fraud mode is no longer effective in deceiving victims, the perpetrators continue to innovate, creating new modes to deceive subsequent victims. From this point, the author intends to show how cyber fraud on social media, especially on Facebook applications, has become a cyberculture because it is considered commonplace on social media. Even though various efforts have been made to remove the phenomena of cyber fraud from Facebook, both carried out by law enforcement officers through law enforcement efforts and by Facebook developers through internal regulations in the application, in fact, until this time, this phenomena still occur.

Regarding buying and selling activities on Facebook, most users understand that many fake accounts commit cyber fraud on this social media platform, not only on Facebook but also on almost all social media platforms, such as Instagram. Therefore, Facebook users will generally be really careful when making buying and selling activities using this application so they do not become cyber fraud victims. There are several ways commonly carried out by Facebook users before making online buying and selling transactions. One of them is asking relatives or friends if anyone has made buying and selling activities with Facebook accounts to avoid making transactions with fake accounts. If relatives or friends have previously successfully made transactions with an account, it can be confirmed that the account does not commit fraud. Another way is by profiling Facebook accounts that will sell or buy goods by searching via their social media accounts. Fake accounts usually have a short history, which is different from real accounts that usually have been around for a long time

and have a long history of activities on social media. Another method is being aware of suspicious things in the buying and selling process.

The suspicious things in the buying and selling process with fake accounts should be threat with suspicion if, first the price is very cheap and unreasonable, far below the market price. The perpetrators usually argue that the low price is because the items sold are from auctions or refurbished goods. Using fake product photos or ones that have been edited using specific applications. Second, this usually can be seen when the product photos look perfect or unrealistic. Third, the account name is usually similar to a popular brand's name; for example, only one letter is different from the original brand name. For example, the account @adidasindonesiaofficial is to be @addidasindonesiaofficial. Also, if the activity history on social media is not much, we also need to thread it with suspicion. This is because the perpetrator of cyber fraud often changes social media accounts. This is committed to avoid tracing victims who have been successfully deceived. Then, if a product post has a comment feature or review, there will be many similar and repeated comments and reviews. It seems like many people review it even though the fake account itself also commits this using other social media accounts. Moreover, reviews written by fake accounts are usually short, consisting of only several words, but many. Lastly, the name in the bank account is different from the name on the social media account. The difference between the name in the bank account and the name on the social media account is not always committed by a fake account, but this can be one of the verification methods to check the authenticity of a buying and selling account.

From the explanation above, the authors intends to explain that it has become a cyberculture on Facebook to carry out various checking steps before making buying and selling transactions to avoid cyber fraud. The victim, Mr. Olfan Mundok, did not carry out this step, so he was deceived into making buying and selling transactions of the vehicle. Furthermore, the Facebook application also has a menu called Marketplace, which functions to facilitate the buying and selling activities of Facebook users. This point also becomes cyberculture on Facebook, where if users want to engage in buying and selling activities, they will use the Marketplace on Facebook. This culture was not understood by the victim, Mr. Olfan Mundok, so he only saw a post that appeared on the "Home Page" and did not search for the product on the Marketplace on the Facebook application.

Based on the analysis above, an explanation can be obtained as to why Mr. Olfan Mundok could be deceived and become a cyber fraud victim with a profile cloning mode. By paying attention to the profile of the victim, who graduated from secondary school and worked as a farmer, it can be analyzed that the victim very likely does not understand several cybercultures on the Facebook application. The limited understanding makes the victim not take the checking steps to the "Kiki Widya S" account, whether it was true that it was a policewoman who served at National Police Headquarters or a fake account. The victim was also not suspicious of the lower price offered by the

perpetrator, which was far from the normal price. Victims at least must ask why an item is being sold at a price far under the market price because someone usually sells goods to make a profit.

Referring to the analysis above, it can be seen that there are still many Indonesian people who are unfamiliar with things commonly occurring on social media. The government should be responsible for providing massive education and socialization to the public to prevent crimes in cyberspace. Crimes, such as cyber fraud, have occurred for a long time, but people still become victims of these crimes due to various factors, including the minimum education (Wahyudi et al., 2022). The government, through the related ministries and institutions, should actively identify actual cyber crimes and crimes that have the potential to occur in the future to take preventive steps so people no longer become victims. Moreover, it has also been explained that space transition theory can analyze how someone can commit cyber crimes. In order to explain a phenomenon, this theory has several postulates that can be used as an analysis. Thus, the author analyzed fraud cases committed by Mr. Abdullah in Wajo, South Sulawesi, using the space transition theory as follows:

First, it can be explained that a person with evil behavior depressed in real life tends to commit crimes in cyberspace. This is in line with the profile of Mr. Abdullah, who is known to not have a permanent job or is unemployed. As an adult at 22 years old, when the case occurred, the person certainly should live independently and be able to meet his own needs. The person is even old enough to get married. Therefore, the perpetrator has a tendency to be depressed in real life, which can provoke him to commit crimes in cyberspace through cyber fraud with profile cloning mode. Thus, the condition of the perpetrator who is under pressure in real life transfers his crimes in real life in accordance with this postulate.

Second, it is stated that flexibility of identity in cyberspace provokes the perpetrator to commit crimes in cyberspace. This is in accordance with the fact that cyber fraud with the perpetrator, Mr. Abdullah, used profile cloning mode in his act. The perpetrator utilizes the ease in manipulating identity on social media and uses it to commit cyber fraud. To create a social media account, such as a Facebook account, the account creator only fills in personal data without factual validation to ensure the identity of the account owner. In the Facebook application, someone can have more than one account because the basis of a Facebook social media account is an email account, not the population identity number. In order to create an email account, there is no factual verification to ensure the validity of the identity registered to create an email account. Therefore, in the Facebook application, it is possible for someone to create a Facebook account that can be misused to commit various crimes in cyberspace, such as cyber fraud.

Third, the natural nature of space and time in cyberspace gives opportunities for criminals to escape. This is in accordance with the cyber fraud in Wajo Polic if paying attention to the description of the case, where the cyber fraud committed by Mr. Abdullah to the victim, Mr. Olfan Mundok, occurred in December 2020. Several months later, the perpetrator was arrested in March 2021 for

committing the action against other potential victims. If the perpetrator utilized several months before being arrested to escape, there is the possibility that the perpetrator would not get arrested by the law enforcement officers. In this case, the perpetrator did not do it because he felt that the law enforcement officers could not detect his action, even though the perpetrator had the opportunity to escape.

Fourth, it is stated that the association of criminals in real life tends to unite perpetrators to commit criminal acts in cyberspace. As explained in the description, the raid carried out by the Criminal Investigation Unit of Wajo Police began with information from the public, which stated that the house becoming a crime scene became a basecamp or gathering place for cyber fraud (pasobis) perpetrators in Kecamatan Maniangpajo, Wajo Regency. This means that there are many other perpetrators who usually act in this house, even though when the arrest, only Mr. Abdullah was committing cyber fraud in the house. This can be proven by the many laptops and mobile devices that were obtained during the arrest. This fact strengthens the suspicion that usually there are usually many cyber fraud perpetrators operating in this house. This shows that Mr. Abdullah, with his friends, is most likely a network or syndicate in real life who commits criminal acts in cyberspace, as one of the postulates in space transition theory.

Fifth, it is stated that someone from a closed society has a greater tendency to commit crimes in cyberspace compared to someone from an open society. Cyber fraud perpetrators in South Sulawesi (Pasobis) will usually look for quiet places or avoid crowded environments. This is important so the perpetrator's activities are not suspected by the local community. When committing the act, the perpetrator usually will stay at home for days without leaving the house or interacting with the environment because cyber fraud activities require the perpetrator to always stand in front of his/her digital devices, waiting for victims to respond to the fraud actions. Thus, this postulate is in line with the characteristics of cyber fraud perpetrators, where a person from a closed community tends to commit crimes in cyberspace compared to a person from an open community environment.

The correspondence between postulates in space transition theory and facts in the cyber fraud case with profile cloning mode in the jurisdiction of the Wajo Police, South Sulawesi, can answer why a person can commit cyber fraud crime, including due to pressures in real life that provoke the perpetrator to commit crimes in cyberspace, flexibility of identity in cyberspace, the natural nature of space and time on social media, environmental and friendship factors, and characteristics of the perpetrators who tend to be closed or in closed environment. These factors have comprehensively explained why a person commits cyber fraud.

According to the analysis of cyber fraud cases with profile cloning mode that still occurs in Indonesia, a description showed that the government has not been able to prevent and overcome cyber crimes effectively. The government should be able to prevent crimes in cyberspace through the implementation of strict regulations on social media. For example, when creating a new account on



social media, verification, such as face recognition, should be carried out to prevent fake accounts (Afrizal et al., 2022). The government can also strictly separate social media platforms and e-commerce platforms. Besides the government, social media developers, such as Facebook, also should support the efforts to prevent crimes in cyberspace. Social media developers should not only pursue profits by allowing many fake accounts to be active on social media, but they should also be responsible for ensuring the safety and convenience of social media users by supporting stricter policies for account creation.

## CONCLUSION

According to the explanation above, the author draws several conclusions obtained from the analysis of cyber fraud with profile cloning mode in Wajo Police using space transition theory and the concept of cyberculture. From the discussion of the concept of cyberculture, the conclusion is obtained that cyber fraud with the victim, Mr. Olfan Mundok, can occur because the victim does not understand several cybercultures in making buying and selling transactions using social media, mainly the Facebook application. The victim might not understand that many fake accounts in the Facebook application act to deceive Facebook users. Thus, the victim was not suspicious or even interested in the certain product offered in the Facebook application. The victim might also not understand that if someone would like to make transactions on social media, they should carry out checking steps to ensure that they do not have transactions with fake accounts committing fraud. Thus, the victim immediately decided to transfer money without knowing whether the policewoman's or seller's account was real or fake.

Furthermore, from the analysis using space transition theory, it can be concluded that cyber fraud with perpetrator Mr. Abdullah is in accordance with several postulates in space transition theory. First, there is a correspondence between postulate 1 and the profile of the perpetrator, Mr. Abdullah, who is unemployed and tends to be depressed in real life due to the demands of life's necessities, so he committed crimes in cyberspace through cyber fraud with profile cloning mode. Postulate 2 is in accordance with the fact that the perpetrator utilizes the ease of manipulating identity on social media and uses it to commit cyber fraud. Postulate 2 is in accordance with the fraud case because the perpetrator, Mr. Abdullah, had the opportunity to escape due to cyber fraud crimes in December 2020, and the perpetrator was arrested in March 2021. Postulate 5 is in accordance with information from society that Mr. Abdullah is usually not alone in the house and has a group that commits crimes in cyberspace. The last, postulate 6, is in accordance with the characteristics of the perpetrator, Mr. Abdullah, which tends to be closed, so he has a tendency to commit crimes in cyberspace.

Based on the analysis of the cyber fraud case, it can be concluded that the government is still unable to prevent crimes in cyberspace, such as cyber fraud. The lack of community education and

permissive regulation of social media contribute to the existence of cybercrimes. Criminals can easily create fake accounts, which will then be used to commit crimes. The community is also not provided with appropriate knowledge to avoid crime in cyberspace.

## **SUGGESTION**

Cyber fraud continues to occur in the middle of the increasingly advanced development of information and communication technology. Various cyber fraud modes continue to change and develop, so the community should be aware of not being a victim when having activities on social media. Therefore, the author suggests that the next researcher conduct a study related to the analysis of cyber fraud with various modes that are developing. This is important so that the government understands the characteristics and methods of handling cyber fraud cases that continue to occur. By understanding the details and characteristics of cyber fraud, the government and academics will also have adequate capacity to provide education to society to avoid cyber fraud with profile cloning mode.

Moreover, strengthening regulations on social media is required to prevent account cloning or the creation of social media accounts that do not match the user's personal data. Face recognition technology has been widely used in banking and government applications. Social media, mainly Facebook, should also implement regulations related to account creation verification, such as using face recognition technology. Therefore, fraud with profile cloning mode can be prevented or reduced due to more valid regulations for social media account creation.

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