THE ROLE OF RELIGIOUS COPING IN MODERATING THE RELATIONSHIP BETWEEN STRESS AND NON-SUICIDAL SELF-INJURY (NSSI)

Nadya Elvina1*; Dini Rahma Bintari2

12Master of Professional Clinical Psychology, Faculty of Psychology, Universitas Indonesia
Jl. Margonda Raya, Pondok Cina, Depok, Jawa Barat 16424, Indonesia
1nadya.elvina@gmail.com; 2dini.rahma@ui.ac.id

Received: 11th February 2022/ Revised: 16th May 2022/ Accepted: 19th May 2022


ABSTRACT

The cross-sectional research aimed to examine the relationship between stress, positive and negative religious coping, and Non-Suicidal Self-Injury (NSSI) severity. It was a global health issue with a high and increasing prevalence among emerging adults. Various factors’ roles in influencing the severity of NSSI had been explored, including stress and religious coping. Data were gathered from 311 emerging adult (age 18-29 years old) participants in Indonesia using an online questionnaire, which included measures of stress (the Perceived Stress Scale-10), positive and negative religious coping (the Brief RCOPE), and NSSI severity (the Non-Suicidal Self-Injury Function Scale). The research reveals that 40.2% of participants have engaged in NSSI. Analysis using simple regression indicates that an increase in stress predicted with statistical significance an increase in NSSI severity. Meanwhile, analysis using moderation demonstrates that negative religious coping has a statistically significant moderation effect on the relationship between stress and NSSI severity. However, moderation analysis indicates that positive religious coping does not have a statistically significant moderation effect on the relationship between stress and NSSI severity. Thus, stress and negative religious coping play important roles in exacerbating NSSI. The research illustrates the importance of prevention and intervention programs for NSSI targeting stress and negative religious coping.

Keywords: religious coping, NSSI, stress, emerging adults

INTRODUCTION

In the past few years, Non-Suicidal Self-Injury (NSSI) has been identified as a significant global health issue (Arshad et al., 2020; Thippaiah et al., 2021). NSSI is the destruction of one’s body tissue that is done deliberately with no suicidal intent and for reasons that are not socially approved, for example, cutting, burning, and scratching (Bjureberg et al., 2021; Nock, 2010). The most common reason for individuals to engage in NSSI is to escape aversive moods and cognitive states (Hepp et al., 2020; Taylor et al., 2018). Although NSSI prevalence commonly peaks in adolescence, its prevalence among emerging adults is also relatively high, reaching 13.4% (Swannell et al., 2014). Moreover, Wester, Trepal, and King (2017) have demonstrated that NSSI prevalence tripled within seven years (2008–2015) among university students. In Indonesia, the percentage of university students engaged in NSSI is 30% (Tresno, Ito, & Mearns, 2012).

Several developmental challenges faced by emerging adults could trigger stress among them, which may lead to the use of NSSI as a coping method (Ewing, Hamza, & Willoughby, 2019; Hamza et al., 2021; Macrynikola, Miranda, & Soffer, 2018). Stress is any discomfort arising from a relationship between an individual and their environment that is appraised as taxing or exceeding their resources and could threaten their well-being (Alharbi & Alshehry, 2019; Lazarus & Folkman, 1984). Indeed, emerging adults face stressful developmental tasks, which include financial...
difficulties, the need to be independent, conflicts in their social environment, academic challenges for those who are still pursuing tertiary education, and the transition into the workforce for those who are starting new jobs (Bartelink et al., 2020; Mitra & Arnett, 2021; Morimoto, 2019; Ranta et al., 2019).

Other than the stressful situations aforementioned, the coronavirus disease (COVID-19) pandemic that is now affecting the whole world could also incite stress for emerging adults (World Health Organization, 2020). The instability and unpredictability of the pandemic, disruption of daily activities, economic instability, the seriousness of the disease, misinformation, and social isolation could lead to an increase in stress among emerging adults (Fowler, 2020; Germani et al., 2020; Zandifar & Badrfam, 2020; Zhai & Du, 2020). Previous studies have suggested that the increase in social isolation and loneliness during the pandemic might lead to an increase in NSSI frequency (Elbogen et al., 2021; Hamza et al., 2020; Hasking et al., 2021), and emerging adults have the highest self-harm prevalence compared to the other age groups in this pandemic (Job, Steptoe, & Fancourt, 2020).

The indication of the increase in NSSI among emerging adults is problematic, considering that NSSI is one of the risk factors for suicide (Brausch & Muehlenkamp, 2018; Griep & MacKinnon, 2020; Kiekkens et al., 2018). Individuals engaging in NSSI are often trapped within a vicious cycle of self-hatred, guilt, shame, and NSSI, which could hinder their recovery process (Gunnarsson, 2021; Mahtani, Melvin, & Hasking, 2018; Tan, Tam, & Bonn, 2019). Moreover, NSSI is one of the most common reasons for hospital emergency room admission, demonstrating high social costs (Marchant et al., 2020; Vuagnat et al., 2019). Individuals who engage in NSSI are also at higher risk for subsequent adverse clinical outcomes (Bjureberg et al., 2021; Izquierdo & Fischer, 2021). Considering how detrimental NSSI is to mental and public health, NSSI represents a significant issue within research and practice contexts (Gandhi et al., 2018; Hasking & Boyes, 2018). Therefore, investigating factors that could act as protective and exacerbating factors of NSSI becomes a pressing issue.

Emotional regulation is suggested to be the most common reason for NSSI behavior (Cipriano, Cellia, & Cotrufo, 2017). On the one hand, individuals tend to engage in NSSI to reduce their negative effects or distract themselves from disturbing negative thoughts (Hughes et al., 2019; Taylor et al., 2018). On the other hand, religiosity could provide individuals with coping methods to manage their negative effects and thoughts (Burlacu et al., 2019; Krok, Brudek, & Steuden, 2019; Royston et al., 2021). In times of crisis due to COVID-19, studies have also demonstrated a higher interest in using religion to cope (Bentzen, 2021).

Religiosity also encompasses religious coping, which explains how people live their religious life and the mechanisms that link religion with other phenomena in their lives (Francis et al., 2019; Hill, 2005). Religious coping is defined as the effort to understand and manage life stressors using ways related to the sacred (Pargament, 1997, as cited in Pargament, Feuille, & Burdzy, 2011). Religious coping is the translation of religious beliefs, practices, experiences, emotions, or relationships directly related to the individual’s health during a stressful period (Abu-Raija & Pargament, 2015; Zinnbauer et al., 1997). In other words, religious coping bridges a person’s religious orientation and the effects of a major life event on them (Zinnbauer et al., 1997).

Pargament et al. (1998) have identified two religious coping patterns: positive and negative. Positive religious coping expresses spirituality, a strong connection with God, beliefs that there is a meaning in life, and spiritual connections with other people. Meanwhile, negative religious coping depicts a fragile relationship with God, perceiving that the world is full of threats and religious difficulties in finding the meaning of life. The use of negative religious coping also represents the presence of religious struggle within an individual, in which there is tension between the person and God (Pargament, 2007; Pargament et al., 2011). A person with religious struggle describes themselves as feeling isolated, ignored, angry, or punished by God while also being in a fight with the evil powers of the spiritual world (Fitchett et al., 2004).

Positive and negative religious coping affects mental health, including stress and NSSI, differently from one another. Previous research studies indicate that positive religious coping is related to positive adjustment to stress (Ano & Vasconcelles, 2005; Pirutinsky, Cherniak, & Rosmarin, 2020) and lower NSSI frequency (Buser, Buser, & Rutt, 2017). Positive religious coping seems to have various adaptive functions, representing the belief that God or a higher power works together with the person to handle stress and that there is a benevolent meaning in stressors experienced (Pargament et al., 1998). Thus, positive religious coping helps them adjust positively to stress and reduces the frequency of NSSI (Ano & Vasconcelles, 2005; Buser, Buser, & Rutt, 2017; Pirutinsky, Cherniak, & Rosmarin, 2020). Meanwhile, negative religious coping is associated with negative adjustment to stress (Ano & Vasconcelles, 2005; Pirutinsky, Cherniak, & Rosmarin, 2020) and higher NSSI frequency (Buser, Buser, & Rutt, 2017). Negative religious coping could represent the heavy burden the individual faces in a stressful situation, accompanied by the feeling that they deserve to be punished and that God is abandoning them (Pargament et al., 1998). Therefore, negative religious coping may lead to a negative adjustment to stress and increased frequency of NSSI (Ano & Vasconcelles, 2005; Buser, Buser, & Rutt, 2017; Pirutinsky, Cherniak, & Rosmarin, 2020). Pargament et al. (2011) have stated that the majority of studies have found that positive and negative religious coping does not have a significant correlation, indicating that the two forms of religious coping do not exist on the same continuum.
An individual may use a combination of positive and negative religious coping methods as an effort to cope with stress (O’Brien et al., 2019). However, previous literature has suggested that the effect of negative religious coping is more substantial compared to the effect of positive religious coping on psychological adjustment to stress (Ano & Vasconcelles, 2005) and NSSI (Buser, Buser, & Rutt, 2017). Nevertheless, to the best of the researchers’ knowledge, there has not been any published article on whether the effect of negative religious coping is more substantial than the effect of positive religious coping in moderating the relationship between stress and NSSI severity. Thus, research on this matter is needed considering the detrimental effects of negative religious coping on mental health (Abu-Raiya & Pargament, 2015; Ano & Vasconcelles, 2005; Buser, Buser, & Rutt, 2017; Pirutinsky, Cherniak, & Rosmarin, 2020).

NSSI has been researched quite extensively in western countries, and this trend in the research literature is described as being monopolized by publications from western countries (Gholamrezaei, de Stefano, & Heath, 2017). Meanwhile, only a few research articles have been conducted to explore NSSI in Asia (Xin et al., 2020). Nevertheless, none of these studies have looked into factors that could play the role of protecting or exacerbating NSSI. Research on NSSI in non-western samples is essential to expand the knowledge and understanding of NSSI (Gholamrezaei, de Stefano, & Heath, 2017), including its protective and exacerbating factors. Research on the effects of religious coping on the relationship between NSSI and stress signifies an interesting phenomenon to be examined, considering how religion significantly impacts various life aspects in Indonesia, including mental health (Anganthi & Uyun, 2019; Bauto, 2016). Therefore, the first aim of the research is to examine whether stress could predict NSSI severity among emerging adults in Indonesia. The second aim is to examine whether positive and negative religious coping methods play a role as moderators of the relationship between stress and NSSI severity. Thus, there are three hypotheses for the research.

**H1.** Increased stress scores would significantly predict an increase in NSSI severity.

**H2.** Positive religious coping would significantly moderate the relationship between stress and NSSI severity. As the positive religious coping scores become higher, the relationship between stress and NSSI severity becomes weaker.

**H3.** Negative religious coping would significantly moderate the relationship between stress and NSSI severity. As the negative religious coping scores become higher, the relationship between stress and NSSI severity becomes stronger.

**METHODS**

The research is approved by the Badan Kaji Etik Fakultas Psikologi Universitas Indonesia (Research Ethics Committee of Universitas of Indonesia; approval number: 870/FPSi.Komite Etik/PDP.04.00/2020). This is a non-experimental, moderation study. Non-probability sampling methods are used to recruit participants, which are convenience and snowball sampling methods. Recruitment is conducted by sharing online posters and messages containing information on the current research through social media (Instagram) and messaging applications (Line and Whatsapp). Participants are directed to fill out an online self-report questionnaire in Indonesian. The online questionnaires are completed in approximately 5–10 minutes. Participation is voluntary and anonymous, and no compensation is given for participating in the research.

The participants are 311 Indonesian emerging adults, with the age range being 18–29 years old (M = 23.37, SD = 2.38). The majority of participants are females (71.7%), working (55.9%), and having a Bachelor’s degree or equivalent as their highest level of education (61.7%). Most participants identify as Muslims (77.2%), while the remainder identifies as Buddhists (7.7%), Protestants (7.4%), Catholics (6.4%), Jehovah’s Witnesses (0.6%), Hindu (0.3%), and Agnostics (0.3%).

The first section of the NSSI-FS or Non-Suicidal Self-Injury-Function Scale (Riska et al., 2019) is used to assess the characteristics of NSSI engaged by participants. Participants are asked whether they have engaged in NSSI and NSSI methods engaged. The scale is then modified by the current researchers to obtain a more comprehensive understanding of participants’ NSSI characteristics. The questionnaire item about the frequency of NSSI is modified to assess the participant’s NSSI frequency on average per year to obtain a more comprehensive overview of the participant’s NSSI behavior. Next, the researchers add four more items to the questionnaire, including when participants engage in NSSI for the first time, whether they have disclosed their NSSI engagement to other people and whom they have told, and whether participants have needed doctor’s assistance after engaging in NSSI. Its severity is measured by adding up three items rated on a 5-point Likert scale. These three items are: when is the first time the participant engaged in NSSI (0: Never to 4: 6 years or more than six years ago), when is the last time the participant engaged in NSSI (0: Never to 4: 0 or 1 year ago), and average NSSI frequency per year (0: Never to 4: 10 times or more than ten times). The score for NSSI severity ranges from 0–12, with higher scores signifying higher severity of NSSI. This scale is developed in Indonesian; thus, no further translation is required. The Cronbach’s alpha of this scale for the current research is 0.90, indicating excellent reliability. Validity is examined using the contrasted group technique, showing that the scale could differentiate...
those who engaged in NSSI from those who do not \((U = 0.00, p < 0.001)\).

Next, the PSS-10 (Perceived Stress Scale-10) by Cohen and Williamson (1988) is used to measure participants’ perceived stress. This scale consists of ten items, rated on a 5-point Likert scale (0: Never to 4: Very often). The total score is obtained by adding six favorable items and four reversed unfavorable items. The possible score range is 0–40, with higher scores denoting higher stress levels. PSS-10 scores could also be grouped into different stress levels, with scores of 0–13 indicating a low level of stress, scores of 14–26 indicating a moderate level of stress, and scores of 27–40 indicating a high level of stress. The research uses the PSS-10 previously translated to Indonesian by Hary (2017), which is further modified by the researchers to match the original version of the scale better. Good reliability is demonstrated by Cronbach’s alpha of 0.85, and validity assessed using corrected item-total correlation indicates that each item is valid.

Lastly, the Brief RCOPE (Pargament et al., 1998) is used to measure participants’ use of religious coping when facing major stressful events. Overall, the Brief RCOPE consists of 14 items, rated on a 4-point Likert scale (1: Not at all to 4: A great deal), which are divided into two subscales: positive religious coping and negative religious coping subscales. Each subscale’s possible total score range is 7–28, with higher scores signifying higher use of each religious coping method. The Brief RCOPE can also be used to identify the presence of religious struggle within an individual. Participants with scores higher than 7 on the negative religious coping subscale are identified as having religious struggles (K. Pargament, personal communication, December 4, 2020). The scale is developed in English. Therefore, the scale is translated into Indonesian through the processes of translation, back-translation, and expert review. Moreover, the word ‘church’ is modified into ‘religious places’ to suit the current research population better. The Cronbach’s alpha for positive and negative religious coping subscales is 0.93 and 0.86, respectively, demonstrating good internal reliability. Validity assessed using the corrected item-total correlation technique indicates that each item is valid.

All data are analyzed using IBM SPSS statistical software version 25 and PROCESS version 4.1. A descriptive analysis is conducted to obtain an overview of participants, which includes age, gender, religion, highest education level, current activity, and characteristics of NSSI. Assumption testing is conducted prior to each statistical analysis. The first analysis conducted is an independent-sample t-test to assess the difference in stress, positive and negative religious coping, and NSSI severity scores between male and female participants. Hypotheses testing is conducted using simple regression and moderation analyses. Hierarchical regression analysis is computed to examine the predictive influence of stress on NSSI severity while controlling gender. Next, moderation analysis is conducted to examine the moderation influence of positive and negative religious coping on the relationship between stress and NSSI severity while controlling for gender. Next, an independent-sample t-test is used to examine whether there is a statistically significant difference in NSSI severity scores between participants with religious struggles and those without. Lastly, simple regression analyses are conducted to examine the religious coping method’s predictive ability on NSSI based on stress levels. In this analysis, only religious coping that reached significance in the moderation analysis is included. The statistical significance level is set at 0.05 for all analyses.

**RESULTS AND DISCUSSIONS**

A descriptive analysis of the variables’ scores is demonstrated in Table 1. Of the total sample, 40.2% \((n = 125)\) of participants have engaged in NSSI. Most of those who have engaged in NSSI are still engaging in NSSI within the past year (47.2%). The most common method of NSSI reported by those who have engaged in NSSI is hitting themselves (50.4%). Among participants who have engaged in NSSI, the majority of them started engaging in NSSI six years or more than six years ago (34.4%), the most recent NSSI engagement is within the past year (57.6%), and with the frequency of one to three times per year on average (55.2%). On stress levels, 65.3% of participants have a moderate level of stress, followed by 20.6% of participants who have a high level of stress, and 14.1% of participants have a low level of stress.

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSI severity</td>
<td>299</td>
<td>0–12</td>
<td>3.08</td>
<td>4.13</td>
</tr>
<tr>
<td>Stress</td>
<td>311</td>
<td>5–38</td>
<td>20.99</td>
<td>6.60</td>
</tr>
<tr>
<td>Religious coping</td>
<td>311</td>
<td>7–28</td>
<td>22.21</td>
<td>5.00</td>
</tr>
<tr>
<td>Positive religious coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative religious coping</td>
<td></td>
<td>7–28</td>
<td>12.61</td>
<td>4.98</td>
</tr>
</tbody>
</table>

Note: \(a\) Number of participants who responded to questions on NSSI severity after excluding those who answered inconsistently on questions pertaining to NSSI history.

Shapiro-Wilk’s values indicate that the assumption of normality is met for the stress variable but violated for positive and negative religious coping variables and NSSI severity. The violation of the normality assumption could be tolerated due to the large size of the sample \((N > 30)\); thus, the central limit theorem could be applied (Field, 2009). The central limit theorem suggests that in large sample size that is distributed normally despite the shape of the collected data may not look normal.
Next, an independent-sample $t$-test is conducted to assess the difference in stress, positive and negative religious coping, and NSSI severity scores between male and female participants. There is no outlier in the data. Shapiro-Wilk’s values indicate that the assumption of normality is met for the stress variable for both male and female participants. However, the assumption of normality is violated for the variables of positive and negative religious coping and NSSI severity for both participant groups. The central limit theorem could be applied due to the large sample size of the current research (Field, 2009). The assumption of homogeneity of variance is met. The $t$-test analysis demonstrates that there is a statistically significant difference in the stress scores between male and female participants, $t(309) = -2.05, p = 0.041, 95\% CI [-3.32, -0.07], d = 0.20$. The $d$ value indicates that the effect size is small (Cohen, 1988). Female participants report higher stress ($M = 21.46, SD = 6.43$) than their male counterparts ($M = 19.77, SD = 6.92$). However, there is no statistically significant difference among genders in NSSI severity and positive and negative religious coping scores. The results of the $t$-test analysis are demonstrated in Table 2. Due to the statistically significant effect of gender on stress, the variable of gender will be used as a control variable in the subsequent analyses.

Hierarchical regression analysis is conducted to examine whether stress has a statistically significant predictive effect on NSSI severity, controlling for gender. Gender is entered at stage one of the regression, while stress is entered at stage two. Assumptions testing indicates that the assumptions of multicollinearity, normal distribution of standardized residual, homoscedasticity, and linearity are met. There is no univariate nor multivariate outlier in the data. The hierarchical multiple regression reveals that at stage one, gender does not contribute significantly to the regression model, $F(1,297) = 0.09, p = 0.768$. Introducing the variable of stress explains an additional 17.8% of the variation in NSSI severity, and this change in $R^2$ is significant $F(1,296) = 64.31, p < 0.001, r = 0.42, r^2 = 0.18$, moderate effect size (Cohen, 1988). This model explains 17.9% of the variance in NSSI severity. The regression statistics are reported in Table 3.

### Table 2 $t$-Test Analysis Results Based on Genders

<table>
<thead>
<tr>
<th>Variables</th>
<th>$n$</th>
<th>$M$</th>
<th>SD</th>
<th>$t$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>NSSI severity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.20</td>
</tr>
<tr>
<td>Male</td>
<td>85*</td>
<td>2.96</td>
<td>4.21</td>
<td>-2.05b</td>
<td>-3.32</td>
</tr>
<tr>
<td>Female</td>
<td>214*</td>
<td>3.12</td>
<td>4.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-3.32</td>
</tr>
<tr>
<td>Male</td>
<td>88</td>
<td>19.77</td>
<td>6.92</td>
<td>-1.53</td>
<td>-2.20</td>
</tr>
<tr>
<td>Female</td>
<td>223</td>
<td>21.47</td>
<td>6.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Religious Coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-2.20</td>
</tr>
<tr>
<td>Male</td>
<td>88</td>
<td>21.52</td>
<td>5.21</td>
<td>-1.58</td>
<td>-2.22</td>
</tr>
<tr>
<td>Female</td>
<td>223</td>
<td>22.48</td>
<td>4.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Religious Coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>88</td>
<td>11.90</td>
<td>4.57</td>
<td>-0.03</td>
<td>-0.61*</td>
</tr>
<tr>
<td>Female</td>
<td>223</td>
<td>12.89</td>
<td>5.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *Number of participants who responded to questions on NSSI severity after excluding those who answered inconsistently on questions pertaining to NSSI history. **p < 0.05

### Table 3 Summary of Hierarchical Regression Analysis for Variables Predicting NSSI Severity

<table>
<thead>
<tr>
<th>Variables</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>0.017</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>0.02</td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>0.42</td>
<td>0.18</td>
<td>0.18</td>
<td></td>
<td>0.18</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.03</td>
<td>-0.61*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>0.43</td>
<td>8.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *$p < 0.05$
Next, moderation analysis is computed to test whether positive and negative religious coping has statistically significant moderation effects on the relationship between stress and NSSI severity, controlling for gender. Assumption testing indicates that the assumptions of linearity, normal distribution of standardized residual, and multicollinearity are all satisfied. The assumption of homoscedasticity is violated, but PROCESS automatically adjusts for this violation. Four multivariate outliers are detected within the data and are excluded from this analysis. The moderation model is statistically significant, $F(6, 288) = 14.39, p < 0.001, r^2 = 0.23$. Therefore, $23,07\%$ of stress, positive religious coping, and negative religious coping variance explains NSSI severity. Gender as a covariate variable does not have a statistically significant predictive effect on NSSI severity, $b = -0.35, t(288) = -0.73, p = 0.463, 95\% CI [-1.30, 0.59]$. Stress does not have a statistically significant predictive effect on NSSI severity, $b = 0.18, t(288) = 1.00, p = 0.318, 95\% CI [-0.17, 0.53]$. Positive religious coping does not significantly predict NSSI severity statistically, $b = -0.16, t(288) = 1.14, p = 0.256, 95\% CI [-0.12, 0.43]$. The interaction effect between stress and positive religious coping on NSSI severity is not statistically significant, $b = -0.01, t(288) = -1.34, p = 0.181, 95\% CI [-0.02, 0.00]$. Thus, positive religious coping does not have a statistically significant moderation effect on the relationship between stress and NSSI severity. Negative religious coping significantly predicts NSSI severity statistically, $b = 0.43, t(288) = 2.26, p = 0.024, 95\% CI [-0.81, -0.06]$. The interaction effect between stress and negative religious coping on NSSI severity is statistically significant, $b = 0.02, t(288) = 2.79, p = 0.005, 95\% CI [0.01, 0.04], \Delta r^2 = 0.02$, small effect size (Cohen, 1988). Therefore, negative religious coping has a statistically significant moderation effect on the relationship between stress and NSSI severity. As negative religious coping increases, there is a greater increase in the relationship between stress and NSSI severity.

The independent samples $t$-test is conducted to examine the difference in NSSI severity scores between the group with religious struggle ($n = 243$) and the group without ($n = 56$). There is no outlier identified in the data. The Shapiro-Wilk’s value indicates that the assumption of normality is violated for both groups. The assumption of homogeneity of variance is also violated; thus, the adjusted results will be reported. The results indicate that there is a statistically significant difference in NSSI severity scores between groups, $t(99.29) = -2.678, p = 0.009, d = 0.37$, small effect size (Cohen, 1988). This result suggests that NSSI severity is statistically significantly higher among the group with religious struggle ($M = 3.34, SD = 4.24$) than the group without religious struggle ($M = 1.93, SD = 3.38$).

Lastly, simple regression analyses are conducted to examine negative religious coping’s role in predicting NSSI severity among different stress levels. Assumption testing indicates that the assumption of linearity is violated, but the assumption of normal distribution of standardized residual is met. The regression model is statistically significant only among the participants with a high level of stress, $F(1, 56) = 6.85, p = 0.011, r = 0.33, r^2 = 0.11$, small effect size (Cohen, 1988). It is found that negative religious coping has a statistically significant predictive effect on NSSI severity, $\beta = 0.33, p = 0.011$. This result demonstrates that an increase in the negative religious coping score by one point would predict an increase in NSSI severity by $0.33$ points among participants with high-stress levels. Meanwhile, regression analysis cannot be conducted for participants with a low level of stress after excluding outliers from the data. For participants who have a moderate level of stress, the regression model is not statistically significant, $F(1, 198) = 0.84, p = 0.361, r = 0.07, r^2 = 0.00$.

The hypothesis that stress would significantly predict NSSI severity is supported by a statistically significant predictive relationship and moderate effect size. A moderate effect size indicates that the capability of stress in predicting NSSI severity is practically significant and, therefore, is important to note. This finding is consistent with previous studies indicating that stress is one of the reasons individuals would engage in NSSI when they have a limited repertoire of strategies to cope with stress (Ewing, Hamza, & Willoughby, 2019; Hamza et al., 2021; Macrynikola, Miranda, & Soffer, 2018). Thus, NSSI could act as a behavioral reaction to stress.

The finding that an increase in stress could predict an increase in NSSI severity becomes problematic, considering that emerging adulthood is a period of instability in which individuals face a variety of stressors (Ranta et al., 2019). In this current research, most participants (85.9%) have moderate to high levels of stress. There is a possibility that the COVID-19 pandemic that is currently hitting the whole world could explain the relatively high-stress levels (Agnew, Poole, & Khan, 2019; Hoyt et al., 2021; Zandifar & Badrfam, 2020). Thus, stress becomes a pressing issue among emerging adults that should be handled to minimize the possibility of stress developing into NSSI.

Next, the hypothesis that positive religious coping would significantly moderate the relationship between stress and NSSI severity is not supported. This finding is not consistent with previous research suggesting that positive religious coping has the potential to act as a protective factor against NSSI (Buser, Buser, & Rutt, 2017). It seems that positive religious coping does not significantly impact on whether an individual engages in NSSI or not, indicated by the absence of a statistically significant difference in positive religious coping between those who have engaged in NSSI and those who have never engaged in NSSI. However, it needs to be noted that in the research conducted by Buser, Buser, and Rutt (2017), only one facet of positive religious coping, collaborative religious coping, has a significant relationship with the decrease in NSSI frequency.
Meanwhile, another facet of positive religious coping, active religious surrender, does not have a significant relationship with the decrease in NSSI frequency. Thus, there is a possibility that the moderation effect of positive religious coping is not demonstrated in the research because of the different effects that each positive religious coping facet has on NSSI.

Moreover, the religious struggle may weaken the potency of positive religious coping in protecting individuals against NSSI. The results of the research indicate that the participant group with religious struggle has a statistically significantly higher NSSI severity with a small effect size compared to the group without religious struggle. This finding is in accordance with previous research indicating that religious struggle is related to worse mental health (Exline & Rose, 2005). Therefore, the results suggest that positive religious coping is not strong enough to act as a protective factor against NSSI.

The hypothesis that negative religious coping would significantly moderate the relationship between stress and NSSI severity is supported by a statistically significant moderation relationship with a small effect size. The current finding demonstrates that as negative religious coping increases, stress exacerbates NSSI severity. This finding has supported a previous study by Buser, Buser, and Rutt (2017), which suggests that negative religious coping has the potential as a risk factor for NSSI. They argue that the feeling of being abandoned by God could evoke the belief that God cares little about the individual and has cut off all contact. Kao, Peteet, and Cook (2020) have implied that when an individual is excessively preoccupied with feelings of abandonment, punishment, and their status in relation to God, they are more prone to worse mental health. They further suggest that these individuals are more likely to demonstrate an emotionally reactive style characterized by heightened anxiety when facing undesirable circumstances. Therefore, individuals who believe God is a cruel figure and abandon them when facing hardships may engage in NSSI to cope with the feelings of abandonment. Indeed, believing God is a cruel figure is linked with poorer mental health (Kao, Peteet, & Cook, 2020; Paine & Sandage, 2017).

Although the current finding’s effect size was small, this finding should not be overlooked, considering that even psychological factors with small effect sizes could also be accumulated and have a considerable impact on the individual (Funder & Ozer, 2019). Moreover, a meta-analysis by Fox et al. (2015) has illustrated that there are 13 risk factors of NSSI with an odds ratio ranging from 1.05 to 5.95. Therefore, the finding that negative religious coping could moderate the relationship between stress and NSSI severity supported the variability of factors that could influence NSSI, although with a small effect size.

Next, negative religious coping has a statistically significant predictive effect on NSSI severity only in the group with high levels of stress. Meanwhile, the predictive effect of negative religious coping on NSSI severity in other groups of stress could not be demonstrated. This finding indicates that when treating individuals engaging in NSSI, managing their stress is crucial and should become the main target in interventions before giving interventions on individuals’ negative religious coping.

This research also demonstrates that negative religious coping has a stronger effect on NSSI than positive religious coping, which is illustrated by the finding that negative religious coping has a statistically significant moderation effect on the relationship between stress and NSSI severity, while positive religious coping does not. This notion is supported by Buser, Buser, and Rutt (2017). Negative religious coping reflects the tension and struggles in the relationship between an individual and God, which also often involves feelings of abandonment and punishment (Pargament et al., 2011). Negative effects following these feelings of abandonment and punishment might have a stronger impact on the individual than the perception of having a secure relationship and feelings of comfort and tranquility from God’s love and grace. Therefore, although the mean score of positive religious coping is higher than the mean score of negative religious coping, the statistically significant moderating role of positive religious coping could not be demonstrated.

The research indicates that 40.2% of participants have engaged in NSSI, with the most common method of NSSI being hitting themselves. Moreover, most participants who have engaged in NSSI started engaging in NSSI six or more than six years ago, most recent NSSI engagement is within the past year and with the frequency of one to three times on average per year. These findings illustrate that NSSI is a relatively common and urgent mental health issue among emerging adults in Indonesia that should be addressed.

The current research begins to address the gap in knowledge regarding NSSI among emerging adults in Indonesia. It provides empirical support for the complexity of the relationship between stress, religious coping, and NSSI. At the same time, this research also provides empirical support on the detrimental effects of negative religious coping and the possibility of negative religious coping having a stronger influence on mental health than positive religious coping. Lastly, although not the focus of the current research, it reveals that the percentage of participants who have engaged in NSSI is higher than that found in previous research with a similar population. Therefore, this may warrant further exploration in future studies.

There are a few implications of the research. First, practitioners should give holistic interventions that target not only NSSI but other factors that could worsen it, such as stress and negative religious coping. Second, practitioners may need to target their interventions on the clients’ stress first before following it with interventions on the use of negative religious coping when handling clients with high stress and high use of negative religious coping. Third, considering that negative religious coping may play
a more significant role in NSSI severity compared to positive religious coping, interventions that target the reduction of negative religious coping before targeting the increase in the use of positive religious coping might be beneficial.

CONCLUSIONS

To conclude, the current research’s findings suggest that an increase in stress plays a role in predicting higher NSSI severity. Negative religious coping is indicated to be a factor that could strengthen the relationship between stress and NSSI severity. In contrast, the role of positive religious coping as a protective factor is not able to be demonstrated. There is a possibility that negative religious coping has a stronger impact on the relationship between stress and NSSI severity than positive religious coping. Current findings may be useful for psychologists practicing in Southeast Asian countries, particularly Indonesia, who are dealing with clients engaging in NSSI.

The research has its limitations. First, it uses a self-report questionnaire that is vulnerable to the possibility of selection bias and inaccuracy in judging oneself, limiting the generalisability of the current research findings. Second, the research applies a quantitative method in which participants’ data gathered are analyzed as one unit. Therefore, it could not describe the dynamics of the relationship between stress, religious coping, and NSSI as to how the individuals are experiencing it. Future research may expand the current research’s findings using the qualitative method to obtain richer data on the dynamics of the relationship between stress, religious coping, and NSSI among individuals as they experience them.

REFERENCES


