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## Posttraumatic stress disorder among sexual harassment victims: the role of social support, resilience, and religious coping

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#### **ABSTRACT**

Female students are still at risk of experiencing sexual harassment, which can lead to posttraumatic stress disorder (PTSD). This study investigated the impact of social support on PTSD female students who have been sexually harassed, as mediated by the resilience and religious coping. Out of a total of 1,439 female students who filed online self-reports, 170 female students reported being sexually harassed by lecturers, male students, and administrative officers. The PTSD checklist-civilian version (PCL-C), Multidimensional scale of perceived social support, brief resilience scale, and brief religious coping scale (RCOPE) were used to collect data. Partial least squares (PLS) modeling was used to test the developed hypothesis. This study found that social support, resilience, and religious coping all had an impact on PTSD. Furthermore, social support has an indirect effect on PTSD through resilience and religious coping. Because resilience and coping are mediators in recovering PTSD and that both can be intervened and modified, a training program specifically designed to improve both is needed to overcome the PTSD symptoms experienced by sexual harassment victims.

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#### 1. INTRODUCTION

Students must have access to high-quality educational programs and excellent service on colleges. The entire educational and learning process is designed to support cognitive, affective, and psychomotor development in a systematic way. However, not all lecturers and administrative officers provide the greatest possible service to students. Sexual harassment of students by lecturers and administrative officers continues to be an issue.

Sexual harassment is defined as any unwelcome sexual contact or advances. Sexual harassment, commonly known as sexual assault, refers to unwanted sexual touches such as forced oral sex or rape. Sexual harassment is characterized as sexually explicit behavior, such as direct or simulated sexual contact, or visual depictions of sexual interaction [1]. Direct or simulated sexual contact may also be considered sexual harassment. According to Lawler and Talbot, various forms of child exploitation for the purpose of adult sexual

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fulfillment, including but not limited to rape, molestation, prostitution, child pornography, and incest, are all considered to be forms of sexual assault [1]. In the context of this article, "sexual harassment" refers to any unwanted, non-consensual, or inappropriate genital contact or exposure, in addition to any sexual insults [2].

Sexual assault is a serious problem all around the world. It is reported that one out of every five women in the United States has been raped or attempted to be raped at some time in their lives [3]. In addition, a survey that was carried out in the United Kingdom found that 7.5% of adults aged 18 to 74, or 3.1 million people, had experienced sexual harassment before the age of 16, and that the perpetrators of this behavior included both adults and juveniles [4]. Moreover, a systematic literature review stated that 10.4-60.7% of women in Japan had experienced sexual harassment. According to a 2017 Central Statistics Agency survey, one-third of Indonesian women between the ages of 15 and 64 have experienced physical or sexual assault at some point in their lives [5]. Sexual harassment is also committed against female college students [6]–[8].

Feelings of shock, dread, sadness, anxiety, and melancholy might follow a sexual assault (SA). It has been shown that sexual harassment has both short-term and long-term effects on women's mental and physical health, and these results are consistent regardless of the age of the victim at the time of the assault. Most sexual harassment victims suppress their symptoms, which might result in depression [9]. Although not all children are traumatized by SA, almost all victims eventually suffer from mental disorders such as depression, post-traumatic stress disorder (PTSD), anxiety, low self-esteem and self-harm, inappropriate sexual behavior, and behavioral disorders; the effects can even last into adulthood [10]. In addition, a study found that women who had SA were more likely to suffer from physical discomfort, 1.3 times more likely to have poorer general health, and 1.4 times more likely to have depression in the prior three years compared to women who did not have SA who were also depressed and anxious but did not have SA [11]. Even victims of sexual harassment are at a significant risk of suicide [12].

The common mental illness known as PTSD has been associated to severe psychiatric morbidity [13]. Additionally, PTSD is an anxiety condition that some people experience after going through a traumatic event like a war, a crime, an accident, or a natural disaster [14]. Individuals who have been exposed to long-term and interpersonal cumulative trauma are at risk for severe PTSD [15]. A Previous study has shown that victims of sexual harassment have high rates of PTSD [16]. Victims of CSA are considered vulnerable to this trauma, because it is interpersonal and repetitive [17], [18], even teenagers have a great potential to experience the same disorder [19], [20].

Social support is a component that affects PTSD. Positive social support can help people deal with stress, prevent them from trauma-related psychopathology, and minimize the functional effects of trauma-related disorders like PTSD [21]. A study found that people with greater social support had fewer PTSD symptoms, but the average intensity of PTSD symptoms was unrelated to daily social support fluctuations [22]. Social support and PTSD have been linked in several research [23]–[25].

PTSD is also affected by the resilience and coping. The ability to tolerate or bounce back from substantial obstacles that endanger stability, life, or development is resilience [26]. A study conducted by Kim *et al.* discovered that resilience was both significantly and negatively correlated to PTSD [27]. In line with this, Reyes *et al.* found an inverse correlation between the two concepts, stating that high resilience is associated with decreased PTSD symptoms [28]. Resilience is one of the important factors for doctors to consider interventions for patients with PTSD [29]. According to Hebert *et al.* personal traits including strong levels of resilience can serve as protective factors against the symptoms of psychological distress and PTSD [24]. The relationship between PTSD and social support can also be mediated by resilience [30]–[33].

Additionally, sexual assault victims use a range of behavioral (e.g., avoidance, addictive behavior) and cognitive coping mechanisms (e.g., cognitive reappraisal, reframing, reduction, memory repression, and distraction) [34]; however, those victims have poor coping strategies; many of them use avoidance strategies [34]. A study reported that sexual assault victims were more likely to engage in internalizing behaviors such as depression and eating disorders (anorexia, bulimia, or obesity) [35]. In line with this, a previous study has also demonstrated that victims of sexual harassment use maladaptive coping techniques [36]. Similar to resilience, coping is also a mediator between social support and PTSD [33], [37].

As a country that places the concept of God as the basis of the state, Indonesian people are known to be religious so that in their daily activities they will include the role of religion in it, including the use of coping. According to Pargament, religion is an integral and multidimensional part of the coping process that should not be ignored [38]. The use of religious coping strategies will have an impact on better health [39]. According to a study by Carpenter, Laney, and Mezulis, using negative religious coping mechanisms was linked to increased stress levels [40]. Therefore, it is assumed that those who experience high PTSD will use negative religious coping strategies, and vice versa.

This study analyzed PTSD experienced by victims of sexual harassment on campuses, as well as examine the influence of social support, resilience, and religious coping used. Therefore, the following hypotheses are proposed:

- H1: Religious coping directly affects PTSD.
- H2: Resilience directly affects PTSD.
- H3: Social support directly affects PTSD.
- H4: Social support directly affects religious coping.
- H5: Social support directly affects resilience.
- H6: Social support indirectly affects PTSD through resilience.
- H7: Social support indirectly affects PTSD through religious coping.

We formulate seven hypotheses that refer to the interrelationships between variables. The hypothesis suggests that social support affect PTSD through resilience and religious coping. The purpose of this study is to demonstrate the model's validity using empirical data. Figure 1 illustrates the integration model for the relationship between the variables tested.

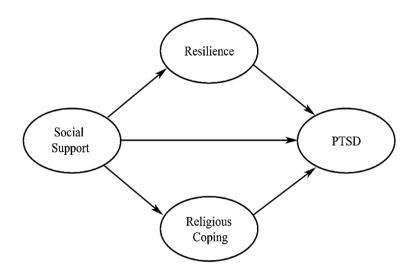


Figure 1. The model of the integration of the relationship between variables

#### 2. RESEARCH METHOD

#### 2.1. Research design and participants

An online cross-sectional survey was implemented in this research to reduce face-to-face contacts and physical contact with participants. In addition, the use of online methods allows a wider range of respondents to be obtained from students at several universities in Indonesia. Data collection was carried out for  $\pm$  3 months in December 2021 to February 2022. A total of 1,439 respondents participated to fill out this survey. Questionnaire links were distributed through WhatsApp, Telegram and Facebook groups. However, only 170 (11.81%) of the 1,439 female students who took part in the survey reported to being sexually harassed by lecturers, students, or administrative officers, both on and off campus.

The specific characteristics of the respondents can be seen in Table 1. The frequency of violence is divided into three categories (1-2 times, 3-5 times, and >5 times); respondents are sexually harassed on average 3-5 times. Furthermore, the perpetrators were dominated by fellow students as many as 104 people (61.76%). From the characteristics of the forms of harassment, the most verbal forms were received by 107 students (62.94%). Then as many as 90 students (52.94%) still received sexual harassment until data collection, while 80 female students (47.06%) admitted that the sexual harassment had ended.

#### 2.2. Data collection

The research scale is the primary tool for data collection. The first section includes questions about the respondent's demographic profile and other characteristics, such as age and sexual abuse experience, followed by questions about the frequency of harassment, perpetrators of harassment, forms of harassment, and duration of harassment. The data of this research were collected using 4 types of scales.

#### 2.2.1. PTSD checklist-civilian version (PCL-C)

The PCL is a widely used self-report rating scale for post-traumatic stress disorder. It has 17 items that are correlated to the main symptoms of PTSD, and there are five possible responses: extremely, quite a bit, moderately, a little bit, and not at all. There are two versions of PCL: i) PCL-M specifically for PTSD

caused by military experience and ii) PCL-C applied generally to any traumatic event [41]. Scoring was done by calculating the sum of all items so that a score range of 17-85 is obtained. The cut-score used in this study was 30, where this score was the most appropriate and sensitive [42]. PCL-C is adaptable to specific time frames and events. For instance, a question concerning "last month" can be changed to "last week" or tweaked to focus on a particular event. This scale has excellent internal consistency (Cronbach's alpha=0.97) and reliability of re-test is 0.92 [43].

Table 1. The characteristics of participants

Variable	Category	Frequency	Percentage
Frequency of harassment	1–2 times	60	35.29
	3–5 times	85	50.00
	> 5 times	25	14.71
Perpetrators of harassment	Lecturer	44	25.88
	Students	104	61.76
	Administrative officer	22	12.94
Types of harassment	Verbal	107	62.94
	Physical	44	25.88
	Special attention to certain body organs	19	11.18
Continuity of harassment	Still happening	90	52.94
	No longer happening	80	47.06

#### 2.2.2. Multidimensional scale of perceived social support (MSPSS)

MSPSS was found to have strong factorial validity and consists of three subscales, each suggesting a separate source of support. There are three subscales: i) family, ii) friends, and iii) other people [44]. This scale contains 12 items with a 7-point rating scale that ranges from strongly disagree (1) to strongly agree (7) [44]. Multiple investigations have demonstrated that the instrument has sufficient psychometric qualities in adult populations [45], [46]. Good internal and retest-test reliability and modest concept validity characterize the MSPSS. Coefficients of Cronbach's alpha were computed for the overall scale and for each subscale. The subscale values for significant others, family, and friends were 0.91, 0.87, and 0.85, respectively. The overall dependability of the scale was 0.88. In addition, the subscale retest reliability values for significant others, family, and friends were 0.72, 0.85, and 0.75, respectively. The value found for the whole scale was 0.85 [44].

#### 2.2.3. The brief resilience scale (BRS)

BRS is a scale that assesses the ability to recover from or bounce back from stress. This scale consists of six items, three of which are positive and three of which are negative. The BRS was evaluated by reverse-coding items 2, 4, and 6 to determine the six-item mean [47]. This scale's filling instructions begin with "Please use the following scale to indicate your level of agreement with each of the following statements: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree. Example item number 1 "I tend to bounce back quickly after hard times". Cronbach's alpha ranges between 0.80 and 0.91, indicating excellent internal consistency. BRS was administered twice, with a one-month retest reliability of 0.69 and a three-month retest reliability of 0.62 [47].

#### 2.2.4. The brief RCOPE

The Brief RCOPE is a 14-item measure that assesses religious coping with major life stressors. A comprehensive RCOPE component analysis revealed two comprehensive forms of positive and negative religious coping [48]. Respondents ranked the amount to which they used religious coping to deal with key life circumstances on a four-point Likert scale ranging from 0 ("not at all") to 3 ("very much"). Example item number 1 "Looked for a stronger connection with God". Positive religious coping (PRC) ranges from 0.75 to 0.94 on the Brief RCOPE, while negative religious coping (NRC) ranges from 0.60 to 0.90. The Brief RCOPE has demonstrated good internal consistency in multiple studies with vastly different samples, with ranges of 0.75 to 0.94 for PRC and 0.60 to 0.90 for NRC. Moreover, a number of empirical research confirm the conceptual validity, predictive validity, and incremental validity of this scale [48].

#### 2.3. Statistical analysis

Using SPSS 25.00 and SMARTPLS, all the data were analyzed. Descriptive statistics were employed to characterize PTSD sufferers in general. This analytical technique will also be used to determine the PTSD classification of respondents based on a cut score of 30. To compare PTSD based on the frequency of harassment, perpetrator and types, the Kruskal-Wallis analysis technique was used, while to test differences in PTSD based on whether or not the abuse was still ongoing, the Man-Whitney test was used. Spearman's Rank-Order Correlation is then utilized to discover the link between all variables and variable dimensions.

In addition, Partial least squares structural equation modelling (PLS-SEM) was employed to simulate the concurrent interaction between numerous components. For data analysis, Smart partial least squares (PLS) statistical software version 3 was employed. PLS is a reliable/very strong data analysis method since it does not rely on numerous assumptions. Partial Least Squares employs the bootstrapping approach or random multiplication; therefore, the assumption of normality is not an issue. Furthermore, there is no minimum number of samples required for PLS [49]. First, the model includes all variables and all possible interactions (direct and indirect effects). Only indicators with values greater than 0.60 are kept in the evaluation of the measurement model (outer). In addition, the quality of the model is also assessed by considering Convergent validity, where the Cronbach Alpha, rho\_A, composite reliability (CR) and average variance extract (AVE) values must be equal to 0.5 or higher. Furthermore, discriminant validity by looking at the heterotrait-monotrait (HTMT) value, where if the score is below 0.90 it is maintained [50]. Second, if the requirements have been met, the next step is to test the path coefficient and total effect to see the direct effect between variables, and the indirect effect to examine the effect of social support on PTSD mediated by resilience and religious coping.

### 3. RESULTS AND DISCUSSION

Table 2 shows the differences in PTSD female victims of sexual harassment seen from the characteristics of the frequency, perpetrator, type of harassment and whether or not the harassment is still ongoing. The results of the analysis show that from the four characteristics tested, there are two variables that show differences, namely the frequency of violence (p=.000); where victims who received abuse >5 times experienced higher PTSD symptoms than victims who received treatment 1–2 times and 3–5 times. Furthermore, the difference was also significant based on the characteristics of whether the harassment was still ongoing or not (p=.000); female students who are still experiencing harassment to date experience higher PTSD symptoms than those who have experienced it but have ended this time. Table 2 shows that there is no statistical difference in the characteristics of perpetrators of harassment (p=.070) and types of harassment (p=.164).

Table 2. Univariate analysis of PTSD victims of sexual harassment

Variables	Total	Mean	Level of PTSD (Cu	ut-Off Score 30)	Statistics	p
	(%)	(SD)	Not Indicated having	Indicated having		
			PTSD	PTSD		
Frequency of harassment					29.675 <sup>b</sup>	.000
1-2 times	60	27.82	28 (46.67 %)	32 (53.33 %)		
	(35.29)	(10.54)				
3-5 times	85 (50)	27.99	44 (51.76 %)	41 (48.23 %)		
		(12.15)				
> 5 times	25	45.84	2 (8%)	23 (92%)		
	(14.71)	(15.07)				
Perpetrators of harassment					5.317 <sup>b</sup>	.070
Lecturer	44	35.48	17 (38.64 %)	27 (61.36 %)		
	(25.88)	(16.81)				
Students	104	28.51	49 (47.12 %)	55 (52.88 %)		
	(61.76)	(12.27)				
Administrative officer	22	30.36	8 (36.36 %)	14 (63.64 %)		
	(12.94)	(10.00)				
Types of harassment					$3.618^{b}$	.164
Verbal	107	31.31	39 (36.45 %)	68 (63.55 %)		
	(62.94)	(13.31)				
Physical	44	30.95	26 (59.10 %)	18 (40.90 %)		
•	(25.88)	(16.28)				
Special attention to certain body parts	19	25.37	9 (47.37 %)	10 (52.63 %)		
1 12 12 12 12 12 12 12 12 12	(11.18)	(5.28)				
Continuity of harassment					-6.323a	.000
Still happening	90	37.47	22 (24.44 %)	68 (75.56 %)		
	(52.94)	(15.19)				
No longer happening	80	22.78	52 (65.00 %)	28 (35.00 %)		
3 11 0	(47.06)	(4.47)				

a Mann-Whitney test, b Kruskal-Wallis test

#### 3.1. Correlation among the main variables

As presented in Table 3, PTSD symptoms in female sexual harassment victims were negatively related to social support from other significant (r=-.330, p=.000), social support from family (r=-.272, p=.000), social support from friends (r=-.271, p=.000), and resilience (r=-.308, p=.000), whereas negative religious has a positive correlation (r=.243, p=.001). Furthermore, all aspects of social support, as well as

resilience and positive religion coping variables, are positively correlated, but there is no correlation with negative religion coping. Positive religious coping (r=.052, p=.503) and negative religious coping (r=-.109, p=.158) were not correlated with resilience.

Table 3. Descriptive statistics and correlation among variables (N=170)	s (N=170)
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	M	SD	1	2	3	4	5	6	7
Social support—other significant (SS-O)	19.13	5.09	1						
Social support–family (SS-Fa)	19.56	4.97	.848**	1					
Social support friend (SS-Fr)	19.59	5.11	.905**	.921**	1				
BRS	23.11	4.75	.187*	.257**	.219**	1			
Positive religious coping (P-R Cope)	14.66	5.04	.564**	.593**	.616**	.052	1		
Negative religious coping (N-R Cope)	12.44	4.86	.140	.112	.146	109	.526**	1	
PTSD	31.89	13.48	330**	272**	271**	308**	.064	.243**	1

<sup>\*\*</sup>p<0.01; \*p<0.05.

#### 3.2. Measurement model

The proposed model was analyzed using a two-stage measurement model see Table 4 (see in Appendix). The measurement model is initially put to the test to see if it is reliable and construct valid. Several indicators, including one on the social support variable (SS8) and two on religious coping (RC8 and RC9), have values below 0.60. All indicators with values below 0.60 have been excluded from this analysis. Furthermore, the Cronbach value is higher than the 0.7 cut-off value, and the AVE is higher than the 0.5 cut-off value, indicating satisfactory convergent reliability and validity [51]. Table 4 (see in Appendix) also presents that all item factor loading values are higher than 0.6 and significant, that all CR and Cronbach Alpha values are higher than 0.7, and that the AVE is higher than 0.5. The heterotrait-monotrait ratio indicates that the measurement model has acceptable discriminant validity, because the diagonal element value is smaller than the specified maximum value of 0.9 [50] Table 5.

Table 5. Heterotrait-monotrait ratio (HTMT)

	1	2	3	4
PTSD				
Religious coping	0.208			
Resilience	0.490	0.133		
PTSD	0.322	0.533	0.233	

#### 3.3. Structural model

The results of the testing the relationship between variables are summarized in Table 6 and Figure 2. There is a relationship between religious coping and PTSD ( $\beta$ =0.315, p=0.000), the negative effect of resilience on PTSD ( $\beta$ =-0.388, p=0.000), the effect of social support on PTSD is also negative ( $\beta$ =-.0399, p=0.000), a positive effect is also found between social support and religious coping ( $\beta$ =0.561, p=0.000) and social support on resilience ( $\beta$ =0.228, p=0.003). The total effect test also shows a significant effect between variables. Furthermore, the effect of social support on PTSD mediated by the religious coping variable is also significant ( $\beta$ =0.177, p=0.000), as well as when mediated by the resilience variable ( $\beta$ =-0.089, p=0.007).

Table 6. Direct, indirect, and total effect of the variables

Direct effect		Total effect		Indirect effect	
β	t-value	β	t-value	β	t-value
0.315	3.978**	0.315	3.978**		
-0.388	5.667**	-0.388	5.667**		
-0.399	5.088**	-0.311	4.228**		
0.561	10.615**	0.561	10.615**		
0.228	3.017**	0.228	3.017**		
				0.177	3.886**
				-0.089	2.693**
	β 0.315 -0.388 -0.399 0.561	β t-value  0.315 3.978** -0.388 5.667** -0.399 5.088**  0.561 10.615**	β         t-value         β           0.315         3.978**         0.315           -0.388         5.667**         -0.388           -0.399         5.088**         -0.311           0.561         10.615**         0.561	β         t-value         β         t-value           0.315         3.978**         0.315         3.978**           -0.388         5.667**         -0.388         5.667**           -0.399         5.088**         -0.311         4.228**           0.561         10.615**         0.561         10.615**	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>\*\*</sup>Significant at p<0.01.

PTSD is a condition in which victims are traumatized by traumatic events, such as being sexually assaulted or having been sexually abused. Sexual harassment is become a concern not only in general settings, but also in special cases such as universities. According to the results, 170 (11.81%) of the 1,439 female students who took part in the survey reported to being sexually harassed by lecturers, staff, or other

students. Female students are subjected to a wide range of harassment, in terms of type, frequency, and duration.

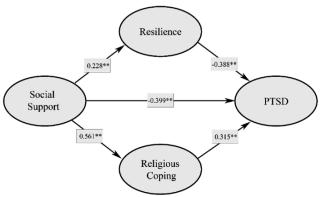


Figure 2. Summary of the relationship between variables

Univariate analysis found that respondents' PTSD symptoms varied based on the frequency of sexual harassment they experienced (p=0.05). Multiple trauma patients showed higher levels of dissociation, remorse, and shame, as well as greater interpersonal sensitivity, according to a study [52]. Multiple traumatic occurrences were linked to greater PTSD scores in women, while recent exposure to assault victims was linked to higher PTSD scores in men [53].

Furthermore, differences were also found based on the characteristics of perpetrators of violence, with students being the most sexual harassment perpetrators, followed by lecturers and administrative officers. A study reported that more than half of postgraduate students who participate have been sexually harassed by other students; this condition has an effect on trauma symptoms [12]. Additionally, several previous studies revealed that perpetrators of violence had a significant impact on the development of PTSD symptoms in sexual harassment victims. Casey and Nurius discovered that victims of sexual assault with a relative's abuser reported more severe levels of abuse, more PTSD symptoms, a greater tendency for self-blame, and more unfavorable social reactions to disclosure than victims of strangers [54]. Women who were sexually abused by other kinds of perpetrators had higher rates of depression than women who were sexually abused by other categories of perpetrators. This indicates that the perpetrator has a major impact on the victim's traumatic experiences [55].

The forms of sexual harassment experienced by students also varied, both physically, verbally and in terms of some intimate parts of the victim. Compared to physical harassment and glances at intimate parts (e.g. breasts or buttocks), female students experienced more verbal sexual harassment. This is in accordance with research findings that the most frequently reported sexual harassment is unwanted comments/verbal and physical harassment [56]. According to another survey, up to 72% of respondents have been verbally abused. 34% of women and 16% of men who claimed having had military sexual trauma (MST) reported experiencing further sexual stress, mostly as a result of repeated sexual remarks and sexual assault (13% of women and 6% of men) or repeated statements and verbal remarks (8% of women and 3% of men) [57].

The major goal of this study was to assess the role of resilience and religious coping in the relationship between social support and PTSD in female students who had been sexually abused. The results showed that social support had a direct impact on PTSD. This finding is in line with findings from earlier studies, which demonstrated that a person's level of social support is inversely proportional to their level of PTSD. This suggests that a person's level of PTSD will improve as their social support improves, and vice versa [22], [58]. Longitudinal research also supports this conclusion [59]. Consequently, social support is one of the variables required by those with severe PTSD symptoms. The presence of social support is protective; high levels of social support and a longer period of time following abuse were connected with less severe PTSD, which increased with the passage of time [60]. The influence of family support on recovering PTSD is greater than that of assistance from friends and significant others. This supports previous research, which demonstrated a negative relationship between social support from family and friends and PTSD at both baseline and follow-up [59]. Therefore, the family must be involved in the intervention of individuals with PTSD [61].

Furthermore, hypothesis testing also shows that there is an effect of social support on resilience. This finding supports previous studies that greater social support and fewer feelings of loneliness lead to increased resilience [62]. Furthermore, studies on the resilience of children whose parents are infected with HIV

show that social support has a significant role [63]. These findings suggest that social support, in general, affects individual resilience building and improvement. Parents, friends, other close relatives, and the general environment can all provide social support. This is also consistent with the findings of Herman *et al.* who found that environmental influences had an effect on an individual's capacity for resilience [64].

Additionally, this study demonstrates that social support has a direct effect on religious coping. This result is consistent with a recent study that shown a correlation between numerous measures of social support and coping style among pregnant women who were earthquake victims [65]. Likewise, the results of research on women with cancer found that they used various coping styles according to the social support they received [66]. Positive coping has a positive association with social support, whereas negative coping has a negative correlation. This suggests that those with high social support likely to employ good religious coping strategies, whereas those with low social support tend to use negative religious coping strategies. According to a prior study, social support is favorably connected with positive coping and negatively correlated with negative coping [67].

Furthermore, both resilience and religious coping directly affect PTSD victims of sexual harassment. Respondents who have high resilience tend to experience low PTSD symptoms. Likewise, respondents who are oriented towards positive coping also have low PTSD symptoms. In line with this, a research conducted by Zang *et al.* revealed that high resilience trait was associated with low PTSD in active military personnel [68]. Similarly, several studies have found that high resilience is correlated to a lower risk of PTSD, and vice versa [69]–[71]. Measurements using the RCope showed that respondents who used the positive RCOPE showed lower PTSD symptoms than those who used the negative RCope. Positive religious coping methods that demonstrate a strong connection to transcendent forces, a sense of spiritual connection with others, and a positive worldview [48], will result in fewer PTSD symptoms. This is consistent with several prior investigations [72], [73].

This study also indicates that social support has an influence on PTSD through religious coping and resilience. This lends support to a prior study's conclusion that perceived social support may play a role as a resilience element in mitigating the impact of stress on PTSD symptoms [74]. According to a previous study, resilience and adaptive coping totally moderate the relationship between social support and PTSD [75]. Another study discovered the same results [76]. These data suggest that resiliency and coping are significant mediators between social support and PTSD in female students who have experienced sexual harassment.

This study has a number of limitations. First, utilizing resilience and religious coping as mediators, this study investigated the association between social support and PTSD in female students who had experienced sexual harassment. Further research can include other characteristics as moderators, such as self-esteem and expectancies, to create a more thorough model. Second, the measurement was only done by cross sectional. Future research should measure this model longitudinally in a larger community of male and female samples. Third, filling out this scale was done online through several social media, therefore the respondents when filling out this scale could not be controlled. Fourth, identification of PTSD should require an in-depth assessment by a mental health professional. Self-assessment may result in non-objective data. Fifth, specifically in Indonesia, victims of sexual harassment are still considered a disgrace that can affect a person's self-esteem; Therefore, the participation in filling out the research scale by students who have experienced sexual harassment was not too high, because they were worried that their data would be spread even though in the instructions section it has been emphasized that all data is anonymous.

Despite these limitations, the findings of this study have a variety of implications. Given that resilience and coping play as mediators in overcoming PTSD and that both can be intervened and modified, a training program specifically designed to strengthen these two aspects is required in order to overcome the PTSD symptoms experienced by victims of sexual harassment. This study also discovered that social support influences PTSD, indicating that interventions for female students who have experienced trauma disorders as a result of sexual harassment should include people who are close to them, such as parents, friends, or other significant people. A study conducted by Price et al. found that increased social support during treatment was associated with a greater reduction in PTSD symptoms [58]. The counselor at the counseling service unit on campus can use a variety of approaches, such as using religion to improve religious coping skills. In the counseling process, clients bring a wide range of beliefs, religious and spiritual practices. Even if they have a different religious or spiritual perspective, counselors can use spiritual principles and practices to better serve clients [77]. Bringing these values into the counseling process, especially to overcome PTSD, will be more effective, especially for people who still retain religious principles. Universities should also have special programs in order to prevent sexual harassment of female students by lecturers, administrative officer, and students, such as establishing a special unit for dealing with sexual harassment, providing legal assistance and protection, formulating several policies, and training students, educators, administrative officer, and campus residents in the prevention and handling of sexual violence. Furthermore, the perpetrators may indeed be subjected to harsh penalties. Preventative procedures are, of course, more effective before a case occurs.

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#### 4. CONCLUSION

PTSD is experienced by all female students who are victims of sexual harassment with varying intensities. This study also examined the association between social support and PTSD using resilience and religious coping as moderating variables. Research findings confirm that both resilience and coping are good mediators of PTSD. In terms of the level of influence, religious coping is stronger than resilience. However, positive religious coping has a negative relationship with PTSD, or it can be said that victims of sexual harassment who use positive religious coping will experience lower PTSD than those who use negative religious coping. This study shows us that to overcome PTSD can be pursued through increasing resilience and the formation of positive religious coping.

#### REFERENCES

- M. J. Lawler and E. B. Talbot, "Child Abuse," in Encyclopedia of Human Behavior, Elsevier, 2012, pp. 460-466. doi: 10.1016/B978-0-12-375000-6.00087-2.
- B. Donohue, H. Hill, and T. Maier-Paarlberg, "Domestic Violence," in Encyclopedia of Stress, Elsevier, 2007, pp. 848-852. doi: 10.1016/B978-012373947-6.00129-X.
- S. Smith et al., "The National Intimate Partner and Sexual Violence Survey: 2015 data brief updated release," The National Intimate Partner and Sexual Violence Survey: 2015 data brief - updated release, 2018.
- Office for National Statistics, "Child sexual abuse in England and Wales: year ending March 2019," Office for National Statistics, [4]
- Badan Pusat Statistik, "In their lives, one in three women between the ages of 15 and 64 had experienced physical or sexual [5] abuse," https://www.bps.go.id/pressrelease/2017/03/30/1375/satu-dari-tiga-perempuan-usia-15---64-tahun-pernahmengalami-kekerasan-fisik-dan-atau-seksual-selama-hidupnya.html (accessed Dec. 25, 2021).
- I. Muhsin, S. Ma'mun, and W. Nuroniyah, "Sexual Violence in an Islamic Higher Education Institution of Indonesian: A Maqasid Al-Shariah and Foucauldian Perspective," Samarah: Jurnal Hukum Keluarga dan Hukum Islam, vol. 5, no. 1, pp. 127-152, 2021, doi: 10.22373/sjhk.v5i1.9144.
- A. Fitri, M. Haekal, A. Almukarramah, and F. Sari, "Sexual violence in Indonesian University: On students' critical consciousness and agency," Gender Equality International Journal of Child and Gender Studies, vol. 7, pp. 153-167, Sep. 2021, doi: 10.22373/equality.v7i2.9869.
- L. B. Klein and S. L. Martin, "Sexual Harassment of College and University Students: A Systematic Review.," Trauma, violence & abuse, vol. 22, no. 4, pp. 777-792, Oct. 2021, doi: 10.1177/1524838019881731.
- J. L. Lowder and S. Oliphant, "Gynecologic Conditions and Body Image," in Encyclopedia of Body Image and Human Appearance, Elsevier, 2012, pp. 468-474. doi: 10.1016/B978-0-12-384925-0.00074-2.
- [10] D. Glaser, "Child sexual abuse," Rutter's Child and Adolescent Psychiatry. pp. 376-388, Jul. 2015. doi: 10.1002/9781118381953.ch30.
- [11] J. Coles, A. Lee, A. Taft, D. Mazza, and D. Loxton, "Childhood sexual abuse and its association with adult physical and mental
- health," *Journal of Interpersonal Violence*, vol. 30, no. 11, pp. 1929–1944, Jul. 2015, doi: 10.1177/0886260514555270.

  C. P. McLean, S. H. Morris, P. Conklin, N. Jayawickreme, and E. B. Foa, "Trauma characteristics and posttraumatic stress disorder among adolescent survivors of childhood sexual abuse," Journal of Family Violence, vol. 29, no. 5, pp. 559-566, Jul. 2014. doi: 10.1007/s10896-014-9613-6.
- [13] J. Sareen, "Posttraumatic Stress Disorder in Adults: Impact, Comorbidity, Risk Factors, and Treatment," The Canadian Journal of Psychiatry, vol. 59, no. 9, pp. 460-467, Sep. 2014, doi: 10.1177/070674371405900902.
- [14] American Psychological Association, "Posttraumatic stress disorder," 2021. [Online]. Available: https://www.apa.org/topics/ptsd (accessed Dec. 25, 2021).
- American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (DSM-5). London: American Psychiatric Association, 2013.
- [16] L. F. Fitzgerald, L. L. Collinsworth, and A. K. Lawson, "Sexual Harassment, PTSD, and Criterion A: If It Walks Like a Duck 'Psychological Injury and Law, vol. 6, no. 2, pp. 81-91, 2013, doi: 10.1007/s12207-013-9149-8.
- [17] M. Cloitre et al., "Evidence for the coherence and integrity of the complex PTSD (CPTSD) diagnosis: response to Achterhof et al., (2019) and Ford (2020)," European Journal of Psychotraumatology, vol. 11, no. 1, Dec. 2020, doi: 10.1080/20008198.2020.1739873.
- J. Brown, M. Burnette, and C. Cerulli, "Correlations Between Sexual Abuse Histories, Perceived Danger, and PTSD Among Intimate Partner Violence Victims," Journal of interpersonal violence, vol. 30, Oct. 2014, doi: 10.1177/0886260514553629.
- J. Sanders, A. R. Hershberger, H. M. Kolp, M. Um, M. Aalsma, and M. A. Cyders, "PTSD Symptoms Mediate the Relationship Between Sexual Abuse and Substance Use Risk in Juvenile Justice-Involved Youth," Child Maltreatment, vol. 23, no. 3, pp. 226-233, 2018, doi: 10.1177/1077559517745154.
- [20] H. Wahyuni, "Risk Factors for Post Traumatic Stress Disorder in Children Victims of Sexual Abuse," Jurnal Ilmiah Kependidikan, vol. 10, no. 1, p. 13, 2016, doi: 10.30595/jkp.v10i1.1076.
- [21] F. Ozbay, D. C. Johnson, E. Dimoulas, C. A. Morgan, D. Charney, and S. Southwick, "Social Support and Resilience to Stress," Psychiatry (Edgmont), vol. 4, no. 5, pp. 35-40, 2007.
- [22] E. R. Dworkin, S. E. Ullman, C. Stappenbeck, C. D. Brill, and D. Kaysen, "Proximal relationships between social support and PTSD symptom severity: A daily diary study of sexual assault survivors," Depression and Anxiety, vol. 35, no. 1, pp. 43-49, Jan. 2018, doi: 10.1002/da.22679.
- [23] B. Aydin, S. Akbas, A. Turla, and C. Dundar, "Depression and post-traumatic stress disorder in child victims of sexual abuse: perceived social support as a protection factor," Nordic Journal of Psychiatry, vol. 70, no. 6, pp. 418-423, Aug. 2016, doi: 10.3109/08039488.2016.1143028.
- [24] M. Hébert, F. Lavoie, and M. Blais, "Post Traumatic Stress Disorder/PTSD in adolescent victims of sexual abuse: resilience and social support as protection factors," Ciência & Saúde Coletiva, vol. 19, pp. 685-694, Apr. 2014, doi: 10.1590/1413-81232014193.15972013.
- [25] D. Okech, N. Hansen, W. Howard, J. K. Anarfi, and A. C. Burns, "Social support, dysfunctional coping, and community reintegration as predictors of PTSD among human trafficking survivors," Behavioral Medicine, vol. 44, no. 3, pp. 209-218, Jul.

- 2018, doi: 10.1080/08964289.2018.1432553.
- [26] S. M. Southwick, G. A. Bonanno, A. S. Masten, C. Panter-Brick, and R. Yehuda, "Resilience definitions, theory, and challenges: interdisciplinary perspectives," *European journal of psychotraumatology*, vol. 5, p. 10.3402/ejpt.v5.25338, Oct. 2014, doi: 10.3402/ejpt.v5.25338.
- [27] S. Kim, S. Park, and G.-U. Kim, "Association of depression, pain, resilience, social support with post-traumatic stress in sexual abuse: A quantile regression approach," Nursing & Health Sciences, vol. 23, no. 3, pp. 611–619, Sep. 2021, doi: 10.1111/nhs.12815.
- [28] A. T. Reyes, R. E. Constantino, C. L. Cross, R. A. Tan, J. N. Bombard, and A. R. Acupan, "Resilience and psychological trauma among Filipino American women," *Archives of Psychiatric Nursing*, vol. 33, no. 6, pp. 177–185, 2019, doi: 10.1016/j.apnu.2019.08.008.
- [29] G. L. Wrenn et al., "The effect of resilience on posttraumatic stress disorder in trauma-exposed inner-city primary care patients.," Journal of the National Medical Association, vol. 103, no. 7, pp. 560–566, Jul. 2013, doi: 10.1016/s0027-9684(15)30381-3.
- [30] A. Besser, M. Weinberg, V. Zeigller-Hill, and Y. Neria, "Acute symptoms of posttraumatic stress and dissociative experiences among female israeli civilians exposed to war: the roles of intrapersonal and interpersonal sources of resilience," *Journal of Clinical Psychology*, vol. 70, no. 12. pp. 1227–1239, 2014. doi: 10.1002/jclp.22083.
- [31] X. Dong *et al.*, "The mediating role of resilience in the relationship between social support and posttraumatic growth among colorectal cancer survivors with permanent intestinal ostomies: A structural equation model analysis," *European Journal of Oncology Nursing*, vol. 29, pp. 47–52, 2017, doi: 10.1016/j.ejon.2017.04.007.
- [32] M. Hirai, R. Charak, L. D. Seligman, J. D. Hovey, J. M. Ruiz, and T. W. Smith, "An association between perceived social support and posttraumatic stress symptom severity among women with lifetime sexual victimization: the serial mediating role of resilience and coping," *Violence Against Women*, vol. 26, no. 15–16, pp. 1966–1986, Dec. 2020, doi: 10.1177/1077801219892645.
- [33] C. Wu *et al.*, "The mediating roles of coping styles and resilience in the relationship between perceived social support and posttraumatic growth among primary caregivers of schizophrenic patients: a cross-sectional study.," *BMC psychiatry*, vol. 21, no. 1, p. 58, Jan. 2021, doi: 10.1186/s12888-021-03058-9.
- [34] K. Walsh, M. A. Fortier, and D. DiLillo, "Adult coping with childhood sexual abuse: A theoretical and empirical review," Aggression and Violent Behavior, vol. 15, no. 1, pp. 1–13, 2014, doi: 10.1016/j.avb.2009.06.009.
- [35] G. Hornor, "Child Sexual Abuse: Consequences and Implications," *Journal of Pediatric Health Care*, vol. 24, no. 6, pp. 358–364, 2013, doi: 10.1016/j.pedhc.2009.07.003.
- [36] S. E. Ullman, M. Relyea, L. Peter-Hagene, and A. L. Vasquez, "Trauma histories, substance use coping, PTSD, and problem substance use among sexual assault victims," *Addictive Behaviors*, vol. 38, no. 6, pp. 2219–2223, Jun. 2013, doi: 10.1016/j.addbeh.2013.01.027.
- [37] L. He, J. Xu, and Z. Wu, "Coping strategies as a mediator of posttraumatic growth among adult survivors of the wenchuan earthquake," *PLoS ONE*, vol. 8, no. 12, p. e84164, Dec. 2013, doi: 10.1371/journal.pone.0084164.
- [38] J. Xu, "Pargament's theory of religious coping: implications for spiritually sensitive social work practice," British journal of social work, vol. 46, no. 5, pp. 1394–1410, Jul. 2016, doi: 10.1093/bjsw/bcv080.
- [39] C. L. Holt, E. M. Clark, K. J. Debnam, and D. L. Roth, "Religion and health in African Americans: the role of religious coping.," American journal of health behavior, vol. 38, no. 2, pp. 190–199, Mar. 2014, doi: 10.5993/AJHB.38.2.4.
- [40] T. P. Carpenter, T. Laney, and A. Mezulis, "Religious coping, stress, and depressive symptoms among adolescents: A prospective study.," *Psychology of Religion and Spirituality*, vol. 4, no. 1. pp. 19–30, 2012. doi: 10.1037/a0023155.
- [41] K.-I. Karstoft, S. B. Andersen, M. Bertelsen, and T. Madsen, "Diagnostic accuracy of the Posttraumatic Stress Disorder Checklist-Civilian Version in a representative military sample," *Psychological Assessment*, vol. 26. pp. 321–325, 2014. doi: 10.1037/a0034889.
- [42] B. Gelaye, Y. Zheng, M. E. Medina-Mora, M. B. Rondon, S. E. Sánchez, and M. A. Williams, "Validity of the posttraumatic stress disorders (PTSD) checklist in pregnant women," BMC Psychiatry, vol. 17, no. 1, p. 179, 2017, doi: 10.1186/s12888-017-1304-4.
- [43] R. Bressler, B. T. Erford, and S. Dean, "A systematic review of the posttraumatic stress disorder checklist (PCL)," *Journal of Counseling & Development*, vol. 96, no. 2, pp. 167–186, Apr. 2018, doi: 10.1002/jcad.12190.
- [44] G. D. Zimet, N. W. Dahlem, S. G. Zimet, and G. K. Farley, "The Multidimensional scale of perceived social support," *Journal of Personality Assessment*, vol. 52, no. 1, pp. 30–41, 1988. doi: 10.1207/s15327752jpa5201\_2.
- [45] J. M. Dambi, L. Corten, M. Chiwaridzo, H. Jack, T. Mlambo, and J. Jelsma, "A systematic review of the psychometric properties of the cross-cultural translations and adaptations of the Multidimensional Perceived Social Support Scale (MSPSS)," *Health and quality of life outcomes*, vol. 16, no. 1, p. 80, 2018, doi: 10.1186/s12955-018-0912-0.
- [46] O. D. Laksmita, M.-H. Chung, Y.-M. Liao, and P.-C. Chang, "Multidimensional scale of perceived social support in indonesian adolescent disaster survivors: a psychometric evaluation," *PLOS ONE*, vol. 15, no. 3, p. e0229958, 2020, doi: 10.1371/journal.pone.0229958.
- [47] B. W. Smith, J. Dalen, K. Wiggins, E. Tooley, P. Christopher, and J. Bernard, "The brief resilience scale: Assessing the ability to bounce back," *International Journal of Behavioral Medicine*, vol. 15, no. 3, pp. 194–200, Sep. 2008, doi: 10.1080/10705500802222972.
- [48] K. Pargament, M. Feuille, and D. Burdzy, "The Brief RCOPE: Current Psychometric Status of a Short Measure of Religious Coping," *Religions*, vol. 2, no. 1. 2011. doi: 10.3390/rel2010051.
- [49] M. Sarstedt, C. Ringle, and J. Hair, "Partial Least Squares Structural Equation Modeling," in *Handbook of Market Research*, 2021, pp. 1–47. doi: 10.1007/978-3-319-05542-8\_15-2.
- [50] J. Henseler, C. M. Ringle, and M. Sarstedt, "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *Journal of the Academy of Marketing Science*, vol. 43, no. 1, pp. 115–135, 2015, doi: 10.1007/s11747-014-0403-8.
- [51] J. Hair, G. T. M. Hult, C. M. Ringle, and M. Sarstedt, A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 2nd edition, SAGE Publications, 2016.
- [52] M. A. Hagenaars, I. Fisch, and A. van Minnen, "The effect of trauma onset and frequency on PTSD-associated symptoms," Journal of Affective Disorders, vol. 132, no. 1–2, pp. 192–199, Jul. 2011, doi: 10.1016/j.jad.2011.02.017.
- [53] T. A. Hartley, J. M. Violanti, K. Sarkisian, M. E. Andrew, and C. M. Burchfiel, "PTSD symptoms among police officers: associations with frequency, recency, and types of traumatic events.," *International journal of emergency mental health*, vol. 15, no. 4, pp. 241–253, 2013, doi: 10.1037/e577572014-379.
- [54] E. A. Casey and P. S. Nurius, "Trauma Exposure and Sexual Revictimization Risk," Violence Against Women, vol. 11, no. 4, pp. 505–530, Apr. 2005, doi: 10.1177/1077801204274339.
- [55] J. L. Domino, S. E. Whiteman, F. W. Weathers, C. T. Blevins, and M. T. Davis, "Predicting PTSD and Depression following Sexual Assault: The Role of Perceived Life Threat, Post-Traumatic Cognitions, Victim-Perpetrator Relationship, and Social Support," Journal of Aggression, Maltreatment & Trauma, vol. 29, no. 6, pp. 680–698, Jul. 2020, doi:

- 10.1080/10926771.2019.1710634.
- [56] I. M. Steine, J. C. Skogen, M. Hysing, L. Puigvert, V. Schønning, and B. Sivertsen, "Sexual harassment and assault predict sleep disturbances and is partly mediated by nightmares: Findings from a national survey of all university students in Norway," *Journal* of Sleep Research, vol. 30, no. 6, p. e13338, Dec. 2021, doi: 10.1111/jsr.13338.
- [57] C. Moreau et al., "From sexual harassment to sexual assault: Prevalence and correlates of sexual trauma in the French military," PLOS ONE, vol. 16, no. 11, p. e0259182, Nov. 2021, doi: 10.1371/journal.pone.0259182.
- [58] M. Price, C. L. Lancaster, D. F. Gros, A. C. Legrand, K. van Stolk-Cooke, and R. Acierno, "An Examination of Social Support and PTSD Treatment Response During Prolonged Exposure.," *Psychiatry*, vol. 81, no. 3, pp. 258–270, 2018, doi: 10.1080/00332747.2017.1402569.
- [59] E. R. Dworkin, H. Ojalehto, M. A. Bedard-Gilligan, J. M. Cadigan, and D. Kaysen, "Social support predicts reductions in PTSD symptoms when substances are not used to cope: A longitudinal study of sexual assault survivors," *Journal of Affective Disorders*, vol. 229, pp. 135–140, 2018, doi: 10.1016/j.jad.2017.12.042.
- [60] S. Fletcher, A. Elklit, M. Shevlin, and C. Armour, "Predictors of PTSD Treatment Response Trajectories in a Sample of Childhood Sexual Abuse Survivors: The Roles of Social Support, Coping, and PTSD Symptom Clusters," *Journal of Interpersonal Violence*, vol. 36, no. 3–4, pp. 1283–1307, Nov. 2021, doi: 10.1177/0886260517741212.
- [61] A. Gewirtz-Meydan, "The relationship between child sexual abuse, self-concept and psychopathology: The moderating role of social support and perceived parental quality," *Children and Youth Services Review*, vol. 113, p. 104938, 2020, doi: 10.1016/j.childyouth.2020.104938.
- [62] J. Lee, J. Hong, Y. Zhou, and G. Robles, "The Relationships Between Loneliness, Social Support, and Resilience Among Latinx Immigrants in the United States," Clinical Social Work Journal, vol. 48, no. 1, pp. 99–109, 2020, doi: 10.1007/s10615-019-00728-w.
- [63] P. K. H. Mo, J. T. F. Lau, X. Yu, and J. Gu, "The role of social support on resilience, posttraumatic growth, hopelessness, and depression among children of HIV-infected parents in mainland China," AIDS Care, vol. 26, no. 12, pp. 1526–1533, Dec. 2014, doi: 10.1080/09540121.2014.923810.
- [64] H. Herrman, D. E. Stewart, N. Diaz-Granados, E. L. Berger, B. Jackson, and T. Yuen, "What is Resilience?," The Canadian Journal of Psychiatry, vol. 56, no. 5, pp. 258–265, May 2011, doi: 10.1177/070674371105600504.
- [65] J. Ren et al., "Depression, Social Support, and Coping Styles among Pregnant Women after the Lushan Earthquake in Ya'an, China," PLOS ONE, vol. 10, no. 8, p. e0135809, Aug. 2015, doi: 10.1371/journal.pone.0135809.
- [66] R. Boatemaa Benson, B. Cobbold, E. Opoku Boamah, C. P. Akuoko, and D. Boateng, "Challenges, Coping Strategies, and Social Support among Breast Cancer Patients in Ghana," Advances in Public Health, vol. 2020, pp. 1–11, Feb. 2020, doi: 10.1155/2020/4817932.
- [67] L. Chen, M. Alston, and W. Guo, "The influence of social support on loneliness and depression among older elderly people in China: Coping styles as mediators," *Journal of Community Psychology*, vol. 47, no. 5, pp. 1235–1245, Jun. 2019, doi: 10.1002/jcop.22185.
- [68] Y. Zang, T. Gallagher, C. P. McLean, H. S. Tannahill, J. S. Yarvis, and E. B. Foa, "The impact of social support, unit cohesion, and trait resilience on PTSD in treatment-seeking military personnel with PTSD: The role of posttraumatic cognitions," *Journal of Psychiatric Research*, vol. 86, pp. 18–25, 2017, doi: 10.1016/j.jpsychires.2016.11.005.
- [69] A. Besser, V. Zeigler-Hill, M. Weinberg, A. L. Pincus, and Y. Neria, "Intrapersonal Resilience Moderates the Association Between Exposure-Severity and PTSD Symptoms Among Civilians Exposed to the 2014 Israel–Gaza Conflict," *Self and Identity*, vol. 14, no. 1, pp. 1–15, Jan. 2015, doi: 10.1080/15298868.2014.966143.
- [70] M. Streb, P. Häller, and T. Michael, "PTSD in paramedics: resilience and sense of coherence.," Behavioural and cognitive psychotherapy, vol. 42, no. 4, pp. 452–463, Jul. 2014, doi: 10.1017/S1352465813000337.
- [71] N. J. Thompson, D. Fiorillo, B. O. Rothbaum, K. J. Ressler, and V. Michopoulos, "Coping strategies as mediators in relation to resilience and posttraumatic stress disorder," *Journal of Affective Disorders*, vol. 225, pp. 153–159, 2018, doi: 10.1016/j.jad.2017.08.049.
- [72] J. K. Mesidor and K. F. Sly, "Religious coping, general coping strategies, perceived social support, PTSD symptoms, resilience, and posttraumatic growth among survivors of the 2010 earthquake in Haiti," *Mental Health, Religion & Culture*, vol. 22, no. 2, pp. 130–143, Feb. 2019, doi: 10.1080/13674676.2019.1580254.
- [73] T. D. Carroll, W. H. McCormick, P. N. Smith, S. L. Isaak, and J. M. Currier, "PTSD, religious coping, and interpersonal antecedents of suicidal desire among military veterans: An initial examination of moderation models.," *Psychology of Religion* and Spirituality, vol. 12, no. 3, pp. 304–310, 2020, doi: 10.1037/rel0000270.
- [74] J.-S. Lee, "Perceived social support functions as a resilience in buffering the impact of trauma exposure on PTSD symptoms via intrusive rumination and entrapment in firefighters," PLOS ONE, vol. 14, no. 8, p. e0220454, Aug. 2019, doi: 10.1371/journal.pone.0220454.
- [75] C. Shikishima, K. Hiraishi, Y. Takahashi, S. Yamagata, S. Yamaguchi, and J. Ando, "Genetic and environmental etiology of stability and changes in self-esteem linked to personality: A Japanese twin study," *Personality and Individual Differences*, vol. 121, pp. 140–146, 2018, doi: 10.1016/j.paid.2017.09.013.
- [76] Z. Chen, S. Shen, and Q. Dai, "Long-term and short-term psycho-social predictors of early-adulthood depression: role of childhood trauma, neuroticism, social-support, resilience, and life-events," *Current Psychology*, 2021, doi: 10.1007/s12144-021-01570-5.
- [77] T. G. Plante and C. E. Thoresen, "Spirituality, Religion, and Psychological Counseling," in *The Oxford Handbook of Psychology and Spirituality*, L. J. Miller, Ed. Oxford University Press, 2013. doi: 10.1093/oxfordhb/9780199729920.013.0025.

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#### APPENDIX

Table 4. Loading, cronbach' alpha, Rho A, CR, and AVE (continue)

1					5	,
Variables	Code	Loading	Cronbach	Dijkstra and Henseler's	CR	AVE
				rho_A		
Social support	SS1	0.831	0.977	0.961	0.981	0.810
	SS2	0.886				
	SS3	0.967				
	SS4	0.945				
	SS5	0.947				
	SS6	0.965				
	SS7	0.950				
	SS8	0.552				
	SS9	0.963				

Table 4. I	Loading, c	ronbach'	alpha, Rho	_A, CR, and AVE (c	ontinue	)
Variables	Code	Loading	Cronbach	Dijkstra and Henseler's rho_A	CR	AVE
	SS10	0.886				
	SS11	0.962				
	SS12	0.898				
Resilience	BRS1	0.858	0.885	0.951	0.914	0.645
	BRS2	0.911				
	BRS3	0.613				
	BRS4	0.799				
	BRS5	0.813				
	BRS6	0.827				
Religious coping	RC1	0.851	0.929	0.888	0.934	0.537
	RC2	0.920				
	RC3	0.908				
	RC4	0.754				
	RC5	0.790				
	RC6	0.857				
	RC7	0.774				
	RC8	0.457				
	RC9	0.416				
	RC10	0.787				
	RC11	0.644				
	RC12	0.716				
	RC13	0.684				
	RC14	0.748				
PTSD	PTSD1	0.789	0.955	0.981	0.960	0.590
	PTSD2	0.656				
	PTSD3	0.806				
	PTSD4	0.614				
	PTSD5	0.716				
	PTSD6	0.815				
	PTSD7	0.768				
	PTSD8	0.849				
	PTSD9	0.829				
	PTSD10	0.654				
	PTSD11	0.876				
	PTSD12	0.839				
	PTSD13	0.733				
	PTSD14	0.778				
	PTSD15	0.817				
	PTSD16	0.781				
	PTSD17	0.784				