

Study on Policing Management for Terrorism Crimes in Indonesia of the decade 2000-2020

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ABSTRACT

In dealing with terrorism in Indonesia in the decade 2000-2020, police management has indicated a change towards a more integrative, comprehensive and transformative direction. It led to the terror management that followed the terrorist's bombing began in 2000 attacking the Philippines embassy in Menteng, Jakarta. Thereafter, acts of terrorism occurred consecutively, with the Bali Bombing I being the biggest one. Terrorism in Indonesia is closely related to the global terrorist movement. Before the Pre-ISIS or Al Qaeda era in 2000-2013, Indonesia had the Jamaah Ansharut Tauhid (JAT) network; ISIS terror networks worked at the international level and in 2014-2018, Indonesia had Jamaah Ansharut Daulah (JAD); 2019 to date is for post ISIS networks. The individual terror model is still playing its role. The integrative handling carried out by the National Police (Polri) through Special Detachment 88 Anti-Terror has managed to unify the database and intersectoral actions. Comprehensive handling is democratic policing management that does not violate human rights which handles identification and profiling of perpetrators, scanning, recruitment, funding, surveillance, arrests, interrogation and guidance during detention and reintegration into society.

Keywords: Management, Terrorism, Democratic Policing, Securitization, Human Rights, National Security

1. Introduction

The series of terrorist acts in Indonesia and foreign countries over the last two decades has forced the Indonesian National Police (Polri) to anticipate and implement more stringent and measurable domestic security management (Kruglanski et al., 2014). In this handling terrorism management, the police are increasingly required to comply with international standards and guidelines for upholding human rights. Acts of terrorism are internationally considered a grave crime against humanity. Terrorism is a crime against civilization and a disaster for civil society. Terrorism is also one of the Trans-Organized Crime (TOC) that can endanger, tarnish world peace and harm the welfare of the community so that it requires special and continuous prevention and handling efforts.

In the course of history, terror has a long enough journey to be called a fairly old phenomenon. They are acts and actions that can cause fear, accompanied by violence, even murder to spread ominous fear. Referring to (Sinclair, Mills, & Guarente, 1997) and (Djelantik, 2008), the most classic recorded acts of terror were carried out by the Sicarii group in Palestine (66-73 AD), an organized religious sect. During the French Revolution (1793-1794), the term terror became very popular. One of the leaders of the terror regime at that time, Maximilien Robespierre, expressed that during the revolution, the people had to choose terror methods to attract the attention of elite groups and even the authoritarian government. In the face of an increasingly complex terrorist landscape, Indonesia is home to a diverse range of actors who use new technologies and tactics to advance their agendas. The terrorist threat to Indonesia has become more dynamic and pervasive as the number of groups, networks and individuals exploit global trends, including by the emergence of safer modes of communication, the expansion of media and social media, and the constant instability of security in various parts of the world. In some areas in Indonesia, many terrorist cells are still dormant or inactive. At the international level, what has contributed to the patterns and variety of forms of terrorism in Indonesia is the post-war influence in Afghanistan which later gave birth to the Al Qaeda network and its successor ISIS after the leadership of Al Qaeda fell under attack by allied forces (Saugel, Heeschen, Hapfelmeier, Romagnoli, & Greiwe, 2020)(Ashgar, 2016; Ali, 2014).

Terrorism acts, which are often brutal, have undergone paradigm shifts and mutations over time. It was originally categorized as a crime against the state, now it includes acts of crime against humanity, with innocent people as victims of their crimes, all of which are carried out with intentionally and can be included in criminal offences with violence, threats of violence or anti-humanitarian actions (Newman, 2010). The terrorism handling management in Indonesia has changed. It was originally the management of 'war' that increasingly led to the adoption of democracy and humanism. Changes in the direction and orientation of the domestic security management and governance in the face of threats of intolerance and terrorism, especially threats to the national interests, the existence of the nation as well as threats that hinder the development process, must be appropriately and quickly addressed (Harrison, 2014). Referring to (Osse, 2006), police management which includes law enforcement functions, social order maintenance and internal security as well as public services, needs to be reoriented by incorporating democratic principles, respect for human rights and ECOSOC, and good governance to make police management that is more humane and in line with international police management standards.

The scope of basic security services includes freeing every citizen from fear and also freeing them from basic human needs. The whole series certainly contains interrelated security managerial dimensions. The National Police must be able to carry out the management of preventing terrorist crimes to the management of handling terrorist acts in an integrated manner. Loopholes in the management of this handling cycle can cause significant damage. Terror prevention management must be able to easily put forward various methods of strict control over potential direct actions to be carried out in detail. In this phase, for example, the contribution of the community becomes very important. That is, communication management and monitoring of attitudes or



behaviour of a group of people need to be arranged in such a way that as a whole will result in layered management (Clarke & Newman, 2006).

This research will explore the dimensions of police governance or management in tackling the threat of terrorism carried out in the last two decades, as well as reflecting and critically evaluating the management of handling terrorism in the previous decade. This research also includes the context of international influence, including the specific managerial efforts carried out by several countries: from a very human approach by adopting democratic principles at first, to a very harsh approach using 'war' management (Osse, 2006).

2. Literature Review

In the course of history, terror has a long enough journey to be considered an old phenomenon. Measures and actions that can cause fear, accompanied by violent performances, even murder to spread a gripping fear.

Black's legal dictionary defines terror as:

"an activity that involves a violent act or an act dangerous to human life that is a violation of the criminal laws of the United States or any State, or that would be a criminal violation if committed within the jurisdiction of the United States or any State and appears to be intended (i) to intimidate or coerce a civilian population, (ii) to influence the policy of a government by intimidation or coercion, or (iii) to affect the conduct of a government by assassination and kidnapping".

According to The Arab Convention on the Suppression of Terrorism 1998:

"any act or threat of violence, whatever its motives or purposes, that occurs for the advancement of an individual or collective criminal agenda, causing terror among people, causing fear by harming them, or placing their lives, liberty or security in danger, or aiming to cause damage to the environment or to public or private installations or property or to occupy or to seize them, or aiming to jeopardize national resources"

According to (Sinclair et al., 1997) and (Djelantik, 2008), the most classic acts of terror recorded were by the Sicarii group in Palestine (66-73 AD), which was an organized religious sect. During the French Revolution (1793-1794), the term terror became very popular. One of the leaders of the terror regime at the time, Maximilien Robespierre, expressed that the people had to choose the methods of terror during the revolution to attract the attention of elite groups and even the authoritarian government. The main characteristic of terrorism in France at that time was the application of management of anti-regime power which was carried out massively, systematically, liberally and well organized.

Political terrorism at that time had relatively the same characteristics, namely: (1) imposing political views and intimidating the insistent public; (2) in carrying out their actions, they kill and burn systematically as a way to achieve certain goals and leave a clear message; (3) victims are not the goal, but as a means to create a war of nerves, with the principle of "kill one person to frighten thousands of others"; (4) for targets, terrorist groups usually choose to be easily covered through their secret works, with the aim of free publication; (5) they convey messages of action very clearly, even though they do not always reveal personal identities; (6) terrorists are those who have very

strong motivation and idealism values, as exemplified by those who struggle for the value of a particular movement, religion and struggle.

The phenomenon of a new model of terrorism then reappeared in the 9/11 event which brought down two twin towers that were symbols of the supremacy of the United States of America. The incident then gave rise to a phenomenon of terrorism with a new dimension which was labelled 'religion' and involved non-state agents as actors. These changes bring consequences for changes in issues, structures and international organizations. This form is a mutation of the old terror forms, which are static, relatively predictable, homogeneous, hierarchical, rigid and not easy to change. The new form of terror movement is then more dynamic, unpredictable, has a wide network, can organize itself well, is independent, and easily adapts to local situations (Karnavian & Sulisty, 2017).

New terrorist organizations such as Al Qaeda and ISIS, for example, are very different from "traditional" terrorist organizations such as the PKK (Kurdish) or IRA (Ireland). Terrorist groups often identify themselves as "weak groups" and "oppressed" in waging war against the state so that they seem to have an asymmetric framework of the oppressed (Ashgar, 2016).

The new model of terrorism is characterized and metamorphosed from several conditions that were born after the cold war and the hardening of the negative impacts of globalization, some of which are: first, it generally arises from failed or weak countries; secondly, it coincided with or intertwined with the post-Cold War communal violence in these divided and failed countries; third, it appears in countries that fail to control the production of light military weapons so that they are distributed to various regions without strict control; fourth, it arises in countries that fail to integrate well-organized and mobilized military and police personnel; fifth, the increase in smuggled goods and refugees across national borders; and sixth, the expansion of underground economic activity and the black market.

Furthermore, Cragin (2017) says that the emergence of terrorists with the label 'religion' in the phenomenon of terrorism after the 9/11 events at least raises two general arguments related to the basic problem of the rise of the terrorism movement. The first argument is the problem of widespread poverty, the practice of injustice, and the emergence of social inequality. These social problems then accumulate, causing marginalization and ultimately encouraging certain groups who feel disadvantaged to fight. The resistance model is very easy and becomes sexy by being wrapped with the label 'religion' so that it is easily inflamed as a weapon to build solidarity and at the same time recruit new personnel to fight, including using women and children as war personnel. As a second argument, through manipulation of religious narratives, it can become a strong attraction and be able to encourage a handful of groups to carry out terror movements, especially youth groups.

The combination of manipulation of religious teachings by ideologues of terror groups was also triggered by widespread anti-Western, anti-capitalist, anti-modern and anti-globalization sentiments, which wanted to restore messianic teachings in this modern age. This terrorism uses religion as a justification for revolutionary actions and their violent nature (Robinson, 2017).

This new model of the terrorist group requires territory to breed and stand for its operational purposes, that is, operation in weak and failed countries. These countries

were selected based on several considerations. First, it deals with the ease of consolidation and control. Territories with weak control and tend to have local conflicts are ideal places to incubate and breed terrorism. Weak and failed countries usually have undergone long-term wars, have the potential for relatively large local conflicts and loose government systems. Such a situation becomes a greater opportunity for the availability of a breeding ground for terrorism (Beninati, 2016; Robinson, 2017).

It will be easier for terrorist networks that already have certain operational areas to escape government supervision and distance themselves from people's surveillance so that they can more easily carry out illegal activities. In carrying out their activities, terrorist networks also often approach corrupt local authorities who are afraid of local conflict or competition, as has happened in several areas such as Bosnia, Kosovo, Chechnya, Sudan, Afghanistan, Columbia, Albania, Sierra Leone (Harrison, 2014).

The tragedy of the Bali Bombing 1 on October 12, 2002, followed by the successful arrest of the perpetrators by the Police, has provided evidence that what is alleged in the various quotations above turns out to have a basis of truth. A series of bombings that followed in Indonesia further proves that Indonesia is one of the countries where international terrorism networks operate. This was partly due to the weak control and supervision of the Indonesian national government since Indonesia was still in the process of transitioning to democracy. Indonesia is used as a potential location for breeding and training terrorist network operations. With various police efforts and in line with the political transition to an increasingly democratic country, several systematic steps for dealing with terror have been carried out optimally with measurable anti-terror management and governance (Karnavian & Sulisty, 2017).

We can measure the success of the Indonesian government in anti-terror governance and management based on several indicators. First, the presence of a legal basis that can be used as the main reference in efforts to prevent and deal with terrorism. In this case, the government immediately issued Government Regulation in Lieu of Law of the Republic of Indonesia (PERPU) No. 1 of 2002 concerning the Eradication of Criminal Acts of Terrorism a week after the Bali bombings. The PERPU later became Law no. 15 of 2003. It was considered that there were still shortcomings in its implementation, so the government issued another Government Regulation in Lieu of Law (PERPU) No. 2 of 2002 which later became Law no. 16 of 2003. These two anti-terror laws were accompanied by the establishment of a Special Detachment 88 tasked with implementing the handling and eradication of terror in this country.

Armed with this legal basis, coupled with experience in handling a series of acts of terrorism in Indonesia, the National Police are more mature and experienced in law enforcement for terrorism cases. Handling terrorism management and governance have been highly integrated into the work pattern of the Indonesian National Police, especially in Special Detachment 88. Like the research conducted by Skolnick and Friedman and Ponomarenko in dealing with terror crimes in the United States, they closely monitored potential suspects in democratic principles that do not violate human rights. Strict surveillance of people suspected of endangering state security is carried out in silence without disturbing individual freedom until the person concerned performs a dangerous action or has found strong evidence to immediately arrest potential terrorists before carrying out their actions.

3. Research Method

This study will use a qualitative approach combined with a rigorous desk review of various journals and secondary sources of information accessible for researchers. Bogdan and Taylor define a qualitative approach as a research procedure that produces descriptive data in the form of narrative or verbal information from people and observed behaviour (Moleong, 2002). This qualitative research involves important efforts, such as asking questions and procedures, collecting data from participants, analyzing data and the final report of this research which has a flexible structure or framework (Creswell, 2016).

Researchers will combine the search for information with the Delphi method. The purpose of using this method is to improve the information obtained from respondents, generally, it is used to improve the quality of data obtained from interviews with respondents. The Delphi method is generally carried out in four (4) stages or the following phases (Gosling, 1996) collecting as much information as possible from the respondent group, 2) exploring the views or opinions of the respondents on the issues being discussed, 3) This conflict, if any, will be used as the basis for finding out the reasons for the conflict, 4) delivering the results and drawing conclusions.

The subjects selected as key informants in this study are individuals and groups involved in handling terrorism, especially terrorism networks that use social media in Indonesia and related parties in it (society, government and law enforcement officers). In addition, the subject of this research will also deal with groups or individuals who have committed or been involved in terrorist networks. Some elements that can be used as subjects in this research are religious leaders, academics, law enforcement officers, terrorism convicts, ex-terrorist convicts. Primary data will be obtained from research subjects to obtain comprehensive conclusions from various groups.

4. Result

4.1 Strategic Management for Terror Control

Strategic management is a set of governance that is planned, implemented, monitored, evaluated and as a basis for Polri's decision making, which is made to be implemented to control the growth and expansion of acts of terrorism, while at the same time maintaining social order (Karnavian & Sulisty, 2017; Mappasiara, 2018). Strategic management in handling terrorist prisoners can be implemented by separating terrorist them into various levels, ranging from the highest level of radicalization to the lowest one (McDaniel, Greenberg, & Kim, 2019). The management process for handling terrorism is the Polri's choice of strategy to secure and control violent acts of terrorism. What is meant by management here concerns the public policies that the Polri carry out in guaranteeing and providing a sense of security for all citizens from disturbances or terrors from a handful of people who have certain intentions to damage the main aspects of life within the nation and state. . On an operational scale, the strategic management of dealing with terrorism is a series of actions and choices of actions to tackle the threat of terrorism, including handling the spread of terrorism, preventing the recruitment of members of prohibited organizations, arresting terrorist suspects, mentoring during the detention and punishment process as well as the deradicalization

process as well as handling terrorist acculturation when returning them to society (T. Ali, 2002).

4.2 Strategic Management for Scanning and Identification of Terrorist Groups in the Community

Polri's strategic management, particularly Special Detachment 88 in their efforts to identify terrorist groups, is to collect information from various sources. The first source of information about terrorist network and its characteristics comes from terrorism convicts who have been arrested. Before terrorists are caught red-handed, there is a scanning process or 'surveillance' in a fairly long time. This is to obtain accurate data and to as much as possible minimize the side effects of the arrest. Special Detachment 88 should not cause a long commotion or noise when arresting suspected terrorists. The second source of information comes from intelligence sources. The terrorists carry out their activities covertly and are often not recognized by members of the surrounding community. Terrorists disguise their identities in such a way that ordinary people or neighbours often do not know and realize that there are terrorist members among them (Mahony, 2010).

4.3 Strategic Management for Deradicalization of Terrorist Prisoners in Correctional Facilities

Regarding supermaximum security, many years ago the management was implemented by arresting terrorists after a terrorist event occurred, although with quite a lot of victims. In the first batch of terror acts in Indonesia after the bombing of the Philippines embassy in Jakarta during the President Gus Dur era, the perpetrators of the bombing were alumni of the Afghan war against the invasion of the Eastern Bloc, especially the Soviet Union. The terrorists were later arrested and then they became "figures" among the prisoners at the correctional facility so that they could build a new terrorist network by spreading the teachings of violence wrapped in Islamic religious jargon. They built a "pesantren" in the correctional facility without worrying about being spied on or arrested again for spreading hatred, anti-state and technical lessons in making terror bombs.

Based on in-depth observations and evaluations, it was found that one of the learning processes for transferring and socializing terror and violence occurred in prisons, then Densus 88 changed the strategy and management of detaining terrorists with the concept of a supermaximum prison, that is one cell for one person with CCTV placed in prison. They were not able to meet and be visited by outsiders in the early days of their detention. Prison management for terrorists is carried out with the concept of "loneliness" or solitude without violence to avoid criticism based on human rights instruments. The management of loneliness makes a prisoner unable to see other prisoners, cannot interact or communicate with one another, makes these terrorist prisoners psychologically devastated and many regret the actions he did before. According to respondents who participated in the detention process at the correctional facility that implemented the system, the detainees turned out to be "screwed". Loneliness is very torturous, especially for terrorist figures who are very used to giving lectures and assignments as well as brainwashing to maintain their fighting spirit (Ashgar, 2016).

The deradicalization process is carried out by providing counter de-idealisation through equal figures or the ones having more mastery in a rival

ideology. The combination of prison with maximum security and lecture delivery or de-ideologisation that directly hits the basis of trust by using the same argument but by reinterpreting it is a deradicalization modality carried out in a correctional facility. Applying scientific arguments, especially individual psychology and a human approach as a new "helping god" as well as programmed discussions in counter ideology with humanist values, is one of the most successful deradicalization approaches in the case of terrorist prisoners. Indonesia is currently facing ideological terrorism. Ideology is one of the contents of thoughts and feelings, so even though we can disband the group, it may not necessarily neutralize the mind and heart. As an example, individuals do not hesitate to commit suicide bombings (Lonewolf).

Terrorist groups will usually approach powerful people in the field they need. They took a financial approach and continued with an ideological approach. Terrorists were once very closed and exclusive. But now they dare to blend into the community. Therefore we need to make a more mature strategy to deal with terrorism. Why does terrorism thrive (openly) in Indonesia? That Indonesia adheres to a one-man vote system is one of the reasons. This makes political parties look for supporters, and terrorist members join them. They can support each other and create a mutualistic relationship. It is possible in the future, if a terrorist member is caught and imprisoned, there will also be a member of a political party who opposes and seeks the terrorist's freedom (Mahony, 2010; Ashgar, 2016 and as'ad said Ali, 2014).

4.4 Strategic Management for Preventing Terrorism

Institutionalize all experiences and governance architecture as well as prevention strategies to thwart all forms of terrorism in Indonesia. The Special Detachment 88 anti-terror will support all proposed solutions locally and empower stakeholders at the local level, accompanying and empowering communities with the information and knowledge and resources they need to address the terrorist threat. Early warning systems, including bystander reporting, will be a critical component of governance of this architecture. Special Detachment 88 will also work closely with foreign partners, technology sector development, collaboration with religious leaders, local stakeholders, and international forums to identify and share best practices. The Indonesian government is also trying to promote a voice of pluralism and tolerance to offset the efforts of radical groups to campaign for the establishment of a caliphate in Indonesia (Ashgar, 2016; Newman, 2010).

To combat violent extremist ideology, the Government of Indonesia is carrying out a process to weaken the capabilities of terrorist ideologies, particularly radical Islamic terrorist ideologies, to create a common identity and purpose among recruited terrorist candidates. We must combat the resilience of terrorist narratives by recognizing that their ideology contains elements that have lasting appeal among their audiences. To reduce the recruitment of terrorists, we need to show that their claims are false and do not offer effective solutions. We will exploit the scepticism among would-be terrorists to suppress the terrorist's ability to incite violence and recruit. We will also communicate on alternatives and promote diversity and plurality to address the various forms of violence that prevent individuals from becoming more committed to these ideologies and their violent methods.

Throughout the recruitment and mobilization cycle, we will draw on operational, diplomatic and developmental successes to demonstrate the futility of terrorist violence (Robinson, 2017; as'ad said Ali, 2014).

Civil Society needs to be empowered for the prevention and expansion of violent ideological campaigns. Through engagement, public communication and diplomacy, governments strengthen and connect our partners with civil society passionate about expanding their terrorism prevention. We will raise awareness of radicalization and recruitment dynamics, highlight successful approaches and interventions at home and abroad, and empower local partners through Counter Radicalization. Over the past twenty years, Special Detachment 88 has built a strong counterterrorism architecture to stop attacks and eliminate terrorists, but we have not developed a deterrence architecture to thwart terrorist radicalization and recruitment. Unless we fight radicalization and terrorist recruitment, we will fight endlessly against terrorism at home, abroad, and online. Therefore, our strategy is to champion and institutionalize prevention and create a global prevention architecture with the help of civil society, private partners and the technology industry (Hryniewicz, 2011; Hilmy, 2014).

5. Discussion

This research optimizes and borrows a strategic management framework or theory by Walayat (2014). This theory states that strategic management plays a very important role in organizations, especially planning and action and is result-oriented, especially in terms of performance (Syauket & Thamrin, 2021). This framework can be borrowed to help Polri analyze the problem of dealing with terrorism in Indonesia. According to Wheelen and Hunger, there are three (3) benefits of strategic management, which consist of:

- a. A clearer strategic vision of the organization, in this case, Polri; how is the attitude of the Police and the state towards the threat of terrorism in the country, how the state behaves and seeks the best solution in dealing with the terror threat without sacrificing citizens or valuable assets;
- b. A sharper focus on what is thought of as a coping strategy and the achievement and time span of the occurrence of social order. Of course, improving people's welfare is also important;
- c. Increased understanding of the ever-changing strategic environment is certainly the denominator for the selection of strategies to deal with the threat of terrorism. From these points, four basic elements of Wheelen and Hunger's theory can be selected, known as Environmental Scanning, Strategy Formulation, Strategy Implementation, and Evaluation and Controlled (Walayat, 2014).

Information directly comes from the public who report situations that attract attention or snippets of events related to certain situations related to terrorism. The National Police, in this case, Special Detachment 88, will follow up on this information by taking further surveillance steps until they have sufficient material and initial evidence to immediately detain terrorists. The old regulations did not allow the police to detain someone suspected of committing a terrorist crime until the act of terror claimed a victim. The new regulations allow the police, particularly Special Detachment

88, to make arrests, once two preliminary pieces of evidence are found. With this latest regulation, Special Detachment 88 can carry out anticipatory activities and pursue terrorist members who are "down" or "sleep" after carrying out their terrorist acts.

The process of recruiting members who will carry out a program is generally carried out through the spread of radical Islamic ideology, for example through the Tauhid series of books, books of teachings derived from Al-Maqdisi's books. Some discussed Saudi disbelief in the eyes of Al-Qaida (Itv A9) and also about Ad-Dimurothuyah. It is implemented in Indonesia by making the government a near enemy, since the government does not operate according to Islamic law, so it is considered apostate. That is different from the "far enemy" where terror can occur in Indonesia but the perpetrators of the attacks come from foreign countries, for example, Dr Azhari's attacks. The derivation of a near enemy is "syrik akbar" (itv A4) since the country adheres to a democratic system and is based on Pancasila (itv A9, A10). Therefore, jihad is needed as an act of struggle and makes the police the target of attack.

6. Conclusion

Indonesia, which continues to grow towards democracy, experiences clashes and is intertwined with social frictions that can lead to conflict. This is fertile ground for the emergence of terrorism. Political dynamics, especially local political competition, are increasingly becoming a fertile ground to express terror as exacerbated by structural poverty and social inequalities that have not been evenly addressed. The recruitment process and propaganda of terrorist networks are still very active, targeting the younger generation through the use of interpretations of certain religious verses who want to learn religion instantly. Even though the Special Detachment 88 task force has strictly monitored the flow of information and this well-established recruitment process, loopholes remain. For this reason, democratic policing management that is more deeply rooted in the community needs to be equipped with religious literacy and counter-discourse with the anti-terrorist movement that uses a religious basis. Religious people need to develop the practice of pluralism that upholds the dimensions of humanity, compassion, social justice and mutual cooperation.

Concrete collaboration across religions, ethnicities, the private sector and between stakeholders in one jurisdiction should be developed and carried out intensively. It is necessary to develop a conceptual, planned and integrated collaboration between the National Police and community leaders who have terrorist prisoners under their guidance. Terrorist families who are not involved in the activities of their parents need special guidance, support and education from the ministry and the state. Thus, they can be neutralized from the radical ideas understood by their parents.

The government through the ministry of religion needs to produce counter-discourse content against the understanding of Islam that deviates from the teachings of fostering good morals, polite behaviour, mutual love, tolerance and mutual help as taught by Rasulullah Muhammad SAW. Content creation in the form of educational materials for children, youth and adults by utilizing social media, mass media and general teachings in education in formal schools is also necessary.

References

- Ali, as'ad said. (2014). *Al-Qaeda: Tinjauan Sosial-Politik, Ideologi, dan Sepak Terjangnya*. Jakarta: LP3ES.
- Ali, T. (2002). *The Clash of Fundamentalisms: Crusades, Jihads and Modernity*. London: Verso.
- Ashgar, A. (2016). Gerakan Terorisme Tahun 2015: Pola Serangan, Jumlah Korban dan Wajah Baru Global Jihad. *Jurnal Keamanan Nasional*, 2(1).
<https://doi.org/https://doi.org/10.31599/jkn.v2i1.35>
- Beninati, J. A. (2016). *Examining the cyber operations of ISIS*. Utica College.
- Clarke, R. V, & Newman, G. R. (2006). *Outsmarting the terrorists* (1st ed.). Praeger.
- Cragin, R. K. (2017). The challenge of foreign fighter returnees. *Journal of Contemporary Criminal Justice*, 33(3), 292–312.
- Creswell, J. W. (2016). *Research Design Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Yogyakarta: Pustaka Pelajar.
- Djelantik, S. (2008). *Diplomasi Antara Teori dan Praktik*. Yogyakarta: Graha Ilmu.
- Gosling, D. (1996). *Gordon Cullen: Visions of Urban Design*. New Jersey: Wiley.
- Harrison, P. (2014). Making planning theory real. *Planning Theory*, 13(1), 65–81.
<https://doi.org/https://doi.org/10.1177/1473095213484144>
- Hilmy, M. (2014). Geneologi dan Pengaruh Ideologi Jihadisme Negara Islam Iraq dan Suriah (NIIS) di Indonesia. *Jurnal Tasawuf Dan Pemikiran Islam*, 2(1).
- Hryniewicz, D. (2011). Civilian Oversight as a public good: Democratic policing, civilian oversight, and the social. *Contemporary Justice Review*, 14(1), 77–83.
- Karnavian, M. T., & Sulisty, H. (2017). *Democratic policing* (2nd ed.). Jakarta: Pensil 324.
- Kruglanski, A. W., Gelfand, M. J., Belanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology*, 35(1), 69–93.
<https://doi.org/doi:10.1111/pops.12163>
- Mahony, I. (2010). Diverging Frame: A Comparison of Indonesia and Australia Press Portrayals of Terrorism and Islamic Groups in Indonesia. *International Communication Gazette*, 72(8), 739–728.
<https://doi.org/https://doi.org/10.1177/1748048510380813>
- Mappasiara, M. (2018). Manajemen Strategik Dan Manajemen Operasional Serta Implementasinya Pada Lembaga Pendidikan. *Idaarah: Jurnal Manajemen Pendidikan*, 2(1), 74–58.
<https://doi.org/https://doi.org/10.24252/idaarah.v2i1.5116>
- McDaniel, D. S., Greenberg, D., & Kim, S. H. (2019). The dark side of construct convergence: Navigating consensus, evolution, and practical relevance in theory building. *Academy of Management Perspectives*, 35(3), 485–502.
<https://doi.org/https://doi.org/10.5465/AMP.2018.0153>
- Moleong, L. J. (2002). *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya.
- Newman, E. (2010). Critical human security studies. *Review of International Studies*, 36(1), 77–94. <https://doi.org/https://doi.org/10.1017/S0260210509990519>
- Osse, A. (2006). *Understanding Policing: A Resource for Human Rights Activists*. Amnesty International Nederland.



- Robinson, L. C. (2017). Just Terror: The Islamic State's Use of Strategic "framing" to Recruit and Motivate. *Orbis*, 6(12), 172–186. <https://doi.org/https://doi.org/10.1016/j.orbis.2017.02.002>
- Saugel, B., Heeschen, J., Hapfelmeier, A., Romagnoli, S., & Greiwe, G. (2020). Cardiac output estimation using multi-beat analysis of the radial arterial blood pressure waveform: a method comparison study in patients having off-pump coronary artery bypass surgery using intermittent pulmonary artery thermodilution as the reference me. *Journal of Clinical Monitoring and Computing*, 34(4), 649–654. <https://doi.org/10.1007/s10877-019-00375-z>
- Sinclair, D. A., Mills, K., & Guarente, L. (1997). Accelerated aging and nucleolar fragmentation in yeast *sgs1* mutants, Sinclair, Mills, Guarente. *Science*, 277, 1313–1316. <https://doi.org/DOI: 10.1126/science.277.5330.1313>
- Syauket, A., & Thamrin, D. (2021). Pemberdayaan Masyarakat di Masa Pandemi Covid-19 Dalam Perspektif Human Security. *Jurnal Keamanan Nasional*, 7(2), 172–183. <https://doi.org/https://doi.org/10.31599/jkn.v7i2.503>
- Walayat, C. M. N. (2014). American Foreign Policy and Rise of Radical Islam in Afghanistan and Iraq. *The Journal Political Science*, 32, 85–105. Retrieved from <http://ps.gcu.edu.pk/wp-content/uploads/2015/02/2014-Walayyat.pdf>





Analysis of the Role of Leadership and Risk Early Warning in Minimizing Human Errors and Work Accidents of Police Officers

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<http://dx.doi.org/10.18415/ijmmu.v9i3.3558>

Abstract

Police officer is one of the professions whose duties tend to be dangerous. Some police officers have even had to sacrifice themselves for doing their duties, while the procedures for carrying out their duties, including on-duty procedures, have been made. This is why it is important for police officers to have good risk management. This is besides the fact that the leadership in a police organization also plays a role. This study analyzes leadership and risk management by involving 159 police officers as respondent subjects. Subjects were obtained by distributing leadership and risk management questionnaires to be processed. This study found that there is a linear correlation between leadership and risk management. A police officer can have good risk management, one of which is because their leaders are equally good at exemplifying risk management. This confirms the idea that leaders are supposed to be role models for their subordinates. Future research can further explore risk management and add perspectives from other variables to complete the results obtained.

Keywords: *Leadership; Police Officer; Risk Management; Work Accident*

Introduction

Police officer is a profession with many duties. One of their most difficult duty is to fight against crimes (Silver, 2011). In doing so, the police must do their best to eradicate crime at its deepest roots. Sometimes a police officer must dare to enter a risky area of operation. This condition has great potential to make him encounter things related to the risk of work accidents or even death (Garner in Shjarback & Nix, 2020). For the on-duty police officers, firearms can be a factor in these risks. On the other hand, have we all thought that in a raid or arrest, they often come in an area vulnerable to deadly dangerous chemicals, many kinds of stuff that may be infected with various kinds of dangerous viruses, as well as animal attacks that possibly cause serious injury to them (Gaines & Kappeler, 2011), which can bring the on-duty police officer pretty near to the risk of work accidents and even death.

There was a case several years ago that the police officer, who initially wanted to catch criminals, turned into a 'sitting duck' to be attacked, resulting in a fatal mistake (Stoughton, 2014). In 2016, a police officer was also killed for doing an arrest in a narcotics case in an area of East Jakarta. The police officer received counterstrike treatment, and finally turned into a victim, and was found dead (Asfar, 2016). Do

you still remember the book bomb case, which a police officer initially wanted to 'defuse', but made himself a victim of an explosion instead? (Qodir, 2011) Now as our earth is experiencing an epidemic called the coronavirus, police officers have more duties, that is protecting the community from the virus, including bringing order to the community to prevent them gather in a certain place. In this case, the police officers have to work extra which potentially makes them exhausted leading to a weakened immune system and the risk of being exposed to the coronavirus itself (Amriel, 2021). Is there any possibility that this incident was not preceded by an action of the risk analysis management? Crime is not only part of conventional cases, but recently also of progressive forms. Crime has a significant counterstrike power (Dothan, 2018).

This condition may not directly cause accidents, but it can cause a loss of performance, both mentally and physically (Nisar & Rasheed, 2019). Basically, police officers with these duties tend to be vulnerable to work accidents (Klinger, 2020). However, other cases show the opposite, the police officers also make mistakes during their raids, pursuits, and shootings. There were cases where the police officer made mistake in shooting their target, missed the shot and by accident shot people who had nothing to do with the pursuit (eg the surrounding community where criminals hide) (Ferguson, Coulson, & Barnett, 2011; Taylor, 2019). The authority for using a firearm will greatly allow the misuse of it (Osse & Cano, 2017). Instead of knocking out the criminals, firearm kills them (died). The police officer was faced with an option whether he dared to shoot or lost his nerve that makes him get shot at the end (Stoughton, 2014).

Based on the principled concept, in each case and handling, the police should have a handling procedure, in the form of work instructions (Putra, 2021). But in its implementation for some cases, mishandling of work procedures is still found. Many cases in the industrial field reveal that one of the causes is sleep deprivation. Long working hours can cause sleep disorders, which in turn lead to work accidents (Blake, 2014). Working as a police officer means dealing with long working hours that end up with sleep deprivation (Scullin, Hebl, Corrington, & Nguyen, 2020). By having an operating system, are all handling be based on the program which is part of the system? This question arises since work accidents still happen. Again, the causative factors of this issue become a subject of study for the researchers. Assuming that the handling is programmed, police officers should have enough sleep, free their minds from stress, and have no constraint on physical ability and work skills.

Bone, Normore, & Javidi (2015) explain the role of leaders in maintaining the work accuracy of their members. Officers who perform critical activities in which they have the risk of serious injury or death will benefit from recognizing how human performance relates to their work. Leaders have an important role in implementing programs into the actions of the members. The goal is to achieve success and avoid errors at work. Meanwhile, another opinion argues that an error happens due to many factors certainly of the personnel themselves which the leaders do not recognise due to lack of data and information. Trying to blame, leaders with no ability to implement the program start being against the conditions of their subordinates who are at high risk of making errors. A research result provides information that determines the monthly police work schedule is complicated and has its own challenges as apparently still not optimal. No software-assisted work scheduling system has been found (Todovic, Makajic-Nikolic, Kostic-Stankovic, & Milan, 2015).

Regarding the absence or imperfection of the software system, the work scheduling system is done manually. As a consequence, there is no proper arrangement on time division and the determination of the personnel on duty, or in other words, it tends to be unorganised. The police officer who lead the operation and the one who carry out the operation apparently need a reminder system in the form of a managerial pattern that will provide four (4) information, namely risk early warning, level of risk potentially causing the police not to perform work instructions, risk of decreased concentration, and the risk of human error and work accident. Before the police conduct an operation, the software will provide initial information about the level of risk of human error and work accidents of each personnel. A study

has shown that the average amount of sleep is negatively correlated with subjective symptoms of fatigue (Agarwal, Mosquera, Ring, & Victorson, 2020).

Research Methods

This research will involve 159 police officers who serve in the scope of duties that require a large amount of energy and concentration. For example, those work in criminal investigation and traffic units. The subject will be given a questionnaire for data collection, including a measurement scale and a questionnaire so that there are two forms of questionnaires to be filled out by the research subjects. The research involves two variables. The dependent variable is risk management, dealing with how the subject manages his/her duties to avoid the risk of work accidents. The independent variable is leadership, with which the leadership perceived by the subject towards his superiors will be measured within a 1-5 interval scale model.

Before the distribution, the questionnaire will be tested on 50 police officers. This is a necessary test to see the validity and reliability of the measuring instruments, whether they conform or not with the objects tested. The trial data obtained will go through item discrimination power test, which is a statistical analysis using the coefficient value of the item-total correlation (Azwar, 2017). This measuring instrument for risk management variables is based on Habibi & Pouya (2015) which consists of 1) understanding the process, 2) guidelines evaluations, 3) determining the critical, 4) task analysis, 5) affecting performance, 6) estimating overall probability, 7) providing cognitive demands, 8) quantitative assessment, 9) initial report, 10) experts comment, and 11) final report. According to the trial, the reliability value was 0.923 and the validity value was in the range of 0.596-0.813. Meanwhile, the leadership variable measuring instrument is a measuring tool made refers to aspects defined by (Ancok (2002). He describes some aspects, namely 1) future orientation, 2) synergizing all units and resources, 3) moving personnel to achieve goals, 4) inviting personnel to move forward together, 5) treating personnel according to their level of maturity, and 6) being able to ensure competence and motivation of their personnel. Based on the test results, the reliability value was 0.942 and the validity value ranged from 0.448 to 0.901. Furthermore, we will use correlated items as research data collection items for analysis. Statistical test is the main method used to carry out the analysis process in this study. This test will measure the influence of the independent variable towards the dependent variable by employing regression analysis.

Data Analysis and Discussion

Overview of Research Subjects

This study uses several analyzes to see the results of the leadership and risk management variables. First, we analyse the subject description to identify the distribution of the subject description as illustrated in Table 1.

Table 1. Subject Description

		Amount	Percentage (%)
Sex	Female	6	3,8
	Male	153	96,2
Rank	Bhayangkara (Enlisted)	99	62,3
	Brigadir (Non Commissioned Officer)	56	35,2
	Perwira (Officer)	4	2,5
TOTAL		159	100

Table 1 provides a description of the subjects, which as seen in the description, are divided into two (2) groups based on sex and police rank group. There are six (6) female subjects (3.8%) and 153 male subjects (96.2%). The police rank group show there are 99 subjects (62.3%) of the Bhayangkara, 56 (35.2%) of the Brigadir and 4 (2.5%) of the Officer. After obtaining a description of the subject, the next thing to analyze is the distribution of the subject based on the categorization values presented in Table 2.

Table 2. Subject Categorization Frequency

	Categorization	Categorization Value	Amount of Subjects	Percentage (%)
Leadership	Low	<28	0	0
	Medium	28-44	40	25,2
	High	>44	119	74,8
Risk Management	Low	<25,7	0	0
	Medium	25,7-40,3	5	3,1
	High	>40,3	154	96,9

The frequency of subjects based on categorization values is given in Table 2. For the leadership variable, the categorization values were grouped into three (3), namely low (<28), medium (28-44), and high (>44). Regarding the number of subjects, 40 people (25.2%) have moderate leadership, 119 people (74.8%) have high leadership, and no subject has low leadership. Meanwhile, the risk management variable has three (3) groups of categorization values, covering low (<25,7), moderate (25.7 – 40.3), and high (>40.3) risk management. There are 5 subjects with moderate risk management (3.1%), 154 subjects with high-risk management (96.9%) and no subject with low-risk management. In conclusion, subjects on average have high leadership and risk management.

Assumption Test

After examining the description of the subject, the next step is the assumption test analysis. This test is required to determine the next analysis technique by using either parametric analysis or non-parametric analysis (Orcan, 2020) as presented in Table 3.

Table 3. Assumption test results (Normality and Linearity)

	Normality	Linearity
Leadership	0,000	0,000
Risk Management	0,000	0,000

Table number 3 provides the assumption test results. The normality value is 0.000, both in the leadership and risk management variables. This explains that the two variables are not normally distributed (> 0.05). The linearity values of the two variables are also respectively at 0.000. This indicates that the variables of leadership and risk management are linear (< 0.05). Based on the results, we can determine that the next analysis technique will use non-parametric data.

Test the Relationship and Its Effect

After the analysis technique is determined, then the relationship test (correlation) and influence test will then be carried out. In this study, we will look at the relationship and influence of the leadership variable on the risk management variable, where the results are presented in Table 4.

Table 4. Correlation Test Result and Effect Size

	Leadership			Risk Management		
	Correlation	Sig	R ²	Correlation	Sig	R ²
Leadership				0,362	0,000	0,115
Risk Management	0,362	0,000	0,115			

Table 4 explains the results of the correlation test and the effect test. As seen in the table, the correlation significance value of the leadership and risk management variables is 0.000, indicating that the two variables have a significant correlation (<0.05). The correlation value is 0.362 indicating the positive relationship of the two variables (positive can also be interpreted as a unidirectional correlation). This positive correlation means that the high leadership of an individual is proportional to the high-risk management he/she has. Vice versa, the low leadership an individual possesses will be proportional to his/her risk low management. Column R² shows the results obtained are 0.115, indicating that leadership affects risk management by 11.5% while the rest can be by other variables not analyzed in this study.

Discrimination Test

In this study, a different test was conducted to explore further the variables of leadership and risk management. In this different test, two (2) groups were analyzed, namely based on gender and based on their rank in the subject's profession as members of the police. The data to be analyzed is the total score of the research subjects' answers that have been averaged, while the results are presented in Table 5.

Table 5. Discrimination Test

		Average Value of Leadership	Sig	Average Value of Risk Management	Sig
		Sex	Female	89,75	0,594
	Male	79,62	80,33		
Rank	Bhayangkara (Enlisted)	80,70	0,743	83,11	0,479
	Brigadir (Non Commissioned Officer)	79,99		75,18	
	Perwira (Officer)	62,75		70,50	

The results of the analysis of the discrimination can be seen in Table 5. In the category by sex, the significant value of the discrimination test on the leadership variable is 0.594 and on the risk management variable is 0.622. This indicates no significant difference between males and females in terms of their leadership and risk management (> 0.05). As viewed from the average value, women have a higher leadership than men ($89.75 > 79.62$). However, men have better risk management than women ($80.33 > 71.67$). According to their ranks, the significant value for the leadership variable is 0.743 and the risk management variable is 0.479. It also indicates no significant difference among police officers of the bhayangkara, brigadir and perwira ranks in their leadership and risk management. Yet, by taking a look at the average value, the bhayangkara police officers have higher leadership than ones of brigadir and the perwira ($80.70 > 79.99 > 62.75$). Based on the average value of the risk management variable, the results show that police officers of the bhayangkara have better risk management compared to police officers of the brigadir and perwira ($83.11 > 75.18 > 70.50$).

Discussion

Police officer is one of the civil service professions whose duty is to maintain order, security, and also law enforcement in an area (Gill, 2018). In performing their duties, the police tend to encounter dangerous risks. This study has discussed the results of the analysis of the police officers' risk management related to their leadership. The results show a positive correlation between risk management and leadership. When a police officer has high leadership, his/her risk management also increases. Otherwise, low leadership is proportional to low-risk management. The result has confirmed previous research which conveyed that leadership is important in risk management so that work safety can continue to improve (Fernández-Muñiz, Montes-Peón, & Vázquez-Ordás, 2014; Alston, 2017). We can measure leadership by examining how capable a leader can manage the risks faced by his organization (Indra et al., 2021). A good leader will continue to carry out further learning and constant self-evaluation, in other words, a leader can actively perform his duties properly (Indra et al., 2021). Being a leader means being a role model for others since their behaviour will be an example for their subordinates (Susilo & Kaho, 2018). Therefore, high leadership will be proportional to the high-risk management of the organization and cause few accidents at work (Mohammadfam, Soltanzadeh, Arsang-Jang, & Mohammadi, 2019).

Leadership and risk management regarding their correlation and effect are previously discussed. Thus, is there any difference in leadership and risk management in terms of sex and police rank? The results found no significant difference between both. However, the results show that women have better leadership. A stereotype that considers women leaders as something special has encouraged women to lead better than men (Alqahtani, 2019). Risk management by men has higher outcomes than the women'. Different from women, although men like to put their souls at hazard, they have a more careful and systematic plan for dealing with danger (Calvert, 2017). Apart from the gender factor, police officers of the bhayangkara have better leadership and risk management than those of the brigadir and perwira.

Conclusion

This study concludes that there is a significant positive correlation between leadership and risk management. When individuals have high leadership, their risk management will also increase, and vice versa. The description of subject categorization concludes that the average research subjects have high leadership and high-risk management. This indicates that members of the police in this study tend to have fewer work accidents while on duty. Police personnel know well what to prepare and how to carry out their duties properly and correctly. However, this research is still limited to proving a theory. We suggest that future research can further explore what leadership style is more effective in shaping risk management for each police personnel, and also add other mediator variables to expectedly provide more complete result.

References

- Agarwal, G., Mosquera, M., Ring, M., & Victorson, D. (2020). Work engagement in medical students: An exploratory analysis of the relationship between engagement, burnout, perceived stress, lifestyle factors, and medical student attitudes. *Medical Teacher*, 42(3), 299–305. <https://doi.org/10.1080/0142159X.2019.1679746>
- Alqahtani, T. (2019). Barriers to Women's Leadership. *Granite Journal*, 3(2), 34–41.
- Alston, G. (2017). *How Safe is Safe Enough?: Leadership, Safety and Risk Management*. Routledge.

- Amriël, R. I. (2021). Polisi dan Pandemi. *detikNews*. Retrieved from <https://news.detik.com/kolom/d-5628375/polisi-dan-pandemi>
- Ancok, D. (2002). *Psikologi kepemimpinan dan inovasi*. Jakarta: Erlangga.
- Asfar, A. M. (2016). KASUS NARKOBA: Polisi DIsenang Bandar: Inilah Awal Mula Teriakkan “Basi” dan Provokasi Mami Yola. *Solopos.com*. Retrieved from <https://www.solopos.com/kasus-narkoba-polisi-disenang-bandar-inilah-awal-mula-teriakan-basi-dan-provokasi-mami-yola-683230>
- Azwar, S. (2017). *Penyusunan Skala Psikologi*. Yogyakarta: Pustaka Pelajar.
- Blake, D. M. (2014). *Fatigue in Police Deadly Force Encounters: Decision Making and Reaction Time*. Kaplan University.
- Bone, D., NOrmore, A., & Javidi, M. (2015). Human factors in law enforcement leadership. *FBI Law Enforcement Bulletin*.
- Calvert, L. (2017). “A More Careful Tender Nurse Cannot Be than My Dear Husband”: Reassessing the Role of Men in Pregnancy and Childbirth in Ulster, 1780–1838. *Journal of Family History*, 42(1), 22–36. <https://doi.org/https://doi.org/10.1177/0363199016681611> Document
- Dothan, S. (2018). When Immediate Responses Fail. *Vanderbilt Journal of Transnational Law*, 51(4), 1075–1107. Retrieved from <https://widgets.ebscohost.com/prod/customerspecific/s7060880/novo-aceso/index.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.568>
- Agarwal, G., Mosquera, M., Ring, M., & Victorson, D. (2020). Work engagement in medical students: An exploratory analysis of the relationship between engagement, burnout, perceived stress, lifestyle factors, and medical student attitudes. *Medical Teacher*, 42(3), 299–305. <https://doi.org/10.1080/0142159X.2019.1679746>
- Alqahtani, T. (2019). Barriers to Women’s Leadership. *Granite Journal*, 3(2), 34–41.
- Alston, G. (2017). *How Safe is Safe Enough?: Leadership, Safety and Risk Management*. Routledge.
- Amriël, R. I. (2021). Polisi dan Pandemi. *detikNews*. Retrieved from <https://news.detik.com/kolom/d-5628375/polisi-dan-pandemi>
- Ancok, D. (2002). *Psikologi kepemimpinan dan inovasi*. Jakarta: Erlangga.
- Asfar, A. M. (2016). KASUS NARKOBA: Polisi DIsenang Bandar: Inilah Awal Mula Teriakkan “Basi” dan Provokasi Mami Yola. *Solopos.com*. Retrieved from <https://www.solopos.com/kasus-narkoba-polisi-disenang-bandar-inilah-awal-mula-teriakan-basi-dan-provokasi-mami-yola-683230>
- Azwar, S. (2017). *Penyusunan Skala Psikologi*. Yogyakarta: Pustaka Pelajar.
- Blake, D. M. (2014). *Fatigue in Police Deadly Force Encounters: Decision Making and Reaction Time*. Kaplan University.
- Bone, D., NOrmore, A., & Javidi, M. (2015). Human factors in law enforcement leadership. *FBI Law Enforcement Bulletin*.
- Calvert, L. (2017). “A More Careful Tender Nurse Cannot Be than My Dear Husband”: Reassessing the Role of Men in Pregnancy and Childbirth in Ulster, 1780–1838. *Journal of Family History*, 42(1), 22–36. <https://doi.org/https://doi.org/10.1177/0363199016681611> Document

- Dothan, S. (2018). When Immediate Responses Fail. *Vanderbilt Journal of Transnational Law*, 51(4), 1075–1107. Retrieved from <https://widgets.ebscohost.com/prod/customerspecific/s7060880/novo-acesso/index.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.568118657&lang=pt-br&site=eds-live&scope=site>
- Ferguson, C. J., Coulson, M., & Barnett, J. (2011). Psychological profiles of school shooters: Positive directions and one big wrong turn. *Journal of Police Crisis Negotiations*, 11(2), 141–158. <https://doi.org/10.1080/15332586.2011.581523>
- Fernández-Muñiz, B., Montes-Peón, J. M., & Vázquez-Ordás, C. J. (2014). Safety leadership, risk management and safety performance in Spanish firms. *Safety Science*, 70, 295–307. <https://doi.org/10.1016/j.ssci.2014.07.010>
- Gaines, L. K., & Kappeler, V. E. (2011). *Policing in America*. New York: Routledge.
- Gill, P. (2018). Rounding up the usual suspects?: developments in contemporary law enforcement intelligence: developments in contemporary law enforcement intelligence. In *Rounding up the Usual Suspects?: Developments in Contemporary Law Enforcement Intelligence*. <https://doi.org/10.4324/9781315186016>
- Habibi, E., & Pouya, A. (2015). The comparative study of evaluating human error assessment and reduction technique and cognitive reliability and error analysis method techniques in the control room of the cement industry. *International Journal of Environmental Health Engineering*, 4(1), 14. <https://doi.org/10.4103/2277-9183.157708>
- Indra, I. M., Dalimunthe, D. A., Santaria, H., Akmalia, S., Subrata, A., Bakry, S. Al, ... Widdhisiadji, B. (2021). *Pengantar Manajemen Resiko* (1st ed.). Klaten: Tahta Media Grup.
- Klinger, D. (2020). Organizational Accidents and Deadly Police-Involved Violence: Some Thoughts on Extending Theory, Expanding Research, and Improving Police Practice. *Annals of the American Academy of Political and Social Science*, 687(1), 28–48. <https://doi.org/10.1177/0002716219892913>
- Mohammadfam, I., Soltanzadeh, A., Arsang-Jang, S., & Mohammadi, H. (2019). Structural Equation Modeling Modeling (SEM) of Occupational Accidents Size Based on Risk Management Factors; A Field Study in Process Industries. *Health Scope*, 7(4), 1–7. <https://doi.org/10.5812/jhealthscope.62380>
- Nisar, S. K., & Rasheed, M. I. (2019). Stress and performance: Investigating relationship between occupational stress, career satisfaction, and job performance of police employees. *Journal of Public Affairs*, 20(1). <https://doi.org/10.1002/pa.1986>
- Orcan, F. (2020). Parametric or Non-parametric: Skewness to Test Normality for Mean Comparison. *International Journal of Assessment Tools in Education*, 7(2), 236–246. <https://doi.org/10.21449/ijate.656077>
- Osse, A., & Cano, I. (2017). Police deadly use of firearms: An international comparison. *International Journal of Human Rights*, 21(5), 629–649. <https://doi.org/10.1080/13642987.2017.1307828>
- Putra, S. J. W. E. (2021). Police Public Relations Profession in the Digital Communication Era: A Phenomenological Study of the Adaptation of West Java Police Public Relations Personnel in the Era of Digital Communication. *American Journal of Humanities and Social Sciences Research*, 5(2), 505–510.
- Qodir, A. (2011, November 25). Kopol Dodi Sudah Diingatkan Agar Tak Utak-atik Bom Buku. *Tribunnews.com*. Retrieved from <https://www.tribunnews.com/nasional/2011/11/25/kopol-dodi->

sudah-diingat-kan-agar-tak-utak-atik-bom-buku#:~:text=TRIBUNNEWS.COM%2C JAKARTA - Tiga,pada 15 Maret 2011 lalu.

- Scullin, M. K., Hebl, M. R., Corrington, A., & Nguyen, S. (2020). Experimental sleep loss, racial bias, and the decision criterion to shoot in the Police Officer's Dilemma task. *Scientific Reports*, *10*(1), 1–9. <https://doi.org/10.1038/s41598-020-77522-z>
- Shjarback, J. A., & Nix, J. (2020). Considering violence against police by citizen race/ethnicity to contextualize representation in officer-involved shootings. *Journal of Criminal Justice*, *66*(December). <https://doi.org/10.1016/j.jcrimjus.2019.101653>
- Silver, A. (2011). *Theories and Origins of the Modern Police* (1st ed.). Routledge.
- Stoughton, S. (2014). *How police training contributes to avoidable deaths*. Retrieved from www.theatlantic.com/national/archive/2014/12/police-gun-shooting-trainingferguson/383681/
- Susilo, L. J., & Kaho, V. R. (2018). *Manajemen Risiko Berbasis ISO 31000: 2018* (D. Novita, Ed.). Jakarta: PT Grasindo.
- Taylor, P. L. (2019). Beyond false positives: A typology of police shooting errors. *Criminology and Public Policy*, *18*(4), 807–822. <https://doi.org/10.1111/1745-9133.12460>
- Todovic, D., Makajic-Nikolic, Kostic-Stankovic, & Milan. (2015). Policing: An International Journal of Police Strategies & Management Police officer scheduling using goal programming Dragana Todovic Dragana Makajic-Nikolic Milica Kostic-Stankovic Milan Martic. *Policing: An International Journal of Police Strategies & Management*, *38*(2), 295–313. Retrieved from <http://dx.doi.org/10.1108/PIJPSM-11-2014-0124>

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Asian Social Work Journal (ASWJ)

Volume 7, Issue 3, June 2022

e-ISSN : 0128-1577

Journal home page:
www.msosialwork.com

Self-Esteem and Stockholm Syndrome in Dating Violence Victims

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Abstract

Violence in dating relationships causes a lot of harm to the victims. It is difficult for female students as victims to realize that they have been harmed, even though they have received a lot of inappropriate treatment. This phenomenon is like an embarrassing incident, closed tightly and accepted by oneself to get the comfort of running a social life on campus. A total of 109 students who were victims of dating violence and were willing to open up were involved to reveal the role of self-esteem and the condition of Stockholm syndrome. The instrument used is a measurement scale that is relevant to the scope of violence in dating. The results of statistical calculations found a downward patterned relationship between self-esteem and Stockholm syndrome. Other results found that low self-esteem played a role in increasing the behavior of Stockholm syndrome. What are the dynamics of Stockholm syndrome such that the victim did a study that needs to be followed up in the next study? The study of the phenomenon of dating violence needs to be seen from the side of the perpetrator (male). Future research is recommended to conduct an analysis involving male respondents.

Keywords: Violence, Dating, Stockholm syndrome, Self-esteem, Student

Introduction

According to Wardhani and Indrawati (2010), dating violence is an act of violence where the act includes threats, coercion, and physical or psychological abuse that occurs in a dating relationship (Wardhani & Indrawati, 2020). Nowadays, it is often found that students are in a romantic relationship with the opposite sex, but violence occurs in their relationship. such as verbal and psychological violence. This condition seems to contradict the meaning of dating. The definition of dating is defined as a relationship between two individuals which is usually carried out with the opposite sex, to be the initial process of building a relationship before going into marriage (Nugroho & Sushanti, 2019). Based on data obtained from the National Commission for Women, cases of violence against women in 2020 in Indonesia amounted to 299,911. The number of cases of dating violence that occurred to women in 2020 reached 1,309, which experienced an increase in cases from 2019 and ranks second after cases of domestic violence (KOMNAS PEREMPUAN, 2021). The results of a survey conducted by Wijaya (2021) found that 63 of 159 student respondents reported being victims of physical violence in dating. Then it was also found that 129 respondents had experienced psychological violence. Both survey results showed a concern. Students are agents of change to solve a problem in the environment or society (Fauziah, 2016). Dating violence that occurs in students is a critical problem that must be resolved immediately so that students can be free from all acts of violence, especially violence in dating (Wahyuni et al., 2020). Stockholm syndrome is a term used to describe a psychological bond between victims and perpetrators of violence or similar conditions where there is one individual who has dominant power to endanger the

life of the victim (Fabrique et al., 2007). Stockholm syndrome is a response crisis related to psychology in the bond that is owned by both partners. This response crisis is more experienced by women (Åse, 2015). The crisis was caused by the disturbing sense of self-esteem of victims of violence being reduced. One of the things that can make the victim's self-esteem low is that the victim is often treated harshly by his partner. The treatment then escalated into threats, and demands from their partners. The self-esteem theory from Coopersmith, in a study conducted by Zahra and Yanuvianti (2019), explains self-esteem as an effort to assess and accept every condition that represents one's state.

Violence in a dating relationship can be explained through the formation of meaning regarding the relationship (Chung, (2007). For example, the attachment that is formed between the perpetrator and the victim. Preoccupied attachment style is a factor that can influence the formation of the Stockholm syndrome tendency (Yuliani & Fitria, 2017). The meaning of a relationship is very much based on the self-esteem that is formed in a relationship bond. In a dating relationship at a young age, it turns out that self-esteem obtained from a relationship turns out to also explains the occurrence of the Stockholm syndrome tendency (Abdullah, 2019). Then it is also known that acceptance of violence is a variable that can influence dating violence victimization with self-esteem (Sabrina et al., 2021).

Research Methods

This research was conducted to obtain the facts behind the phenomenon of violence in dating. The process of collecting preliminary facts is carried out qualitatively. This initial study was conducted by interviewing five sources who have been or are currently victims of violence. Interviews were conducted to get an overview of the symptoms that occurred in the research field as a result of being a victim of violence. The description of the symptoms that appear is then processed to identify research variables and then proceed with conducting a survey study of 109 respondents who are willing, have, or are currently experiencing violence in dating. The research data were collected using a questionnaire instrument for measuring self-esteem and Stockholm syndrome, which were tested for reliability using a single trial test. Descriptive analysis, correlation, and regression were used to calculate the research quantitative data.

Results and Discussion

Self-esteem is a variable that was successfully revealed through the interview process. Facts that represent self-esteem are found in a state of declining self-esteem due to difficulty and fear of making decisions. Another fact is that there is no other choice but to have a relationship because if you move on to another, there is a fear that the fallen self-esteem will get worse. Moreover, because there is a threat given by the partner, the feeling of self-worth falls to the point that it results in a decrease in confidence in one's abilities, assuming that there is no more positive value from oneself in a relationship.

Symptoms similar to Stockholm syndrome were also collected through the interview process. The picture in the form of receiving harsh treatment is because the victim has great affection for his partner. Some even develop the belief that the abusive treatment of a partner is an expression of affection for the victim. Another fact is that because the relationship is already long enough, they choose to continue to survive even though they are treated harshly. No one else can understand that a partner is also a reason to choose to stick around.

There are three forms of violence reported by the subject. The first form is getting treatment with harsh and inappropriate words. The second form is getting rough treatment in the context of sexuality. The last is being a victim of physical violence from their partner. The results of the analysis found that verbal violence was the most widely accepted. When analysed by including the mean value of Stockholm syndrome, it turns out that the tendency is higher than sexual and physical violence. Being a victim of sexual violence tends to form lower self-esteem. The results of the calculation show that the lowest average value of self-esteem is in victims of sexual violence.

Table 1: Descriptive Forms of Violence

Violence Frequency Stockholm	Mean	
	Syndrome	Self-esteem
Verbal	46 73.283 (S)	50.848 (S)
Sexual	36 72.139 (S)	48.944 (S)
Physical	27 69.111 (S))

Results

Rihandita (2018) revealed that the most common forms of violence experienced by victims during courtship were verbal and emotional violence. In dating relationships, the most common form of violence is verbal abuse. Although there are three forms of violence, verbal violence is the thing most victims receive in a dating relationship (Julianto et al., 2020). Verbal abuse is a form of violence that correlates with the self-esteem of the victim (Saragih, 2021). The use of violent words is an important part of explaining Stockholm syndrome. Because threats tend to make it difficult for fear to make decisions. Bolívar-Suárez et al. (2021) can explain this because self-esteem also determines the victim's acceptance of violence

Table 2 Hypothesis Statistical Test

Variable	Statistical	Stockholm Syndrome
Self-Esteem	Spearman's Rho	0.472***
	P-Value	< 0.001
	R2	0.493

Source: results of research data analysis

Self-esteem has been shown to have a relationship with Stockholm syndrome. The results of the study found that there was a relationship in the opposite direction. The relationship that occurs is seen in the negative coefficient, a very significant relationship. The implication is that self-esteem can predict the tendency of Stockholm syndrome in victims of dating violence. Low self-esteem tends to predict an increase in the victim's attempt to commit Stockholm syndrome to his partner. Self-esteem contributes significantly to making victims of dating violence more likely to develop Stockholm syndrome. Low self-esteem can form a tendency to create comfort and maintain relationships despite experiencing harsh treatment from their partners. Infante explained that a victim who finds dating violence has low self-esteem (Jones & Gardner, 2002). Due to the formation of low self-esteem, victims of courtship violence receive harsh treatment from their partners and choose to stay (Sholikhah & Masykur, 2020). According to Qinthara, (2021) individuals with high self-esteem can more easily be free from relationships in which there is violence, this is because when individuals have high self-esteem, they will prefer to find new relationships rather than stay in relationships. which made him feel insecure. Yuliani and Fitria (2017) explained that the increase in Stockholm syndrome occurs because of the emotional attachment between the victim and his partner.

The results found in the study provide other information regarding the implications of the process of undergoing education carried out by respondents. It seems that the condition of the respondent experiencing an unhealthy situation in a romantic relationship will have an impact on his comfort in carrying out and completing the study. One of the effects that are easily felt is a decrease in cognitive quality which can have an impact on the study process. As revealed by the research results of R. Y. Wijaya, (2021) which revealed that dating does influence student learning concentration. Disturbing the

concentration of studying, lowering college achievement, can affect one's relationship with friends and family, and also causes forgetting things because of thinking about a girlfriend.

Conclusions

Self-esteem and Stockholm syndrome are variables that can explain the phenomenon of female students choosing to survive in relationships that contain acts of violence. Low self-esteem has a close relationship with the tendency to do Stockholm syndrome. On the other hand, the tendency of Stockholm syndrome can be suppressed by having good self-esteem. It is difficult to form positive self-esteem in the victim. The existence of harsh treatment increasingly makes victims of violence receive harsh treatment from their partners. Turning things around is something that is done to be used as an excuse to maintain a relationship. This research has not reached out to the strategic steps that need to be taken or carried out to improve the quality of life of victims of dating violence. For this reason, studies are needed that can produce easy handling modules and can help victims in making decisions that do not harm themselves. Considering not only the problem of hampered social interaction but also problems in carrying out education which is closely related to the ideals of interest in work.

References

- Abdullah, D. M. (2019). *Hubungan Self Esteem Terhadap Kecenderungan Mengalami Stockholm Syndrome Pada Remaja Perempuan Siswa SMK 1 Panji Situbondo*. 2–3.
- Åse, C. (2015). Crisis Narratives and Masculinist Protection. *International Feminist Journal of Politics*, 17(4), 595–610. <https://doi.org/10.1080/14616742.2015.1042296>
- Bolívar-Suárez, Y., Gómez, J. A. M., Yanez-Peñúñuri, L. Y., Anaconda, C. A. R., & Gómez, A. M. G. (2021). Self-esteem, Body Image, and Dating Violence in Colombian Adolescents and Young Adults. *Journal of Interpersonal Violence*, 5. <https://doi.org/10.1177/0886260521994588>
- Chung, D. (2007). Young Women's Experiences and Understandings of Dating Violence. *Violence Against Women*, 1274–1295.
- Fabrique, N. De, Romano, S. J., Vecchi, G. M., & Hasselt, V. B. Van. (2007). *Understanding Stockholm Syndrome*. 76(7).
- Fauziah, H. H. (2016). Faktor-Faktor Yang Mempengaruhi Prokrastinasi Akademik Pada Mahasiswa Fakultas Psikologi Uin Sunan Gunung Djati Bandung. *Psymphatic : Jurnal Ilmiah Psikologi*, 2(2), 123–132. <https://doi.org/10.15575/psy.v2i2.453>
- Jones, S. R., & Gardner, S. P. (2002). Variables Related to Attitudes toward Domestic Violence and Use of Reasoning, Verbal Aggression, and Violent Conflict Tactics in High School Students. *Journal of Family and Consumer Sciences Education*, 20(1), 32–47.
- Julianto, V., Cahayani, R. A., Sukmawati, S., & Aji, E. S. R. (2020). Hubungan antara Harapan dan Harga Diri Terhadap Kebahagiaan pada Orang yang Mengalami Toxic Relationship dengan Kesehatan Psikologis. *Jurnal Psikologi Integratif*, 8(1), 103. <https://doi.org/10.14421/jpsi.v8i1.2016>
- KOMNAS PEREMPUAN. (2021). CATAHU 2020 Komnas Perempuan: Lembar Fakta dan Poin Kunci (5 Maret 2021). <https://komnasperempuan.go.id/siaran-pers-detail/catahu-2020-komnas-perempuan-lembar-fakta-dan-poin-kunci-5-maret-2021>
- Nugroho, W. B., & Sushanti, S. (2019). Kekerasan dalam Pacaran: Anatomi Konflik dan Penyelesaiannya. *JSW (Jurnal Sosiologi Walisongo)*, 3(2), 145–162. <https://doi.org/10.21580/jsw.2019.3.2.3928>
- Qinthara, S. A. (2021). Muda Di Kota Bandung. 5(2), 1–13.
- Rihandita, G. (2018). Studi Deskriptif Laki-Laki Sebagai Korban Kekerasan Dalam Masa Pacaran. *Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 7(1), 1–12.
- Sabrina, A., Bachtiar, Q., & Hartini, N. (2021). Pengaruh Self-Esteem dan Penerimaan Kekerasan dalam Pacaran terhadap Dating Violence Victimization pada Remaja Perempuan. <http://e-journal.unair.ac.id/index.php/BRPKM>
- Saragih, N. A. (2021). Analisis Self Esteem Dengan Perilaku Verbal Abuse Pada Guru. 1(2), 18–21.

- Sholikhah, R., & Masykur, A. M. (2020). "Atas Nama Cinta" (Studi Fenomenologi pada Perempuan Korban Kekerasan Dalam Pacaran). *Empati*, 8(4), 52–62.
- Wahyuni, D. S., Komariah, S., & Sartika, R. (2020). Analisis Faktor Penyebab Kekerasan dalam Hubungan Pacaran pada Mahasiswa Universitas Pendidikan Indonesia. *Sosietas*, 10(2), 923–928.
- Wardhani, F., & Indrawati, E. S. (2020). Hubungan antara Harga Diri dengan Intensi Kekerasan dalam Pacaran pada Mahasiswa Program Studi Teknik Mesin Universitas Muhammadiyah Surakarta. *Jurnal Empati*, 9(6), 491.
- Wijaya, E. P. (2021). Kekerasan dalam Pacaran di Kalangan Mahasiswa UNS.
- Wijaya, R. Y. (2021). *Dampak Pacaran Terhadap Konsentrasi Mahasiswa Pens Dalam Perspektif Islam Dan Ilmu Psikologi*. 105, 1–21.
- Yuliani, A., & Fitria, N. (2017). Peran Preoccupied Attachment Style terhadap Kecenderungan Mengalami Stockholm Syndrome pada Perempuan Dewasa Awal. *Psychopathic : Jurnal Ilmiah Psikologi*, 4(2), 275–288. <https://doi.org/10.15575/psy.v4i2.1341>
- Zahra, G. P., & Yanuvianti, M. (2019). Prosiding Psikologi Hubungan Antara Kekerasan Dalam Berpacaran (Dating Violence) dengan Self Esteem Pada Wanita Korban KDP Di Kota Bandung. *The Relationship Between Dating Violence with Self Esteem on Woman Victim Dating Violence in Bandung City*.

Merancang Alat Perekam Data Denyut Jantung Dan Tayangan 360 Dalam Satu Layar Monitor

Designing a Heart Rate Data Recorder and 360 Impression in One Monitor Screen

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Abstrak

Penelitian variabel psikologis cenderung banyak menggunakan kuesioner penelitian, karena dilakukan menggunakan pendekatan penelitian survey. Padahal ada beberapa data yang terkait dengan keadaan psikologis tidak dapat diungkap secara nyata atau secara *real time*, misalnya adalah denyut jantung yang berubah akibat pemberian stimulus tertentu. Penelitian ini berusaha untuk mencoba mengkolaborasikan beberapa alat yang terpisah untuk digunakan sebagai alat pengumpul data denyut jantung sebagai dampak tayangan video. Perangkat yang digunakan merupakan perangkat yang mudah didapatkan dan dioperasikan, juga tidak memerlukan pemrograman untuk menggunakannya. Berdasarkan pendekatan *trial-error* dan pelajari video tutorial, dan juga literatur lainnya. Penelitian ini berhasil mengkolaborasikan perangkat yang untuk digunakan dalam mengobservasi efek tayangan terhadap reaksi denyut jantung melalui satu tampilan layar monitor. Alat ini disusun sebatas dengan mengkolaborasikan beberapa perangkat sesuai dengan fungsinya, dan tingkat keberhasilannya terbatas kepada kesanggupan perangkat dalam menampilkan data di layar *computer*.

Kata kunci: data, denyut jantung, layar monitor, video360

Abstract

Research on psychological variables tends to use a lot of research questionnaires, because it is carried out using a survey research approach. Even though there are some data related to psychological conditions that cannot be revealed in real time or in real time, for example, the heart rate changes due to the provision of certain stimuli. This study seeks to try to collaborate on several separate tools to be used as a means of collecting heart rate data as a result of video viewing. The device used is a device that is easy to obtain and operate, it also does not require programming to use it. Based on a trial-error approach and study video tutorials, as well as other literature. This research has succeeded in collaborating with a device to be used to observe the effect of impressions on heart rate reactions through one monitor screen display. This tool is structured to be limited to collaborating with several devices according to their functions, and the success rate is limited to the ability of the device to display data on a computer screen.

Keywords: data, heart rate, screen, video360

1. PENDAHULUAN

Proses penelitian untuk studi eksperimen dalam psikologi dilakukan dengan desain untuk mengetahui pengaruh stimulus (rangsangan) terhadap terjadinya kondisi perilaku tertentu. Perubahan-perubahan yang terjadi harus terukur dan dapat diamati. Perubahan yang terjadi juga akan dilihat penyebabnya pada perlakuan yang diberikan [1]. Berbeda dengan penelitian lain, pada penelitian eksperimen ini subjek akan diberikan beberapa perlakuan dan diamati perubahan yang terjadi [2]. Kerumitan melakukan pengukuran dan observasi terhadap data menjadi

tantangan, atau justru menjadi kendala bagi seorang peneliti. Belum lagi dalam hal proses penyimpanan data yang sangat berpeluang untuk tidak terekam dengan baik, atau cenderung berupa penggunaan kertas-kertas yang sangat banyak, sehingga tidak sejalan konsep *go-green* [3]. Padahal teknologi saat ini menawarkan kemudahan dan kecanggihan tertentu, dan bisa didesain sesuai dengan keinginan (*custom*). Teknologi yang dimaksud adalah *computer* berbasis aplikasi [4].

Tayangan berupa film pendek banyak digunakan sebagai stimulus pada penelitian eksperimen untuk mengungkap terjadinya perubahan-perubahan denyut jantung pada subjek [5] [6]. Film dibuat dalam format *video*, pada banyak kajian formatnya *video* biasa. Saat ini format *video* mengalami inovasi yang sudah semakin canggih, salah satunya adalah format 360 [7]. Pembuatan *video* dalam format yang biasa untuk dijadikan stimulus penelitian, memerlukan waktu dan biaya yang cukup besar. Terlebih lagi jika stimulusnya dibuat dalam format *video 360*, memerlukan perangkat yang aplikasi visual dan pemrograman yang khusus (*software animasi*) dan waktu pengolahan yang lama [8]. Padahal format 360 memberikan sensasi visual yang lebih menarik, karena ada sensasi seperti misalnya pengguna dapat menggeser dan memutar sudut pandang 360 derajat untuk menonton dari sudut berbagai sisi [9]. Secara ideal memang tayangan *virtual reality* dibuat melalui metode pemrograman tertentu yang dapat diketahui melalui kamera yang digunakan saat mengambil gambar, dan juga menggunakan aplikasi khusus jika *video* masih dalam format biasa [10]. Implikasinya jika tayangan formatnya *video* biasa, maka diperlukan eksplorasi teknologi informasi pemrograman untuk dapat diubah menjadi *video 360*. Untuk itu diperlukan cara yang hemat dan tepat sesuai tujuan penelitian untuk membuat format *video* tersebut

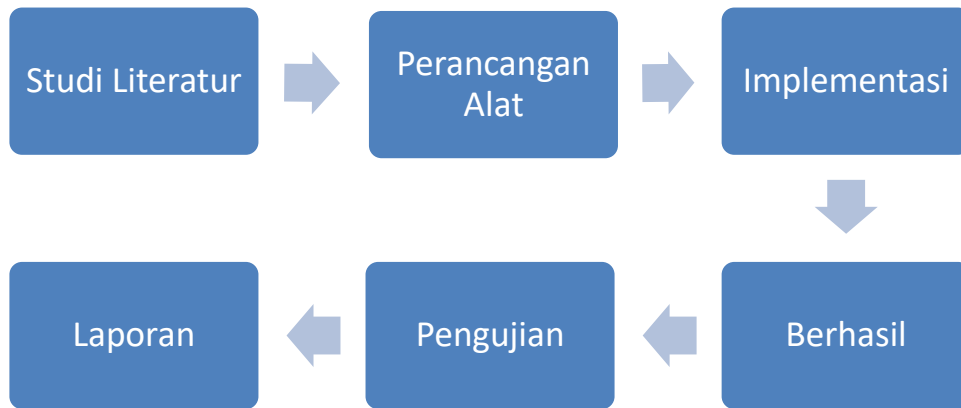
Denyut jantung merupakan salah satu objek kajian yang pernah dilakukan oleh penelitian lainnya, untuk memperhatikan dampak tayangan film terhadap denyut jantung [11]. Beberapa penelitian terdahulu yang melibatkan pengukuran denyut jantung dalam bidang medis lebih banyak menggunakan ECG katoda basah maupun inovasinya menjadi katoda kering [12] dan biaya pemeriksaannya yang relative mahal [13], atau mungkin sulit dijangkau untuk penelitian yang sangat minim biaya penelitiannya. Saat ini banyak tersedia alat dan aplikasi untuk dapat melihat denyut jantung. Alat yang dimaksud adalah *wrist band* (gelang tangan) yang dilengkapi dengan sensor pendeteksi denyut [14], dan *bluetooth* sebagai konektor pembagi data kedalam aplikasi. Data denyut jantung langsung dapat terlihat pada aplikasi yang sudah terinstal aktif pada perangkat (*smartphone*), dimana data yang dikalkulasi pada *wristband* terbagi kepada *smartphone*.

Alat-alat pengukur denyut jantung yang modern dan dengan biaya yang tinggi memang ada yang menyediakan tampilan data dan grafik denyut jantung, termasuk merekam kedua hal tersebut [15]. Tetapi alat tersebut belum bisa observasi data lainnya dalam satu frame tampilan layar *computer*. Observasi satu tampilan menjadi suatu kebutuhan praktis bagi para penelitian dalam melakukan pengamatan, karena terfokus kepada tampilan layer pada satu perangkat, sehingga peneliti tidak perlu resiprokal pada satu perangkat dan juga perangkat lainnya ketika sedang melakukan pengamatan. Karenanya diperlukan suatu pengembangan alat yang dapat memudahkan pengamatan dalam penelitian eksperimen, yang dapat membantu peneliti fokus kepada satu perangkat saat mengamati objek kajiannya [16]. Dalam hal ini adalah menggabungkan tampilan tayangan *video* format VR, dan tampilan denyut jantung yang ada pada perangkat *smartphone* dapat digabungkan menjadi satu pada perangkat *computer portable*. Dengan peneliti mengobservasi seluruh alat ukur melalui satu layar monitor, maka secara bersamaan dan lebih ringkas dapat mengetahui pergerakan denyut jantung setiap detiknya dan juga pergerakan *video* dalam VR tersebut.

Pendahuluan menguraikan latar belakang permasalahan yang diselesaikan, isu-isu yang terkait dengan masalah yg diselesaikan, ulasan penelitian yang pernah dilakukan sebelumnya oleh peneliti lain yg relevan dengan penelitian yang dilakukan. Penilaian utama reviewer dari bagian Pendahuluan ini adalah bagaimana penulis membahas penelitian terkait sehingga jelas kontribusi dan posisi dari penelitian yang dilakukan. Penelitian terkait haruslah paper dari sumber jurnal atau seminar prosiding. Definisi-definisi tidak perlu dijelaskan detail.

2. METODE PENELITIAN

Metode penelitian yang digunakan adalah eksperimen, metode eksperimen adalah metode yang dilakukan dengan cara merancang, membuat, menguji kemudian mengimplementasikannya pada rangkaian yang telah digabungkan secara otomatis.



Gambar 1. Flowchart Perancangan Alat Detak Jantung

Penelitian ini diawali dengan kajian studi literatur mengenai penelitian-penelitian terdahulu terkait dengan pengaruh efek tayangan terhadap denyut jantung dan bagaimana responnya terhadap emosi kemarahan. Dari kajian literatur tersebut maka beberapa alat dirangkai untuk menjawab kebutuhan penelitian. Setelah alat selesai dirancang maka di implementasikan kepada subjek-subjek penelitian.

Kajian penelitian difokuskan kepada merancang alat yang dapat digunakan sebagai alat yang komprehensif untuk dapat mencakup pengamatan terhadap denyut jantung sebagai akibat tayangan. Pengamatan keduanya dilakukan melalui satu frame computer, dan data-datanya dapat tersimpan langsung di dalam media penyimpanan computer. Agar penelitian dapat mewujudkannya, dilakukan dengan proses *trial-error* yang tentunya merujuk kepada referensi yang relevan. Artinya sebelum suatu langkah dicobakan, peneliti mencari rujukan terlebih dahulu melalui referensi tertulis dan tutorial video.



Gambar 2. Perangkat Yang Digunakan

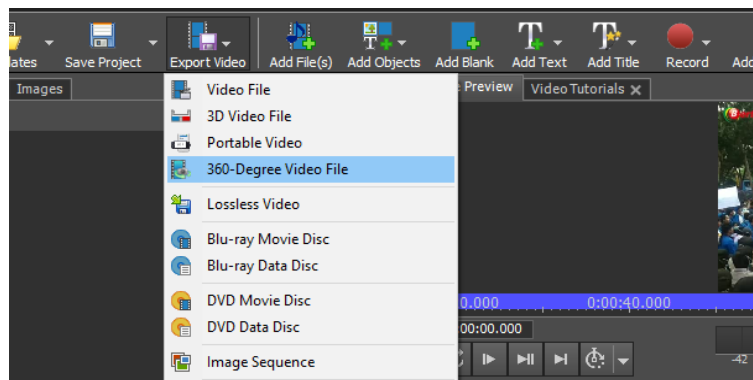
Langkah-langkah yang dimaksud adalah mengubah format video yang akan dijadikan stimulus, menjadi format 360. Kedua adalah menyambungkan *smartphone1* yang sudah terinstal aplikasi pengukur denyut jantung dengan layar komputer. Masih langkah yang kedua adalah menyambungkan *smartphone2* yang sudah terhubung dengan media pemutar tayangan dengan layar computer yang sama. Semua perangkat yang digunakan dimanfaatkan fungsi-fungsinya sesuai dengan kepentingan dan tujuan penelitian. Misalnya perangkat computer digunakan sebagai layar observasi data tayangan dan denyut jantung, dimana untuk perekaman datanya menggunakan aplikasi *screen recorder*. Smartphone digunakan sebagai alat untuk memunculkan data denyut jantung dari wristband, dan juga sebagai pemutar video 360. Perangkat VR box digunakan sebagai media untuk menyaksikan tayangan 360

Tabel. 1 Peralatan Penelitian

ALAT	KEGUNAAN	KETERANGAN
Komputer Portable	Monitor video dan Heart Rate	OS Windows 10, terinstal aplikasi copy screen
<i>Smartphone1</i>	Aplikasi Heart Rate	OS Android >5, terinstal aplikasi sesuai wristband
Wrist Band	Sensor Heart Rate	Gunakan sensor berlisensi truesin
Kabel Konektor	Koneksi telepon ke heart rate	Sebagai kabel data untuk menggandakan tampilan telepon seluler1 ke perangkat komputner portable
Kaca mata VR+head set	Media menonton	Dilengkapi dengan headset
<i>Smartphone2</i>	Pemutar video 360	Berbasis android prosesor quad core, terkoneksi dengan Bluetooth untuk copy screen ke computer portable
Konektor Mouse	Kendali telepon selular dengan mouse	tabsy
Mouse	Kendali pemutar video	wireless
Kabel headset	Mengeluarkan suara dari computer masuk ke headset	Koneksi suara computer berpindah ke headset

3. HASIL DAN PEMBAHASAN

Tayangan disusun untuk dijadikan sebagai stimulus yang akan memberikan pengaruh terhadap denyut jantung. Dalam penelitian ini mencoba merubaha tayangan video biasa menjadi tayangan 360. Menurut Su & Grauman (2017) tayangan yang pada mulanya adalah video biasa, pada dasarnya dapat diubah menjadi video 360°. Tetapi tidak bisa dirubah secara langsung, sehingga memerlukan aplikasi yang ada pada computer protable, dan yang dapat digunakan adalah aplikasi videotpad. Menurut penjelasan Riski, Video *pad* digunakan karena merupakan aplikasi yang dapat digunakan untuk mengedit audio-video [18], dalam fitur-fitur ekspor AVI dan WMV. Prosesnya adalah dengan memilih menu export video dan kemudian dilanjutkan dengan memilih *360-Degree Video File*. Selanjutnya aplikasi akan berporses dan merubahnya menjadi video dengan format 360.



Gambar 1. Merubah Video Menggunakan Aplikasi

Video yang sudah ada dimasukan ke dalam aplikasi, dilakukan dengan memilih file tayangan yang sudah tersedia (yang akan dijadikan stimulus). Proses ini merupakan langkah untuk melakukan export file ke dalam ruang pengeditan. Pada aplikasi sudah disediakan tool bar untuk mengubahnya menjadi *360degree video file*. Tetapi hal ini memerlukan tindak lanjut di dalam aplikasi, yaitu memilih resolusi tayangan. Dalam hal ini dapat memilih *360degree 960p* dengan *wode screen letterbox*. File yang sudah diubah perlu diubah penamaannya agar tidak terjadi tumpang tindih nama file, dan sebaiknya simpan dalam folder yang berbeda. Pastikan bahwa proses perubahan format sudah terjadi keseluruhan (100%). File tersebut disiapkan untuk dimasukan kedalam media youtube. Tentunya perlu untuk mengunggah file yang sudah disiapkan. Seperti pada umumnya saat mengunggah tayangan ada isian-isian yang harus dilengkapi. Karena untuk kepentingan penelitian, sebaiknya visibilitas tayangan dibatasi untuk kepentingan pribadi (bukan go public). Pastikan bahwa unggah tayangan sudah selesai di dalam akun youtube peneliti. Tandanya adalah saat peneliti mulai masuk kembali ke akunnya video yang diunggahnya ditemukan di dalam akun dan video dapat ditayangkan dalam format 360 [19].



Gambar 2. Tampilan Saat Video Berubah Menjadi Format 360

Karena penelitian menggunakan kaca mata atau VR box, maka langkah selanjutnya adalah dengan memilih icon kacamata VR. Agar dapat memutar tayangan maka smartphone2 diperasikan memutar tayangannya, untuk selanjutnya dipasangkan ke dalam kaca mata VR. Sehingga tayangan yang tampil saat menggunakan kaca mata VR sudah berupa tayangan virtual reality, dimana penggunaanya dapat merasakan sensasi pengamatan dengan bergerak memutar tubuhnya. Mengingat dasar video yang digunakan dalam penelitian ini adalah video biasa, maka sensasi yang dapat dirasakan adalah hanya dapat melihat tayangan dalam persepektif berputar hingga 360degree (tidak ada sensasi lainnya) Sebagai catatan penting agar sensasinya lebih bisa dirasakan subjek sebaiknya menyaksikan tayangan dengan berdiri.

Proses penelitian yang memerlukan pengumpulan data denyut jantung memerlukan alat-alat yang dapat melakukan pencatatan data. Pengumpulan data *heart rate* dilakukan dengan proses pengukuran berdasarkan sensor dan aplikasi, Menampilkan denyut jantung pada menggunakan wristband dan menampilkan datanya pada layar monitor pernah dilakukan pada suatu penelitian [20] Meskipun penelitian tersebut belum hanya menggabungkan tampilan stimulus audio dan data denyut jantung. Penelitian kali ini memfokuskan kepada tayangan dan denyut jantung. Adapun kedua alat tersebut di dalam proses pengambilan data dikenakan secara bersamaan dengan pemberian stimulus tayangan berupa film. Proses memutarnya menggunakan alat bantu pemutar dan kacamata VR (*virtual reality*).



Gambar 3. Menampilkan Tayangan Pada Layar Monitor

Proses penelitian yang memerlukan pengumpulan data denyut jantung memerlukan alat-alat yang dapat melakukan pencatatan data. Pengumpulan data *heart rate* dilakukan dengan proses pengukuran berdasarkan sensor dan aplikasi, Adapun kedua alat tersebut di dalam proses pengambilan data dikenakan secara bersamaan dengan pemberian stimulus tayangan berupa film. Proses memutarinya menggunakan alat bantu pemutar dan kacamata VR (*virtual reality*).



Gambar 4. Menampilkan Denyut Jantung Pada Layar Monitor

Sebagai langkah awal set-up alat adalah dengan proses menghubungkan (*pairing*) antara *wristband* dengan aplikasi pengukur denyut pada telepon seluler1 (aplikasinya sangat bergantung kepada *wristband* yang digunakan). Test dilakukan dengan menggunakan fitur berjalan di dalam ruangan, indikator aplikasi bekerja adalah muncul data denyut jantung dan ada kesesuaian antara denyut yang muncul pada *wristband* dengan denyut yang ada pada smartphone. Selanjutnya tampilan pada aplikasi disalin agar dapat ditampilkan pada layar monitor (*computer portable*), dan dihubungkan dengan menggunakan kabel data. Set-up aplikasi denyut dianggap berhasil ketika tampilan pada telepon seluler1 tampil serupa dengan yang terlihat pada monitor.



Gambar 5. Tampilan Monitor Tayangan dan Denyut Jantung

Langkah kedua adalah dengan melakukan set-up pemutar film. Telepon seluler2 digunakan sebagai perangkat untuk memutar video 360. Tayangan pada telepon seluler2 akan dicopy agar tampil juga pada layar monitor, kedua perangkat tersebut dihubungkan secara wireless (dalam hal ini gunakan *bluetooth*). Ada kemiripan dengan cara menampilkan *heart rate* ke layar monitor, yaitu menggunakan aplikasi copy screen. Indikator keberhasilannya adalah gerak yang terjadi pada pemutar film, diikuti dengan tampilan pada layar monitor.

Apabila set-up langkah pertama dan kedua sudah berhasil, maka diperlukan set-up tampilan pada layar monitor. Tata letak tampilan dapat disesuaikan dengan kenyamanan peneliti dalam melakukan observasi ataupun monitoring tayangan dan dampaknya terhadap denyut jantung. Test dapat dilakukan dengan menguji penggunaan *heartrate*, bersamaan dengan pemutaran tayangan menggunakan kaca mata VR. Setup alat ini dapat digunakan untuk mengumpulkan data denyut jantung sebagai efek tayangan, hasil dari proses *setup up* ini dapat mengumpulkan data untuk selanjutnya dianalisis dampak tayangan terhadap denyut jantung [21]. Karena alat dirancang untuk menyimpan data kemunculan denyut jantung selama menyaksikan tayangan. Maka tampilan layar direkam dengan menggunakan aplikasi video screen, dan apabila peneliti memerlukan data denyut jantung maka peneliti perlu melihat data-datanya secara manual pada file video hasil perekaman screen. Proses pencatatan data denyut jantung dilakukan dengan menggunakan tabel, dan data yang tercatat merupakan data denyut jantung yang muncul pada video selama menyaksikan tayangan.

Tabel. 2. Contoh Pencatatan Manual Denyut Jantung

98	100	101	100	103	99	97
100	98	97	96	97	95	93
100	101	98	95	97	96	97
96	97	99	100	99	100	101
102	101	102	100	101	102	103
101	102	97	98	102	104	100
97	98	99	100	98	97	99
102	103	101	102	101	102	104
102	103	101	102	101	102	104

102	100	104	106	103	105	102
101	103	106	101	100	97	99
101	105	103	99	101	102	103
107	102	95	97	98	96	95
97	96	97	98	100	99	94
96	98	100	101			

4.KESIMPULAN DAN SARAN

Alat dapat digunakan dalam keadaan tampilan pada kedua telepon seluler juga tampil pada layar computer portable, dan juga suara tayangan dapat keluar dengan jelas pada headset yang melekat di kacamata VR. Ada catatan penting yang harus diperhatikan saat memasang pemutar pada kaca mata VR, yaitu posisi gambar harus tepat. Karena tayangan diputar dalam format video 360 (virtual reality). Proses pengambilan data dilakukan pada ruang tertutup yang hening atau dengan peredam yang cukup. Selama proses subjek melakukannya dengan posisi duduk (diatur sesuai kenyamanan subjek). Agar proses pemberian tayangan dapat berjalan lancar, diperlukan ketersediaan jaringan paket data yang terhubung dengan baik dan kondisi sinyal stabil. Mengingat tayangan hanya dapat diputar dengan menggunakan jaringan berbasis internet. Fokus perancangan alat dalam penelitian ini adalah kepada alat yang dapat mengobservasi dan merekam data denyut jantung. Alat dirancang dalam penelitian terbatas kepada menampilkan data dalam satu layar monitor, dan perekaman datanya juga berupa file video. Dampaknya untuk menganalisis data yang diinginkan perlu melihat secara manual pada file video hasil perekaman. Sehingga kedepannya diperlukan perancangan yang dapat menghasilkan luaran berupa data langsung dan statistiknya (bukan file video).

DAFTAR PUSTAKA

- [1] S. Azwar, *Metode Penelitian*, 1st ed. Yogyakarta, 1998.
- [2] N. K. Denzin, *The research act: A theoretical introduction to sociological methods*. Transaction Publishers, 2017.
- [3] A. Sheopuri and A. Sheopuri, "Green Hr Practices in the Changing Workplace," *Bus. Dimens.*, vol. 2, no. January, pp. 13–26, 2015, [Online]. Available: <http://business-dimensions.org/download/Anuj-Sheopuri-and-Anita-Sheopuri-/BDV02I01P0013.pdf>.
- [4] K. J. Astrom and B. Wittenmark, *Computer-controlled systems: theory and design*. Courier Corporation, 2013.
- [5] R. R. Huesmann, J. Moise-Titus, C. L. Podolski, and L. D. Eron, "Longitudinal Relations between Children's Exposure to TV Violence and Their Aggressive and Violent Behavior in Young Adulthood: 1977-1992," *Dev. Psychol.*, vol. 39, no. 2, pp. 201–221, 2003, doi: 10.1037/0012-1649.39.2.201.
- [6] C. Lawrence and E. Hodgkins, "Personality influences on interpretations of aggressive behavior: The role of provocation sensitivity and trait aggression," *Pers. Individ. Dif.*, vol. 46, no. 3, pp. 319–324, 2009, doi: 10.1016/j.paid.2008.10.022.
- [7] L. De Cicco, S. Mascolo, V. Palmisano, and G. Ribezzo, "Reducing the network bandwidth requirements for 360 ° immersive video streaming ," *Internet Technol. Lett.*, vol. 2, no. 4, p. e118, 2019, doi: 10.1002/itl2.118.
- [8] A. Ardiyan, M. S. Mansuan, and J. Putra, "Sinematografi Animasi Dalam Media Virtual Reality Bermuatan Hantu Lokal Indonesia," *J. Dimens. DKV Seni Rupa dan Desain*, vol. 4, no. 1, p. 87, 2019, doi: 10.25105/jdd.v4i1.4563.
- [9] X. Raming, V. Tulenan, and X. Najoan, "Virtual Reality Berbasis Video 360 Derajat pada Tari-Tarian Adat Suku Minahasa," vol. 11, no. 1, 2017.
- [10] Y. C. Su and K. Grauman, "Learning Compressible 360° Video Isomers," *Proc. IEEE*

- Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, pp. 7824–7833, 2018, doi: 10.1109/CVPR.2018.00816.
- [11] A. Lafont, J. Rogé, D. Ndiaye, and J. M. Boucheix, “Towards a better understanding of emotion blends: The case of anger-related emotion blends elicited via film clips,” *Cogn. Brain, Behav. An Interdiscip. J.*, vol. 23, no. 2, pp. 77–99, 2019, doi: 10.24193/cbb.2019.23.05.
- [12] J. O. Prima, B. Pamungkas, N. -, and S. -, “Polyaniline as Novel Polymer Materials for Dry Electrode- Based Electrocardiography (ECG),” *J. Elektron. dan Telekomun.*, vol. 18, no. 1, p. 1, 2018, doi: 10.14203/jet.v18.1-8.
- [13] R. Hariri, L. Hakim, and R. F. Lestari, “Sistem Monitoring Detak Jantung Menggunakan Sensor AD8232 Berbasis Internet of Things,” *J. Telekomun. dan Komput.*, vol. 9, no. 3, p. 164, 2019, doi: 10.22441/incomtech.v9i3.7075.
- [14] D. S. Lee, T. W. Chong, and B. G. Lee, “Stress Events Detection of Driver by Wearable Glove System,” *IEEE Sens. J.*, vol. 17, no. 1, pp. 194–204, 2017, doi: 10.1109/JSEN.2016.2625323.
- [15] A. F. Putri and A. Widiatoro, “Monitoring Ekg (Elektrokardiograf) Berbasis Mikrokontroler Dan Pemrograman Delphi 7.0,” *J. Tek. Elektro dan Komput. TRIAC*, vol. 7, no. 1, pp. 23–27, 2020, doi: 10.21107/triac.v7i1.7196.
- [16] S. Bagavathiappan, B. Lahiri, J. Philip, and T. Jayakumar, “Infrared thermography for condition monitoring—A review,” *Infrared Phys. Technol.*, vol. 60, pp. 35–55, 2013.
- [17] Y. C. Su and K. Grauman, “Making 360° Video Watchable in 2D: Learning videography for click free viewing,” *Proc. - 30th IEEE Conf. Comput. Vis. Pattern Recognition, CVPR 2017*, pp. 1368–1376, 2017, doi: 10.1109/CVPR.2017.150.
- [18] I. N. Fauziah G, M. Rais, and J. P. Jamaluddin P, “Penggunaan Media Audiovisual Untuk Meningkatkan Hasil Belajar Siswa Dalam Mata Pelajaran Membiakan Tanaman Dengan Biji Jurusan Agribisnis Pembibitan Dan Kultur Jaringan Kelas X Di Smk Negeri 4 Jenepono,” *J. Pendidik. Teknol. Pertan.*, vol. 3, no. 1, p. 49, 2018, doi: 10.26858/jptp.v3i1.5197.
- [19] J. Burgess and J. Green, *YouTube: Online video and participatory culture*. John Wiley & Sons, 2018.
- [20] R. Abdillah, Y. W. Pertiwi, E. S. H. Hutahaeen, R. Bastoro, R. A. P. Putri, and T. A. Perdini, “Self-monitoring dan Kemampuan Verbal Terhadap Perilaku Berbohong,” *J. Kaji. Ilm.*, vol. 20, no. 3, pp. 249–260, 2020, doi: 10.31599/jki.v20i3.283.
- [21] E. S. H. Hutahaeen, Y. W. Pertiwi, H. Dayita Pohan, T. A. Perdini, and R. Bastoro, “Efek Tayangan Demonstrasi Sebagai Stimulus Untuk Pengaruhi Aktivitas Denyut Jantung Sebagai Representasi Reaksi Kemarahan,” *J. Kaji. Ilm.*, vol. 21, no. 2, pp. 159–170, 2021, doi: 10.31599/jki.v21i2.572.



Self-Presentation Analysis of the K-POP Dance Cover Community Member

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<http://dx.doi.org/10.18415/ijmmu.v9i10.4016>

Abstract

Many communities spread across cities in Indonesia. The K-pop cover dance community is one of them. This becomes a medium where young K-Pop dance cover enthusiasts gather to learn dance choreography performed by South Korean idols. To play roles on stage, a K-pop dance cover member must have a good self-presentation to support his/her performance. The self-presentation does not occur as it is but is influenced by various factors. In this study, we will discuss the influential factors to self-presentation, including body image, popularity, and self-esteem. We will also see how big the impact is. We involved 300 K-pop dance cover members in Indonesia to be research respondents. They were willing to fill out a research questionnaire that had been prepared in advance. After collecting data from 300 respondents, we conducted a correlation and influence analysis. The result indicates a unidirectional (positive) relationship between self-presentation and body image, popularity and self-esteem variables. The results of the influence test show that the self-esteem variable serves as a mediator which mediates body image and popularity with the self-presentation variable. With self-esteem as a mediator variable, the influence given to self-presentation becomes greater. Further research needs to examine the tips or efforts that K-pop dance cover members do to maintain and improve their self-esteem.

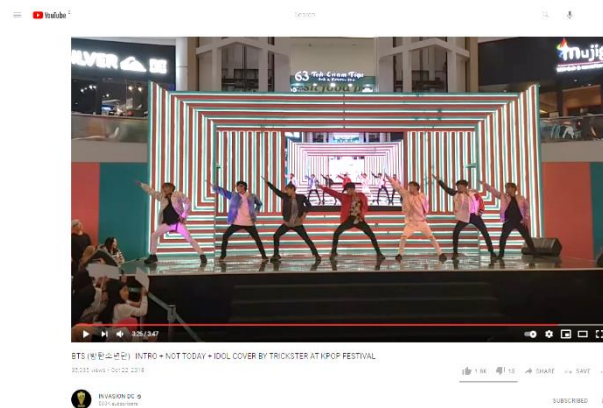
Keywords: *Self-presentation; Body Image; Popularity; Self-Esteem; Dance Cover*

Introduction

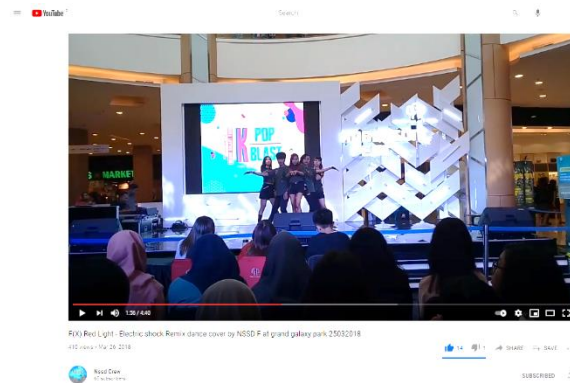
Especially in Indonesia, many media lately broadcast products from South Korea, becoming one of the top exporting countries, especially in the entertainment industry (Kemala, 2019). Many people like South Korean entertainment, especially the songs sung by Korean idols who always present energetic, complex, and creative choreography (Shin & Kim, 2013; Asmoro, 2015). This is what attracts young people in Indonesia to learn it and initiate the K-Pop dance cover communities which until now we can find them almost all over Indonesia (Fella & Sair, 2020).

K-Pop dance cover is a community that accommodates young K-Pop dance cover enthusiasts to gather and learn the choreography of K-Pop idols (Jaana, 2017). K-Pop dance cover was first popular in Indonesia through the boyband Super Junior (Suju) with their song "Sorry-Sorry" around 2009, and since

then, young people in Indonesia started to like K-pop dance covers and dig up information on other South Korean girlbands and boybands (Hermawan, 2016). In covering their idol group, each dance cover member has their respective roles according to each member of the idol group (Khiun, 2013).



Picture 1. Dance cover BTS “Idol” by Trickster
Source: Invasion, 2018



Picture 2. Dance cover F(x) “Red Light” by NSSD F
Source: NSSD Crew, 2018

In Figures 1 and 2, we can see that in performing their roles on stage, dance cover members will prepare many things, including physical performance, personal appearance (costumes, hairstyles, make-up, accessories, etc.), and body gestures (lipsync and freestyle). They set their appearance and attitude to follow the role of each member they cover. This behaviour is not without purpose. By doing this, they expect positive impressions from others in their job as cover dance dancers (Kenzy & Sugandi, 2018). Such actions or behaviours can be defined as self-presentation.

According to Goffman (in Sriwigati, Priyowidodo, & Tjahyana, 2018) self-presentation is a behaviour that one does to manage one’s impressions to others. The K-pop cover dance community members need a self-presentation that makes them likeable and gets a positive impression as well. Huang (2014) argues that there are several ways individuals use to improve their self-presentation, namely: 1) Ingratiation, that is paying attention and praising others to show a friendly attitude, 2) Damage Control, that is a strategy that individuals use to reduce negative impressions about themselves and how the individuals apologize to others when they make mistakes, 3) Manipulation, that is giving negative opinions about other people and making rational reasons why others are considered bad, 4) Self Promotion, that is sharing one’s positive achievements or positive activities to make one look good, while the other factors are body image, popularity and self-esteem (Rozika & Ramdhani, 2016).

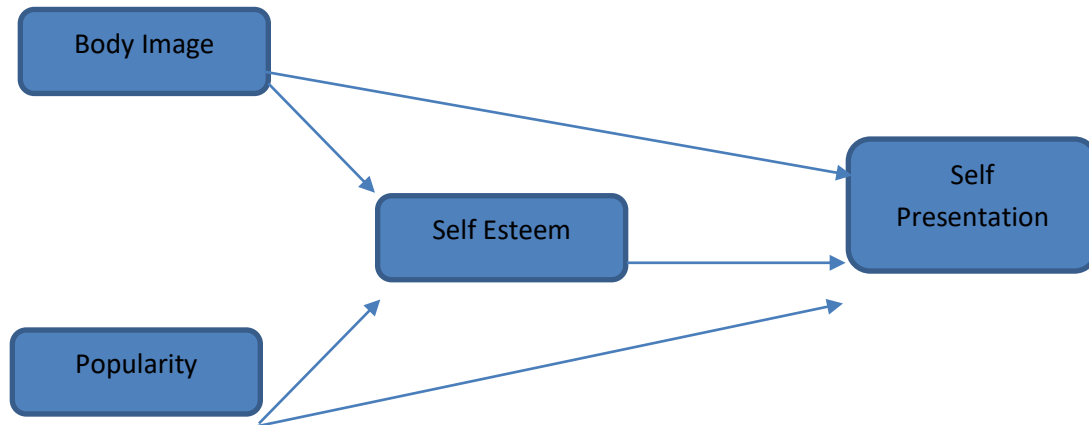
Body image is a term that can refer to the thoughts, feelings, and perceptions of individuals about their bodies (Ricciardelli & Yager, 2016). According to Apsari, Mayangsari, & Erlyani (2017), body image is the perception that individuals have about themselves regarding their physical and physical characteristics to the individual's appearance in general. In supporting their appearance, individuals as members of K-pop dance covers must have a good body image. Self-presentation and body image are interrelated variables (Britton, Martz, Bazzini, Curtin, & LeaShomb, 2006). A good body image will increase the self-presentation (Ferreira, Duarte, Pinto-Gouveia, & Lopes, 2013). In addition to body image, individual popularity can also support good self-presentation (Zook & Russotti, 2013).

What is meant by the term popular is being known and liked by many others (KBBI, 2017). Popularity refers to the status of individual entities in a group (Cillessen, Schwartz, & Mayeux, 2011). Individuals cannot be popular without the presence of a group, that's why group warfare is important in building one's popularity. Popular individuals will generally show qualities liked by others such as being cooperative, forgiving and a man of his words, and generous (De Bruyn & Van Den Boom, 2005). Popularity can directly affect self-presentation, but it can also be through the variable self-esteem as a mediator (Lansu, Cillessen, & Karremans, 2015), so can the body image (Sánchez Arenas & Ruiz Martínez, 2015). A high body image and popularity produce feelings of high self-esteem as well.

In dance activities (dance cover), the self-esteem factor can support a dance performance (Eusanio, Thomson, & Jaque, 2014). With high self-esteem, a dancer can think creatively and be more perfect in performing his/her dance on stage (Chou et al., 2019). Self-esteem can be interpreted as an assessment of an individual's personal value, including an emotional component and a cognitive component (Eromo & Levy, 2017). Self-assessment also includes awareness of one's own weaknesses, self-acceptance, and also the benefits of oneself to others (Nguyen, Ownsworth, Nicol, & Zimmerman, 2020).

Previous research has discussed self-presentation variables in the dance cover community. Firstly, Kang (2014) has conducted a research in Thailand with the transgender dance cover community members as the subject of the discussion. The study found that the transgender group was the most enthusiastic and skilled in dance cover. They feel freer to express themselves as transgender in the dance cover environment. Second, Kenzy & Sugandi (2018) researched a cover dance K-Pop group from Bandung named Sinister. This study uses a qualitative method and the results show that Sinister presents themselves like the idols they cover namely NCT. The next research belongs to Nurhadi, Suseno, & Sujana (2019) who examines the self-presentation communication model in the dance cover group Ex(shit). From the results of this study, the Ex(shit) group indeed made a self-presentation following the aspects proposed by Goffman (1959).

No previous researches have analyzed the self-presentation variable with other variables on members of the dance cover community, only the self-presentation variable as a single variable has been used and with qualitative analysis techniques. Therefore, this study will look at the results of the self-presentation of dance cover members in general (overall) with quantitative techniques. Not only measuring self-presentation but also looking at the relationship between variables that can affect self-presentation.



Picture 3. Research Hypothesis Flow

Research Methods

This research involved 300 individuals who are members of K-Pop dance cover communities, both males and females. The total amount of subjects is based on non-probability sampling. This method is used due to limited access and a large research population (Ibrahim, 2020). Data on subjects was obtained by contacting prospective subjects one by one to ask for their willingness to fill out the research questionnaires.

Research data obtained through the distribution of a questionnaire scale measuring instruments that have been tested first. The measuring instrument distributed consists of 4 variables to be measured in this study, namely the self-presentation, self-esteem, body image, and popularity variables. We tested those 30 members, which in this case only those who come from the scope of the NSSD Crew (one of the K-pop cover dance associations). The data is then tested through the discrimination power of the items, which is a statistical analysis by calculating the value of the correlation coefficient between the item scores and the total item scores (Azwar, 2009).

The self-presentation variable measuring instrument (direct) was built based on the aspects of self-presentation initiated by Goffman (1959), namely: proper front, role involvement, idealism, and mystification. The instrument made consists of 11 items. After going through the trial, 3 items were declared invalid and unfit to be used for data collection, so that the remaining 8 items were ready to be used. The trial process produces a reliability value of 0.925 and the validity value ranges from 0.302 to 0.815.

The measuring instrument for the variable of self-esteem uses aspects that Coopersmith initiated (in Hidayat & Bashori, 2016), including power, significance, virtue, and ability. This measuring tool consists of 16 items the first time it is made, but 1 item is declared invalid and unfit for use so that 15 items are remaining. The reliability value is 0.946 while the validity value is in the range of 0.532 – 0.905.

Body image measuring instrument is made based on Thompson's 3 aspects (2011), namely the perception of body parts and overall appearance, comparison with other individuals, and reactions to other people or socio-culture. This instrument initially consisted of 8 items, after going through the trial process, 1 item was declared invalid, leaving 7 items. The reliability value is 0.796 and the validity value ranges from 0.306 to 0.700.

The popularity measuring instrument is made based on the aspects that Sigall and Lindzey put forward (in Grinder, 1978), namely physical attractiveness, personal characteristics, and aspects of being active in the social environment. This instrument consists of 12 items, and after the trial process, 1 item is

declared invalid so that 11 items are remaining. The reliability value is 0.944 and the validity value is in the range of 0.667 – 0.886.

We carried out the analysis with a quantitative approach. The quantitative approach is research that uses data analysis techniques in the form of numbers to describe and present data (Suryani & Hendryadi, 2015). The research data obtained will be through descriptive analysis techniques, correlations, and also regression. Descriptive analysis is to see the distribution of subjects in certain groups such as age, domicile, gender and type of cover. The correlation test is to see the nature of the relationship between the 4 variables, plus a regression test to see the effect between variables. We also employ discrimination tests in this study to see the differences in variables for the sex groups and the cover types (cross/no cross). We use the term cross to define individuals who cover idols that do not match their gender, for example, men covering female idols or vice versa (Koesmayadi, 2013). While no cross is a definition given to individuals who cover idols according to their gender, for example, men who cover male idols and women who cover female idols. This is for seeing whether individuals cover idols according to or against their gender.

Data Analysis and Discussion

Several analytical tests were conducted to test the hypothesis. The first is a descriptive difference test analysis, used to see the distribution of descriptive data on subjects in the population of the K-pop dance cover community. Subject groups were divided into two groups, namely the gender group (female or male) and the cover type group (cross or no cross). In addition to looking at the descriptive data of the subject, we use this analysis to see differences in the subject based on the mean value.

Table 1. Frequency and Mean by Gender and Cover Type

		Gender		Cover Type	
		P	L	Cross	No Cross
PD	Frequency	230	70	50	250
	Mean	34,10*	33,71*	34,03	33,90
BI	Frequency	230	70	50	250
	Mean	25,69	26,78	26,09	25,24
P	Frequency	230	70	50	250
	Mean	43,35	43,44	43,14	44,50
HD	Frequency	230	70	50	250
	Mean	58,83	59,10	58,94	58,70

The table above shows the number of subjects by gender group and type of cover. There are 230 female subjects and 70 male subjects. The number of cover cross subjects (men cover female idols or women cover male idols) is 50 people, while no cross subjects (men cover male idols or women cover female idols) is 250 people. The table also explains the differences in self-presentation between female and male subjects. The mean value of the number of female subjects is 34.10 and of male subjects is 33.71. This indicates that female subjects have a higher self-presentation than men (Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999; Haferkamp, Eimler, Papadakis, & Kruck, 2012; Tifferet & Vilnai-Yavetz, 2018).

Descriptive analysis in its discussion reveals differences between female and male self-presentation (Tyler & Feldman, 2004). Women have a higher self-presentation than men because women also communicate more often with other dance cover members than men who communicate only to a few members. Since females are more open, they are active in forming their identity (Kusumasari & Hidayati, 2014). Other variables can also affect differences in self-presentation between individuals, namely

feelings about their own existence (popularity), as well as an assessment of how valuable they are (self-esteem), where self-esteem here can also be used as a mediator between variables.

The discrimination test is followed by the correlation test between variables. The correlation test in this study serves to see the correlation or relationship between the self-presentation variable and three other variables (body image, self-esteem, and popularity). Also to see the relationship between self-esteem variables with body image and popularity variables (since in this study the self-esteem variable acts as a mediator variable).

Table 2. Correlation Test Results Between Variables

		PD	BI	P	HD
PD	Kor	-	0,309**	0,487**	0,421**
	Sig	-	0,00	0,00	0,00
BI	Kor	0,309**	-	-	0,546**
	Sig	0,00	-	-	0,00
P	Kor	0,487**	-	-	0,573**
	Sig	0,00	-	-	0,00
HD	Kor	0,421**	0,546**	0,573**	-
	Sig	0,00	0,00	0,00	-

Table 2 above shows that the self-presentation variable is positively correlated with the body image variable (0.309**), the popularity variable (0.487**), and the self-esteem variable (0.421**). This means that if the body image, popularity and self-esteem variables are high, the self-presentation variable also increases. The self-esteem variable is also positively correlated with the body image variable (0.546**) and the popularity variable (0.573**). From these results, the hypothesis on variable dynamics may be valid. Influence analysis is needed to find out more.

Influence test analysis in this study was used to see the magnitude of the influence between variables and also to determine whether the self-esteem variable was feasible or not feasible as a mediator variable.

Table 3. Results of Intervariable Influence Test

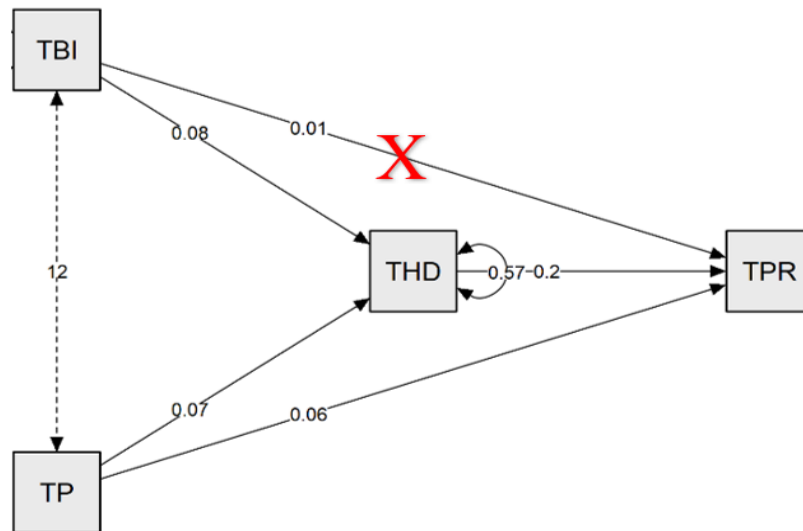
				Estimate	Z value	p	95% Confident Interval	
							Lower	Upper
BI	→	PD		0,007	0,523	0,601	-0,020	0,035
P	→	PD		0,061	5,772	0,001	0,041	0,082
BI	→	HD	→ PD	0,016	2,802	0,005	0,005	0,028
P	→	HD	→ PD	0,014	2,855	0,004	0,004	0,023

Table 3 indicates that body image cannot affect self-presentation significantly ($p = 0.601 > 0.05$), but popularity can directly affect self-presentation with a significant value of 0.001. Body image through self-esteem variable can affect self-presentation with a significant value of 0.005, so does the popularity through self-esteem variable ($p = 0.004 < 0.05$).

Table 4. Result of Influence

	R ²
Self Presentation	0.268
Self Esteem	0.426

Table 4 explains that the popularity and self-esteem affect self-presentation variables by 26.8% while the rest is influenced by other variables not examined in this study. Then the body image and popularity variables together affect the self-esteem variable by 42.6%. As the conclusion is given in the following figure.



Picture 4. The results of the feasibility test for the variable of self-esteem as a mediator

Figure 4 can explain that body image cannot directly affect self-presentation, but body image must go through the variable of self-esteem as a mediator. It is different from the popularity variable, which both directly and through the self-esteem variable can influence self-presentation. That way we can conclude that the self-esteem variable is successful and deserves to be a mediator variable.

Self-presentation is a must-have for every dancer, including K-pop cover dance dancers (Flett, Nepon, Hewitt, Molnar, & Zhao, 2016). The higher the self-presentation behaviour one has, the more perfect the dance performance one presents (Leary, 2019). Each individual also shows various efforts. K-Pop dance cover members will usually join K-pop events wearing t-shirts or accessories that indicate them as K-poppers. When it's time for them to perform, they will change into costumes they have prepared to look like the idols they cover as well as dress up as attractively as possible, then after performing they will greet and take pictures with other members or audiences (Kenzy & Sugandi, 2018).

Individuals as members of the K-pop dance cover community have a goal to become famous, not just to win the competitions (Thanh, 2014). When they see many other people know them, they will feel popular (Yack, 2001). The K-pop cover dance community is divided into many groups. Lansu & Cillessen (2015) suggest that the role of the group is important in building popularity. K-pop cover dance members will usually expand the network of friends between community members and also fellow K-poppers. A wide network of friends will make them more famous and popular (Closson & Watanabe, 2018). By expanding friendship, it can be said that the dancer has carried out self-promotion (Berglez, 2016). Self-promotion is one of the efforts in building self-presentation (Huang, 2014). By feeling popular, someone will show a more maximal self-presentation and effort (Djafarova & Trofimenko, 2019). Individuals with high popularity will try to maintain it and depend on the community, for the sake of increasing self-esteem and self-presentation (Meeus, Beullens, & Eggermont, 2019). Thus, by increasing feelings of high self-esteem, popularity can increase and self-presentation will grow maximally (Lobel, Slone, & Winch, 1997).

In contrast to popularity which can directly affect self-presentation, body image and self-presentation have a positive relationship in the same direction but not significantly influential, so it is

necessary to mediate the body image variable with the self-esteem variable. A low body image will make individuals feel unworthy to perform dances on stage, then their self-esteem will decrease. The look alike assessment aspect in the K-pop cover dance competition is very important. Here, we need to adjust the assessment of the performance of the dance cover group on stage to the original idols (Andrade, Lui, Palma, & Hefferen, 2015). It includes their hair colour, hair shapes, facial vibes, body shapes, costumes, and footwear. So, it's also important to position the dance cover members according to the idol that suits them. The comparison of their performance to the idol whose dance they are covering creates a significant difference. Rozika & Ramdhani (2016) suggest that individuals are more likely to compare their own body image with others than build their own body image standards. This is what makes them show decreased self-esteem and self-presentation.

Conclusion

This study found that the high self-presentation of K-pop dance cover members does not appear by itself, but influenced by other variables, namely popularity and self-esteem. This study succeeded in finding a positive (parallel) correlation between the four variables, but the body image variable could not affect self-presentation. This variable must go through self-esteem first to be able to influence self-presentation. Individuals with high body image will have increased self-esteem. Likewise his/her self-presentation, through the popularity variable will also produce the same. When one feels to have a high popularity, one's self-esteem will increase and one's self-presentation will get better. In this study, the self-esteem variable succeeded in being a mediator and had a higher influence on self-presentation. This proves that self-esteem plays a very important role in supporting the self-presentation of dance cover members. So, it is necessary to examine in future researches on how members of the K-pop cover dance community make an effort to maintain their self-esteem.

References

- Andrade, H., Lui, A., Palma, M., & Hefferen, J. (2015). Formative Assessment in Dance Education. *Journal of Dance Education*, 15(2), 47–59. <https://doi.org/10.1080/15290824.2015.1004408>.
- Apsari, L., Mayangsari, M. D., & Erlyani, N. (2017). Pengaruh Perilaku Modeling Pada Tayangan Drama Korea Terhadap Citra Diri Remaja Penggemar Drama Korea. *Jurnal Ecopsy*, 3(3), 144–148. <https://doi.org/10.20527/ecopsy.v3i3.2662>.
- Asmoro, A. A. (2015). Pengaruh Penggunaan Internet Terhadap Pengetahuan Korean Music Popular (K-Pop) Di Soulmate Community Kota Samarinda. *eJournal Lmu Komunikasi*, 3(1), 473–485.
- Azwar, S. (2009). Efek seleksi aitem berdasar daya diskriminasi terhadap reliabilitas skor. *Buletin Psikologi*, 17(1), 28–32.
- Berglez, P. (2016). Few To Many Communication: Public Figures Self Promotion on Twitter Through “Joint Performances” in Small Networked Constellations. *Annales-Anali Za Istrske in Mediteranske Studije - Series Historia et Sociologia*, 26(1), 171–184. <https://doi.org/10.19233/ASHS.2016.15>.
- Britton, L. E., Martz, D. M., Bazzini, D. G., Curtin, L. A., & LeaShomb, A. (2006). Fat talk and self-presentation of body image: Is there a social norm for women to self-degrade? *Body Image*, 3(3), 247–254. <https://doi.org/10.1016/j.bodyim.2006.05.006>.
- Chou, C., Huang, M., Lin, T., Lu, F. J., Chiu, Y. H., & Chen, J. (2019). Moderating Effect of Self-Esteem on the Relationship between Perfectionism and Creative Thinking among Collegiate Dancers. *Creativity Research Journal*, 31(2), 188–197. <https://doi.org/10.1080/10400419.2019.1606620>.

- Cillessen, A., Schwartz, D., & Mayeux, L. (2011). Popularity in the Peer System. Retrieved from <http://books.google.fr/books?id=btyCbvEWuloC>.
- Closson, L. M., & Watanabe, L. (2018). Popularity in the Peer Group and Victimization Within Friendship Cliques During Early Adolescence. *Journal of Early Adolescence*, 38(3), 327–351. <https://doi.org/10.1177/0272431616670753>.
- Crew, N. (2018). F(x) Red Light - Electric Shock Remix dance cover by NSSD F. Retrieved March 26, 2018, from Youtube website: <https://www.youtube.com/watch?v=JaLWMrZ-VPM>.
- De Bruyn, E. H., & Van Den Boom, D. C. (2005). Interpersonal behavior, peer popularity, and self-esteem in early adolescence. *Social Development*, 14(4), 555–573. <https://doi.org/10.1111/j.1467-9507.2005.00317.x>.
- Djafarova, E., & Trofimenko, O. (2019). “Instafamous”—credibility and self-presentation of micro-celebrities on social media. *Information Communication and Society*, 22(10), 1432–1446. <https://doi.org/10.1080/1369118X.2018.1438491>.
- Eromo, T. L., & Levy, D. A. (2017). The rise, fall, and resurgence of “self-esteem”: A critique, reconceptualization, and recommendations. *North American Journal of Psychology*, 19(2), 255–302.
- Eusanio, J., Thomson, P., & Jaque, S. V. (2014). Perfectionism, Shame, and Self-concept in Dancers. *Journal of Dance Medicine & Science*, 18(3), 106–114. <https://doi.org/http://dx.doi.org/10.12678/1089-313X.18.3.106>.
- Fella, S., & Sair, A. (2020). “Menjadi Korea”: Melihat Cara, Bentuk dan Makna Budaya Pop Korea Bagi Remaja di Surabaya. *Journal of Urban Sociology*, 3(2).
- Ferreira, C., Duarte, C., Pinto-Guoveia, J., & Lopes, C. (2013). The need to present a perfect body image: Development of a new measure of perfectionistic self-presentation. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Flett, G. L., Nepon, T., Hewitt, P. L., Molnar, D. S., & Zhao, W. (2016). Projecting perfection by hiding effort: supplementing the perfectionistic self-presentation scale with a brief self-presentation measure. *Self and Identity*, 15(3), 245–261. <https://doi.org/10.1080/15298868.2015.1119188>.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life: Selections. Projecting the Definition of the Situation*.
- Grinder, R. . (1978). *Adolescence* (2nd ed.). New York: John Wiley and Sons Inc.
- Haferkamp, N., Eimler, S. C., Papadakis, A. M., & Kruck, J. V. (2012). Men are from mars, women are from venus? Examining gender differences in self-presentation on social networking sites. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 91–98. <https://doi.org/10.1089/cyber.2011.0151>.
- Hermawan, G. F. F. (2016). Pemaknaan Gaya Hidup Dance Cover Poison di Kota Bandung The Lifestyle Meanings of Poison Dance Cover Group in Bandung. *E-Proceeding of Management*, 3(1), 872–881.
- Hidayat, K., & Bashori, K. (2016). *Psikologi Sosial*. Jakarta: Erlangga.
- Huang, H. (2014). Self-presentation Tactics in Social Media. (Icss), 416–421. <https://doi.org/10.2991/icss-14.2014.76>.
- Ibrahim, J. T. (2020). *Metode Penelitian Sosial Ekonomi Pertanian* (1st ed.). UMM Press.

- Invasion. (2018). BTS Intro + Not Today + Idol Cover by Trickster. Retrieved October 22, 2018, from Youtube website: <https://www.youtube.com/watch?v=68GmQpaphCA>.
- Jaana, M. (2017). Inspecting the quality management of an event through K-pop Dance Cover Competition (Haaga-Helia University). Retrieved from https://www.theseus.fi/bitstream/handle/10024/135948/Miettinen_Jaana.pdf?sequence=1&isAllowed=y.
- Kang, D. B. (2014). Idols of Development: Transnational Transgender Performance in Thai K-Pop Cover Dance. *TSQ: Transgender Studies Quarterly*, 1(4), 559–571. <https://doi.org/10.1215/23289252-2815246>.
- KBBI. (2017). Kamus Besar Bahasa Indonesia (KBBI). Retrieved from <http://kbbi.web.id/>.
- Kemala, A. (2019). Globalisasi Industri Hiburan Jepang dan Korea: Pengaruh terhadap Perspektif Publik antar Negara. *Global: Jurnal Politik Internasional*, 20(2), 201. <https://doi.org/10.7454/global.v20i2.336>.
- Kenzy, Y. M. N., & Sugandi, M. S. (2018). Presentasi Diri Grup K-Pop Cover Dance (Studi Dramaturgi Pada Grup K-Pop Cover Dance Sinister). 3(April), 104–111.
- Khiun, L. K. (2013). K-pop dance trackers and cover dancers: Global cosmopolitanization and local spatialization. *The Korean Wave: Korean Media Go Global*, 165–181. <https://doi.org/10.4324/9781315859064>.
- Koesmayadi, T. A. B. (2013). Presentasi Diri “Poison” Grup Cross Cover Dance Musik Pop Korea di Kota Bandung (Studi Dramaturgi Mengenai Presentasi Diri “Poison” Grup Cross Cover Dance Musik Pop Korea di Kota Bandung). Universitas Komputer Indonesia.
- Kusumasari, H., & Hidayati, D. S. (2014). Rasa Malu Dan Presentasi Diri Remaja Di Media Sosial. *Jurnal Psikologi Teori Dan Terapan*, 4(2), 91. <https://doi.org/10.26740/jptt.v4n2.p91-105>.
- Lansu, T. A. M., & Cillessen, A. H. N. (2015). Associations of group level popularity with observed behavior and influence in a dyadic context. *Journal of Experimental Child Psychology*, 140, 92–104. <https://doi.org/10.1016/j.jecp.2015.06.016>.
- Lansu, T. A. M., Cillessen, A. H. N., & Karremans, J. C. (2015). The Effects of Social Status and Self-Esteem on Imitation and Choice of a Popular Peer. *Journal of Relationships Research*, 6, 1–11. <https://doi.org/10.1017/jrr.2015.11>.
- Leary, M. R. (2019). *Self-Presentation (Impression Management and Interpersonal Behavior)*. United States: Taylor & Francis Inc.
- Lee, S. J., Quigley, B. M., Nesler, M. S., Corbett, A. B., & Tedeschi, J. T. (1999). Development of a self-presentation tactics scale. *Personality and Individual Differences*, 26(4), 701–722. [https://doi.org/10.1016/S0191-8869\(98\)00178-0](https://doi.org/10.1016/S0191-8869(98)00178-0).
- Lobel, T. E., Slone, M., & Winch, G. (1997). Masculinity, popularity, and self-esteem among Israeli preadolescent girls. *Sex Roles*, 36(5–6), 395–408. <https://doi.org/10.1007/BF02766655>.
- Meeus, A., Beullens, K., & Eggermont, S. (2019). Like me (please?): Connecting online self-presentation to pre- and early adolescents’ self-esteem. *New Media and Society*, 21(11–12), 2386–2403. <https://doi.org/10.1177/1461444819847447>.
- Nguyen, W., Ownsworth, T., Nicol, C., & Zimmerman, D. (2020). How I See and Feel About Myself:

- Domain-Specific Self-Concept and Self-Esteem in Autistic Adults. *Frontiers in Psychology*, 11, 1–12. <https://doi.org/10.3389/fpsyg.2020.00913>.
- Nurhadi, Z. F., Suseno, N. S., & Sujana, A. (2019). Model Komunikasi Tentang Presentasi Diri Grup K-pop Cross Cover Dance Grup EX (SHIT). *Jurnal Komunikasi Dan Media*, 4(1), 49–63.
- Ricciardelli, L. A., & Yager, Z. (2016). *Adolescence and Body Image (From Development to Preventing DIssatisfaction)*. New York: Routledge.
- Rozika, L. A., & Ramdhani, N. (2016). Hubungan antara Harga Diri dan Body Image dengan Online Self-Presentation pada Pengguna Instagram. *Gadjah Mada Journal Psychology*, 2(3), 172–183.
- Sánchez Arenas, J. J., & Ruiz Martínez, A. O. (2015). Relación entre autoestima e imagen corporal en niños con obesidad. *Revista Mexicana de Trastornos Alimentarios*, 6(1), 38–44. <https://doi.org/10.1016/j.rmta.2015.05.006>.
- Shin, S. I., & Kim, L. (2013). Organizing K-Pop: Emergence and market making of large Korean entertainment houses, 1980-2010. *East Asia*, 30(4), 255–272. <https://doi.org/10.1007/s12140-013-9200-0>.
- Sriwigati, N. A., Priowidodo, G., & Tjahyana, L. J. (2018). Taktik self-presentation Ridwan Kamil dan Deddy Mizwar dalam Pilkada 2018 di Instagram. *Journal E-Komunikasi*, 6(2), 1–12.
- Suryani, & Hendryadi. (2015). *Metode Riset Kuantitatif: Teori dan Aplikasi pada Penelitian Bidang Manajemen dan Ekonomi Sosial (1st ed.)*. Jakarta: Pramedia Group.
- Thanh, P. T. (2014). Asianization, Imagination, Fan Culture and Cultural Capital of Vietnamese Youth: A Case Study of K-pop Cover Dance Groups in Hanoi Vietnam. 1st AIKS Conference on Korean Studies, 150–169.
- Thompson, R. A. (2011). Emotion and emotion regulation: Two sides of the developing coin. *Emotion Review*, 3(1), 53–61. <https://doi.org/10.1177/1754073910380969>.
- Tifferet, S., & Vilnai-Yavetz, I. (2018). Self-presentation in LinkedIn portraits: Common features, gender, and occupational differences. *Computers in Human Behavior*, 80, 33–48. <https://doi.org/10.1016/j.chb.2017.10.013>.
- Tyler, J. M., & Feldman, R. S. (2004). Truth, lies, and self-presentation: How gender and anticipated future interaction relate to deceptive behavior. *Journal of Applied Social Psychology*, 34(12), 2602–2615. <https://doi.org/10.1111/j.1559-1816.2004.tb01994.x>.
- Yack, B. (2001). Popular sovereignty and nationalism. *Political Theory*, 29(4), 517–536. <https://doi.org/10.1177/0090591701029004003>.
- Zook, J. M., & Russotti, J. M. (2013). Academic Self-Presentation Strategies and Popularity in Middle School. *Journal of Early Adolescence*, 33(6), 765–785. <https://doi.org/10.1177/0272431612467229>.

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Mapping the Construct of Obedience in Education

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<http://dx.doi.org/10.18415/ijmmu.v9i12.4233>

Abstract

Obedience in the world of education is general education and religious-based education. Parameters of obedience with the rules are seen conventionally through the absence of behavior that violates the rules. However, the extent to which students interpret the rules requires more specific measurements. Therefore, a measurement concept is needed to map how students interpret the rules. This study intends to develop a measuring instrument that can map obedience through an approach to how students interpret the rules in the universities environment. Students who come from general-based and religious-based universities are involved in getting the classification of manifestations of obedience. The correlation techniques and component analysis found that religious-based students complied with the stages of accept, belief, and act. In contrast, the general (non-religious) students complied with the stages of accept, act, and belief. Therefore, this study recommends that it is necessary to study the obedience model in order to predict obedience factors.

Keywords: *Construct; Education; Obedience*

Introduction

The current obedient culture needs to be maintained and improved within the family, community, and educational environment. However, in the educational environment, especially in universities, it is realized that obedience still needs to be improved. It is because a person's attitude is ideally based on applicable norms or rules and laws because individuals who behave wrongly or violate the rules will get sanctions (Engelmann et al., 2019).

Obedience in the educational perspective is a form of individual willingness to act on the authorities' or educators' orders and wishes (Normasari, Sarbaini, and Adawiyah, 2012), which is further associated with the scope of students. Bellizzi & Hasty (in Suleman, 2020) explain that an obedient attitude can produce a good attitude by working on each rule with precision, using maximum competence in completing tasks and using intelligence and experience to show good results. Looking at some of these descriptions, the researcher interprets that obedient students can carry out every rule imposed by the authorities regarding academic activities, such as lecture activities and activities within the university environment.

When students in higher education can follow the norms and rules given, they can determine a positive attitude, and from a psychological perspective, this attitude is called obedience (Ariyanto & Sa'diyah, 2018). In terminology, obedience is a response from someone related to obedience to the authority of the rules (Milgram, 1963; Blass, 1999; Kaposi, 2017). Obedience is a fundamental element in the structure of social life that can be demonstrated and applied by individuals in a situation, condition, or location (Milgram, 1963; Sarbaini, 2014). One of them can be applied in higher education, namely, students. The role of obedience in the scope of higher education is considered essential to ensure an orderly teaching and learning process (Raby, 2012) so that the target time for the study period can be achieved.

Students in higher education are the concern in this study. These students are in a public or non-boarding university environment with students who are in a religious-based boarding universities environment and are referred to as mahasantri. Suntiah et al. (2020) found that religious-based students will have higher discipline and obedience values. After all, the boarding rules will directly impact these students so that they can encourage moral change in everyday life and make them accustomed to practicing kindness and obeying the rules. However, another study by Simbolon (2012) found that religious students also committed violations such as not maintaining security and order in the universities or boarding environment by hurting others or bullying. In addition, there are also forms of violations committed by religious students, including dating, smoking, being less concerned with the environment, less sociable, and challenging following applicable rules because they feel bored, tired, and want to get out of the dorm (Febriyanti & Montessori, 2020). Thus, researchers will also measure the level of obedience of students.

In this study, obedience is focused on attitudes related to student's academic activities. When they are in the universities environment, which refers to the literal meaning, academics are all things related to academies or schools, significantly higher education (Merriam-webster, 2021). Concerning academic obedience, it is noted that there are still many violations in students' academic activities; therefore, the researcher aims to develop a construct or measuring instrument that measures academic obedience. The measuring instrument is based on the theory proposed by Blass (2000) to develop Milgram's theory (1963). Milgram (1963) states that individuals tend to be obedient to other individuals who have authority, so it can be explained that obedience is related to obey to the authority of the rules. Developing from the theory put forward by Milgram, Blass (2000) explains that obedience is an obedient individual attitude in the sense of belief, accept, and act willing to make requests or orders from others or carry out predetermined rules. As a basis for measuring academic obedience, aspect theory is needed as a construct of academic obedience derived from Blass's theory of obedience aspect (2000). The aspects in question are belief, accept, and act.

Based on these aspects, this study will look at how the academic obedience construct can measure the level of students by looking at whether the process of students being able to obey the authorities or rules is to accept, then act, or something else. In the end, the academic obedience construct can be the right tool to measure the academic obedience of individuals when carrying out the process of academic activities.

Research Methods

Respondents in this study amounted to 300. Respondents were selected based on their common characteristics. One hundred fifty respondents were selected from general-based Universities, and 150 were determined to be from religion-based Universities. The instrument used in this study is designed to reveal how to interpret the rules. So that data on the proportion of scores on each aspect of obedience is obtained. Therefore, before taking data, the instrument was tested first regarding the consistency of the measuring instrument in different groups of respondents. Respondent data obtained is then analyzed using correlation techniques and component analysis.

Data Analysis and Discussion

Consistency of Measurement in Different Groups

The construction of obedience measurement refers to the theory presented by Blass. This theory includes three aspects that explain how to interpret the rules. First, this construct was tested using a correlation technique involving two groups of respondents with different characteristics.

Table 1. Correlation Test Results in Different Groups

	Significance	Correlation coefficient
Boarding Universities * Non Boarding Universities	< 0,001	0,991**

The analysis results found that the items used to measure obedience in groups of students on general-based universities can also measure obedience in groups of students on religious-based universities. In addition, the correlation test results managed to get a significant relation. These results indicate that the measurement items function consistently in measuring obedience. The items tested are as follows.

Table 2. Blueprint Measuring Obedience

Aspect	Indicator	Item
Belief	a. belief in the rules that are made	a. believe that the rules made by the university are beneficial for students
	b. belief in the important of making rules	a. believe in the urgency of making student rules when doing activities on universities
Accept	a. accept the rules enforced wholeheartedly	a. respond to the academic regulations of the lecturer wholeheartedly when carrying out lecture activities b. accept the consequences of academic regulations that apply in the faculty environment gracefully
	b. accept wholeheartedly the orders that are in the rules	c. sincerely accept the changes in the rules made by the university a) sincerely accept the instructions contained in the academic regulations from the lecturer when attending lectures b) gladly accept the contents of the academic regulations that apply in the faculty environment c) carry out the rules imposed by the university without feeling forced
Act	1. choose to obey the applicable regulations	a) choose to comply with the applicable faculty regulations when carrying out lecture activities
	2. carry out the applicable regulations consciously	1) carry out the academic rules from the lecturer in lecture activities without having to be reminded 2) obey the rules in the faculty environment consciously 3) follow every direction given by the university without anyone telling me first
Total		12

Based on the analysis results, six items fell out, resulting in 12 items worthy of being used as a measuring instrument for obedience. Of the 12 eligible items, the validity values in each group (boarding and non-boarding universities) were obtained as follows.

Table 3. Validity Test Results

Variable	Group	Validity Range
Obedience	Boarding universities	0,860 – 0,879
	Non-boarding universities	0,912 – 0,921

The validity value of the obedience measurement instrument in the boarding universities group ranges from 0.860 to 0.879. While the value of validity in the group of non-boarding tertiary institutions ranged from 0.912 to 0.921. The reliability value that was successfully obtained from the 12 items.

Table 4. Realibility Test Results

Variable	Group	Reliabilitas
Obedience	Boarding universities	0,879
	Non-boarding universities	0,923

The reliability test found that the obedience measurement instrument for the boarding universities group was 0.879, while the non-boarding universities group was 0.923.

Construct Analysis of Obedience Measurement

The measurement construct is a obedience elaboration structure. It consists of three aspects of elaboration; each aspect is a linear construct. However, the constructs were tested in order of the respondent groups. This order reflects the way students interpret the rules that apply on universities. The descriptive respondents in this study are:

Table 5. Descriptive Respondents

	UAbelief		UAaccept		UAact	
	M	F	M	F	M	F
Valid	146	234	146	234	146	234
Mean	7.973	7.684	23.610	22.953	15. 986	15.457
Minimum	3.000	3.000	14.000	8.000	9.000	10.000
Maximum	10.000	10.000	30.000	30.000	20.000	20.000

In table 5, it is shown that there are 146 male respondents and 234 female respondents. In the 'belief' aspect, it can be seen that the minimum total score of respondents' answers is three, and the total maximum answer score is 10, with an average score of 7.97 for male respondents and 7.68 for female respondents. In the 'accept' aspect, the minimum answer score for male respondents is 14 and for female respondents 8, while the maximum score for respondents (both male and female) is 30. On the average value of the accept aspect, the score is 23, 61 for males and 22.95 for female respondents. In the 'act' aspect, the minimum total score for the male respondents is 9, while for the female respondents is 10. The maximum total score for both males and females is 20. The average score for the 'act' aspect is 2, 23 for male and 2, 30 for female respondents. The factor analysis test found that the three components could measure obedience. Construct analysis in this study establishes three constructs: accept, belief, and act.

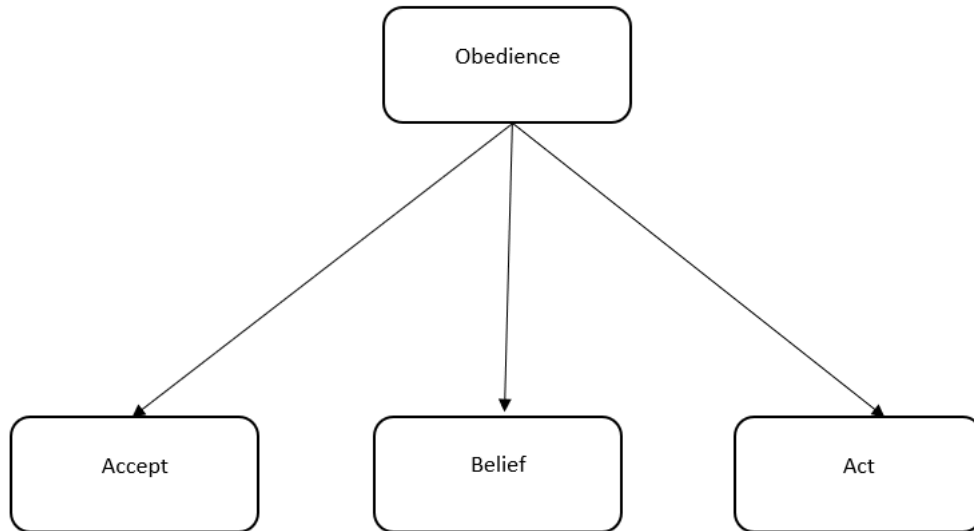


Figure 1. Construction of Measuring Tools
These Results Indicate That There is Some Redundancy in the Variables

Component Analysis

Component analysis in this study used principal component analysis. The primary component analysis in this study is related to the explanation of the variance-covariance structure derived from a set of total scores per aspect through various linear combinations of the obedience variable.

Table 6. Main Component Analysis Results

Variable	Group	Component	Random Consistency	Unique
Obedience	Non-boarding universities	Accept	0,921	0,153
		Act	0,882	0,221
		Belief	0,858	0,263
	Boarding universities	Accept	0,881	0,224
		Belief	0,823	0,323
		Act	0,736	0,458
	Boarding Universities * Non Boarding Universities	Accept	0,900	0,190
		Belief	0,839	0,296
		Act	0,816	0,334

The table above shows different results between non-boarding universities and boarding universities. In non-boarding universities, it was found that to build an attitude of obedience, they would accept the rules first, and act, and then build trust regarding the rules. In religion-based boarding universities, they will accept the existing rules first and then decide to believe or not believe; when they have believed them, they will implement or carry out these rules. These results are the same as the general results (a combination of boarding and non-boarding universities). The same result is obtained: to comply with the rules, they will accept belief, and then act.

Discussion

Ideally, religious-based university students and general university students must comply with the regulations given by the authorities, in this case, the educators at the University. Therefore, students with a respectful attitude can carry out every rule imposed by the authorities in academic activities, such as

lecture activities and activities within the university environment (Dewantara et al., 2021). Therefore, this study conducted 3 (three) analyses, namely analysis of measurement consistency, measurement constructs, and components.

The consistency analysis of obedience measurement refers to the aspect theory proposed by Blass (1999), namely belief, accept, and act. Based on the results of the consistency analysis, it is known that the measurement items can consistently measure adherence to religious-based and general university students. In a previous study conducted by Rochat & Blass (2014), this measuring instrument was used to measure obedience through an experimental method; where in this study, students were given an order to be carried out when the student did not carry out what was ordered, the student would be punished. The results of this study indicate that students can comply by carrying out what is ordered. Another study by Bègue et al. (2015) showed that the aspect theory proposed by Blass (1999) could measure obedience. Another study by Agnesta (2018) showed that the obedience aspect proposed by Blass (1999) could measure obedience in the dormitory regarding gender.

Next, the researcher conducted a construct analysis. Construct analysis is an analytical test that can determine whether the items compiled to support the aspects and whether these aspects can support the variables (Khong, 2005). Based on the analysis results, student obedience can be measured using the construct theory proposed by Blass, namely accept, belief and act. Furthermore, principal component analysis is used to help interpret phenomena not obtained under general conditions (Lu et al., 2018). Based on the results of the component analysis, it can be seen that the aspects proposed by Blass cannot precisely measure obedience with the same hierarchy. The hierarchy of obedience found in religion-based students starts with accepting, believing, and acting. These results align with research conducted by Chasanah (2021), which explains that students at boarding universities who obey the rules will accept first, then trust the rules and do whatever is ordered by the authorities. While students at public universities will accept first, then carry out the regulations, and finally believe in the regulations. This result is a new thing obtained from this study related to the hierarchy of obedience of general (non-religious) university students.

Conclusion

Based on several analytical tests that have been carried out, the results show that the obedience construct used in this study can measure obedience, both in general university students and religion-based university students. The data analyzed in this study is a quantitative test-retest. Based on the findings in this study, the researcher recommends that a study of the obedience model is necessary to predict the factors of obedience. For further research, conducting a construct analysis using the experimental method is necessary.

Acknowledgement

Our gratitude for the Institute for Research, Public Service and Publication (LPPMP) Bhayangkara University, Jakarta Raya, which has organized an internal grant. Our gratitude for Bhayangkara University Jakarta Raya for supporting this research activity for the 2022 fiscal year through letter number SKEP/097/IV/2022/UBJ.

References

Agnesta, T. (2018). Perbedaan Kepatuhan Terhadap Peraturan Asrama ditinjau dari jenis kelamin pada santri. *Riset Psikologi*, 2018(3).

- Ariyanto, E. A., & Sa'diyah, N. H. (2018). Kepatuhan Terhadap Figur Otoritas dan Radikalisme Pada Remaja. 105(3), 129–133.
- Bègue, L., Beauvois, J. L., Courbet, D., Oberlé, D., Lepage, J., & Duke, A. A. (2015). Personality Predicts Obedience in a Milgram Paradigm. *Journal of Personality*, 83(3), 299–306. <https://doi.org/10.1111/jopy.12104>
- Blass, T. (1999). The milgram paradigm after 35 years: Some things we now know about obedience to authority. *Journal of Applied Social Psychology*, 29(5), 955–978. <https://doi.org/10.1111/j.1559-1816.1999.tb00134.x>.
- Blass, T. (2000). *Obedience to Authority*. Lawrence Erlbaum Associate.
- Chasanah, N. (2021). Leadership of Kiai and Students' Obedience in Islamic Boarding School. *Resolusi*, 4(1), 42.
- Dewantara, J. A., Hermawan, Y., Yunus, D., Prasetyo, W. H., Efriani, E., Arifiyanti, F., & Nurgiansah, T. H. (2021). Anti-corruption education as an effort to form students with character humanist and law-compliant. *Jurnal Civics: Media Kajian Kewarganegaraan*, 18(1), 70–81. <https://doi.org/10.21831/jc.v18i1.38432>.
- Engelmann, S., Chen, M., Fischer, F., Chingyu, K., & Grossklags, J. (2019). Clear sanctions, vague rewards: How China's social credit system currently defines "good" and "bad" behavior. *FAT* 2019 - Proceedings of the 2019 Conference on Fairness, Accountability, and Transparency*, 69–78. <https://doi.org/10.1145/3287560.3287585>.
- Febriyanti, F., & Montessori, M. (2020). Pembinaan Perilaku Sosial Antar Mahasiswa di Asrama Mahasiswa Surau Yayasan Amal Saleh. *Journal of Civic Education*, 3(1), 141–147. <https://doi.org/10.24036/jce.v3i1.333>.
- Kaposi, D. (2017). The resistance experiments: Morality, authority and obedience in Stanley Milgram's account. *Journal for the Theory of Social Behaviour*, 47(4), 382–401. <https://doi.org/10.1111/jtsb.12137>.
- Khong, K. W. (2005). The Perceived Impact Of Successful Outsourcing On Customer Service Management. *Supply Chain Management: An International Journal*, 10(5).
- Lu, M., He, K., Huang, J. Z., & Qian, X. (2018). Principal Component Analysis for Exponential Family Data. In G. R. Naik (Ed.), *Advances in Principal Component Analysis Research and Development*. Springer. <https://doi.org/https://doi.org/10.1007/978-981-10-6704-4>.
- Merriam-webster. (2021). Screen Shot 2015-05-29 at 09. www.Merriam-Webster.Com.
- Milgram, S. (1963). Primary Sources Behavioral Study of Obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371-378.
- Normasari, Sarbaini, & Adawiyah, R. (2012). Jurnal pendidikan kewarganegaraan. *Jurnal Pendidikan Kewarganegaraan*, 3(5), 320–327. http://eprints.ulm.ac.id/1161/1/JURNAL_PKN_Vol_3_No_5_Mei_2013.pdf.
- Raby, R. (2012). *School Rules: Obedience, Discipline, and Elusive Democracy*. In *Practical Professional Child Care*. University of Toronto Press. <https://doi.org/10.12968/ppcc.2006.3.7.38877>.
- Rochat, F., & Blass, T. (2014). Milgram's unpublished obedience variation and its historical relevance. *Journal of Social Issues*, 70(3), 456–472. <https://doi.org/10.1111/josi.12071>.

- Sarbaini. (2014). *Good Practices-Pendidikan Nilai, Moral dan Karakter Kepatuhan* (1st ed.). Aswaja Presindo Yogyakarta.
- Simbolon, M. (2013). Perilaku Bullying pada Mahasiswa Berasrama. *Jurnal Psikologi*, 39(2), 233–243. <https://doi.org/10.22146/jpsi.6989>.
- Suleman, D. (2020). Disiplin: Sikap Dan Perilaku Taat. *SCIENTIFIC JOURNAL OF REFLECTION : Economic, Accounting, Management and Business*, 3(1), 11–20. <https://doi.org/10.37481/sjr.v3i1.111>.
- Suntiah, R., Fikri, M., & Assidiqi, M. H. (2020). Perbandingan Akhlak Siswa Berasrama dengan Non Asrama SMA Boarding School. *Atthulab: Islamic Religion Teaching and Learning Journal*, 5(1), 24–36. <https://doi.org/10.15575/ath.v5i1.5216>.

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MEASURING THE EFFECTIVENESS AND SUCCESS RATE OF TRAINING PROGRAMS

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ABSTRACT

Training activities are designed to achieve targets and the success will be viewed based on the changes. Obstacles occur when running a training program, especially when measurable, accountable and objective methods are imposed to assess success. Formulas and formulations of effectiveness and success are often considered the same. An effective training program is characterized by the understanding of the participants, while the success of the training is seen from the actual implementation of the understanding of the training material into real work. This study intends to analyze and conceptualize ways of measuring the effectiveness and success rate of a training program implementation. The data analyzed are illustrative data for two groups: Training 1 and Training 2. Quantitative analysis and multivariate statistical techniques are employed for several variables. The results of the analysis describe the methods of measurement that can calculate the effectiveness and determine the level of success of a training program. The results obtained are also supported by further analysis of paired samples test, correlation test and model test involving a mediator. The results obtained in this paper are illustrative data so their accuracy should be later practised in activities that require a calculation of effectiveness and success rates, such as interventions, training and counselling.

Keywords: Effectiveness, Measure, Success

1. Introduction

Measurement of effectiveness shows the important goals whether a work activity is achieved or not (Schermerhorn, Hunt, & Osborn, 1995). As an example, we can see whether the achievements in the training program are effective or not through the comparison between the achievements taught to the participants and the number of achievements they understood. Achievements become objectification in measurable effectiveness. The gap that occurs between expectations and reality is measured by a mathematical formula. The effectiveness rate of the training is seen based on the impact obtained as a consequence of carrying out the assignment. Simply put, the explanation of the formula for measuring effectiveness is the effect metric. We can use the study of effect metrics to find out what was obtained as a result of certain treatments. For



example, to find out whether sponsorship communication can provide more financial benefits compared to other communication processes (Olson & Thjømmøe, 2009).

We can find out the effectiveness by using the planned achievement objects and the achievements that have been obtained from administering certain treatments. The effectiveness of the training program can be checked by directing the object of examination to be evaluated and the absorption of the understanding of participants' responses in a learning process (Mohanty, Dash, Dash, & Das, 2019). Program effectiveness is an objective reality. An effective program can be measured by the realization and target variables (Cyntia & Kartika, 2019). Disclosure of scientific facts and realities is based on objective measures through fixed numbers that represent reality. The industrial engineering world has used the Overall Equipment Effectiveness (OEE) concept to measure the effectiveness of using production machines in achieving production targets (Prabowo, Suprpto, & Farida, 2018). OEE produces a calculated output in the form of a percentage of effectiveness. The formula for calculating effectiveness has been stated in the scientific literature in the field of human resource management (HRM), particularly to see the level of worker productivity. There is also a quantification of effectiveness applied to the scaling model, for example, a scaling instrumentation technique for measuring the effectiveness of communication training that uses the Science Communication Training Effectiveness Scale to measure the effectiveness of a science communication training program designed to improve communication between scientists and non-scientists (Rodgers, Wang, & Schultz, 2020).

Success is not something accidentally achieved, but rather a condition that begins with planning, treatment goals, strengthening of carrying out treatment, and the impact of treatment. Motivation and orientation towards learning goals are the two variables that evidently contribute the most to predicting training success (Tziner, Fisher, Senior & Weisberg, 2007). In theoretical logic, effectiveness is not enough to be equated to describing success. An effective training program is known for its role in raising awareness and its success in describing the implementation of what is obtained from the training (Clegg, Rees & Titchen, 2010). Training is given to developing the capacity of human resources, and its success is seen through the failure or success of training programs in achieving organizational targets (Brinkerhoff, 2005). Success is formulated by referring to actual targets and assigned targets. Some use the approach to reporting on the implementation of the assignment. In the scope of behaviour and outcomes, success describes the knowledge and skills acquired in training that has been applied to the job and has a wider impact on the organization (Bates, 2004). Success becomes easier to know through the presence or absence of behaviour and attitudes that apply understanding in completing a job to get real work results.

Training effectiveness and success have different operational patterns. The effect of training is only to achieve a certain understanding, such as increasing understanding and knowledge (Cahyo & Reni, 2016), but success is seen through the implementation of the understanding gained through training in real work areas, for example, the participation of trainees in implementing the training model (Fitria, Kristiawan & Rahmat, 2019). Several studies on effectiveness did not continue to observe the effects of training and its application in accomplishing task demands. Studies on the success of human resource management only focus on productivity to achieve organizational



targets (Iskandar, 2018). The effectiveness and success of training is a series, in which effective training can support the success of achieving organizational targets. Observation of the effectiveness and success is only carried out towards changes in progress as a result of providing learning programs, for example when we develop student potential through learning (Maheasy, 2018). The reliability of the effectiveness and success rate for its quantitative measure is unknown and tends to refer to the subjective-qualitative sense. The reliability of an intervention module is immeasurable. Also, there is the risk of having a very high value of subjectivity that will lead to confusion in assessing the impact of the training program or intervention.

This research tries to involve the technique of measuring effectiveness in the industrial fields which will be compiled in a short formula. The training program as discussed in this study is an illustration that describes its process and measures its effectiveness, followed by an illustration of the success rate of the training program (since there is an implementation of the training effect). The calculation results described in this study can be used to measure the effectiveness of training, measure the success rate in other training programs, such as for providing intervention activities, module implementation activities, training in community service activities, and case study research that learns about the effectiveness or success of performance.

2. Literature Review

Effectiveness is defined as a description of a state of the effectiveness of a program, given as a mission to achieve certain goals. Organizationally, effectiveness is considered as the ability of the organization to figure out the success of program outcomes and operations (Geartner & Ramnarayan, 1983).

Effectiveness is seen through the planned achievement of objects and the achievements that have been obtained as a result of getting certain treatments. The effectiveness of the training program is checked by directing the object of examination by evaluating it and gaining an understanding as the reaction of participants in participating in learning (Mohanty et al., 2019). Program effectiveness is an objective reality. Effective programs can be calculated using the realization and target variables (Cyntia & Kartika, 2019).

Theoretically, effectiveness cannot describe success. It takes the role of effective training for increasing success. Training is an activity carried out by certain parties to correct and improve attitudes, behaviour, skills and knowledge insights under agency provisions (Ichsan, 2020). The effectiveness and success of training is a series in which the effects of training can support success in achieving organizational targets.

3. Research Method

The study used two groups of illustrative data: Training 1 (N=40) and Training 2 (N=40). The data consists of the description of the training to achieve targets at work. The target is derived from the company's plan for one of its work units, and to achieve it, it is carried out through training activities. The training program is structured to provide technical understanding and knowledge. The training is intended to provide learning regarding the number of targets (ie as many as 4) and methods for reaching targets. There are six variables analyzed for the illustrative data. The first is the



company's expected target (ETC), which is the company's expected target for one of its work units. Secondly, it is the understanding of the training participants regarding the targets assigned to them by the company (ATP), which is the number of work targets the company expects to be understood through training. Thirdly, it is the training effectiveness variable (TE), which is a variable that can be known by calculating the difference between ETC and ATP, the amount is a percentage. The fourth variable is the target achieved by the workers (TA) in actualizing the understanding of the training. The fifth one is the actual success (AS) which is calculated based on the formulation (referring to TA, ETC and ATP). The last one is the variable success rate of training (SRT), known through the calculation formula (TE and AS).

a. Success Rate of Training

$$SRT = \frac{(TE+AS)}{2} \times 100\%$$

The results of the calculation of SRT are categorized in the form of

Table 1. Success Rate Category Range

Category	Percentage Range	Description
Not Successful	≤ 25%	Failed
Less Successful	> 25% - 51%	Failed
Quite Successful	>51% - 77%	Need Improvement
Very Successful	>77% - 100	Succeed

On the illustrative data of Training 1 and Training 2, a follow-up test was applied. The illustrative data is used to obtain supporting facts that will strengthen the results of the TE and SRT calculations. Statistical analysis was carried out on the data of Training 1 and Training 2 to compare them with the paired sample t-test technique. Statistical analysis of correlation and regression was then used as a second follow-up test. Correlation and regression were performed to obtain variables related to TE and SRT and variables that contributed to both (TE and SRT).

4. Result

The training program is designed to achieve targets, for example in the form of Target 1, Target 2, Target 3 and Target 4. All targets are designed in the learning process; in the training of work targets. Everything is delivered through training activities. The results of the calculation provide data on the ETC and ATP variables. Both are then analyzed to obtain data on the effectiveness of the implementation of the training.

Table 2. Results of Training 1 Effectiveness Test

Training 1 (N=40)	ETC	ATP	Training Effectiveness
Amount	4	148	3700
Average	4	3,7	92,5
Category			Very Effective

The calculation results found that the training is prepared and carried out very effectively in achieving the targets expected by the company. On average, the trainees gained an understanding of the targets assigned to them by 3.7 (equal to 4). The result of measuring the effectiveness of the training program is 92.5%. Referring to the category intervals, Training 1 is a very effective training program. Training 2 has similar illustrative data, but with different subjects. The data of Training represents training that has not achieved maximum results. It is used to compare the effectiveness of Training 1 to Training 2. Understanding of the targets assigned by the company and the effectiveness of training become variables processed and analyzed so that the differences between the two can be seen.

Table 3. Results of Training 2 Effectiveness Test

Training 2 (N=40)	ETC	Target Understood	Training Effectiveness
Amount	4	84	2100
Average	4	2,1	52,5
Category			Fairly Effective

Based on the calculation results for the Training 2, of the 4 targets taught to the training participants, the average target understood by the training participants is 2.1. Furthermore, the percentage of effectiveness which means the achievement of the training objectives is only 52.5. These results indicate that Training 1 is more effective than Training 2 (92.5 > 52.5). Based on the effectiveness category interval, Training 2 is in the moderately effective category. Training with moderately good effectiveness still requires further steps, so a success rate test is needed.

Table 4. Results of Training 2 Effectiveness Test

Training 1 (N=40)	ETC Max	ETC Limit	ATP	Training Effectiveness s	Actual Target	Actual Success s	Training Success Rate
Amount	4	3	148	3700	146	3793	3746,43
Average	4	3	3,7	92,5	3,65	94,82	93,6607
Category							Very Successful

Regarding training and the calculation of its effectiveness, the success rate will depend on the implementation of the training program in real work areas. This implementation is seen based on the achievement of the actual target of workers. The average Actual Target of Training 1 is 3.65 consisting of 40 workers who have received training. The results indicate that understanding of the target tends to be relevant to the

actual target achieved (3.65 AT of 4 ETC). The training success rate is about +93.7%. The results of this calculation provide an illustration that the training carried out was very successful in helping the company achieve its targets. The training successfully affects the achievement of targets above the minimum target threshold value (TA>ETC Limits). These results place Training 1 as having the maximum success rate (Very Successful).

Table 5. Success Rate of Training 2

Training 1 (N=40)	ETC	ETC Limit	Target Understood	Training Effectiveness	Actual Target	Actual Success	Training Success Rate
Amount	4	3	84	2100	74	2426	2263
Average	4	3	2,1	52,5	1,85	60,6	56,57
Category							Need Correction

Regarding the results of the SRT calculation for Training 2, the average AT of workers who received training was 1.85. This result is quite far from the average AT in Training 2. The SRT of Training 2 is + 56%, categorized as training that needs to be improved with reference to ETC Limit. The AT achievement in Training 2 has a difference of 1.15 compared to the ETC limit. Training 2 is assumed to contain errors and problems since expectations do not match reality.

Training 1 & Training 2 have different levels of impact. Training 1 is more effective and more successful than Training 2 as seen based on numbers and percentages. This is also corroborated by the results of the comparison analysis of paired samples. The test results found a significant difference between Training 1 and Training 2. The test was conducted on TE, AT, and ETC data.

Table 6. Paired Samples T-test Calculation Results

Training 1	Training 2	t	Df	p
Effectiveness Training 1	Effectiveness Training 2	15,06 4	39	<.001
Actual Target Training 1	Actual Target Training 2	10,43 7	39	<.001
Results Training 1	Results Training 2	12,37 2	39	<.001

Regarding the probability level of the difference between Training 1 and training on the TE variable, the t value is 15,064 with a significance level of t table $p < 0.001$. This means that the magnitude of the impact (TE) between Training 1 and Training 2 is significantly different. The same level of probability also occurs in the other two variables (AT and SRT). Thus, Training 1 has more impact on the actual target achievement than Training 2 ($p < 0.001$), and Training 1 has a higher success rate than Training 2 ($p < 0.001$). The results of this comparison of paired samples test have

managed to illustrate the difference between effective training and the less effective one, successful training and unsuccessful one.

Table 7. Correlation Coefficient Test Results

Training 1	Coefficient R			
	ATP	TE	TA	SRT
ATP	-			
TE	1.000	-		
TA	0.362	0.362	-	
SRT	1.000	0.611	0.958	-
Training 2				
ATP	-			
TE	1.000	-		
TA	0.203	0.203	-	
SRT	0.454	0.454	0.963	-

The effectiveness and success of the training program were continued by examining the interrelationships between the variables based on the Training 1 and Training 2 groups. The Training 1 data are analyzed on the target variables understood by the participants, effectiveness, the number of actual targets achieved and the level of success of the training. The results of the correlation test found a relationship between all the variables analyzed. All of them show a significant correlation with one another. Data analysis of Training 2 is also carried out on the same variables. The results of the correlation test found that the targets understood among the training participants (ATP) are not related to the actual targets successfully achieved.

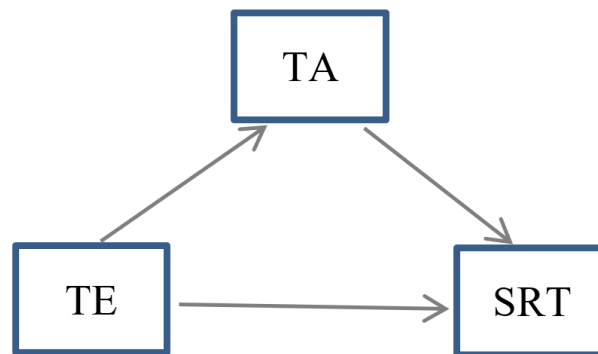


Figure 1 Training Success Rate Model

The same also applies to the effectiveness of Training 2 which has nothing to do with the achievement of the actual targets. This indicates that the amount of AT achieved by the participants has nothing to do with the two preceding variables so the targets achieved by workers have nothing to do with the training program. For this reason, the success in Training 2 is not due to the understanding gained during the training. There should be other things related to AT, that's why improvements are needed for Training 2.

Table 8. Role of Effectiveness on Success with Actual Target Mediator

	Estimate	Error Std.	Z Mark	P	95% Trust Range	
					Lower Limit	Upper Limit
TE→TA→SRT	0,245	0,100	2,457	0,014	0,050	0,441

Data analysis was continued to examine the variables that influenced the success rate of the training. The data tested are TE, AT and SRT variables. To prove its effectiveness and success, testing the pathway model is required. TE as a predictor variable, AT as a mediator and SRT as the outcome of the effect of TE and AT. The mediator pathway test shows that TE has a direct effect on SRT and an indirect effect on SRT (mediated by AT). We can use model analysis to ensure the effectiveness and success of the training program. Effective training has a positive impact on the success rate of training. The meeting point of both is the achievement of actual targets and effective training that has an impact on the achievement of AT. The success rate of training will be influenced by the number of actual targets achieved

5. Discussion

The effectiveness of the training must be seen from the perspective of the beneficiaries (Mohanty et al., 2019). Learning programs provide a mechanism to develop all recipients in overcoming any challenges given by the environment, educational programs can play an effective role because they can play a direct role in learning program participants. The strategic goal is the development of knowledge of work skills (Ancok, 2012). If training has a very good level of effectiveness, the training system will support the implementation of the organization's strategic goals with a positive motive and all parties are committed to working together to make it effective (Sinambela, 2016). The training program is structured to increase understanding whose effectiveness indicators are increasing knowledge about competencies in carrying out certain activities (Fitria et al., 2019), and also increasing awareness about the importance of applying the competencies gained through training (Hutahaean, Pertiwi, Pohan, Perdini, & Novitasari, 2022).

As stated by Sinambela (2016) that the effectiveness of training requires the support of commitment of all parties. The less effective training means that parties do not optimally carry out their commitments, especially in terms of carrying out their roles in a way that tends to be less professional (Bates, 2004). Another cause of the training ineffectiveness is the human factor as people tend to be unstable. We can carry out effective learning by fostering motivation to always be involved and participate in the learning process. Creating an effective learning atmosphere is to create a sense of comfort, fun and motivation so that it becomes a driving force and encouragement for participants to learn more (Maheasy, 2018). One of the reasons is that the knowledge adopted from the training results will make people who take part in the training need to reconfigure the knowledge (Luozzo, Pop, & Schiraldi, 2021) that has been stored for a long time.

Ideally, the success of a training program must be based on needs (Suci & Jamil, 2019), such as the needs of the organization to achieve certain targets. The success rate

of training must be seen based on the actual performance that has been achieved since it has an impact on increasing competence in doing and getting things done. One part of the training that can support success is job aids which provide the beneficiaries with the opportunity to apply the training at work (Kurniadi, 2007). Through training, organizations try to achieve success and avoid the risk of not achieving targets. Although there are training methods that apply the concept of simulation, this only teaches the steps to do and complete a task. The success or failure of a training program can be known through real performance that represents individual performance and the achievement of organizational targets. A successful training program is characterized by its ability to help the organization achieve its goals. If otherwise, it means that there are points in the training program that must be improved. There is an obligation to improve the training program and represent an error so that training will not fail to help the organization achieve its targets.

6. Conclusion

The effectiveness of training is about the accuracy of training methods to achieve the objectives of the training. Training programs and materials are prepared based on certain expectations of the organization, especially the expectations of achieving job targets. Effective training can have an impact on instilling an understanding of the expected targets, so understanding becomes an important capital in mastering work behaviours that will support work performance. The success of training is an advanced stage of effective training because success can be known through the implementation of the understanding gained into real work demands. Understanding of the amount and how to get the target is carried out towards the achievement of the actual target, then the difference between the training and the actual target achieved will be calculated. The actual target unrelated to the training effect explains the achieved target is not due to the training factor.

The data analyzed in this study are based on conditions of very effective and moderately effective training. To support the usefulness of the formula on effectiveness and success rate, it is expected that further research will be implemented into real training activities, including other activities in the form of social intervention. Regarding the intended targets in the formula, targets are highly adaptable to the objectives of the training carried out.

References

- Ancok, D. (2012). *"Psikologi kepemimpinan & inovasi."* Penerbit Erlangga.
- Bates, R. (2004). *"A Critical Analysis of Evaluation Practice: The Kirkpatrick Model and The Principle of Beneficence."* Evaluation and Program Planning, 27 (3), 341-347.
<https://doi.org/10.1016/j.evalprogplan.2004.04.011>
- Brinkerhoff, R. O. (2005). *"The Success Case Method: A Strategic Evaluation Approach to Increasing the Value and Effect of Training. Advances in Developing Human Resources2,"* 7 (1), 86-101.
<https://doi.org/https://doi.org/10.1177/1523422304272172>
- Cahyo, M. T., & Reni, P. T. (2016). *"Efektivitas Pelatihan Teknologi Budidaya Bawang Putih Varietas Lokal Ramah Lingkungan dengan Metode Ceramah di Kabupaten"*



- Karanganyar.*" Agraris: Journal of Agribusiness and Rural Development Research, 2(1), 61–68. <https://doi.org/https://doi.org/10.18196/agr.2126>
- Clegg, B., Rees, C., & Titchen, M. (2010). "A Study Into The Effectiveness of Quality Management Training: A Focus On Tools and Critical Success Factors." *TQM Journal*, 22(2), 188–208. <https://doi.org/https://doi.org/10.1108/17542731011024291>
- Cyntia, P. K., & Kartika, I. N. (2019). "Analisis Efektivitas Program Revitalisasi Pasar Tradisional dan Dampaknya Terhadap Pendapatan Pedagang dan Pengelolaan Pasar Pohgading." *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 7, 805. <https://doi.org/https://doi.org/10.24843/eeb.2019.v08.i07.p06>
- Fitria, H., Kristiawan, M., & Rahmat, N. (2019). "Upaya Meningkatkan Kompetensi Guru Melalui Pelatihan Penelitian Tindakan Kelas." *Abdimas Unwahas*, 4 (1), 14–25. <https://doi.org/https://doi.org/10.31942/abd.v4i1.2690>
- Geartner, G. H., & Ramnarayan, S. (1983). "Organizational Effectiveness: An Alternative Perspective." *Academy of Management Review*, 8 (1), 97–107. <https://doi.org/https://doi.org/10.5465/amr.1983.4287709>
- Hutahaean, E. S. H., Pertiwi, Y. W., Pohan, H. D., Perdini, T. A., & Novitasari, F. (2022). "Pelatihan Teamwork Pada Anggota Pengelola RPTRA Malaka Sari, Jakarta Timur." *Jurnal Pengabdian Kepada Masyarakat UBJ*, 5 (1), 1–10. <https://doi.org/10.31599/jabdimas.v5i1.705>
- Ichsan, R. Nu. (2020). "Pengaruh Pelatihan Terhadap Prestasi Kerja Karyawan Pada PDAM Tirtanadi Cabang Padang Bulan Medan." *Jurnal Ilmiah Metadata*, 2 (1). <https://doi.org/https://doi.org/10.47652/metadata.v2i1.20>
- Iskandar, D. (2018). "Strategi Peningkatan Kinerja Perusahaan Melalui Pengelolaan Sumber Daya Manusia dan Kepuasan Kerja dan Dampaknya Terhadap Produktivitas Karyawan." *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 12 (1), 23–31. <https://doi.org/https://doi.org/10.32812/jibeka.v12i1.8>
- Kurniadi, D. (2007). "Prinsip-Prinsip Dasar Manajemen Pelatihan." In Universitas Pendidikan Indonesia.
- Luozzo, S. Di, Pop, G. R., & Schiraldi, M. M. (2021). "The Human Performance Impact On Oee In The Adoption of New Production Technologies." *Applied Sciences (Switzerland)*, 11(18). <https://doi.org/10.3390/app11188620>
- Mahmudah, M. (2018). "Pengelolaan Kelas: Upaya Mengukur Keberhasilan Proses Pembelajaran." *Jurnal Kependidikan*, 6 (1), 53–70. <https://doi.org/https://doi.org/10.24090/jk.v6i1.1696>
- Mohanty, P. C., Dash, M., Dash, M., & Das, S. (2019). "A Study On Factors Influencing Training Effectiveness." *Espacios*, 40 (2).
- Olson, E. L., & Thjømmøe, H. M. (2009). "Sponsorship Effect Metric: Assessing The Financial Value of Sponsoring By Comparisons To Television Advertising." *Journal of the Academy of Marketing Science*, 37 (4), 504–515. <https://doi.org/https://doi.org/10.1007/s11747-009-0147-z>
- Prabowo, H. A., Suprpto, Y. B., & Farida, F. (2018). "The Evaluation of Eight Pillars Total Productive Maintenance (Tpm) Implementation and Their Impact On Overall Equipment Effectiveness (Oee) and Waste." *Sinergi*, 22 (1), 13. <https://doi.org/https://doi.org/10.22441/sinergi.2018.1.003>



- Rodgers, S., Wang, Z., & Schultz, J. C. (2020). "A Scale to Measure Science Communication Training Effectiveness." *Science Communication*, 42 (1), 90–111.
<https://doi.org/https://doi.org/10.1177/1075547020903057>
- Schermerhorn, J., Hunt, J., & Osborn, R. (1995). "Basic Organizational Behavior." (John Wiley & Sons. Inc (ed.)).
- Sinambela, L. (2016). "Manajemen Sumber Daya Manusia (Membangun Tim Kerja yang Solid Untuk Meningkatkan Kinerja)." Penerbit PT Bumi Aksara.
- Suci, Y. T., & Jamil, A. S. (2019). "Hubungan Tingkat Kepuasan Pelayanan Dengan Keberhasilan Peserta Pelatihan Teknis Bagi Penyuluh Pertanian." *Jurnal Hexagro*, 3(2). <https://doi.org/10.36423/hexagro.v3i2.279>
- Tziner, A., Fisher, M., Senior, T., & Weisberg, J. (2007). "Effects of Trainee Characteristics On Training Effectiveness." *International Journal of Selection and Assessment*, 15 (2), 167–174. <https://doi.org/https://doi.org/10.1111/j.1468-2389.2007.00378.x>





Asian Social Work Journal (ASWJ)

Volume 7, Issue 4, August 2022

e-ISSN : 0128-1577

Journal home page:
www.msosialwork.com

Regulation of Emotions in Crowd Control Police

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Abstract

Emotion is an important factor for achieving positive performance. Especially crowd control police performance. In certain situations, there is confrontation and violence. A narrative of riots was created, because police clashed with demonstrators. The emotion regulation and their physiological indicators becomes a co-occurring phenomenon in a riot of demonstrations. Police anger in violent demonstration situations needs to be clearly mapped. This study intends to map the dominance of emotion regulation by involving heart rate indicators. Riot demonstration stimulus was given to participants to stimulate aggressive impulses, heart rate was measured when participants watched the video. Research participants come from Crowd Control Police in the Jakarta working area. Research data is tested by correlating emotion regulation with heart rate, provocation, and impulsive aggression. The results found the dominance of emotion regulation to other variables. The pulsating impulse of the riot stimulus effect is suppressed by emotion regulation. Research findings recommend the need to optimize the role of emotion regulation in dealing with violent demonstration situations. Optimization is done to apply emotion regulation consistently. Optimization to apply emotion regulation consistently.

Keywords: demonstration, stimulus, heart rate, emotion regulation

Introduction

Emotional events have consequences for poor performance problems caused by experiencing emotional difficulties (Thornton & Herndon, 2016). The physiological perspective turns out to be part of explaining the angry reaction. For example, the study of angry heart rate illustrates the anger process in the heart rate region. This part of the brain is associated with heart rate impulses and emotional management (Mather & Thayer, 2018). Due to the chaos, the officers were unable to handle the pressure properly. There is a mental challenge in it. Because the problem that arises when the police enforce the rules is a negative expression (Mercadillo & Barrios, 2011). Police are called to duty and respond to angry and violent confrontations (Augustin & Fagan, 2011). Unfortunately, there is an inappropriate emotional practice at work. Peaceful demonstrations were not achieved, instead there were clashes between police and demonstration participants (Irwadi, 2021).

Crowd control police have a strong risk of aggressiveness (Sutatminingsih et al., 2019). Police aggressiveness is highly dependent on the behavioral factors of the demonstrators (Putra et al., 2020). In a crowded demonstration situation, good governance is needed. (Hugo Gorringer & Rosie, 2008). Especially the management of the intensity of demonstrations. Provocation destroys self-esteem, and

eventually leads to aggressive behavior (Robertson et al., 2012). Not being able to regulate emotions properly (emotional dysregulation) results in aggression (Miles et al., 2015). Emotional dysregulation is a mediator in the difficulty of recognizing and expressing emotions that influence aggression (Velotti et al., 2016). Impulsive aggression is correlated with uncontrollable emotions (Gross & Jazaieri, 2014). Heart rate and emotions are studied together. The large basal area of the brain greatly influences cardiovascular function (Phillips & Krassioukov, 2015). Heart rate is also an indicator of aggressive impulses. Heart rate is a variable used to explain increased aggression (Puhalla et al., 2017). Film clips (Lafont et al., 2019), as well as standard video libraries (Shu et al., 2020) were used as external stimuli to observe the physiological impact of heart rate. Many studies use a wet cathode as a pulse measuring instrument. Another study succeeded in measuring pulse using a wristband sensor. Heart rate smart watch used in research to monitor emotional state (Shu et al., 2020).

The police are not fully tasked with solving crime cases. There are other duties of the Police, namely carrying out the task of guarding and securing demonstrations (Lembaga Pendidikan dan Pelatihan Polri, 2020). The duty of the Police is to maintain a balance between their authority and the people's right to freedom of democratic life. The most important balance lies in the behavior of handling demonstrations without arrogance, and not being provoked by mass protesters (Fernandez, 2008). Crowd control police repeatedly faced situations with negative emotional intensity. Thus, the police need the right method to be able to regulate their emotions appropriately (Berking et al., 2010).

Literature Review

Provoked

It starts with a demonstration. Demonstration that took place in a riot contained provocation actions. This will have an impact on the emergence of a perceived provocation. The protester intentionally provokes the target, for the purpose of eliciting retaliatory behavior from the target (Anderson & Bushman, 2002). Police were called on duty to respond to angry and violent confrontations (Augustin & Fagan, 2011). Provocation is the arousal of negative emotions, carried out by insulting and attacking the target (Scott, Stepp & Pilkonis, 2014). The emotional trajectory from negative to positive also determines the risk of emotional resilience after a person is exposed to a traumatic condition (Galatzer-Levy et al., 2013). Provocation through video shows can have an effect on aggressiveness (Troop-Gordon, Gordon, Vogel-Ciernia, Lee, & Visconti, 2018). When the provoking stimulus succeeds in provoking an angry response, the target is in a provoked state.

Emotion Regulation

Emotion regulation is an ability related to emotional experiences and emotional responses that are formed (Hsieh & Chen, 2017). Emotion regulation takes place after a person is in an emotional state. The inability to control emotional impulses describes a state of dysregulation (Laura, Dixon, Tull, Lee, Kimbrel & Gratz, 2017). Able to withstand the influence of emotional stimuli from the environment, indicating the functioning of good emotional regulation (Miles, Menefee, Wanner, Miles, Teten Tharp & Kent, 2015). The function of emotion regulation is to restore positive emotional qualities. Emotion regulation is used to restore emotional well-being from external situations that interfere with emotional quality (Gyurak, Gross & Etkin, 2011). The consequence of emotional dysregulation is impulsive aggression (Long, Felton, Lilienfeld & Lejuez, 2014). Conversely, when the intensity of emotion regulation increases, it can predict the success of reducing aggressiveness (Robertson, Daffern, & Bucks, 2012).

Anger and Heart Rate

The heart rate observed in the anger study was obtained by means of a frequency measured in beats per minute (bpm). Then it is used as a reference to distinguish the heart rate of respondents who experience anger, and those who are in normal condition (Mohamed, Jusoh, & Ahmad 2013). Under certain

circumstances. When individuals face a stressful situation, the sympathetic nervous system will regulate the heart rate response to be faster or stronger (Guspriyadi, Wahyuning & Yuniar, 2014). Experimental studies have succeeded in revealing that the heart rate of anger that occurs due to the impact of getting treatment watching video clips (Lafont, Rogé, Ndiaye, & Boucheix, 2019). But it seems that the heart rate monitoring used is more difficult, compared to the heart rate measurement procedures performed in other studies. One of them is a study that uses a heart rate smartwatch to monitor emotional state (Shu, Yu, Chen, Hua, Li & Jin, 2020).

Impulsive Aggression

Berkowitz (1993) explains that aggression has two forms; instrumental aggression and impulsive aggression or hostile aggression. Unlike instrumental aggression, aggression is proactive. But impulsive aggression is known through unplanned aggressive reactions Dorfman, Meyer-Lidemberg, & Buckholtz, 2014). Impulsive aggression is a habit of unplanned acts of aggression and is carried out without thinking about social sanctions in the future Zillmann & Iii (2007). Impulsive aggression as emotional, responsive and angry behavior that causes harm to others (Stanford, Houston, Mathias, Villamarett-pittman, Helfirtz, Conklin, & Conklin, 2003). Impulsive aggression occurs because the individual is difficult to regulate his anger (anger regulation), such as not being able to control his anger (Denson, Pedersen, Friese, Hahm & Roberts, 2011).

Methodology

This study conducted an experimental test using the video stimulus of peaceful and riot demonstrations. Stimulus design to generate different heart rates impulses. Heart rate measurements were taken while participants were watching videos. The tool used to measure the pulse is a smartwatch bracelet. The first stimulus given was a peaceful demonstration video (SV1), followed by watching a riot demonstration video (SV2). Peaceful demonstrations represent low provocation, riotous demonstrations represent high provocation situations. This study also collects data through a research questionnaire instrument. The data is used to see the pattern of relationships and the dominance of the influence of emotion regulation. The research participants were 55 members of the Crowd Control Police. All participants were involved based on their willingness to receive treatment, watching demonstration videos, measuring their heart rates, and filling out research questionnaires. The selected participants are subjects who have experience in carrying out their duties face to face with demonstrators when escorting demonstrations in the working area of the Jakarta area. The analysis technique of the sample group comparison test, correlation and regression is used to realize the research objectives

Result

Descriptive Analysis

The profile description of research participants is filled with police officers with the rank of non-commissioned officer; brigadier one, and brigadier two police. Based on his rank, an analysis was conducted to find other relevant profiles.

Participants from the Brigadier One group had a higher pulse impulse, which was quite high. this result was followed by a rate that >90bpm occurred in the BRIPTU group. This pulse rate is labeled as an angry pulse. Due to the effect of watching the riot demonstration stimulus.

The mean score for being provoked was greater for participants in the BRIPTU group. The average score puts the BRIPTU group in the moderately provoked category. The BRIPDA group is in the less provoked category. Categorization refers to the maximum score obtained by participants in their group.

The overall score for emotion regulation in the BRIPDA group was high. This indicates the occurrence of good emotional regulation in the BRIPDA group. However, these results do not mean that BRIPTU participants have poor emotional regulation. Because the category of emotional regulation of the BRIPTU group is at an adequate level.

Table 1. Description of Participants by BRIPTU and BRIPDA Ranks

	Average Pulse SV2 Impact		Provoked		Emotion Regulation		Impulsive Aggressions	
	BRIPDA	BRIPTU	BRIPDA	BRIPTU	BRIPDA	BRIPTU	BRIPDA	BRIPTU
Valid	48	7	48	7	48	7	48	7
Missing	0	0	0	0	0	0	0	0
Mean	82.461	95.916	12.667	18.286	33.438	26.857	8.354	14.000
Std. Deviation	10.691	11.188	4.768	8.674	3.162	5.273	2.365	5.164
Minimum	58.880	83.920	9.000	9.000	25.000	16.000	7.000	8.000
Maximum	107.530	118.380	26.000	34.000	36.000	32.000	15.000	24.000

The profile of participants from the BRIPTU group had a fairly high number of impulsive aggressions. The BRIPDA group scored low. The profile of participants from the BRIPTU group had a fairly high number of impulsive aggressions. The BRIPDA group scored low. This situation illustrates that the impulsive aggression of the BRIPTU group is higher than that of the BRIPDA.

Pulse Comparison Test

The pulsation of the stimulus effect of a peaceful demonstration video is compared to the pulse of a riotous demonstration. The variables measured were the number of pulse movements, and the average pulse. In general, SV1 effect pulse movements are few in number. SV2 has a very large number of pulsating movements. The SV1 pulse rate is lower than the SV2 pulse rate.

Table 2. Significance of The Difference in Mean Rate and Movement of Heart Rate

Stimulus Measurement Results 1		Stimulus Measurement Results 2	t	df	p
Average Pulse SV1 impact	-	Average Pulse SV2 Impact	-0.427	54	0.336
Movement Pulse SV1 Impact	-	Movement Pulse SV2 impact	-36.238	54	< .001

Note. For all tests, the alternative hypothesis specifies that Measure 1 is less than Measure 2. For example, Average pulse T1 impact is less than average pulse T2 impact.

Note. Student's t-test.

Although the SV1 rate was lower, it was not significantly different. Both were in the <90 bpm category. This result is not in line with expectations. The SV2's design is for higher beats, and is in the >90 bpm category. Further analysis is needed to determine the cause. The results of previous studies stated that emotion regulation had an effect on heart rate.

Table 3. Direct Effects of Emotion Regulation on Heart Rate

Variable		Average Pulse SV2 Impact	Average Pulse SV1 impact
Emotion Regulation	correlation coefficient	-0.279*	-0.233
	p-value	0.039	0.087
	Direct effect	-2.114*	-
	p-value	0.039	-

* $p < .05$, ** $p < .01$, *** $p < .001$

Further analysis was conducted to determine the effect of emotion regulation on heart rate. The correlation value between SV2 pulse and regulation is -0.279, significantly correlated. Between SV1 pulse and emotion regulation was not significantly related. Regulation exerts a direct effect by suppressing heart rate impulses originating from a riotous demonstration stimulus.

Indications of regulation have the power seen from the results of the cumulative descriptive calculation of the mean score. This indicator is useful to see the dominance that occurs in relation to other variables. Relationship with being provoked, and with impulsive aggression.

Table 4. SV2 Effect Pulse Congruence

Participant	Bpm	Category	Prv	ER	IA	Congruence Conditions		
						Condition	No	
1	86,59	<90bpm	12 (34)	30 (36)	7 (24)	C***		1
2	82,68	<90bpm	18 (34)	27 (36)	14 (24)	NC		
3	80,76	<90bpm	12 (34)	36 (36)	7 (24)	C***		2
4	71,4	<90bpm	22 (34)	25 (36)	14 (24)	NC		
5	84,55	<90bpm	18 (34)	32 (36)	10 (24)	C***		3
6	85,08	<90bpm	18 (34)	28 (36)	13 (24)	NC		
7	76,12	<90bpm	9 (34)	36 (36)	7 (24)	C***		4
8	100,95	≥90bpm	22 (34)	25 (36)	14 (24)	C***		5
9	89,95	<90bpm	10 (34)	29 (36)	8 (24)	C**		6
10	94,32	≥90bpm	26 (34)	33 (36)	7 (24)	NC		
11	84,88	<90bpm	18 (34)	29 (36)	10 (24)	C**		7
12	98,8	≥90bpm	12 (34)	36 (36)	7 (24)	NC		
13	95,44	≥90bpm	21 (34)	29 (36)	16 (24)	C***		8
14	91,75	≥90bpm	34 (34)	16 (36)	24 (24)	C***		9
15	80,86	<90bpm	9 (34)	36 (36)	7 (24)	C***		10
16	102,89	≥90bpm	24 (34)	33 (36)	10 (24)	NC		
17	118,38	≥90bpm	9 (34)	30 (36)	10 (24)	NC		
18	74,11	<90bpm	15 (34)	30 (36)	10 (24)	C***		11
19	87,15	<90bpm	9 (34)	36 (36)	7 (24)	C***		12
20	83,53	<90bpm	9 (34)	30 (36)	7 (24)	C***		13
21	91,65	≥90bpm	19 (34)	29 (36)	7 (24)	NC		
22	80,9	<90bpm	9 (34)	36 (36)	7 (24)	C***		14
23	85,84	<90bpm	18 (34)	27 (36)	15 (24)	NC		
24	78,87	<90bpm	9 (34)	33 (36)	7 (24)	C***		15
25	91,02	≥90bpm	19 (34)	27 (36)	14 (24)	C***		16
26	90,08	≥90bpm	13 (34)	33 (36)	7 (24)	NC		
27	58,88	<90bpm	13 (34)	33 (36)	7 (24)	C***		17

Participant	Bpm	Category	Prv	ER	IA	Congruence Conditions		
						Condition	No	
28	82,08	<90bpm	9 (34)	36 (36)	7 (24)	C***		18
29	74,8	<90bpm	9 (34)	36 (36)	7 (24)	C***		19
30	85,37	<90bpm	18 (34)	33 (36)	7 (24)	C**		20
31	80,39	<90bpm	9 (34)	36 (36)	10 (24)	C***		21
32	84,96	<90bpm	9 (34)	36 (36)	7 (24)	C***		22
33	77,32	<90bpm	9 (34)	36 (36)	7 (24)	C***		23
34	62,41	<90bpm	9 (34)	36 (36)	7 (24)	C***		24
35	90,45	≥90bpm	10 (34)	34 (36)	12 (24)	C***		25
36	107,53	≥90bpm	13 (34)	33 (36)	11 (24)	NC		
37	94,68	≥90bpm	21 (34)	33 (36)	10 (24)	NC		
38	95,79	≥90bpm	9 (34)	36 (36)	7 (24)	NC		
39	63,16	<90bpm	9 (34)	36 (36)	7 (24)	C***		26
40	85,4	<90bpm	9 (34)	36 (36)	10 (24)	C***		27
41	68,64	<90bpm	9 (34)	36 (36)	7 (24)	C***		28
42	97,06	≥90bpm	9 (34)	33 (36)	7 (24)	NC		
43	70,65	<90bpm	18 (34)	36 (36)	7 (24)	C**		29
44	76,74	<90bpm	9 (34)	33 (36)	7 (24)	C***		30
45	75,87	<90bpm	15 (34)	36 (36)	7 (24)	C***		31
46	80,41	<90bpm	9 (34)	34 (36)	7 (24)	C***		32
47	83,92	<90bpm	13 (34)	32 (36)	12 (24)	NC		
48	85,58	<90bpm	9 (34)	36 (36)	7 (24)	C***		33
49	81,2	<90bpm	15 (34)	26 (36)	14 (24)	NC		
50	72,27	<90bpm	9 (34)	33 (36)	7 (24)	C***		34
51	68,24	<90bpm	9 (34)	36 (36)	7 (24)	C***		35
52	96,42	≥90bpm	9 (34)	36 (36)	7 (24)	NC		
53	67,78	<90bpm	9 (34)	36 (36)	7 (24)	C***		36
54	97,35	≥90bpm	9 (34)	33 (36)	7 (24)	NC		
55	75,62	<90bpm	15 (34)	36 (36)	7 (24)	C***		37

Corresponds: pulse data categories, in line with provoked scores, emotion regulation, impulsive aggression

There are data from 37 participants that support the proven research hypothesis.

*** in line with three variables

** in line with two variables

There were 37 participants who contributed in line. This means that a high emotional regulation score will be followed by a low impulsive aggression, not too provoked, and a pulse <90 bpm. 28 participants were less able to contribute in line. The comparison test did not find any difference in pulse rate between SV1 and SV2. Through the congruence analysis, it was seen that there were 17 participants whose pulse was >90bpm. The number of participants is more that is not in line. But for this the cause is known based on the results of the correlation test.

The pattern of emotion regulation dominates the relationship seen through the results of the mediation test. The results of the mediator's analysis found that there was an indirect effect of the provoked state on impulsive aggression.

Emotion regulation plays a role as a mediator in a provoked state influenced by impulsive aggression. Emotional regulation succeeded in suppressing the influence of the provoked state on impulsive aggression. The results of the analysis get an indirect effect that plays an effective role in inhibiting the influence of provocation on impulsive aggression. Regulation places its dominance as a mediator. There

is an indirect effect of the provoked state to impulsive aggression, emotion regulation bridges this influence. Regulation suppresses provocation to make participants less provoked, so that their effect on impulsive aggression is also decreased.

Table 5. Flow Indirect Effects With Emotion Regulatory Mediators

	Estimate	Std. Error	z-value	p	95% Confidence Interval	
					Lower	Upper
Provoked → ER → IA	0.295	0.059	4.986	< .001	0.179	0.411

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Discussion

The Police Brigadier was assigned to the front line of the demonstration. In a state of violent demonstration, the police are more at risk of taking aggressive action, because they are powerless to use their ego of power. (Queirós et al., 2009). The police worked to pay attention to the dynamics of the demonstration, and to the command of the leader. Obeying directions is a must. Being able to control behavior is an important trait in predicting the aggressive potential of police officers (Koepfler, 2010). While securing the demonstration, the police tried to maintain stability. In certain situations, it is impossible for the police to accommodate demonstrators, and the behavior of demonstrators needs to be limited (Gorringer & Rosie, 2013). The provocation is delivered by the provocateur whose purpose is to provoke an emotional response to the target of the provocation (Tumskiy, 2019). While on duty, there was interaction between the police and the masses. The police are trying to disperse the crowd, and at the same time create public trust (Gorringer & Rosie, 2013).

Normal heart rate (not angry) is below 90 bpm, angry state > 90 bpm (Mohamed et al., 2013). SV2 is designed to give the effect of a higher heart rate. Riot demonstrations are designed to provide a higher pulsating effect than the stimulus of peaceful demonstration videos. Research shows that pulse rates are no different. This needs to be continued with other tests. Test for the effect of emotion regulation. Referring to previous research could be due to the role of emotion regulation. This measurement involves the role of physiological signals, one of which is through the heart rate (Ménard et al., 2015), and heart rate mediated by closely related emotion regulation describes a calm pulse (Geisler et al., 2010). When a person is faced with angry stimuli, the stimuli tend to direct the individual to carry out strategies to regulate emotions (Lafont et al., 2019).

Emotion regulation restrains impulses to express emotions, seen through physiological responses to heart rate variability (Wei et al., 2017). situations in the environment are antecedent to emotion regulation (Gross, 2008). Because it is difficult to manage emotions, environmental conditions affect the occurrence of impulsive aggression (Gross & Jazaieri, 2014). The intensity of provocation is highly correlated with reactive aggression, this happens because it is moderated by a weak disposition of emotion regulation. (Juujärvi et al., 2006). Reassessment causes one to choose a retaliation to provoke or not to retaliate (Denson et al., 2011). The impact of provocation is lowered by emotion regulation, this reduces the risk of impulsive aggression. Emotion regulation has been shown to improve emotional quality and reduce levels of aggression (Robertson et al., 2012).

Conclusion

The dominance of emotion regulation brings positive consequences for the crowd control police. The consequences are good in guarding demonstrations. Good emotional regulation is an important competency that must be optimized when it comes to securing demonstrations Strengthening the capacity to regulate emotions will help DALMAS police to be able to withstand more aggressive impulses.

Defenses using emotion regulation prevent impulsive aggression. On the contrary, it gets worse, because provocation increases its effect to make members can be provoked to behave aggressively. As an indicator, the pulse of anger is suppressed because there is a dominant emotion regulation. The study concluded that to predict impulsive aggression it is necessary to pay attention to individual characteristics in the task. The occurrence of acts of violence carried out by the police who control the crowd is not part of the authority to carry out instrumental aggression. But there are police officers who are provoked. Individuals become more aggressive because they are unable to restore the comfort of their emotional state. Impulsive aggression control is in emotion regulation. Emotion regulation is central to anger control. However, if it is not managed properly, it will trigger clashes between demonstrators and the police on duty.

References

- Augustin, D., & Fagan, T. J. (2011). Roles for Mental Health Professionals in Critical Law Enforcement Incidents: An Overview. *Psychological Services*, 8(3), 166–177. <https://doi.org/10.1037/a0024104>
- Berking, M., Meier, C., & Wupperman, P. (2010). Enhancing Emotion-Regulation Skills in Police Officers: Results of a Pilot Controlled Study. *Behavior Therapy*, 41(3), 329–339. <https://doi.org/10.1016/j.beth.2009.08.001>
- Berkowitz, L. (1993). *Agression: Its causes, consequences and control*. McGraw-Hill Book Company.
- Denson, T. F., Grisham, J. R., & Moulds, M. L. (2011). Cognitive reappraisal increases heart rate variability in response to an anger provocation. *Motivation and Emotion*, 35(1), 14–22. <https://doi.org/10.1007/s11031-011-9201-5>
- Denson, T. F., Pedersen, W. C., Friese, M., Hahm, A., & Roberts, L. (2011). Understanding impulsive aggression: Angry rumination and reduced self-control capacity are mechanisms underlying the provocation-aggression relationship. *Personality and Social Psychology Bulletin*, 37(6), 850–862. <https://doi.org/10.1177/0146167211401420>
- Dorfman, H. ., Meyer-Lidenberg, A., & Buckholtz, J. . (2014). Article Sleep and Emotional Functions Reference. *Curr Topics Behav Neurosci*, 17, 297–313. <https://doi.org/10.1007/7854>
- Fernandez, L. . (2008). *Policing discent : social control and the anti-globalization movement*. Rutgers University Press.
- Galatzer-Levy, I. R., Brown, A. D., Henn-Haase, C., Metzler, T. J., Neylan, T. C., & Marmar, C. R. (2013). Positive and negative emotion prospectively predict trajectories of resilience and distress among high-exposure police officers. *Emotion*, 13(3), 545–553. <https://doi.org/10.1037/a0031314>
- Geisler, F. C. M., Vennwald, N., Kubiak, T., & Weber, H. (2010). The impact of heart rate variability on subjective well-being is mediated by emotion regulation. *Personality and Individual Differences*, 49(7), 723–728. <https://doi.org/10.1016/j.paid.2010.06.015>
- Gorrynge, H., & Rosie, M. (2013). “We will facilitate your protest”: Experiments with Liaison Policing. *Policing*, 7(2), 204–211. <https://doi.org/10.1093/police/pat001>
- Gorrynge, Hugo, & Rosie, M. (2008). It’s a long way to Auchterarder! “Negotiated management” and mismanagement in the policing of G8 protests1. *British Journal of Sociology*, 59(2), 187–205. <https://doi.org/10.1111/j.1468-4446.2008.00189.x>
- Gross, J. J. (2008). Emotion Regulation. *Social Functions Of Law*. <https://doi.org/10.15216/978-5-4365-0413-1>
- Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation, and psychopathology: an affective science perspective. *Clinical Psychological Science*, 2(4), 387–401. <https://doi.org/10.1177/2167702614536164>
- Guspriyadi, D., Wahyuning, C. S., & Yuniar, Y. (2014). Analisis tingkat stres dan tingkat kelelahan masinis berdasarkan heart rate variability. *Jurnal Online Institut Teknologi Nasional*, 02(02), 57–67.
- Gyurak, A., Gross, J. J., & Etkin, A. (2011). Explicit and implicit emotion regulation: A dual-process framework. *Cognition and Emotion*, 25(3), 400–412. <https://doi.org/10.1080/02699931.2010.544160>
- Irwadi, B. (2021). Penegakan hukum terhadap aksi unjuk rasa mahasiswa yang berujung anarkis di kota samarinda. *Journal of Law (Jurnal Ilmu Hukum)*, 1(2), 560572.

- Juujärvi, P., Kaartinen, J., Laitinen, T., Vanninen, E., & Pulkkinen, L. (2006). Effects of physical provocations on heart rate reactivity and reactive aggression in children. *Aggressive Behavior*, 32(2), 99–109. <https://doi.org/10.1002/ab.20129>
- Koepfler, J. R. (2010). *Predicting police aggression : Using theory to inform police selection assessment*.
- Lafont, A., Rogé, J., Ndiaye, D., & Boucheix, J. M. (2019). Towards a better understanding of emotion blends: The case of anger-related emotion blends elicited via film clips. *Cognition, Brain, Behavior. An Interdisciplinary Journal*, 23(2), 77–99. <https://doi.org/10.24193/cbb.2019.23.05>
- Laura, J., Dixon, M. T., Tull, A. A., Lee, N. A., Kimbrel, K. L., & Gratz. (2017). *The Role of Emotion Driven Impulse Control Difficulties*. 73(6), 722–732. <https://doi.org/https://doi.org/10.1002/jclp.22372>
- Lembaga Pendidikan dan Pelatihan Polri. (2020). *Bahan Ajar (Hanjar) Fungsi Teknis Sabhara (Dalmas)*.
- Long, K., Felton, J. W., Lilienfeld, S. O., & Lejuez, C. W. (2014). The role of emotion regulation in the relations between psychopathy factors and impulsive and premeditated aggression. *Personality Disorders: Theory, Research, and Treatment*, 5(4), 390–396. <https://doi.org/10.1037/per0000085>
- Mather, M., & Thayer, J. (2018). How heart rate variability affects emotion regulation brain networks. *Curr Opin Behav Sci*, 19, 98–104. <https://doi.org/10.1016/j.cobeha.2017.12.017>.How
- Ménard, M., Richard, P., Hamdi, H., Daucé, B., & Yamaguchi, T. (2015). Emotion recognition based on heart rate and skin conductance. *PhyCS 2015 - 2nd International Conference on Physiological Computing Systems, Proceedings*, 26–32. <https://doi.org/10.5220/0005241100260032>
- Mercadillo, R. E., & Barrios, F. A. (2011). Brain Correlates of Impulsivity in Police Officers : A Neurocognitive and Ethnological Exploration. *The Open Criminology*, 4(2), 54–60.
- Miles, S. R., Menefee, D. S., Wanner, J., Teten Tharp, A., & Kent, T. A. (2015). The Relationship Between Emotion Dysregulation and Impulsive Aggression in Veterans With Posttraumatic Stress Disorder Symptoms. *Journal of Interpersonal Violence*, 31(10), 1795–1816. <https://doi.org/10.1177/0886260515570746>
- Miles, S. R., Menefee, D. S., Wanner, J., Tharp, A. T., & Kent, T. A. (2015). The Relationship Between Emotion Dysregulation and Impulsive Aggression in Veterans With Posttraumatic Stress Disorder Symptoms. *Journal of Interpersonal Violence*, 1(22), 1–22. <https://doi.org/10.1177/0886260515570746>
- Mohamed, M., Jusoh, N. ., & Ahmad, I. . (2013). Anger Mood Detection Based On Face Recognition And Heartbeat. *International Journal of Engineering Research & Technology (IJERT)*, 2(2).
- Phillips, A. A., & Krassioukov, A. V. (2015). Contemporary cardiovascular concerns after spinal cord injury: Mechanisms, maladaptations, and management. *Journal of Neurotrauma*, 32(24), 1927–1942. <https://doi.org/10.1089/neu.2015.3903>
- Puhalla, A., Fahlgren, M., Ammerman, B., Kulper, D., Ph, D., & Ph, D. (2017). *Relationship Between Heart Rate Reactivity and In-VIVO Aggression During Provocation*.
- Putra, I. K. W. P., Widiati, I. A. P., & Sugiarta, I. N. G. (2020). Peran Anggota Kepolisian Dalmas Polda Bali dalam Penegakan Hukum terhadap Penanganan Unjuk Rasa Tolak Reklamasi Teluk Benoa. *Jurnal Konstruksi Hukum*, 1(2), 362–368. <https://doi.org/10.22225/jkh.2.1.2548.362-368>
- Queirós, C., Leitão, A., & Teixeira, I. (2009). *The influence of burnout in aggressive behavior among Portuguese Police officers*. 6(1966), 2009.
- Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior*, 17(1), 72–82. <https://doi.org/10.1016/j.avb.2011.09.006>
- Shu, L., Yu, Y., Chen, W., Hua, H., Li, Q., Jin, J., & Xu, X. (2020). Wearable emotion recognition using heart rate data from a smart bracelet. *Sensors (Switzerland)*, 20(3), 1–19. <https://doi.org/10.3390/s20030718>
- Sutatminingsih, R., Tuapattinaja, J. M. P., & Siregar, R. H. (2019). Emotion Stability and Aggressive Behavior of the Members of Mass Control Unit (Dalmas) of North Sumatra Police. *Elm vā Innovativ Texnologiyalar Jurnalı*, 7(16), 112–133. <https://doi.org/10.5782/2616-4418.7.2019.112>
- Thornton, M. A., & Herndon, J. (2016). Emotion Regulation in Police Officers Following Distress: Effects of Tenure and Critical Incidents. *Journal of Police and Criminal Psychology*, 31(4), 304–309. <https://doi.org/10.1007/s11896-015-9186-1>
- Troop-Gordon, W., Gordon, R. D., Vogel-Ciernia, L., Ewing Lee, E., & Visconti, K. J. (2018). Visual Attention to Dynamic Scenes of Ambiguous Provocation and Children’s Aggressive Behavior. *Journal of Clinical Child and Adolescent Psychology*, 47(6), 925–940. <https://doi.org/10.1080/15374416.2016.1138412>

- Tumskiy, S. (2019). Positive Provocation In The Postmodern Society: Opportunities and Risks. *Section Sociology & Healthcare POSITIVE*.
- Velotti, P., Garofalo, C., Petrocchi, C., Cavallo, F., Popolo, R., & Dimaggio, G. (2016). Alexithymia, emotion dysregulation, impulsivity and aggression: A multiple mediation model. *Psychiatry Research, 237*, 296–303. <https://doi.org/10.1016/j.psychres.2016.01.025>
- Wei, C., Han, J., Zhang, Y., Hannak, W., Dai, Y., & Liu, Z. (2017). Affective emotion increases heart rate variability and activates left dorsolateral prefrontal cortex in post-traumatic growth. *Scientific Reports, 7*(1), 1–10. <https://doi.org/10.1038/s41598-017-16890-5>
- Zillmann, D., & Weaver, J. B. (2007). Aggressive personality traits in the effects of violent imagery on unprovoked impulsive aggression. *Journal of Research in Personality, 41*(4), 753–771. <https://doi.org/10.1016/j.jrp.2006.08.006>