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Relationship Between Forgiveness, Triadic Forgiveness Dimensions, and Resilience in Javanese Emerging Adults

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ABSTRACT

This study explores the relationship between general forgiveness, the triad of forgiveness dimensions (i.e., forgiveness of self, others, and situations), and resilience in emerging adult Javanese undergraduate students. The study included 405 subjects ($M_{Age} = 18.50$; $SD_{Age} = 0.600$; male = 25.2%; female = 74.8%). The Forgiveness Scale, and the Indonesian version of the Connor-Davidson Resilience Scale (CD-RISC-25) were used to measure general forgiveness and its triad dimensions and resilience, respectively. The results of data analyses performed using Spearman's rho showed that forgiveness of self, others, and situations were individually positively related to resilience. General forgiveness showed a greater correlation with resilience in men than in women. Forgiveness of situations consistently had the greatest correlation of all with resilience across all test results. In men, forgiveness of others had a higher correlation with resilience than self-forgiveness, whereas in women self-forgiveness had a higher correlation with resilience than forgiveness of others. Our results indicate that men reap greater benefits in terms of increasing resilience from forgiveness. In both sexes, forgiveness of situations had the greatest effect on resilience compared to self-forgiveness and forgiveness of others. Men showed greater ability to increase resilience by forgiving others; whereas resilience in women improved with self-forgiveness. Overall, since resilience is related to overcoming adversity, the results of this study indicate that forgiveness assists both men and women to overcome adversity. Although further research is required, our results further indicate that forgiveness may mediate the relationship between adverse experiences and resilience or even ameliorate the emergence of psychopathology. The differences between the sexes and their responses to different types of forgiveness need to be considered. These results have implications for researchers and practitioners in future studies and interventions.

Keywords: collectivistic culture, emerging adult, forgiveness, Indonesia, Javanese, resiliency.

1. INTRODUCTION

Undergraduate students between 18 to 25 years old (Santrock, 2014) are considered to be emerging adults. Emerging adulthood describes the period of transition between late adolescence and early adulthood and is uniquely characterized as a period of identity exploration, instability, self-focus, and of feeling 'in-between' as well as being the age of possibility (Arnett, 2006). In addition to the general developmental tasks facing emerging adults, those at

university undergo a variety of unique experiences compared with those who decide not to continue their education to a higher level. These experiences include changes in social and family relations and socio-economic status, as well as separation from family and friends due to studying far from home. The search for identity and the formation of self-concept are common issues facing emerging adults studying at university (Adams, Meyers, & Beidas, 2016; Elias, Ping, & Abdullah, 2011).

The personal histories and adverse events they may have experienced during childhood and adolescence all play a role in the way undergraduate students adjust during the emerging adulthood period. The data shown in Table 1 represent the

adverse childhood experiences reported in study of Indonesian undergraduate students (Salma, Kaloeti, Rahmandani, Sakti, & Suparno, 2019). The number of adverse events experienced by subjects in the study ranged from 0 to 7. Most subjects (54.2%) claimed to have had no adverse childhood experiences, whereas 30.1% reported one adverse childhood experience during the first 18 years of life. Bullying was the most common childhood adversity experienced among the Indonesian undergraduate subjects (33.2%), followed by emotional abuse (8.8%), physical abuse (6.9%), parent(s) passed away (6.9%), and emotional neglect (5.7%).

Table 1. Prevalence of Adverse Childhood Experiences' Types among Indonesian Undergraduate Samples (n = 419)

Adverse Childhood Experiences	f	%
Emotional abuse	37	8.8
Physical abuse	29	6.9
Sexual abuse	9	2.1
Emotional neglect	24	5.7
Physical neglect	6	1.4
Living in family with parents separated or divorced	12	2.9
Living in family with domestic violence	7	1.7
Living with family member with alcohol or substance abuse problem	5	1.2
Living with family member with mental health problems	13	3.1
Having incarcerated family member	10	2.4
Bullying	139	33.2
Parent(s) passed away	29	6.9

Source: (Salma et al., 2019)

As both present and past experiences affect current mental health, undergraduate students, who have experienced prior adversity, may find it difficult to make personal, social (Adams et al., 2016; Horgan, Sweeney, Behan, & Mccarthy, 2016), and academic adjustments (Elias et

al., 2011). In addition to worsening physical condition (Kalmakis & Chandler, 2015), these students may also experience mental health issues such as stress, anxiety, depression (Chernomas & Shapiro, 2013; Iqbal, Gupta, & Venkatarao, 2015), substance abuse

(Skidmore, Kaufman, & Crowell, 2016), and other forms of symptomatology (Adams et al., 2016; Benjet, Borges, & Medina-mora, 2010; Dvir, Ford, Hill, & Frazier, 2014). Furthermore, students experiencing the mental health problems may influence others, resulting in an increase in mental health issues within the cohort (Cranford, Eisenberg, & Serras, 2009). Specific evidence relating to parental child-rearing strategies indicates that these strategies also affect self-regulation, socio-emotional adjustment, and psychopathology in early adulthood (Baker & Hoerger, 2012). The greater the adversity experienced during childhood and adolescence, the greater likelihood of depression in emerging adulthood. Emerging adults having experienced high levels of adversity have been shown to be 2.5 times more likely to suffer from depression in later life (Salma et al., 2019).

Resilience plays a crucial role in achieving the requisite adjustments during emerging adulthood and has been shown to be a reliable predictor of higher academic performance than demographic variables. It further results in greater hope (Ayyash-Abdo, Sanchez-Ruiz, & Barbari, 2016), lower psychological distress, better adjustment, higher life satisfaction (Liu, Wang, Zhou, & Li, 2014), increased virtues, better posttraumatic growth (Duan, Guo, & Gan, 2015), and better mental health (Hartley, 2011).

Some studies have demonstrated that stressful experiences foster resilience (Wilks & Spivey, 2010), and resilience has been shown to moderate the relationship between childhood adversity and depression (Poole, Dobson, & Pusch, 2017) as well as between childhood adversity and mental health (Logan-Greene, Green, Nurius, & Longhi, 2014). However, the opposite results were obtained in a study involving Indonesian undergraduate students. This study found that adverse childhood experiences were more likely to result in depressive symptoms rather than fostering resilience (Kaloeti et al., 2019). Among undergraduate students, resilience partially mediated the relationship between psychological distress and depressive symptoms but not to the same extent that childhood traumas led to depressive symptoms.

Considering how traumas impact low self-acceptance (Schulz et al., 2017), self-criticism and self-punishment (Kaess et al., 2013), and social dysfunction (Bruce, Heimberg, Blanco, Schneier, & Liebowitz, 2012), it is an important to study the relationship between forgiveness and trauma. In the act of forgiveness, people acknowledge that a transgression (an event that people perceive as violating their expectations and assumptions about how they, other people, or the world ''ought'' to be) has occurred, and then carry out the cognitive, emotional, and/or behavioral work needed to reframe the transgression so that it is no longer perceived as negative (L. Y. Thompson et al., 2005). It is clear that transgressors are not limited to others but can also be oneself or situations beyond one's control. Forgiveness has been shown to have an impact on the mental and physical health of people during stress exposure experiences (L. Toussaint, Shields, Dorn, & Slavich, 2014). Forgiveness also has an impact on posttraumatic growth in people who have experienced adveristy (Laufer, Raz-Hamama, Levine, & Solomon, 2009). The forgiveness of transgressions in romantic

relationships has been shown to lead to increased commitment to the relationship by those who forgive (Ysseldyk & Wohl, 2012).

Previous studies have examined how forgiveness predicts resilience in adolescents (Mary & Patra, 2015), adults (Broyles, 2005), undergraduate students (Gupta & Kumar, 2015; Kumar & Dixit, 2014), and other specific population groups (Abid & Sultan, 2015; Hee & Mihyoung, 2014; Waldron, Braithwaite,

Oliver, Kloeber, & Marsh, 2018).

Previous studies have shown that forgiveness differs between collectivistic and individualistic cultures. Specifically, the focus of attention on self or others associated with forgiveness differs for the two culture types. Table 2 shows how forgiveness, especially self-forgiveness and forgiveness of others, is defined in the collectivistic and individualistic cultures (Sandage & Williamson, 2005).

Table 2. Comparisons of Individualistic and Collectivistic Worldviews in Relations to Forgiveness

Factor Viewed	Individualistic Worldview	Collectivistic Worldview
View of self	Independent, self-reflexive	Interdependent, socially embedded
View of relationships	Exchange/contractual	Communal/covenantal
Primary face concern	Self-face	Other-face and self-face
Forgiveness and reconciliation	Sharply distinct	Closely related
Value of self-forgiveness	High	Low
Central goal of forgiveness	Personal well-being	Social well-being
Primary tools for forgiveness	Professional psychotherapy, self-help resources, and individual coping skills	Communal mediators/healers, narratives, rituals, and symbols

Source: (Sandage & Williamson, 2005)

The relationship between forgiveness and resilience has yet not been adequately been described in terms of the specific contributions of self-forgiveness, forgiveness of others, and forgiveness of situations. In addition, although it is possible to forgive situations beyond one's own control, evidence of this remains limited compared to self-forgiveness and forgiveness of others (Mullet, Neto, & Rivière, 2005).

Hence, this study seeks to comprehensively examine the relationship between these three dimensions of forgiveness and resilience; specifically, within the emerging adult developmental period and the culture of a single ethnic

group in a collectivistic country, namely the Javanese of Indonesia.

Java is one of the ethnicities in Indonesia, and the Javanese self-concept is based on a prototype description of the Javanese as individuals who enjoy and strive to achieve harmony in a shared life (Susetyo, Widiyatmadi, & Sudiantara, 2014). Accordingly, harmony must always be sought when interacting with others and in social life in general. Respect is a mandatory part of behavior toward others, particularly those who are older or have a higher position. For Javanese '*rasa*' (literally in English is feeling or emotion) has an important role, especially in the social realm, where it is evidenced as the

subtlety of behavior (Jatman, 2011). In Javanese people are never single individuals, '*Aku*' ('I'), but there are always others (Jatman, 2011). '*Mawas diri*' ('Introspection') is very important in Java, as it leads one to the right path, to self-understanding, self-surrender, and finally self-awareness (Jatman, 2011). Patriarchy is upheld in the Javanese culture, hence men are considered to hold a higher social position than women (Hermawati, 2007).

This culture milieu indicates that forgiveness may play an important role in improving resilience and preventing mental health problems in Javanese undergraduate emerging adults. Further investigation into the types of forgiveness, the period and developmental tasks, and the inherent culture – in this case Javanese culture – is required. Forgiveness and increased resilience may help Javanese undergraduate emerging adults to deal with difficult situations that have not been sufficiently addressed both in the past and in the present. This study used a quantitative cross-sectional method to examine the relationship between forgiveness as a whole and also between the triadic dimensions of forgiveness and resilience in Javanese undergraduate emerging adults.

We hypothesized that there are positive and significant relationships between forgiveness, its dimensions (self-forgiveness, forgiveness of others, and forgiveness of situations), and resilience in Javanese undergraduate emerging adults. We carried out data analyses in order to obtain comprehensive results.

2. METHODS

2.1. Participants

This study involved 405 Javanese undergraduate students from Diponegoro University who were categorized as emerging adults based on their ages which fell in the range of 18–22 years (M_{Age} = 18.50; SD_{Age} = 0.600; male = 25.2% [M_{Age} = 18.53; SD_{Age} = 0.671]; female = 74.8% [M_{Age} = 18.49; SD_{Age} = 0.575]). The majority (96.8%) of the subjects in this study were aged 18–19 years and in the first year of their study (including students from the Faculty of Sciences and Mathematics [36.1%], Faculty of Public Health [22.7%], Faculty of Psychology [17.0%], Faculty of Economics and Business [14.8%], and Faculty of Engineering [9.4%]).

2.2. Procedures

After obtaining permission from students in several faculties at Diponegoro University. Participants were volunteers and data collection were carried out giving due consideration to the lecture schedules of first year students. Once the psychological scales were completed, the data were scored, entered, and reduced on the basis of any unmet criteria. Data from just 405 (61.27%) of the 661 respondents involved in this study could be further examined. Data from 256 (32.73%) could not be processed due to incomplete responses or because they came from ethnic groups other than Javanese.

2.3. Measures

2.3.1. Demographic Characteristics

The identity section of the psychological scale was used to collect information regarding the participants' ethnicity, sex, age, faculty, and major subject.

2.3.2. Forgiveness

Forgiveness was measured using a forgiveness scale developed based on (L. Y. Thompson et al., 2005). This scale measures general forgiveness, as well as the dimensions of forgiveness, namely self-forgiveness, forgiveness of others, and forgiveness of situations. The whole scale consists of 48 items of which 40 items measure general forgiveness (Cronbach's alpha = 0.912), 14 items measure self-forgiveness (Cronbach's alpha = 0.764), 19 items measure forgiveness of others (Cronbach's alpha = 0.884), and 13 items measure forgiveness of situations (Cronbach's alpha = 0.832). The Forgiveness Scale is a Likert scale with four-point responses ranging from 'strongly disagree' to 'strongly agree'. Scores on favorable items range from 0 for 'strongly disagree' to 3 for 'strongly agree', and vice versa for unfavorable items. Total score is the sum of the scores of all items on the scale or subscales.

2.3.3. Resilience

The Connor-Davidson Resilience Scale (CD-RISC-25) (Connor & Davidson, 2003) was used to measure resilience. The CD-RISC-25 is a 25-item scale with a 5-point Likert response type, ranging from 0 for 'not true at all' to 4 for 'true nearly all the time'. Cronbach's alpha in this study was 0.89. The total score is obtained by adding up all the item scores on the scale.

2.4. Data Analysis

This quantitative cross-sectional study used a correlational approach. As the results of normality testing using Kolmogorov-Smirnov on all variables were not normal, non-parametric statistical tests were performed. The bivariate correlation tests were performed using Spearman's rho. Further statistical tests were also carried out to provide support for the results obtained. The partial correlation tests were conducted to observe the correlation between forgiveness, the triadic forgiveness dimensions, and resilience by controlling for sex and age, both separately and together. Wilcoxon signed rank tests were used to examine the difference in mean scores between variables of the triadic forgiveness dimensions. The Mann-Whitney and Kruskal-Wallis tests were also used to measure the significance of the mean difference in the scores of each variable based on sex and age. All tests were performed using the Statistical Packages for Social Science version 22 (SPSS 22).

3. RESULTS

Table 3 shows the demographic data of the 405 participants in this study. Of the study cohort 74.8% were women (M_{Age}=18.49; SD_{Age}=.575), and the rest were men (M_{Age} = 18.53; SD_{Age} = 0.671). The age range of participants was 18–22 years (M_{Age} = 18.50; SD_{Age}= 0.600), with the majority (96.8%) of participants aged 18–19 years. The mean and standard deviation of the scores of each variable of demographic data are also listed for comparison in Table 3.

Table 3. Demographic Data of Participants and Descriptive Statistics of Variables

Demographic Characteristics	Total (%)	Descriptive Statistics									
		Forgiveness		Self-Forgiveness		Forgiveness of Others		Forgiveness of Situations		Resilience	
		Mean	StDev	Mean	StDev	Mean	StDev	Mean	StDev	Mean	StDev
Sex											
Male	102 (25.2)	70.96	14.140	24.09	4.728	35.62	8.700	22.21	5.211	69.30	12.171
Female	303 (74.8)	71.59	12.437	24.53	4.669	35.86	6.801	22.35	4.868	69.41	11.210
Age (years old)											
18	220 (54.3)	70.99	12.995	24.22	4.635	35.78	6.955	22.13	5.008	68.78	11.432
19	172 (42.5)	71.98	12.170	24.59	4.800	36.00	7.414	22.43	4.713	69.97	11.653
20	10 (2.5)	72.80	21.740	26.60	3.471	33.30	12.859	24.20	7.829	72.10	9.279
21	2 (0.5)	62.50	4.950	20.00	1.414	31.50	3.536	21.00	1.414	72.50	7.778
22	1 (0.3)	80	-	26	-	40	-	25	-	69	-
Total	405 (100)	71.43	12.872	24.42	4.682	35.80	7.315	22.31	4.950	69.38	11.444

The results of data analyses performed using Spearman's rho are shown in Table 4. These findings indicated that the three dimensions of forgiveness (forgiveness of self, others, and situations) were independently positively and significantly related to resilience ($r_{xy} = 0.346$, p = 0.000; $r_{xy} = 0.350$, p = 0.000; $r_{xy} = 0.391$, p = 0.000, respectively).

Table 4. Correlation between Forgiveness, the Triadic Dimensions of Forgiveness, and Resilience

	Resilience		1		2		3	
	r_{xy}	p	r_{xy}	p	r_{xy}	p	r_{xy}	p
Forgiveness	.432**	.000						
Self-Forgiveness	.346**	.000	.677**	.000				
Forgiveness of Others	.350**	.000	.801**	.000	.295**	.000		
Forgiveness of Situations	.391**	.000	.842**	.000	.615**	.000	.503**	.000
Male								
Forgiveness	.453**	.000						
Self-Forgiveness	.327**	.001	.549**	.000				
Forgiveness of Others	.397**	.000	.822**	.000	.168	.092		
Forgiveness of Situations	.400**	.000	.831**	.000	.533**	.000	.497**	.000

	Resilience		1		2		3	
	r_{xy}	p	r_{xy}	p	r_{xy}	p	r_{xy}	p
Female								
Forgiveness	.419**	.000						
Self-Forgiveness	.349**	.000	.717**	.000				
Forgiveness of Others	.327**	.000	.789**	.000	.333**	.000		
Forgiveness of Situations	.383**	.000	.847**	.000	.639**	.000	.502**	.000

Notes. **Correlation is significant at the 0.01 level (two-tailed); 1 = Forgiveness; 2 = Self-Forgiveness; 3 = Forgiveness of Others.

General forgiveness correlated with resilience by as much as $r_{xy} = 0.432$ (p = 0.000). Even after being controlled for sex and age, both separately and together, these correlations remained significant (p = 0.000) as shown in Table 5.

Forgiveness of situations had the highest correlation of all to resilience. This was followed by self-forgiveness, and forgiveness of others consistently showed the lowest correlation with resilience across all tests, especially after controlling for sex and age. When the dimensions of forgiveness were tested against each other, apart from revealing a positive and significant relationship, tests of the correlation between self-forgiveness and forgiveness of others were always the weakest compared to the correlations among other dimensions of forgiveness (Akoglu, 2018).

Table 5. Correlation between Forgiveness, the Triadic Dimensions of Forgiveness, and Resilience after Controlling for Sex and Age

Control Variables	Resilience		1		2		3	
	r_{xy}	p	r_{xy}	p	r_{xy}	p	r_{xy}	p
Sex								
Forgiveness	.424**	.000						
Self-Forgiveness	.350**	.000	.684**	.000				
Forgiveness of Others	.313**	.000	.813**	.000	.255**	.000		
Forgiveness of Situations	.388**	.000	.873**	.000	.648**	.000	.522**	.000
Age								
Forgiveness	.423**	.000						
Self-Forgiveness	.348**	.000	.683**	.000				
Forgiveness of Others	.314**	.000	.814**	.000	.256**	.000		
Forgiveness of Situations	.386**	.000	.873**	.000	.647**	.000	.524**	.000
Sex & Age								
Forgiveness	.423**	.000						
Self-Forgiveness	.348**	.000	.683**	.000				
Forgiveness of Others	.314**	.000	.814**	.000	.256**	.000		
Forgiveness of Situations	.386**	.000	.873**	.000	.647**	.000	.523**	.000

Notes. **Correlation is significant at the 0.01 level (two-tailed); 1 = Forgiveness; 2 = Self-Forgiveness; 3 = Forgiveness of Others.

Table 4 also shows that in both men and women, forgiveness and the triadic

forgiveness dimensions were positively and significantly correlated with resilience. Although there was greater correlation in men (r_{xy} = 0.453, p = 0.000) than in women (r_{xy} = 0.419, p = 0.000). Also, in men forgiveness of others had a higher correlation with resilience than self-forgiveness, whereas in women, forgiveness of others had a lower correlation with resilience than self-forgiveness. Nevertheless, the correlation between forgiveness of situations had the highest correlation with resilience of all the dimensions of forgiveness in both sexes. Additionally, no significant correlation was found between self-forgiveness and forgiveness of others among male participants.

Table 6. Descriptive Statistics of Triadic Dimensions of Forgiveness after Adjustment

| Criteria | Descriptive Statistics after Adjustment | | | | | |
| | Self-Forgiveness | | Forgiveness of Others | | Forgiveness of Situations | |
	Mean	StDev	Mean	StDev	Mean	StDev
All Participants (N=405)	1.7445	.33451	1.8842	.38481	1.7164	.38079
Male (N=102)	1.7206	.33773	1.8749	.45750	1.7082	.40043
Female (N=303)	1.7526	.33360	1.8874	.35785	1.7191	.37460

Table 6 shows the differences in descriptive statistics after being adjusted based on the calculated mean score per item per participant. Forgiveness of others had the highest score of all, followed by self-forgiveness, and forgiveness of situations. The differences between the dimensions of forgiveness among all participants, male participants, and female participants, were tested using the Wilcoxon signed rank test as shown in Table 7. A strong significance exists in the differences between forgiveness of others and self-forgiveness and between forgiveness of others and of situations. The difference between self-forgiveness and forgiveness of situations consistently showed the weakest significance of all, and, in men, the difference in these two variables was insignificant.

Table 7. Differences between Triadic Dimensions of Forgiveness in All Participants, Male Participants, and Female Participants

| | Forgiveness of Others –Self-Forgiveness | | Forgiveness of Situations – Self-Forgiveness | | Forgiveness of Situations – Forgiveness of Others | |
	Z	P	Z	p	Z	p
All Participants (N=405)	-6.884[b]	.000	-2.114[c]	.035	-8.746[c]	.000
Male (N=102)	-3.459[b]	.001	-.168[c]	.867	-3.791[c]	.000
Female (N=303)	-5.925[b]	.000	-2.418[c]	.016	-7.961[c]	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

Finally, differences in the scores for each variable were examined based on sex

and age as shown in Table 8. Neither sex nor age were significant predictors of differences in all variables. This implied that there was no significant difference in

the correlation between forgiveness, the triadic forgiveness dimensions, and resilience between men and women.

Table 8. Differences of Forgiveness, the Triadic Dimensions of Forgiveness, and Resilience According to Sex and Age

Grouping Variable	Forgiveness		Self-Forgiveness		Forgiveness of Others		Forgiveness of Situations		Resilience	
	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
Sex	.000	1.000	1.449	.229	.183	.669	.018	.895	.066	.797
Age	3.297	.509	7.049	.133	2.901	.575	1.551	.818	1.501	.827

4. DISCUSSION

The results of this study indicated that general forgiveness was positively and significantly related to resilience. Likewise, the three dimensions of forgiveness (forgiveness of self, others, and situations) were also independently positively and significantly related to resilience. Even after controlling for sex and age, both separately and together, these correlations remained significant. Our results therefore supported our earlier hypothesis that forgiveness and its dimensions are positively and significantly related to resilience in Javanese undergraduate emerging adults. The results of tests on the entire cohort, especially after controlling for sex and age, showed that forgiveness of situations had the highest correlation with resilience (similar results were obtained in tests involving only male or only female participants), followed by self-forgiveness, and forgiveness of others had the lowest correlation of all. By contrast, the mean scores of the triadic dimensions of forgiveness were highest for forgiveness of others, followed by forgiveness of self, and forgiveness of situations had the lowest correlation (this applied to all

participants, male participants only, and female participants only).

Religion and cultural aspects play a critical role in sculpting the psychological state of people in Indonesia (Muluk, Hudiyana, & Shadiqi, 2018) particularly among the Javanese, one of the tribal communities in Indonesia who internalize the wisdom of their cultural legacy and religion (Loewenthal, 2019). These aspects are linked to a number of mental health concerns including depression, anxiety, stress, coping, well-being, resilience, and forgiveness (Jackson & Bergeman, 2011; Jansen, Motley, & Hovey, 2010; Ann Macaskill, 2007; Raghavan & Sandanapitchai, 2019; Sanchez, Dillon, Concha, & De La Rosa, 2015). In general, we found that forgiveness was positively and significantly associated with resilience among the Javanese emerging adults. Our findings of a positive and significant relationship between forgiveness and resilience among participants are consistent with those reported in previous studies investigating the relationship between forgiveness and resilience among undergraduate students (Gupta & Kumar, 2015; Kumar & Dixit, 2014). Similar research results were also shown in

adolescent samples (Mary & Patra, 2015), adult samples (Broyles, 2005), and samples from specific population cohorts (Abid & Sultan, 2015; Hee & Mihyoung, 2014; Waldron et al., 2018). Forgiveness facilitates stronger resilience in facing adversities, which also beneficial for overcoming stress and trauma and fostering interpersonal skills (B. S. Thompson & Korsgaard, 2019; Wade, Tucker, & Cornish, 2014).

The appraisal of problems (primary appraisal) and the effectiveness of coping (secondary appraisal), as well as the use of coping strategies during forgiveness are important factors underlying the relationship between forgiveness and resilience. In the act of forgiving, individuals make primary appraisals by choosing to perceive the conflict as less threatening, and less uncontrollable in general as well as seeing themselves as having more control over it (Ysseldyk, Matheson, & Anisman, 2009). Forgiveness is also associated with an appraisal of coping effectiveness, which evaluates avoidant coping as less effective. Likewise, in coping strategies, forgiveness is related to lower endorsements of both emotional engagement and avoidant coping. In addition, Jeter *et al* (Jeter & Brannon, 2016) explain that in the act of forgiveness, individuals primarily use positive reinterpretation/growth and active coping. The negative correlation between subjective stress and well-being is moderated effectively by one of two strategies: problem-focused coping in the form of support-seeking (in adolescence) or problem-focused coping in the form of meaning-focused coping (in young adulthood). This is then linked as an indicator of resilience (Leipold, Munz, &

Michéle-Malkowsky, 2018).

Although some previous studies have used the concept of triadic dimensions of forgiveness according to (L. Y. Thompson et al., 2005), those studies did not specifically explain the difference in correlation between each disposition and resilience (Abid & Sultan, 2015; Gupta & Kumar, 2015; Kumar & Dixit, 2014; Mary & Patra, 2015). The present study indicated that in terms of resilience they the concept of triadic forgiveness in context of Javanese emerging adults is a continuum, forgiveness of situation has the highest correlations and is thererfore the primary dimension, and followed by forgiveness of self, and then forgiveness of others. In other words, the resilience of Javanese emerging adults displaying increases with their increasing ability to forgive situations rather than forgiving the self or others. In this case, forgiveness of situation refers to the forgiving situations that are out of one's control, such as disease, natural disaster, or the lottery of birth. The high correlation between forgiveness of situations and resilience is likely due to the nature of the adversity experienced within the cohort that was initially uncontrolled (the result of this study indicated that the mean score in forgiving of situations was the lowest). These statements are in line with the definition of resilience according to Soanes et al (Soanes & Stevenson, 2006) who attribute it to the Latin verb resilire, meaning 'to jump back', and define resilience as being "ready to withstand or recoup rapidly from *troublesome conditions*". An adverse experience as described in Raglan et al's (Raglan & Schulkin, 2014) definition of resilience is a 'lasting stress or trauma, including

extreme or dramatic changes and inconsistencies'.

Emerging adults are forced to accept and adjust to adverse experiences, and consequently they tend to be more resilient. Several studies consistently postulate that forgiveness of situation is positively correlated to lower anxiety, fewer depressive and stress syndromes, improved physical health, and greater life satisfaction and psychological well-being (Gençoğlu, Şahin, & Topkaya, 2018; Lawler et al., 2005; L. Y. Thompson et al., 2005). When adaptive coping is used in the face of adverse experiences, as with meaning-focused coping, it is likely to be palliative because it dampens the negative impact of problems that cannot be resolved by changing the situation (Leipold et al., 2018). Forgiveness of situations may improve individuals' willingness or ability to see a problem from a different point of view and is positively and significantly related to positive reappraisals Conversely, forgiveness of situations is negatively and significantly related to catastrophizing (Butt, Sanam, Gulzar, & Yahya, 2013). Research by Butt et al (Butt et al., 2013) showed that forgiveness of situations was more strongly correlated with positive reappraisal and catastrophizing than the other two dimensions of forgiveness.

The correlation between forgiveness of others and resilience was smaller than that of self-forgiveness after controlling for sex and age. This may be reviewed in the light of two things. First, results across the entire cohort as well as for both sexes separately, consistently showed that the mean score of forgiveness of others had the highest correlation with resilience of the three dimensions (even higher than self-forgiveness), the correlation with

resilience was relatively weak. Some previous studies proved that collectivist culture and social harmony affect decisional and emotional forgiving (Fu, Warkins, & Hui, 2008; Hook, Worthington, & Utsey, 2009). This is especially true in the Javanese cultural context where the great value that is placed on harmony accounted for variance in emotional forgiveness above and beyond both rumination and decisional forgiveness together (Kurniati, Worthington, Poerwandari, Ginanjar, & Dwiwardani, 2017). The collectivistic goal of forgiveness prioritizes restoring social harmony and well-being above personal benefits (Ho & Fung, 2011; Hook et al., 2009; Sandage & Williamson, 2005). In Javanese culture, harmony is the prior collectivistic-oriented value that shapes one's psychological state of being (Mulder, 2005). Furthermore, this value is rooted in Javanese understanding of the human construct called *kejawen* which differentiates the inner-self (*diri bathin*) from the outer-self (*diri lahir*). In this construct, the major concern is the outer-self, which is expected to be aligned with Javanese norms (C. Geertz, 2013; H. Geertz, 1961). This mechanism might drive emerging adults to forgive situationally the adverse conditions or even traumas that they experienced due to their inability to change the situation as well as the cultural values which force them to do so. This same cultural mechanism also encourages them to forgive others rather than forgiving of themselves. People who live and grow in Javanese culture strive to maintain social harmony (Magnis-Suseno, 2001). In order to do so, Javanese emerging adults tend to forgive others rather than themselves. Forgiveness of others is seen as coping

mechanism and involves abandoning feelings of revenge, blame, and condemnation and strengthening feelings of compassion and generosity toward the transgressor (Enright, 1996). In other words, emerging adults adopt a positive attitude toward the person who has acted unjustly and forgive him/her. This results in positive physical and mental health outcomes as well as spiritual well-being (Webb, Toussaint, & Conway-williams, 2012).

Self-forgiveness is involves more than just excusing and forgetting one's own unjust acts. It is, by contrast, a painful process that requires moral stocktaking as a precondition to personal growth as well as resilience (Woodyatt, Wenzel, & de Vel-Palumbo, 2017). Self-forgiveness must be authentic forgiveness, in order to achieve healing from the wounds inflicted and develop resilience (Cheavens, Cukrowicz, Hansen, & Mitchell, 2016; Purcell, Griffin, Burkman, & Maguen, 2018). On the other hand, self-forgiveness is likely to be implausible from a collectivistic worldview because the self is socially defined and socially sustained (Sandage & Williamson, 2005). This condition makes self-forgiveness difficult for individuals in a collectivistic culture, because it is viewed as a personal need rather than a social one and hence is not facilitated or promoted in a collectivistic culture. In line with this, resilience is basically a concept that is more intrapersonal than interpersonal. Resilience reflects individual struggles, describing a trajectory of responses to stressors that allow the individual to continue to function within normative boundaries while undergoing extreme stress (Raglan & Schulkin, 2014). Based

on this explanation, when self-forgiveness occurs, is directed more toward increasing individual resilience than forgiveness of others would be. Wohl et al (Wohl, DeShea, & Wahkinney, 2008) postulate that self-forgiveness serves as mediator between self-blame and depression acting to ensure that self-related emotions, behaviors, and beliefs become more positive. They argue that self-forgiveness leads to less self-deprecation, fewer feelings of entitlement and greater self-love and compassion from others.

The second reason that the correlation between forgiveness of others and resilience was smaller than that of self-forgiveness lies in the relationship between these two types of forgiveness and the development of psychopathology. Self-forgiveness has a greater correlation with neuroticism than forgiveness of others (Mullet et al., 2005). Compared to the forgiveness of others, self-forgiveness places greater emphasis on efforts to reduce neuroticism so that adaptive countermeasures in stressful situations are more likely. Self-compassion as a close concept, even as a component of self-forgiveness (Gilbert & Woodyatt, 2017), has been investigated as a mechanism to overcome self-criticism. In self-critical individuals, the ability to show compassion to oneself when experiencing feelings of unworthiness, inferiority, failure, and guilt is strongly associated with emotional resilience and psychological well-being (Neff & Mcgehee, 2010; Warren, Smeets, & Neff, 2016). By contrast, frequent self-criticism and habitual low self-compassion are related to recurrent depression and to vulnerability to depression (Ehret, Joormann, & Berking, 2015).

Therefore, as they do not fully understand the relationship between forgiveness and resilience, Javanese emerging adults tend to prioritize their outer-selves and so forgive others first, before exercising self-forgiveness that involves the inner-self. However, as they develop a better understanding of the association of forgiveness and resilience, Javanese emerging adults may come to recognize that the inner-self plays a greater role in increasing resilience than the outer-self and, as such, that self-forgiveness has a greater role to play in their well-being than the forgiveness of others.

Our findings indicated that there were no differences in the correlations between the triadic forgiveness dimensions and resilience scores in terms of gender. These findings contradict Javanese cultural views regarding gender differences. The Javanese culture strongly distinguishes between the roles of males and females in society. Males are perceived as stronger and as such they are required to protect females and also take the lead and be in charge in various societal contexts. Moreover, females are stereotypically viewed as more emotional, less rational and less aggressive than males (Uyun, 2002). Some previous studies concerning the correlations between forgiveness and constructs such as empathy, positive and negative emotions, or decision making, likewise reported no differences in these correlations in terms of gender (Conejero, Etxebarria, & Montero, 2014; Loren Toussaint & Webb, 2005). Moreover, resilience is not determined by gender, it is driven by acceptance, culture, learning, forgiveness, social support, and personality (Ramírez-Maestre & Esteve,

2014; Southwick, Bonnano, Masten, Panter-Brick, & Yehuda, 2014).

When examined separately, in both men and women, forgiveness and the triadic forgiveness dimensions also correlated positively and significantly with resilience. Although there was no significant difference in each variable according to sex, the correlation of general forgiveness with resilience was greater in men than in women. This was in line with previous research involving adolescent participants where forgiveness was found to correlated more strongly to resilience in boys (Mary & Patra, 2015). Furthermore, in men self-forgiveness had a lower correlation with resilience than forgiveness of others, whereas in women self-forgiveness had a higher correlation with resilience than forgiveness of others. Evidence from previous studies suggests that psychopathology is more likely to occur in women than men, whether in terms of perceived stress (Shah, Hasan, Malik, & Sreeramareddy, 2010) or symptoms of stress, anxiety or depression (Iqbal et al., 2015; Kelly, Tyrka, Price, & Carpenter, 2008). Although the results also showed that women appeared to be more forgiving than men, women had significantly less self-reassurance and had greater self-criticism in the form of inadequate-self and hated-self (Kupeli, Chilcot, Schmidt, Campbell, & Troop, 2013) which may be the reason why self-forgiveness had a greater impact on resilience in women than in men. Even after receiving intervention, women showed no significant increases in self-forgiveness (Charzynska, 2015). In other research it was found that women reported that they put more effort into forgiveness, appraised forgiveness as more difficult and

showed weaker responses when experimental forgiveness prompts were given, compared to men (Root & Exline, 2011).

Among all the relationships between the triadic dimensions of forgiveness, the correlation between self-forgiveness and forgiveness of others always had the weakest correlation. In male participants in particular, there was no significant relationship between self-forgiveness and forgiveness of others. When further examination was conducted (both for all participants, only male participants, and only female participants), the difference between self-forgiveness and forgiveness of others consistently showed the weakest significance compared to differences between other dimensions. Compared to forgiveness of situations, self-forgiveness and forgiveness of others have received more attention and comparisons have been

drawn of their influence. Previous studies support our findings and explain the small but significant correlation (Barber, Maltby, & Macaskill, 2005), or even lack of significant correlation (A. Macaskill, Maltby, & Day, 2002) between self-forgiveness and forgiveness of others. This may be ascribed to the perception that self-forgiveness and forgiveness of others represent two very different things. For instance, when viewed in cultural terms (Sandage & Williamson, 2005), different patterns of association for self and other-forgiveness emerge –even in the same culture (Ann Macaskill, 2012). The weak correlation between these two dimensions, which was non-existent in men, may therefore be a result of different patterns of association of these to constructs between men and women as shown in a previous study (Maltby, Macaskill, & Day, 2001).

5. CONCLUSION

Our results have important implications for researchers conducting future studies focused on forgiveness and resilience, especially in collectivistic cultures such as the Javanese culture, given that we have shown that cultural differences have implications for forgiveness. This study emphasizes the role of forgiveness in increasing the resilience of emerging adult Javanese undergraduate students. Though this study was initially intended to explain how forgiveness played a role when adverse experiences did not have a direct relationship with resilience; the mechanisms by which forgiveness moderates the relationship between the two variables (i.e., adverse experiences and resilience) require further

investigation. The insights gained from differences observed between the two sexes and the types of forgiveness need to be taken into account in further studies. Likewise, practitioners should also consider these findings in future interventions focusing on forgiveness, in order to alleviate the negative impact of adversity experiences and increase resilience both for individuals and for groups. Groups should be formed by considering the participants' homogeneity based on sex.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

ETHICAL CLEAREANCE

All participants were signed the informed consent prior to the data collection.

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