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### 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, Villamarette-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	<b>95.916</b>	12.667	<b>18.286</b>	33.438	<b>26.857</b>	8.354	<b>14.000</b>
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 (Gorringe & 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 (Gorringe & 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>
- Gorringe, 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>
- Gorringe, 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>
- 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>