



## Emotion Regulation and Forgiveness among Female Inmates

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*Article History:*

**Received**  
2024-11-09

**Revised**  
2024-12-01

**Accepted**  
2024-12-15

**Published**  
2024-12-30

**Abstract.** Female prisoners face various challenges during detention, including the loss of their roles as mothers, social isolation, and privacy restrictions. During detention, female prisoners may feel bored, fear violence, and have difficulty building trust. They need to engage in emotion regulation and forgiveness to maintain their mental health. Sometimes, female prisoners experience difficulties in emotion regulation. Previous research has indicated that difficulties in emotion regulation impact the forgiveness process. This study aims to examine the relationship between emotion regulation and forgiveness among female prisoners. The research method used is quantitative with a convenience sampling technique. A total of 190 female prisoners aged 18-65 years completed the Difficulties in Emotion Regulation Short Form (DERS-SF) and Heartland Forgiveness Scale (HFS) questionnaires. Spearman Correlation Analysis yielded  $r = -.324$  and  $p = .001 < .01$ . The results indicate a negative and significant relationship between difficulties in emotion regulation and forgiveness. This means that the stronger the difficulties in emotion regulation, the weaker the tendency toward forgiveness. This conclusion can also be interpreted to mean that there is a positive and significant relationship between emotion regulation and forgiveness. In other words, the stronger the ability in emotion regulation, the stronger the tendency toward forgiveness. The research findings are expected to provide important insights into the development of more effective interventions to support emotion regulation and forgiveness, as well as the social reintegration process of female prisoners. Additionally, these findings can serve as a foundation for the development of further research ideas to explore the factors that influence emotion regulation and forgiveness.

**Keywords:** *Correctional Institutions; Emotion Regulation; Female Inmates; Forgiveness; Prison*

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## Introduction

In Indonesia, the number of criminal incidents increases significantly each year. According to data from the Operations Control Bureau, Headquarters of the Indonesian National Police, in 2023, there were 584,991 recorded criminal incidents. This number increased compared to 2022, which had 372,965 incidents (Badan Pusat Statistik [BPS], [2024](#)). Both male and female offenders face the consequence of serving detention periods in correctional facilities (prisons). Upon entering detention, their status changes to inmates.

During their imprisonment, inmates face consequences that are not only physical but also psychological. Research indicates a risk of physical violence perpetrated by fellow female inmates. This potential is 1.7 times higher for female inmates experiencing psychological disorders (Blitz et al., 2008, as cited in Subandi et al., [2022b](#)). Additionally, inmates confront a new reality, including the loss of freedom of movement (Anggraini, [2015](#); Buwono & Yuwono, [2024](#)), loss of autonomy, isolation from family and friends, limited privacy, and the necessity to follow others' rules and orders (Crewe et al., [2017](#)). This new environment can also generate negative emotions such as increased boredom, fear of violence, and involvement in or witnessing violence within the prison environment (Cesaroni & Peterson, 2010; Edgemon & Clay-Warner, 2019; Gabrysch et al., 2020; Van der Laan & Eichelsheim, 2013; Wallace & Wang, 2020, as cited in Cunha et al., [2023](#)). These negative feelings are often exacerbated by difficulties in building trust with others (see Crewe et al., [2017](#)). As a result, inmates experience a decline in psychological well-being and quality of life due to violence and fear of becoming victims (Baidawi et al., 2016; Wooldredge, 1999, as cited in Skowroński & Talik, [2021](#)).

Based on research, compared to male inmates, female inmates are more vulnerable to experiencing mental disorders and substance abuse disorders (Al-Rousan et al., 2017; Binswanger et al., 2010; Fazel & Seewald, 2012, as cited in Subandi et al., [2022b](#)). Over time, substance abuse can worsen mental health (Dingle et al., [2018](#), as cited in Saraswati & Herdiana, [2022](#)). This indicates the presence of issues related to emotion regulation among female inmates. According to Sinha and Li (2007, as cited in Saraswati & Herdiana, [2022](#)), substance abuse is often carried out by individuals who experience difficulties in emotion regulation.

On the other hand, negative emotions can be managed through emotion regulation (Gross et al., [2006](#), as cited in John & Gross, [2007](#)). Emotion regulation involves being aware of and understanding emotions, accepting them, controlling impulses, acting in line with goals despite negative emotions, and using adaptive strategies to manage emotions in order to achieve personal goals and meet situational demands (Gratz & Roemer, [2004](#)). Effective emotion regulation prevents individuals from impulsively expressing their anger (Junita et al., [2022](#)).

However, the study by Laws dan Crewe (2016) concluded that female inmates often do not have the freedom to implement various emotion regulation strategies. For example, inmates have no control over cell assignments and must share cells with strangers, which can lead to emotional and mental discomfort. In such situations, it becomes difficult for inmates to apply the situation selection strategy to avoid the emergence of unwanted emotions. According to John dan Gross (2007) situation selection is the effort to limit exposure to situations likely to evoke negative emotions. This strategy involves avoiding specific persons, places, or activities.

Sharing a cell also limits privacy, preventing inmates from freely employing the situation modification strategy, such as listening to music for relaxation (Laws & Crewe, 2016). Situation modification refers to efforts to reduce the negative emotional impact by altering the situation (John & Gross, 2007). Furthermore, the limited range of activities within the correctional facility restricts inmates' ability to use distraction strategies to generate more neutral or positive emotions. Most inmates participating in the study reported feeling the need to suppress their emotional expressions, such as concealing sadness, to avoid negative treatment from fellow inmates (Laws & Crewe, 2016).

Difficulties in emotion regulation can lead to poor physical and mental health (Hirsch et al., 2012). Additionally, when anger is not properly regulated, it can escalate into chronic anger, which drives aggressive and violent behavior (Howells et al., 2005; Novaco, 2011, as cited in Yu et al., 2021). Chronic anger also contributes to a lack of cooperation within the correctional facility system and increases recidivism rates (Enright et al., 2016).

To help inmates overcome difficulties in emotion regulation, prisons in Indonesia collaborate with various parties in efforts to rehabilitate inmates. Various activities implemented include emotion regulation training for inmates with drug-related cases (Saraswati & Herdiana, 2022), emotion regulation training to enhance future optimism (Agripinata & Dewi, 2013), mindfulness programs to reduce depression among inmates (Wuryansari & Subandi, 2019). Research by Guendelman et al., (2017) shows that mindfulness-based interventions have a positive impact on emotion regulation. Additionally, prophetic psychotherapy interventions conducted by Kusumastuti (2020) also improve emotion regulation among inmates. To maintain mental health, counseling and other psychological interventions such as supportive group therapy, dhikr therapy by Subandi et al., (2022a), and forgiveness therapy to enhance psychological well-being (Subandi et al., 2022b) are also implemented.

The ability to regulate emotions positively influences the tendency for forgiveness among inmates. Previous research highlights that emotion regulation is crucial to the forgiveness process. Emotion regulation helps individuals manage negative emotions such as anger, sadness, and resentment, preventing these emotions from affecting them deeply (Junita et al., 2022).

Other studies also indicate that emotion regulation plays a role in overcoming negative affect that arises in response to emotional wounds (Fincham & May, [2019](#)). During the forgiveness process, emotions transform from negative to neutral or positive, though not automatically. Individuals need to overcome tendencies toward anger or revenge by regulating their emotions to respond positively (Ho et al., [2020](#)). Therefore, it can be concluded that the better one's ability to regulate emotions, the greater the likelihood of achieving forgiveness. Conversely, a lack of this ability can hinder forgiveness.

On the other hand, Laws dan Crewe ([2016](#)) found that inmates use the reappraisal strategy in emotion regulation to shift their perspective on experiences in correctional facilities. Reappraisal involves reassessing a situation more positively by considering the various meanings that may be associated with it (John & Gross, [2007](#)). Through the reappraisal strategy, inmates interpret correctional facilities as a 'forced' opportunity for self-development (Laws & Crewe, [2016](#)).

Ho et al., ([2020](#)) also discovered that individuals who use the cognitive reappraisal strategy tend to exhibit forgiveness. An experimental study by Witvliet et al., ([2015](#)) revealed that a compassionate reappraisal strategy can enhance positive emotions, reduce negative emotions, and support forgiveness. This strategy helps individuals perceive those who have hurt them as humans in need of positive change. In other words, individuals engage in reappraisal by focusing on the humanity and need for positive growth of the person who inflicted harm.

Forgiveness is a process of changing an individual's perception so that their responses — including thoughts, emotions, and behavioral tendencies — toward the person who caused harm, the harmful act itself, and its consequences shift from negative to neutral or positive (Thompson et al., [2005](#)). When individuals feel they have been treated unfairly or have suffered a loss due to someone else's behavior, they tend to exhibit negative responses, such as seeking revenge or avoiding the source of the harm (Fincham & May, [2019](#)). These responses can arise not only immediately after the event but also when the individual recalls the event (Thompson et al., [2005](#)). Forgiveness can overcome these negative responses (Fincham & May, 2019). Forgiveness can be directed toward oneself, others, and situations (Thompson & Snyder, [2004](#)).

The change in status to an inmate due to violating the law leads to the loss of material comfort, relational well-being, and autonomy, resulting in a loss of life meaning (Vanhooren et al., [2017](#)). For female inmates who have children, this situation becomes even more difficult due to the loss of contact and the deterioration of their relationships with their children. As a result, they feel burdened because they cannot fulfill their role as mothers (Owen, 1998, as cited in Crewe et

al., (2017). According to Hairston (1991, as cited in Crewe et al., 2017), the most traumatic experience for female inmates is adjusting to the loss of their role as mothers during detention.

During their punishment period, inmates also tend to experience loneliness (Buwono & Yuwono, 2024). They often experience feelings of guilt, regret, anger, and sadness. These negative emotions are then expressed through self-harm and suicidal ideation (Crewe et al., 2017). The increase in guilt and social isolation can affect self-esteem (Lynch & Graham-Bermann, 2000, as cited in Kalemi et al., 2019).

Efforts to reduce feelings of guilt, enhance self-esteem, and foster self-acceptance can be achieved through forgiveness of self (Rangganadhan & Todorov, 2010, as cited in Sari & Sa'id, 2023). True self-forgiveness means that inmates take responsibility for the violations and the negative emotions they have experienced. This forgiveness encourages self-love and the belief that change is possible (Fisher & Exline, 2010; Kim & Enright, 2014; Woodyatt & Wenzel, 2013, as cited in de Alencar & Neto, 2021). As for forgiveness toward situations, according to Thompson et al., (2005), it can be achieved when individuals can wisely cope with situations, environments, or whatever is perceived as "God's destiny." Through this process, inmates can realize that there are things in life that are beyond their control.

Forgiveness is also a key factor in the success or failure of interpersonal relationships (Allemand et al., 2007; McCullough et al., 1997, as cited in Agung, 2015). Forgiveness toward others is necessary when inmates experience conflicts with family members outside the correctional facility. For example, conflicts may arise when inmates feel neglected by their families (Meilina, 2013, as cited in Buwono & Yuwono, 2024). Meanwhile, conflicts among inmates can manifest as aggression. Female inmates exhibit higher levels of physical aggression and hostility compared to non-criminal women (Ramirez et al., 2003, as cited in Kalemi et al., 2019). Forgiveness plays a crucial role in resolving interpersonal conflicts within the correctional facility environment. Thus, inmates will be better able to manage their interpersonal relationships, which directly impacts their social reintegration process (de Alencar & Neto, 2021).

Social reintegration is support to prepare inmates for their return to society (United Nations Office on Drugs and Crime [UNODC], 2006). Forgiveness in the social reintegration process serves as a means to release pain (Pinho et al., 2016, as cited in Moniz et al., 2024), shame, and guilt (Zechmeister & Romero, 2002, as cited in Moniz et al., 2024). Forgiveness also aids in the reconstruction of self-esteem and self-concept for both victims and perpetrators, thereby encouraging more positive attitudes toward others and society (Cornish & Wade, 2015; Woodyatt & Wenzel, 2013, as cited in Moniz et al., 2024).

Based on previous studies, the prevalence of forgiveness tendencies among female inmates in Indonesia has been reported. Research conducted by Raudatussalamah and Susanti

(2014) revealed that 69% of female inmates in Pekanbaru exhibited forgiveness tendencies in the moderate category, while 30% fell into the high category. Similarly, a study by Neonufa and Shanti (2023) found that 66.9% of female inmates in Kupang demonstrated forgiveness tendencies in the moderate category, while 14% were classified in the high category.

A study involving participants from free society aged 19–69 revealed that women have lower total scores for the tendency to forgive than men. Additionally, women tend to find it more difficult to forgive themselves and situations compared to forgiving others (Kaleta & Mróz, 2022). This tendency can be explained through the concept of self, where women focus on maintaining relationships with others and feel more emotionally connected and responsible for those around them (Markus & Kitayama, 1991, as cited in Kaleta & Mróz, 2022). Women often believe that the harmony of their relationships with others may be disrupted by their own mistakes. This belief ultimately impacts their positive self-image (Fincham et al., 2004, as cited in Kaleta & Mróz, 2022) and leads to feelings of shame (Markus & Kitayama, 1991, as cited in Kaleta & Mróz, 2022).

Scientific research examining the correlation between emotion regulation and forgiveness in adult samples is still relatively rare. Junita et al., (2022) investigated this correlation in a study involving 275 divorced women in Central Aceh. This research explored forgiveness toward others as part of dealing with negative emotions that arise after divorce. The research identified a positive and significant correlation between emotion regulation and forgiveness. In this sense, the higher the level of emotion regulation, the higher the level of forgiveness among divorced women in Central Aceh.

Similar results were also found in a study conducted by Malik dan Suminar (2022). Their research involved 201 respondents aged 11–22 who were victims of cyberbullying. This study explored forgiveness toward others as the perpetrators of cyberbullying. On the other hand, Nabila dan Herani (2021) did not find a correlation between emotion regulation and forgiveness in 581 students aged 16–52 during the COVID-19 pandemic. This study focused on how individuals faced situations in an effort to manage stress and practice forgiveness of others during the pandemic.

Another study found that emotion regulation influences both forgiveness and depression in adolescents (Zhang et al., 2020). It was further found that there is a negative correlation between forgiveness and negative affect, anxiety, anger control, and depression. The more positive affect an individual possesses, the greater their tendency to engage in forgiveness behavior (see Kaleta & Mróz, 2022; Thompson et al., 2005).

This is a substantial topic related to psychological well-being and the successful social reintegration of inmates. However, studies focusing on female offenders remain underexplored

(Kalemi et al., [2019](#)). The limited number of scientific studies underscores the importance of further research. The contradictions in research findings concerning the correlation between emotion regulation and forgiveness also highlight the necessity for further investigation. Additional research is therefore needed to confirm and better understand the correlation between these two variables. Hence, this study aimed to examine the correlation between emotion regulation and forgiveness among female inmates.

### Methods

This study employed a correlational method to examine the correlation between emotion regulation and forgiveness. Participants were female inmates aged 18–65. A convenience sampling technique was employed in a women's correctional facility in Indonesia. This location was selected for its ease of access and administrative approval.

The study used the Difficulties in Emotion Regulation Scale Short Form (DERS-SF) to measure emotion regulation. The DERS-SF is a short version of the DERS (36 items) developed by Gratz dan Roemer (2004). The DERS-SF consists of 18 items while retaining the same six dimensions as the full version. These dimensions are non-acceptance, goals, impulse, awareness, strategies, and clarity. DERS-SF was developed by Kaufman et al., ([2016](#)) and psychometrically validated in Indonesian by Danasasmita et al., ([2024](#)). Modifications were made to the DERS-SF to align with the study's context.

A high score on this measurement tool indicates a stronger level of difficulty in emotion regulation for the respondents. Conversely, a low score indicates a lower level of difficulty in emotion regulation. Since the DERS focuses on difficulties, the measurement results can also be interpreted as a high score meaning low emotion regulation ability, while a low score means high emotion regulation ability. This interpretation is also demonstrated in the study by Estévez et al., ([2017](#)), where the results from the DERS tool were interpreted as emotion regulation being negatively correlated with other variables under investigation, even though the correlation scores obtained were positive.

The collected data were then subjected to validity and reliability testing to determine Cronbach's Alpha and the corrected item-total correlation values. A total of 17 items from the DERS-SF were included in the analysis, as one item had a corrected item-total correlation value below 0.2. The final Cronbach's Alpha value was 0.894, with corrected item-total correlations ranging from 0.261 to 0.695.

Forgiveness was measured using the Heartland Forgiveness Scale (HFS), developed by Thompson et al., ([2005](#)). This measurement instrument consisted of 18 positive and negative items designed to measure attitudes of forgiveness of self, others, and situations (Thompson et al.,

[2005](#)). The HFS has been translated and adapted into Indonesian by Zivana Sabili and Julia Suleeman (Sabili, [2016](#)). Modifications were made to the HFS to suit the study's context. A high score on this measurement tool indicates a high tendency for forgiveness toward oneself, others, and situations (Thompson et al., [2002](#)).

The collected data were then subjected to validity and reliability testing to determine the Cronbach's Alpha and the corrected item-total correlation values. Meanwhile, 13 items of the HFS were included in the analysis, as five items had corrected item-total correlation values below 0.2. The final Cronbach's Alpha value was 0.805, with the corrected item-total correlation values ranging from 0.296 to 0.603.

Data analysis began with assumption testing to assess whether the data were normally distributed. Normality tests using Kolmogorov-Smirnov and Shapiro-Wilk were conducted, and it was found that the data were not normally distributed. Given this situation, a Spearman Correlation test was performed to test the hypothesis. This was followed by Kruskal-Wallis and Dunn-Bonferroni Post-Hoc Tests to examine differences in variables based on demographic data. All data analyses were conducted using the IBM *Statistical Package for the Social Sciences* (SPSS) software.

## Results

The data processing began with the exclusion of invalid data. Out of the 194 questionnaires collected, four were excluded because the respondents did not complete all the items, refused to provide demographic information, or filled out the questionnaire insincerely or with a forced attitude. Thus, the processed data consisted of 190 participants, all of whom had provided consent and signed the informed consent form. Demographic information based on age, educational background, and marital status is presented in Table 1. Data on offenses committed are provided in Table 2, while data on sentence length and incarceration duration are in Table 3.



## Emotion Regulation and Forgiveness among Female Inmates

Table 1.

General Overview of Participants by Age, Educational Background, and Marital Status

	Category	Frequency	Percentage (%)
Age	18 - 25 years	14	7.4
	26 - 33 years	46	24.2
	34 - 41 years	54	28.4
	42 - 49 years	47	24.7
	50 - 57 years	21	11.1
	58 - 65 years	8	4.2
	<b>Total</b>	<b>190</b>	<b>100</b>
Educational Background	Elementary School	4	2.1
	Junior High School	20	10.5
	Senior High School/Equivalent	116	61.1
	Diploma	10	5.3
	Bachelor's Degree	33	17.4
	Master's Degree	7	3.7
<b>Total</b>	<b>190</b>	<b>100</b>	
Marital Status	Single	36	18.9
	Married	101	53.2
	Divorced	53	27.9
	<b>Total</b>	<b>190</b>	<b>100</b>

Table 2.

General Overview of Participants Based on Type of Offense

Type of Offense	Frequency	Percentage (%)
Offenses against life	7	3.7
Offenses against physical integrity	2	1.1
Offenses against morality	3	1.6
Offenses against personal freedom	1	0.5
Offenses against property with violence	1	0.5
Offenses against property without violence	4	2.1
Drug-related offenses	111	58.4
Fraud, embezzlement, corruption	42	22.1
Offenses against public order	1	0.5
Electronic Information and Transactions offenses	4	2.1
Violence against children	8	4.2
Others	6	3.2
<b>Total</b>	<b>190</b>	<b>100</b>

Table 3.

General Overview of Participants Based on Sentence Length and Incarceration Duration

	Category	Frequency	Percentage (%)
Sentence Length	0 - 2 years	20	10.5
	3 - 5 years	47	24.7
	6 - 8 years	70	36.9
	9 - 11 years	27	14.2
	12 - 14 years	13	6.8
	15 - 17 years	9	4.7
	18 - 20 years	2	1.1
	Life imprisonment	2	1.1
	<b>Total</b>	<b>190</b>	<b>100</b>
Incarceration Duration	0 - 2 years	126	66.3
	3 - 5 years	51	26.9
	6 - 8 years	4	2.1
	9 - 11 years	9	4.7
<b>Total</b>	<b>190</b>	<b>100</b>	

This study employed the DERS-SF to assess emotion regulation, specifically to measure the levels of difficulty in regulating emotion. Therefore, the test results indicated an inverse

correlation to the participants' level of emotion regulation ability. Lower scores on the DERS-SF represent lower levels of difficulty in emotion regulation, whereas higher scores indicate greater difficulties in emotion regulation. Consequently, lower scores on the DERS-SF could also be interpreted as reflecting stronger levels of emotion regulation ability among participants, while higher scores indicated weaker levels of emotion regulation ability.

The descriptive analysis of the DERS-SF in this study revealed an empirical mean of 2.10. Referring to the norms outlined in Table 4, the level of difficulties in emotion regulation among female inmates falls into the low category. This indicated that female inmates possess a strong level of emotion regulation. Similarly, the descriptive analysis of the HFS in this study demonstrated that the empirical mean for the forgiveness variable falls into the high category ( $M = 3.02$ ). These findings suggested that female inmates demonstrated a strong inclination toward forgiveness.

Table 4.  
Interpretation Categories of Research Results

Measurement Data	Norms	Category
DERS-SF	$X \leq 2.33$	Low
	$2.33 < X \leq 3.67$	Moderate
	$3.67 < X$	High
HFS	$X \leq 2$	Low
	$2 < X \leq 3$	Moderate
	$3 < X$	High

The assumption testing conducted using the One-Sample Kolmogorov-Smirnov and Shapiro-Wilk methods indicated that the  $p$ -values for both measurement instruments were below 0.05. The results of the One-Sample Kolmogorov-Smirnov test for DERS-SF showed  $p = 0.039 < 0.05$ , sedangkan uji *Shapiro Wilk* adalah  $p = 0.001 < 0.05$ . Meanwhile, the results for HFS were  $p = 0.001 < 0.05$ , in the One-Sample Kolmogorov-Smirnov test and  $p = 0.002 < 0.05$  in the Shapiro-Wilk test. These findings indicated that the data distribution was not normal. The detailed results are presented in Table 5.

Table 5.  
Results of Classical Assumption Testing

Measurement Data	$p$ -value One-Sample Kolmogorov Smirnov	$p$ -value Shapiro Wilk	Description
DERS-SF	0.039	<0.001	Not normal
HFS	<0.001	0.002	Not normal

Source: Research Results, processed with IBM SPSS, 2024

This study hypothesized that there was a correlation between emotion regulation and forgiveness among female inmates. To test this hypothesis, a correlation analysis was conducted using Nonparametric Correlations, specifically Spearman's Correlation, as the data were not

normally distributed. The results of the analysis between DERS-SF, which measured difficulties in emotion regulation, and HFS, which measured forgiveness, revealed  $r = -0.324$  and  $p = 0.001 < 0.01$ . These findings indicated that  $H_0$  was rejected and  $H_1$  was accepted, with a negative  $r$ -value.

However, since a high score on the DERS-SF indicates stronger difficulties in emotion regulation, the correlation results of this study can be viewed as a positive relationship. A similar interpretation can be seen in the study by Estévez et al., (2017). In their research, although the correlation test produced a positive score, they interpreted the relationship between emotion regulation and other variables under investigation as a negative correlation. Therefore, the Spearman Correlation results in this study can also be interpreted to mean that there is a positive and significant relationship between emotion regulation and forgiveness among female inmates. This relationship can be understood as the stronger the emotion regulation ability, the stronger the tendency toward forgiveness. Conversely, the weaker the emotion regulation ability, the lower the tendency toward forgiveness. Detailed data are presented in Table 6.

Table 6.  
Correlation Test Results

Correlation Test	$r$	$p$	Description
Difficulties in Emotion Regulation and Forgiveness	-0.324	<0.001	Negative and significant correlation
Non-Acceptance and Forgiveness	-0.154	0.034	Negative and significant correlation
<i>Goals and Forgiveness</i>	-0.147	0.044	Negative and significant correlation
<i>Impulse and Forgiveness</i>	-0.386	<0.001	Negative and significant correlation
<i>Awareness and Forgiveness</i>	-0.336	<0.001	Negative and significant correlation
<i>Strategies and Forgiveness</i>	-0.314	<0.001	Negative and significant correlation
<i>Clarity and Forgiveness</i>	-0.130	0.074	No correlation
Difficulties in Emotion Regulation and Forgiveness of Self	-0.157	0.030	Negative and significant correlation
Difficulties in Emotion Regulation and Forgiveness of Others	-0.392	<0.001	Negative and significant correlation
Difficulties in Emotion Regulation and Forgiveness of Situations	-0.261	<0.001	Negative and significant correlation

Source: Research Results, processed with IBM SPSS, 2024

The Kruskal-Wallis test revealed no significant differences in difficulties with emotion regulation among female inmates based on age ( $p = 0.689 > 0.05$ ), educational background ( $p = 0.123 > 0.05$ ), marital status ( $p = 0.694 > 0.05$ ), type of offense ( $p = 0.387 > 0.05$ ), sentence length ( $p = 0.214 > 0.05$ ), and incarceration duration ( $p = 0.441 > 0.05$ ). Similarly, the Kruskal-Wallis test conducted on the forgiveness variable indicated no significant differences in forgiveness among female inmates based on educational background ( $p = 0.323 > 0.05$ ), marital status ( $p = 0.343 >$

0.05), type of offense ( $p = 0.123 > 0.05$ ), and sentence length ( $p = 0.606 > 0.05$ ). However, significant differences in total forgiveness scores were found based on age ( $p = 0.026 < 0.05$ ) and incarceration duration ( $p = 0.044 < 0.05$ ).

In the age category, due to the presence of significant differences, a follow-up analysis was conducted using Dunn-Bonferroni Post-Hoc Tests. The analysis revealed a significant difference in forgiveness levels, with a significance level of alpha 0.05, between the age groups of 42–49 years and 50–57 years, with  $p = 0.014 < 0.05$  and a mean difference = -0.36. This indicates that the 42–49 age group has a lower average level of forgiveness compared to the 50–57 age group.

### Discussion

This study aimed to examine the correlation between emotion regulation and forgiveness among female inmates. The measurement tool used was the DERS-SF, which measures difficulties in emotion regulation. A high score on the DERS-SF indicates stronger difficulties in emotion regulation. Therefore, the correlation results of this study can be viewed as a positive relationship. A similar interpretation can be seen in the study by Estévez et al., (2017). In their research, although the correlation test produced a positive score, they interpreted the relationship between emotion regulation and other variables under investigation as a negative correlation.

The Spearman Correlation test showed a negative and significant relationship between difficulties in emotion regulation and forgiveness. This means that the lower the difficulties in emotion regulation, the higher the forgiveness among female inmates. This result can also be interpreted as a positive and significant relationship between emotion regulation and forgiveness. In other words, the stronger the emotion regulation ability, the stronger the tendency toward forgiveness among female inmates. The findings of this study align with those of Junita et al., (2022) as well as Malik dan Suminar (2022). In contrast, the findings of this study differ from those of Nabila dan Herani (2021) who did not find a relationship between emotion regulation and forgiveness.

The primary consideration for using DERS rather than ERQ in this study was that DERS focuses on difficulties in emotion regulation. DERS was considered more comprehensive as it encompasses cognitive, affective, and behavioral aspects, whereas ERQ emphasizes tendencies in the use of specific strategies for emotion regulation (Sörman et al., 2022). Therefore, DERS was deemed more appropriate for the research context, where female inmates were likely to encounter challenges in applying certain approaches to emotion regulation.

HFS was employed to measure general forgiveness, differing from the TRIM scale, which assesses responses to specific interpersonal offenses and focuses on forgiveness motivation

(McCullough et al., 1998, as cited in Thompson & Snyder, [2004](#)). HFS evaluates the tendency to forgive broadly, encompassing forgiveness of self, others, and situations that may occur in the daily lives of female inmates. HFS was considered more appropriate for the phenomena addressed in this study, including guilt, regret, offenses committed by others, and situational difficulties faced by female inmates during incarceration.

Based on the analysis, emotion regulation difficulties were negatively and significantly correlated with all dimensions of forgiveness. This finding can also be interpreted as indicating that emotion regulation positively and significantly correlates with all dimensions of forgiveness. However, further correlation tests on the dimensions of emotion regulation difficulties revealed that only the clarity dimension demonstrated no significant correlation with forgiveness among female inmates. The researchers proposed two assumptions to explain this finding.

First, clarity pertains to an individual's ability to understand specifically and clearly what emotions are being experienced (Gratz & Roemer, [2004](#)). This means individuals with strong clarity skills can accurately differentiate whether they are feeling anger, irritation, or frustration. Clarity correlates to emotions occurring in the present (currently occurring), whereas forgiveness involves profound emotional and cognitive changes, which may not solely depend on understanding specific emotions occurring in the present (currently occurring). According to experts, forgiveness requires significant effort and strong commitment as it is a lengthy, subjective, and complex process (Castrillon-Guerrero et al., 2018; Gouveia et al., 2015; Orbon et al., 2015, as cited in Moniz et al., [2024](#)).

Second, despite the  $r$  value indicating a negative tendency based on the correlation test, there was no significant correlation between clarity and forgiveness among female inmates. The correlation between clarity and forgiveness may be mediated by other variables not measured in this study. Further research is required to explore additional factors that may influence this correlation.

The descriptive analysis indicated that the female inmates in this study exhibited low levels of difficulties in emotion regulation. This can also be interpreted as their high emotion regulation. These findings suggest that the female inmates demonstrated good self-control, optimism, positive thinking, nonaggressive behavior, and no tendencies toward depression (Anggraini, [2015](#)). Emotion regulation among female inmates may improve due to several factors, including high levels of religiosity (Anggraini, [2015](#)) and participation in regular religious programs within the correctional facility. Religiosity provides positive coping mechanisms, including reliance on God and gratitude, which support adaptive emotion regulation (Anggraini, [2015](#)).

Apart from religiosity, social support also plays a significant role in enhancing emotion regulation among female inmates. Adequate social support provides individuals with more opportunities to express emotions to trusted persons. Such opportunities can encourage more adaptive emotion regulation (Lopez et al., [2024](#)). During their incarceration, the female inmates in this study potentially received social support from fellow inmates and family members. Although limited, the correctional facility still allowed family visits or telephone contact.

Descriptive analysis in this study also indicated that female inmates exhibited a high level of forgiveness. This ability enables them to release emotional pain (Pinho et al., 2016 as cited in Moniz et al., [2024](#)), preventing them from being trapped in emotional wounds. Individuals with high levels of forgiveness tend to experience lower levels of depression, anger, and anxiety, along with higher life satisfaction (Thompson et al., [2005](#)).

Part of this study's findings align with those of Kaleta and Mróz ([2022](#)), which highlight the role of gender in forgiveness. They found that women generally face fewer challenges in forgiving others. However, this study's findings differ in terms of forgiveness of self and forgiveness of situations. These two dimensions were categorized as high among the female inmates, contrasting with the findings by Kaleta dan Mróz ([2022](#)) which suggested that these dimensions are generally more challenging for women.

The descriptive analysis in this study differs from the findings of Neonufa dan Shanti ([2023](#)), as well as Raudatussalamah and Susanti ([2014](#)). Both studies found that the majority of female inmates demonstrated moderate levels of forgiveness, with some exhibiting high levels. High forgiveness among female inmates is influenced by several factors. A study conducted by Subandi et al., ([2022b](#)) revealed that the effectiveness of forgiveness is driven by several internal factors, including awareness, willingness, commitment, and religiosity, as well as external factors, including support and a sense of togetherness among the inmates.

Another influencing factor is the adaptation strategies employed by female inmates. A study conducted by Raudatussalamah and Susanti ([2014](#)) indicated that female inmates tend to adapt to unpleasant conditions in correctional facilities by forming comforting friendships. Furthermore, self-acceptance is a supporting factor for the attainment of forgiveness of self. Inmates with high self-acceptance are able to embrace their strengths and weaknesses and view past experiences more positively.

The Kruskal-Wallis analysis indicated no significant differences in emotion regulation abilities among different age groups. This result contradicts the explanation presented by Mikkelsen et al., ([2023](#)) which demonstrated that individuals undergo changes in emotion regulation abilities as they age. In this study, most respondents had a background in drug-related

offenses (58.4%). After being transferred to the women's correctional facility, they participated in social rehabilitation programs. These programs included spiritual mental guidance, social reintegration guidance, psychosocial intervention, independence training, and physical training (Hanafi & Wibowo, [2022](#)).

In addition to social rehabilitation, all female inmates also had the opportunity to attend regular religious programs according to their respective faiths. Both programs were accessible to all age groups. Research has demonstrated that religious-based programs positively contribute to reducing offenses within correctional facilities (Johnson, 2011, as cited in Jang & Johnson, [2022](#)), and reshaping moral and character development (Jang & Johnson, [2022](#)). Thus, these two rehabilitation programs can potentially enhance emotion regulation among female inmates, which may explain the insignificant age-related differences in this study.

Emotion regulation level differences were also analyzed based on demographic data, including educational background, marital status, type of offense, sentence length, and incarceration duration. The analysis revealed no differences based on these demographic factors. Meanwhile, forgiveness level differences were significant based on age and incarceration duration but not significant based on educational background, marital status, type of offense, and sentence length.

Dunn-Bonferroni Post-Hoc tests were conducted for the categories of age and incarceration duration. The analysis results for age indicated that the 42–49-year-old group had a lower average level of forgiveness compared to the 50–57-year-old group. These findings support expert claims that forgiveness is dynamic and tends to increase with age (Girard & Mullet, 1997; Subkoviak et al., 1995; Toussaint et al., 2001, as cited in Kaleta & Mróz, [2018](#)). However, this development does not occur uniformly across all aspects of forgiveness. Charzyńska and Heszen's study (2013, as cited in Kaleta & Mróz, [2018](#)) demonstrated that forgiveness of self is not associated with age, demonstrated that forgiveness of self is not associated with age, whereas forgiveness of others and general forgiveness tendencies (total forgiveness) tend to increase with age. This study's findings slightly differ from those of Charzyńska and Heszen (2013, as cited in Kaleta & Mróz, [2018](#)) as no significant differences were observed in the three dimensions of forgiveness across age groups. Nonetheless, significant differences were observed in total forgiveness by age, aligning with Charzyńska and Heszen's findings (2013, as cited in Kaleta & Mróz, [2018](#)). These results may lack strength, as significant differences were only observed between the two age groups.

The Dunn-Bonferroni Post-Hoc test results for incarceration duration revealed that the group incarcerated for 3–5 years had a lower average level of forgiveness compared to the group incarcerated for 6–8 years. Longer incarceration experiences allow inmates to participate in more

rehabilitation programs, both social and religious. A study conducted by Moniz et al., (2024) found that rehabilitation programs benefit inmates by fostering self-awareness, enhancing social skills necessary for reintegration into society, and shaping a more positive life perspective, thereby improving their forgiveness levels (Moniz et al., 2024). Thus, longer incarceration periods provide inmates with greater opportunities to engage in programs that promote forgiveness.

### Conclusion

The objective of this study was to examine the relationship between emotion regulation and forgiveness among female inmates. The results showed that there is a positive and significant relationship between emotion regulation and forgiveness. This means that the higher the ability in emotion regulation, the higher the level of forgiveness. These results are consistent with the research hypothesis, with the  $H_0$  being rejected and the  $H_1$  accepted.

The analysis results also demonstrated that only clarity had no significant correlation with forgiveness among the emotion regulation dimensions. Additionally, there were indications of differences in forgiveness levels based on age and incarceration duration. Longer incarceration experiences provided female inmates with more opportunities to participate in rehabilitation programs, both social and religious, which strengthened forgiveness.

Future research could expand the sample scope to include inmates from various correctional facilities across Indonesia, including male inmates. Moreover, this study highlights the potential influence of religiosity and social support in supporting emotion regulation and forgiveness. Future studies could also explore additional factors affecting the correlation between these two variables. These findings are expected to inform the development of rehabilitation-based interventions to enhance emotion regulation and forgiveness among inmates.

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- QxeVZOVWJhQ1NsOXNEL3k2b3BOV2VMdCtPVWZkVytVYmVLRTNyblidiRnlMN2NOTKJleUY3VzY2anJlbdsaTVIb1pBMlI6OFpIQTNLk3dVcEQ5Y2phQlIRWIRPbXN1eTEwYXRLK3VVK0luTXFLQ0Z6d3JUeC9wSkpKZUNIM0RmY3IDSjlpNDFZckc=&\_gl=1\*m03rzm\*\_ga\*OTMxNjM3MDAyLjE3MTI2MDAxMjU.\*\_ga\_XXTTVXWHDB\*MTczNDUxMTAxNS4xMS4xLjE3MzQ1MTE2MTAuMC4wLjA.
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