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**Original Article**

# *The Effect of Interpersonal Communication Skills, Social Support, and Coping Strategy on Resilience in Master of Nursing Students Who Work on Thesis*

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***ABSTRACT***

*The majority of Master of Nursing Students are experiencing moderate to high levels of stress. Especially while working on their thesis. High-stress levels in nursing students can make them vulnerable to mental health disorders. One of the interventions to solve this problem is by building their resilience. Several previous studies related to resilience in nursing students focus more on undergraduate students. This study aims to analyze factors related to resilience in a master of nursing students in one of the state universities in East Java who are working on a thesis and see the fit of the resilience model. This study used a cross-sectional design with a total sampling technique. The minimum sample size is 10x the number of exogenous variables studied. There are 6 exogenous variables in this study so the minimum sample size is 60 respondents. The sample in this study amounted to 63 respondents. Univariate analysis in this study was carried out by analyzing numerical data using mean, median, and standard deviation values. Meanwhile, for categorical data, proportion analysis is used. Multivariate analysis was carried out using Partial Least Square (PLS) using SmartPLS 4. The result of this study shows p-values for X3 and Y, X5 and Y, X6 and Y, X1 and X6, X4 and X6 are below 0,05. So it can be concluded that interpersonal communication skills, social support, and coping strategies are positively related to resilience. Spirituality and physical health were not related to resilience but were positively related to coping strategies. Meanwhile, emotional intelligence is not related to either of them. The resilience model is a good fit. Further research by improving the research design is needed to support the results of this study.*

***Keywords:*** *Resilience, Master of Nursing Students, Resilience Model, Factors Related to Resilience.*

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## INTRODUCTION

The majority of master of nursing students carry out various roles, namely as students, nurses, and caregivers in their households[1]. This situation can cause stress for students. Research shows that levels of stress, anxiety, and depression in students in health disciplines (especially nursing) are higher and show more severe symptoms than students in other disciplines[2]. Meanwhile, nursing students who are completing their final assignments experience moderate levels of stress, moderate anxiety, and moderate depression[3].

High levels of stress are also experienced by master of nursing students at One of state university in East Java. Based on preliminary studies, data shows that master of nursing students have moderate to severe levels of stress. Students also revealed that working on their thesis was a stressor during their master's degree in nursing. This problem can cause delays in completing final assignments and extend the student's study period[4,5,6]. Apart from that, stress can also affect personal well-being, student academic performance, communication with patients during clinical practice, as well as the quality and safety of health services

provided by nursing students[2].

Based on the results of the preliminary study and literature review above, it can be concluded that nursing students are vulnerable to mental health disorders due to high levels of stress. Therefore, intervention is needed to prevent the occurrence of mental health disorders, one of which is by building resilience in students. Resilience can be seen as resistance to stress[7]. Resilience is generally described as a person's ability to overcome difficulties[8]. Resilience is also defined as the ability to overcome unpleasant events[9]. Thus resilience can be defined as an individual's ability to face situations that cause stress. Resilience can reduce mental health disorders and improve well-being in students, as well as increase professionalism in practice or in the workplace. Resilience building in master of nursing students needs to be carried out to increase their resilience. Before building resilience in students, it is necessary to know the factors related to resilience in master of nursing students.

Based on Kumpfer (1999) resilience model, factors related to resilience are the individual's internal characteristics, the external environment and the interaction process between the individual and the environment[10]. Individual internal characteristics consist of spiritual, cognitive, social/behavioral, emotional/affective and physical aspects. The external environment includes the balance and interaction between risk factors and protective factors in the environment around the individual including family, community, school, peers. This includes social support obtained from the individual's social environment. The process of interaction between the individual and the environment, namely how the individual overcomes stressors or challenges that arise, including the coping strategies used by the individual.

This model is in accordance with several previous studies and reviews regarding factors related to resilience in students. Based on the literature review, resilience in students is related to several factors, namely demographic characteristics, spirituality, emotional intelligence, interpersonal communication skills, physical health, social support, and coping strategies. Based on this background, the author wants to study factors related to resilience in master of nursing students in One of state university in East Java who work on thesis.

## METHOD

This study uses a cross sectional research design. The author analyzes the factors related to resilience in master of nursing students in One of state university in East Java who work on thesis.

The author uses the Rule of Thumb for robust PLS SEM estimations to calculate the minimum sample size in this study. Barclay et al (1995) suggest a minimum sample size of 10x the number of exogenous variables studied[11]. There are 6 exogenous variables in this study so the minimum sample size is 60 respondents. The sample in this study amounted to 63 respondents. This study was conducted in October-November 2023 online using Zoho form.

In this research, the demographic characteristics questionnaire contains questions regarding the respondent's identity including name, age, gender, period of study, GPA, employment status, source of financial during master studies, marital status, and living conditions. The Spirituality Questionnaire used by authors comes from The Daily Spiritual Experience Scale questionnaire[12]. This questionnaire measures perceptions of God's presence and His involvement in life. Measurements in this questionnaire use a Likert scale ranging from 1 (never) to 6 (several times a day). According to Davies et al. (2010), the Brief Emotional Intelligence Scale (BEIS) is a 10-item scale questionnaire based on the Emotional Intelligence Scale (SEIS) and the emotional intelligence framework by Salovey and Mayer [13,14,15]. This questionnaire uses a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

On the other hand, the Interpersonal Communication Competency Scale (ICCS) was used to measure interpersonal communication skills[16]. ICCS identifies competencies in 10 interpersonal communication domains. This questionnaire consists of 30 question items with ratings using a Likert scale from "almost always" (5) to "almost never" (1). The physical health questionnaire used by the authors comes from the Physical Health Questionnaire (PHQ) by Schat and Kelloway [17]. The PHQ is a short and modification version of the health scale developed by Spence et al. [18]. The assessment of this questionnaire uses a Likert scale from 1

to 7. The social support questionnaire used by the authors comes from The Social Support Inventory (SSI) questionnaire. SSI is a short instrument that measures the satisfaction felt by individuals regarding the social support they receive. This instrument can be applied in a variety of settings. This questionnaire has a rating based on a Likert scale of 1 (receiving very little support from other people) to 5 (receiving very much support from other people).

Coping strategies in this study were measured using the Brief-COPE (B-COPE) questionnaire. Brief-COPE (B-COPE) is a shortened form of Coping Orientation to Problems Experience (COPE). B-COPE contains 14 scales with 2 items in each scale. Rating of each item was carried out on a four-point Likert scale ranging from 0 (never) to 3 (always). The resilience questionnaire used by authors comes from the 10-Item Connor-Davidson Resilience Scale (CD-RISC-10) questionnaire. Initially, the Connor–Davidson Resilience Scale (CD-RISC) consisted of 25 items and five factors. However, the structure of the questionnaire was found to be unstable across different social and cultural groups, so revisions were made to shorten and increase the reliability of the questionnaire. This questionnaire has a score of 0 (not at all) to 4 (always).

Univariate analysis in this study was carried out by analyzing numerical data using mean, median and standard deviation values. Meanwhile, for categorical data, proportion analysis is used. Multivariate analysis was carried out using Partial Least Square (PLS) using SmartPLS Version 4. The author chose to use this type of test because it can test several variables at one time and does not require many assumptions to be met. The PLS model is carried out based on three stages, namely outer model measurement, inner model measurement and goodness of fit test. This research has received ethical approval from the Ethics Committee of the Faculty of Health Sciences, Brawijaya University with ethic approval number No.6080/UN10.F17.10.4TU/2023

## RESULTS

### *Outer Model Testing*

Outer model testing was carried out to test the validity and reliability of the research indicators and variables. The following are the results of the outer model testing carried out by the authors. Convergent validity can be tested at the indicator level or variable level. At the indicator level, convergence validity can be seen from the results of the loading factors. The loading factor value is considered sufficient if the justification of an indicator for the latent variable is at least 0.7 [19]. The loading factor value for each indicator in this study ranged from -0.111 to 0.922. Based on the analysis, the results showed that several indicators had not yet reached 0.7. These indicators are considered invalid and will be removed from further analysis.

Meanwhile, at the variable level, convergent validity can be seen from the internal consistency value or also called composite reliability. Composite reliability is a combination of the overall reliability of indicators and latent variables. A variable is considered reliable if its composite reliability value reaches 0.7[19]. The following is the composite reliability value of each research variable:

**Table 1.** Composite Reliability for Each Variables.

| Variable | Composite reliability (rho_a) | Composite reliability (rho_c) |
|---|---|---|
| Spirituality (X1) | 0.960 | 0.957 |
| Emotional Intelligence (X2) | 0.749 | 0.786 |
| Interpersonal Communication Ability (X3) | 0.811 | 0.815 |
| Physical Health (X4) | 0.861 | 0.882 |
| Social Support (X5) | 0.884 | 0.914 |
| Coping Strategies (X6) | 0.813 | 0.854 |
| Resilience (Y) | 0.942 | 0.947 |

The table above shows that all research variables have a composite reliability value of >0.7, so it can be concluded that all variables have met the reliability criteria.

Similar to convergent validity, discriminant validity can also be tested at the indicator level and latent variable level. The cross loading value can be used to see discriminant validity at the indicator level. The cross loading value illustrates that the loading value of an indicator on its variable must be greater than that on other variables[19]. The results of research data analysis show that the cross loading value of each indicator meets the discriminant validity criteria.

Discriminant validity at the latent variable level can be seen from the comparison between the root value of Average Variance Extracted (AVE) and the correlation value of the latent variable in question with other latent variables or what is called the Fornell-Larcker Criterion. A variable is considered valid if the AVE root value is greater than the correlation value with other variables[19]. The following are the Fornell-Larcker Criterion values from research data.

***Table 2. Fornerll-Larcker Criterion.***

| | X1 | X2 | X3 | X4 | X5 | X6 | Y |
|---|---|---|---|---|---|---|---|
| X1 | 0.822 | | | | | | |
| X2 | 0.357 | 0.699 | | | | | |
| X3 | 0.299 | 0.395 | 0.672 | | | | |
| X4 | -0.279 | -0.408 | -0.521 | 0.745 | | | |
| X5 | 0.296 | 0.358 | 0.506 | -0.343 | 0.827 | | |
| X6 | 0.508 | 0.553 | 0.580 | -0.601 | 0.308 | 0.666 | |
| Y | 0.452 | 0.570 | 0.609 | -0.435 | 0.561 | 0.655 | 0.818 |

***Inner Model Testing***

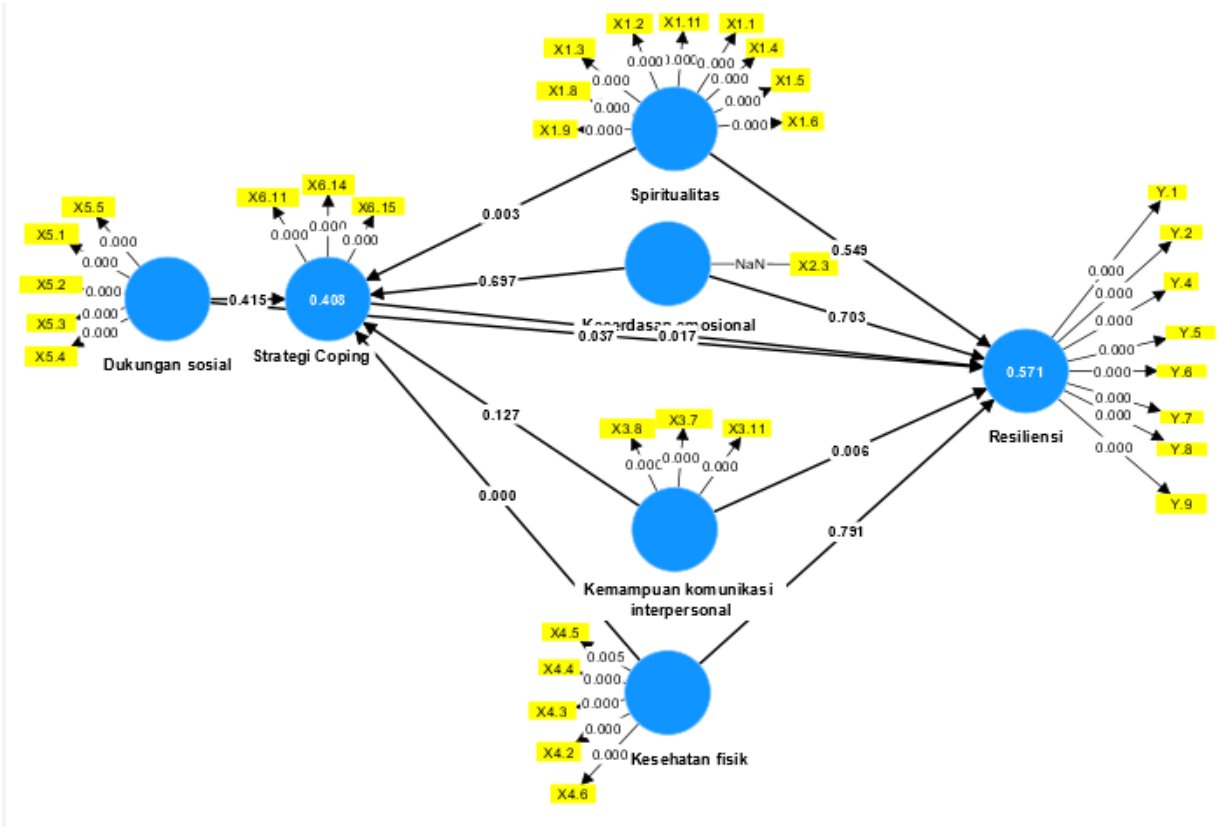


**Figure 1. Resilience Model in Master of Nursing Student Who Work on Thesis**

After testing the outer model, the authors then tested the inner model. Before testing the inner model, some invalid items will be removed first. So a new arrangement of variables and indicators is produced as follows:

**Table 3. List of Variables and Indicators After Removing Invalid Indicators.**

| Variables | Indicators |
|---|---|
| Spirituality (X1) | X1.1, X1.2, X1.3, X1.4, X1.5, X1.6, X1.7, X1.8, X1.11 |
| Emotional Intelligence (X2) | X2.3 |
| Interpersonal Communication Ability (X3) | X3.7, X3.8, X11 |
| Physical Health (X4) | X4.2, X4.3, X4.4, X4.6 |
| Social Support (X5) | X5.1, X5.2, X5.3, X5.4, X5.5 |
| Coping Strategies (X6) | X6.11, X6.14, X6.15 |
| Resilience (Y) | Y.1, Y.2, Y.4, Y.5, Y.6, Y.7, Y.8, Y.9 |

After removing invalid indicators, the authors then carried out a bootstrapping test. The bootstrapping test is a random multiplying of the number of samples. Table 4. below describes the results of the bootstrapping test.

**Table 4. Relationship between Spirituality, Emotional Intelligence, Interpersonal Communication Skills, Physical Health, Social Support and Coping Strategies with Resilience in Master of Nursing Students Work on Thesis**

| | *p-value* | Relationship |
|---|---|---|
| Spirituality (X1) → Resilience (Y) | 0.549 | Not Significant |
| Emotional intelligence (X2) → Resilience (Y) | 0.703 | Not Significant |
| Interpersonal communication skills (X3) → Resilience (Y) | 0.006 | Significant |
| Physical health (X4) → Resiliensi (Y) | 0.791 | Not Significant |
| Social support (X5) → Resiliensi (Y) | 0.037 | Significant |
| Coping strategies (X6) → Resiliensi (Y) | 0.017 | Significant |

**Table 5. Relationship between Spirituality, Emotional Intelligence, Interpersonal Communication Skills, Physical Health, and Social Support with Coping Strategies in Master of Nursing Students Work on Thesis**

| | *p-value* | Relationship |
|---|---|---|
| Spirituality (X1) → Coping strategies (X6) | 0.003 | Significant |
| Emotional intelligence (X2) → Coping strategies (X6) | 0.697 | Not Significant |
| Interpersonal communication skills (X3) → Coping strategies (X6) | 0.127 | Not Significant |
| Physical health (X4) → Coping strategies (X6) | 0.000 | Significant |
| Social support (X5) → Coping strategies (X6) | 0.415 | Not Significant |

***Good of Fit Testing***

To see the fitness of the model with the data, the author carried out a goodness of fit model test. The Goodness of fit test in the smartPLS 4 software can be done by looking at the coefficient of determination and the model fit

**Table 6. Adjusted R Square Value of the Resilience Model in Master of Nursing Students Who Work on Thesis**

| Variable | Adjusted R square |
|---|---|
| Coping Strategies (X6) | 0.408 |
| Resilience (Y) | 0.571 |

**Table 7. SRMR Value of the Resilience Model in Master of Nursing Students Who Work on Thesis**

| | Saturated model | Estimated model |
|---|---|---|
| SRMR | 0.095 | 0.095 |

## DISCUSSION

### Characteristics of Respondents

Respondents have an age range of 24 to 50 years with a median of 30 years. This shows that respondents is in the young and middle adult age group. Research conducted by Yesilbalkan et al. (2021) also shows that nursing postgraduate students are in the young adult and middle adult age groups[20].

The majority of respondents are women. This is shown by the proportion of respondents who are female at 61.9%. Meanwhile, male respondents were only 39.1%. Most of respondents have married. This is shown by the proportion of students who are married at 55.6%. Meanwhile, the remaining 44.4% of students are single. Meanwhile, based on where they live, the majority of students live with their families (63.5%). Some students also

live alone (27%) or with friends (9.5%). Students who live with their families also have higher resilience than students who live alone or with friends.

The majority of respondents are employed. The proportion of students who are employed is 76.2% while those who are unemployed is 23.8%. Most students work in health service facilities, whether hospitals, clinics, health centers or others. The proportion of students working in health care facilities was 52.1%, while the remaining worked in educational institutions (39.5%) and worked as entrepreneurs (8.3%). Meanwhile, for funding sources while being a students, some students received costs from scholarships (34.9%), their own costs (30.2%) or from their families (34.9%).

The GPA of respondents is in the range of 2,85-4.00 with a median value of 3.83. Meanwhile, for the study period, most of the respondents were in semester 3 while the rest were in semesters 5 and 7 or had graduated. Based on these data, it can be concluded that the cognitive abilities of respondents are in the good category.

The spirituality score of respondents is in the range 15-66 with a median score of 50.00. Based on these data, the number of respondents who had a high level of spirituality (≥50) was 31 people, while the number of respondents who had a low level of spirituality (<50) was 32 people. So it can be concluded that the spirituality of majority of respondents is in the low category. this is probably caused by spirituality in this study is not only measured based on how individuals build good relationships with God, but also how individuals build good relationships with fellow humans, such as helping motivate or inviting friends to work on a thesis together. These two things are difficult for students to do considering that the majority of students have other responsibilities such as working or becoming caregivers in the family so they rarely interact with each other directly.

The emotional intelligence scores of the students are in the range 11-24 with a mean score of 18.41. Based on this data, there are 31 students who have a high level of emotional intelligence (≥18.41), while there are 32 students who have a low level of emotional intelligence (<18.41). So it can be concluded that the emotional intelligence of majority of he respondents are in the low category. This situation is probably caused by students working on their thesis being in a situation that causes stress. This situation can affect the emotions of the students concerned[21].

Based on the results of data collection, the interpersonal communication skills of the respondents are in the range 27-54 with a median score of 42.00. Based on these data, the number of students with high interpersonal communication skills (≥42) was 33 people, while the number of students with low interpersonal communication skills (<42) was 30 people. So it can be concluded that the majority of respondents have good interpersonal communication skills. The results of this research are in accordance with previous research conducted by Yildirim et al (2021) [22].

The physical health score of respondents are in the range 9-41 with a medin value 22,00. Based on this data, the number of respondents who have a good level of physical health (<22) is 30 people, while the number of respondents who have a poor level of physical health (≥22) are 33 people. So it can be concluded that the physical health of respondents mostly are in the bad category. This is probably because students who work on theses are in a situation that causes stress. This situation can affect students' physical health. Apart from that, some students had a history of illness such as Asthma, upper respiratory tract infection, Urticaria, Vertigo, Urinary tract infection. Hypothyroidism, and Food Allergies.

Based on the results of data collection, the value of social support received by respondents is in the range 10-25 with a median value of 21.00. Based on this data, there are 33 students who think that social support the receive is adequate (≥21), while those who think they receive inadequate social support (<21) is 30 people. So it can be concluded that most students feel that the social support they receive is adequate. The adequacy of social support felt by students is probably due to the fact that most students live with their families. The family is one of the most important sources of social support, because the family is generally the first person to fulfil an individual's needs and desires [23].

The coping strategy scores of respondents are in the range 28-45 with a median score of 41.00. Based on these data, the number of respondents who had a good level of coping strategy (≥41) was 34 people, while the number of respondents who had a bad level of

coping strategy (<41) was 29 people. So it can be concluded that respondents more often use adaptive than maladaptive coping strategies. This is in line with research by Straup et al., (2022), and Putri, Priyono, and Fitrianingrum (2022)[24,25]. This is probably because respondents already know about adaptive and maladaptive coping strategies. Apart from that, individuals in young adulthood and middle adulthood generally have good decision-making abilities [26]. This knowledge and ability can be used by students to decide on the best coping strategy that the student can use.

The resilience score of respondents is in the range 13-40 with a median value of 33.00. Based on this data, the number of respondents who have a high level of resilience (≥33) is 33 people, while the number of respondents who have a low level of resilience (<33) is 30 people. So it can be concluded that resilience of respondents mostly are in the high category. This is supported by research which shows that student resilience is in the good category [27].

**The Relationship between Spirituality, Emotional Intellgence, Interpersonal Communication Skills, Physical Health, Social Support and Coping Strategies with Resilience in Master of Nursing Students Who Work on Thesis**

Spirituality is not related to resilience (p value 0,549). These results are different from previous research[28–30]. The absence of a significant relationship between spirituality and resilience in this study is possibly caused by the majority of respondents' spirituality values being in the low category while the majority of their resilience values are in the high category.

Emotional intelligence is not related to resilience (p-value 0.703). These results are different from the results of previous research[31–33]. There is no relationship between the variables of emotional intelligence and resilience in this study, possibly due to the majority of values The emotional intelligence of the respondents was in the low category, while the majority's resilience was in the high category.

Interpersonal communication skills are positively related to resilience (p value 0.006). The better a person's interpersonal communication skills, the better their resilience will be. These results are in accordance with previous research conducted by [22,34,35].

Interpersonal communication is an important component in increasing resilience. Effective interpersonal communication can help individuals utilize existing interpersonal resources in their environment when facing stressors [35]. Individuals who do not have good communication skills may not be able to communicate their thoughts and feelings so that individuals feel not understood, lonely, or experience failure in academic and professional life which can affect their physical and psychological conditions [22].

Physical health is not related to resilience (p value 0.791). Previous research discussing physical health and resilience is still very limited. However, physical health can be related to physical fitness. Where physical fitness, based on several cross-sectional and longitudinal studies, can be a protective factor against various mental health problems [36].

Social support is positively related to resilience (p value 0.037). The more adequate social support a person feels, the better their resilience will be. These results are in accordance with previous research [37–39].

Social support can improve well-being and quality of life, hope, satisfaction with life, and resilience as well as reduce various mental health disorders such as anxiety and depression[37]. The support a person receives can be a key parameter to increase their resilience and enable them to manage negative emotions more effectively [39]. Research shows that groups of young adults who are resilient generally have something in common, namely having quality relationships with their parents and those around them, and having superior cognitive abilities, both socially and emotionally [40].

Coping strategies are positively related to resilience (p value 0.017). The less frequently someone uses maladaptive coping strategies, the better their resilience will be. These results are in accordance with previous research [41–43].

Coping strategies relate to psychological health and well-being. Adaptive coping strategies are associated with higher levels of adaptation to stressors and lower risk of anxiety and depression. So students who have adaptive coping strategies tend to have better resilience. On the other hand, students who have good resilience are better able to understand the importance of adaptive coping styles and can deal with problems effectively [44].

Research conducted on health workers in Singapore shows that maladaptive coping strategies are positively related to psychological

morbidity. Health workers who use adaptive coping strategies show lower psychological morbidity. So it can be concluded that maladaptive coping strategies are associated with worse psychological conditions. This can be related to how individuals adapt to the environment negatively which can then affect their mental health [43].

**The Relationship between Spirituality, Emotional Intellgence, Interpersonal Communication Skills, Physical Health, and Social Support with Coping Strategies in Master of Nursing Students Who Work on Thesis**

Spirituality is positively related to coping strategies (p-value 0.003). The higher a student's spirituality, the less often the student uses maladaptive coping strategies. These results are in accordance with previous [45–47].

Spirituality plays an important role in coping mechanisms as it becomes the first line of defense against adversity and pain. Spirituality can be considered as a force that influences, provides motivation and direction to survive and becomes a guide to achieving life goals. Spirituality can help humans search for meaning and purpose in life to gain hope, love, inner peace, comfort and support. Spirituality can also be a guide for individuals to implement adaptive coping strategies. Therefore, the higher a person's level of spirituality, the better their coping strategies will be [45,47,48].

Emotional intelligence is not related to coping strategies (p-value 0.697). This may be because the coping strategies analyzed in this study were only maladaptive coping strategies (denial, distraction, self-blame). Based on previous research, emotional intelligence has a weak relationship with maladaptive coping strategies [49]. These results are supported by another research which shows that emotional intelligence has a weak and negative correlation with maladaptive coping strategies [50].

Interpersonal communication skills are not related to coping strategies (p-value 0.127). The absence of a significant relationship between interpersonal communication skills and coping strategies in this study is probably because interpersonal communication skills are not directly related to coping strategies. Research shows that interpersonal communication skills can be indirectly related to coping strategies through problem solving skills [51,52].

Physical health is positively related to coping strategies (p-value 0.000). The less frequently students experience physical health problems, the less frequently they use maladaptive coping strategies. There has been no research that directly discusses the relationship between physical health and coping strategies. However, a study conducted to assess the effectiveness of physical and mental health training revealed that such training can influence trainees' choice of coping strategies [53]. Another research also found a significant relationship between coping strategies and physical/psychological conditions [54].

Social support was not related to coping strategies (p-value 0.415). This is possibly because the coping strategies analysed in this study were only maladaptive coping strategies. Based on research, social support is not directly related to maladaptive coping strategies. However, social support is related to maladaptive coping strategies indirectly through psychological flexibility [55].

**Resilience Model Good of Fit**

To see the fitness of the model, the author carried out a goodness of fit model test. The Goodness of fit test in the smartPLS 4 software can be done by looking at the coefficient of determination and the model fit test. The coefficient of determination can be used to see the relationship between the independent variable and the dependent variable. The coefficient of determination can be seen from the adjusted R-Square value of each variable relationship.

The coefficient of determination (Adjusted R square) shows that interpersonal communication skills, social support and coping strategies have a moderate relationship to resilience (57.1%). Apart from that, spirituality and physical health also have a moderate relationship with coping strategies (40.8%). Next, the author tested the goodness of fit of the model by looking at the SRMR (Standardized Root Mean Square Residual) value.

Based on the SRMR value, it can be concluded that the model has good fit because it has an SRMR value below 0.1. SRMR is defined as the difference between the observed correlation and the correlation matrix implied in the model. Thus, it allows assessment of the average difference between observed and expected correlations as an absolute measure of

the goodness-of-fit criterion (model). Values less than 0.10 or 0.08 (in a more conservative version) are considered appropriate. In this study, the model has met the goodness of fit test criteria so it is considered to have a good fit.

**Nursing Implications**

Implications for the development of nursing science and research based on this study are Interpersonal communication skills, social support and coping strategies have been proven to have a significant relationship with resilience in master of nursing students. This can be used as a basis for developing interventions to increase resilience by paying attention to factors related to resilience. Apart from that, the spirituality, emotional intelligence and physical health of the respondents in this study are in the low category while their resilience is in the high category, it is feared that this cause no significant relationship between these variables.

Implications for nursing practice based on this study are the spirituality, emotional intelligence and physical health scores of the respondents are in the low category so intervention is needed to improve spirituality, emotional intelligence and physical health of the respondents. Apart from that, some students still have low interpersonal communication skills, social support and coping strategies scores so intervention is needed to overcome these problems.

## CONCLUSION

There is a significant relationship between interpersonal communication skills, social support and coping strategies with resilience in master of nursing students who work on thesis. Meanwhile There is no significant relationship between spirituality, emotional intelligence and physical health with resilience in master of nursing students who work on thesis. There is a significant relationship between spirituality and physical health with coping strategies in master of nursing students who work on thesis. Meanwhile There is no significant relationship between emotional intelligence, interpersonal communication skills and social support with coping strategies in master of nursing students who work on thesis.

This study has limitations, namely the number of respondents in this study was only 63 respondents. This is due to the author's limitations in getting contact with respondents, especially respondents who are working on their thesis in 2022. Apart from that, it is also due to the presence of potential respondents who did not respond when contacted or who were willing to be a respondents. but could not be contacted again for follow-up. In this study, the question items on the instrument used in this research are still related to each other, causing several research indicators to become invalid and have to be deleted. This may influence the content of the variables studied. Further research with an experimental design to improve the score of spirituality, emotional intelligence and physical health is needed to support the results of this study. Apart from that, selecting research instruments that are not related to each other is necessary to increase the validity of indicators and variables studied

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## CONFLICTS OF INTEREST

The authors declare that they have no financial or personal interests that could influence the results reported in this article.

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