Research Article

The Impact of Academic Stress and Spiritual Intelligence on Subjective Well-Being in Students During the Pandemic Period

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Abstract. The COVID-19 pandemic has led to a shift in the learning system from offline to online. Online learning in the long term can affect the subjective well-being of students. Several previous studies have linked students’ subjective well-being with academic stress or spiritual intelligence. Thus far, studies have not examined whether academic stress and spiritual intelligence can simultaneously contribute to students’ subjective well-being. This research intended to determine the contribution of academic stress and spiritual intelligence to students’ subjective well-being. 116 students in one municipality in East Java province completed three measuring instruments, specifically the subjective well-being scale, academic stress scale, and spiritual intelligence scale. Data were tested using multiple linear regression. The findings illustrated that academic stress partially affected subjective well-being (t = 8.567; p < 0.05), spiritual intelligence partially affected subjective well-being (t = 3.677; p < 0.05), and academic stress and spiritual intelligence in combination affected subjective well-being (F = 44.567; p < 0.05; R² = 0.386). These results suggested that 38.6% of the variation in subjective well-being in students could be explained by academic stress and spiritual intelligence. Therefore, in order to maintain their subjective well-being during this long pandemic, students are advised to improve their capacity to deal with academic stress and develop their spiritual intelligence.

Keywords: subjective well-being, academic stress, spiritual intelligence

1. Introduction

The coronavirus was early confirmed to have entered Indonesia on March 2, 2020. Since the coronavirus spread, Wuhan as the center of the spread of the virus has established a social distancing program to lockdown because the spread of the virus comes from droplets that are simply transmitted through saliva, either when speaking or when sneezing. Social distancing and lockdown programs have paralyzed many activities in the world, both in terms of economic, social, educational, and so on. The society who are asked to run the self-quarantine program must carry out work from home and study from home. This policy change impacts the community, both physically and psychologically.
One of the psychological effects of work from home and study from home is the decline in subjective well-being. The result of a study in Germany showed subjective well-being was quite stable between December 2019–March 2020, but changed between March 2020–May 2020 in line with the determination of the coronavirus as a pandemic by WHO on March 11, 2020 [1]. This phenomenon also occurs in students in Indonesia. The condition of student SWB in Indonesia has also decreased because of affective and cognitive interpretations of changes in the learning system that occur from offline to online [2].

Subjective well-being is defined as a multidimensional construct comprising three major components, namely satisfaction with life, positive emotions, and negative emotions that represent an ongoing state of psychological health [3]. A person’s cognitive and affective evaluation of his life, which includes an emotional assessment of various events experienced in line with a cognitive assessment of life satisfaction and fulfillment, is often referred to as subjective well-being. Someone who has high subjective well-being is a person who is satisfied with their living conditions, often feels positive emotions, and rarely feels negative emotions [4].

Factors that affect subjective well-being can be divided into internal and external factors. Internal factors affect subjective well-being, namely gratitude, forgiveness, personality, spirituality, while external factors that affect subjective well-being, namely social support [5]. Subjective well-being also has a relationship with stress levels where individuals who have high levels of stress have low levels of happiness while individuals who have low levels of stress have high levels of happiness [6].

Stress experienced by students or students is known as academic stress. Academic stress is a condition where students cannot face academic demands and perceive academic demands that are accepted as distractions. Academic stress is caused by academic stressors. Aspects that affect academic stress include biological aspects related to one’s body condition and biopsychosocial aspects related to one’s mental and social conditions. Internal factors that influence academic stress include mindset, personality, and beliefs, while external causes are dense lessons, frequently changing curriculum, study time and subjects, and pressure to achieve high [7].

Besides academic stress, subjective well-being in students is generally associated with spiritual intelligence. In general, students are assumed to have the same subjective well-being as early adults, but the facts are different, this is also correlated with spiritual intelligence [8]. Spiritual intelligence is the ability to solve problems of meaning and value. Spiritual intelligence is needed to function Intelligent Quotient (IQ) and Emotional Quotient (EQ) effectively, even spiritual intelligence is the highest human intelligence.
Spiritual intelligence is a creative process that will occur when a human reaches his limit, the boundary between knowing or losing himself because spiritual intelligence contains existential intelligence. Aspects that make up spiritual intelligence include the ability to be flexible, the ability to have high self-awareness, the ability to face and take advantage of suffering, the ability to face and transcend pain, the quality of life inspired by vision and values, an unwillingness to cause unnecessary harm. The awareness to avoid or do things that are harmful to oneself or others, think holistically, the tendency to ask why and how to find basic answers and become an independent person.

2. Literature Review

Previous research on student subjective well-being and academic stress was conducted on 192 first-year students in the UK. The results show that persistent stress is negatively associated with life satisfaction. Academic stress has a major role in respondents’ subjective well-being because of factors such as excessive homework, forgotten tasks, and study [9].

Previous research on subjective well-being and spiritual intelligence has shown inconsistent results. One study conducted on nurses in Iran showed a significant relationship between spiritual intelligence with psychological well-being and with life goals. In addition, there is a significant relationship between components of spiritual intelligence (extension of conscious states, production of personal meaning, transcendental awareness, and existential crisis thinking) and psychological well-being [10]. Another study conducted on civil servants at a public university in Indonesia found that there was no significant relationship between spiritual intelligence and subjective well-being. Spiritual intelligence is related to subjective well-being, but the correlation is weak. This is because spiritual intelligence has a strong tendency to correlate with social activities and self-control [11].

Another research on the relationship between spiritual intelligence and subjective well-being in Indonesia was conducted on students from boarding schools in Yogyakarta city. The results indicate that spiritual intelligence has a positive impact on subjective well-being. This is because adolescents who have strong subjective well-being have positive sentiments in their lives, and when someone has positive sentiments, they have high spiritual intelligence [12]. Another research conducted on university graduates discovered that spiritual intelligence was proven to predict subjective well-being [13].
From the previous study’s findings, it can be concluded that there are still inconsistent findings concerning the relationship between spiritual intelligence and subjective well-being. Several studies reveal a significant relationship, but there are also studies whose results show an insignificant relationship between spiritual intelligence and subjective well-being. During this pandemic, students are among the most affected groups, and the academic stress variable is crucial to investigate. To gain more evidence concerning the relationship between spiritual intelligence and subjective well-being and to determine the role of academic stress on subjective well-being, as well as to find out how the collective contribution of spiritual intelligence and academic stress to subjective well-being. Therefore, this study was conducted entitled “The Role of Academic Stress and Spiritual Intelligence on Subjective Well-Being in Students During the Pandemic Period”.

3. Method

3.1. Population and sample

The population of this study was all male and female (aged 16-25 years old) undergraduate students of the 2020 batch at public universities in Malang City. Sample election because this batch of students is new students who early entered college during a pandemic. Thus, the students had to perform online learning. 116 participants from five state universities in Malang, consists of 78.4% female and 21.6% male students.

3.2. Research Instruments

This study utilizes three measuring instruments, the Subjective Welfare Scale, Academic Stress Scale, and Spiritual Intelligence Scale. To test the subjective well-being variable, a subjective well-being scale was adopted which was adapted from the original Satisfaction with Life Scale (SWLS) developed. This scale comprises 5 elements with four answer choices, namely strongly disagree, disagree, agree, and strongly agree. The second scale is the academic stress scale used to measure the academic stress variable. This scale comprises 32 items with 4 answer choices, strongly disagree, disagree, agree, and strongly agree. This academic stress scale was adapted from the original Academic Stress Inventory (ASI) scale. The third scale is the spiritual intelligence scale used to measure the spiritual intelligence variable. This scale consists of 24 items with 4 answer choices, strongly disagree, disagree, agree, and strongly agree. This spiritual
Table 1: Presents the data got from the measurement of subjective well-being, spiritual intelligence, and academic stress variables.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Deviation Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective well being</td>
<td>116</td>
<td>10.00</td>
<td>25.00</td>
<td>15.9138</td>
<td>3.54246</td>
</tr>
<tr>
<td>Spiritual intelligence</td>
<td>116</td>
<td>48.00</td>
<td>96.00</td>
<td>72.1207</td>
<td>10.08154</td>
</tr>
<tr>
<td>Academic stress</td>
<td>116</td>
<td>60.00</td>
<td>140.00</td>
<td>97.7241</td>
<td>16.11188</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The intelligence scale was adapted from the original The Spiritual Intelligence Self-Report Inventory (SISRI-24) scale developed by [16][17].

The psychometric properties of the three scales were obtained by conducting a Confirmatory Factory Analysis (CFA) analysis of the data obtained from a total of 116 subjects. The results of the analysis show that the measurement models of these three scales fit (chi square= 111,012, df= 96, p= 0.140 > 0.05, CMIN/DF= 1.156, GFI= 0.906, AGFI= 0.867, CFI= 0.989, RMSEA= 0.037). For reliability, obtained Construct Reliability (CR) on each variable is 0.07 so that it can be declared reliable. The five items on the subjective welfare scale have the lowest factor loading of 0.642. The items on the academic stress scale and intellectual intelligence scale have a factor loading of more than 0.5.

3.3. Data Analysis

We employed multiple linear regression to figure out the role of academic stress and spiritual intelligence on subjective well-being, either partly or simultaneously.

4. Results and Discussion

4.1. Result

Table 1: Table of descriptive analysis of subjective well-being, spiritual intelligence and academic stress

4.1.1 Role of Academic Stress (X1) on Subjective well-being (Y)

The t-statistic test is used to test how far the independent variable, in this case academic stress (X1), contributes to subjective well-being (Y). If the probability value is less than 0.05, thus the independent variable significantly affects the dependent variable, in this case, subjective well-being.
TABLE 2: Table of T-test results that determine the results of the hypothetical role of academic stress on subjective well-being

<table>
<thead>
<tr>
<th>Coefficients^c</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficient</td>
<td>T</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.621</td>
<td>11.885</td>
<td>.338</td>
<td>.832</td>
</tr>
<tr>
<td>Academic stress</td>
<td>.193</td>
<td>.216</td>
<td>.190</td>
<td>8.567</td>
</tr>
<tr>
<td>Spiritual intelligence</td>
<td>.887</td>
<td>.248</td>
<td>.766</td>
<td>3.677</td>
</tr>
</tbody>
</table>

TABLE 3: F test results that determine the results of the hypothesis role of spiritual intelligence on subjective well-being

<table>
<thead>
<tr>
<th>ANOVA^d</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>Regression</td>
<td>559,352</td>
<td>2</td>
<td>279,666</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>108,334</td>
<td>71</td>
<td>11,926</td>
</tr>
<tr>
<td>Total</td>
<td>777,778</td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: SWB
Predictors: (Constant), Academic stress, Spiritual intelligence

As stated on table 1, it can be observed that the t-count value of the academic stress variable is 8,567, while the significance value is 0.007 where this value is less than 0.05, which means H1 is accepted that academic stress has a partially significant effect on subjective well-being. Meanwhile, the t-count of spiritual intelligence is 3,677, while the significance value is 0.000 below 0.05, meaning that H2 is accepted, that spiritual intelligence has a partially significant effect on subjective well-being.

4.1.1. Role of Spiritual Intelligence (X2) on Subjective Well-being (Y)

The F statistic test is used to test the dependent variable, whether spiritual intelligence (X2), simultaneously affects the subjective well-being variable (Y). If the significance value is less than 0.05, the two independent variables affect simultaneously and simultaneously on the Y variable.

In accordance with table 2 above shows that this model has an F value of 44,573, a significance level of 0.000 or below 0.05, which means that the two independent variables, namely academic stress, and spiritual intelligence, simultaneously affect subjective well-being variable.
4.1.2. Role of Academic Stress (X1) and Spiritual Intelligence (X2) on Subjective well-being (Y)

The three-variable regression analysis test is employed to analyze whether the dependent variable (academic stress (X1), spiritual intelligence (X2)), whether simultaneously expresses an effect on the subjective well-being variable (Y). If the significance value is less than 0.05, thus the two independent variables influence together and simultaneously on the Y variable.

Based on the results of simple linear regression calculation (R) of 0.368, it shows a relationship between academic stress variables (X1), spiritual intelligence (X2), and subjective well-being (Y) which means it acquires a low linear relationship. The value of the adjusted R square is 0.368 or 38.6%. This indicates that the subjective well-being variable can be pointed out through the two independent variables, namely academic stress and spiritual intelligence of 38.6%. While the rest, 61.4% is explained outside of other analytical factors.

4.2. Discussion

4.2.1. Role of Academic Stress (X1) on Subjective well-being (Y)

The first hypothesis testing is whether there is a relationship between academic stress and subjective well-being in students at public universities in Malang City. Based on the calculations using T statistics, it is noted that the significance value between spiritual intelligence and subjective well-being is 0.007 < 0.05, which means the relationship between the two is significant. Based on the results of simple linear regression calculations in table 4.2, it is known that the t value between spiritual intelligence and subjective well-being is 8.567. However, the regression result between these two variables is negative. Thus, if a person's academic stress level is high, later the person's SWB level will be poor, and vice versa.
It consistent with past research, namely academic stress contributes to students’ subjective well-being. This is evidence researched showing that academic stress plays a large role in respondents’ subjective well-being because of factors such as excessive homework, forgotten assignments, and studying for examinations, assessing the work of classmates, or individual willing to respond [1]. In the classroom causes academic stress, students who have high academic stress have low SWB scores. The researcher assumed the hypothesis that academic stress would correlate with SWB, both high and low, based on previous research.

Despite of this result, the role of academic stress was excessively on the subjective well-being of students. In research conducted on 192 first-year university students in the UK, constant stress was negatively associated with life satisfaction. The Changes in the environment from school to campus are one factor that leads to academic stress. Environmental changes are one stressor that can enhance students’ academic stress scores and reduce SWB scores. The transition to university is stressful and a successful change is critical to well-being. Historically, research on academic stress has concentrated on ill-health. This is the initial British study to implement a positive psychology approach to studying change characteristics among new undergraduates. Bachelor of England in the third week of their first semester and then six months afterward. Revealed that optimism mediates the relationship between stress and negative influence, while the SWB component over time shows a significant relationship with life satisfaction and positive influence. Contrary to the predictions, stress levels remained steady over time despite increased academic alienation and decreased self-efficacy. Optimism emerged as a key factor for new students to adjust to university, helping to minimize the impact of stress on well-being throughout the academic year [9].

Through research conducted it indicates that subjective well-being is negatively correlated with academic stress with an F score of 3.211 and p < 0.001 [25]. Negative emotions such as anger, disappointment, sadness can be the impact of academic stress, where these negative emotions can ultimately affect a person’s SW. Regarding the relationship between subjective well-being with emotional intelligence and academic stress shows that SWB and academic stress have a relationship, this is evidenced by the correlation score F 9.862 and significance p < 0.001 [4]. This is evidenced by the psychological dynamics of participants who feel negative emotions when they have low SWB scores, such as often feeling sad, feeling guilty, feeling that their life is useless[4].
4.2.2. Role of Spiritual Intelligence (X2) on Subjective well-being (Y)

Examination of the second hypothesis is whether there is a relationship between spiritual intelligence and subjective well-being in students at public universities in Malang City. Based on the results of calculations utilizing the statistical formula T in table 2, it is noted that the significance value between academic stress and subjective well-being is 0.000 < 0.05, so the relationship between the two is significant. Based on the results of simple linear regression calculations in table 4.2, it is known that the value of the T statistic between spiritual intelligence and subjective well-being is 3.677, which is positive. If a person's spiritual intelligence is high, then that person's SWB is also high, and vice versa, if someone's spiritual intelligence is low, thus that person's SWB is too low.

It resulted as coherent with the previous studies. Revealed that there was a significant relationship between spiritual intelligence and psychological well-being and having a purpose in life [10]. In addition, there is a significant relationship between components of spiritual intelligence, including expansion of the conscious state, production of personal meaning, transcendental awareness, and critical existential thinking and psychological well-being. Meanwhile, the research conducted stated that there was no relationship between SWB and academic stress [11]. Both studies show that, although spiritual intelligence has a relationship with SWB, spiritual intelligence only has a weak correlation with SWB. This is because spiritual intelligence has a strong tendency to correlate with social activities and self-control. Conducted a study at Muhammadiyah boarding school students in Jogjakarta which showed that spiritual intelligence had a positive impact on subjective well-being[12]. This is because teenagers who have high SWB tend to have positive emotions in their lives, and when someone has positive emotions, they tend to have high spiritual intelligence as well. Meanwhile, investigation conducted shows that spiritual intelligence is correlated with subjective well-being in students[18]. In research conducted it shows that spiritual intelligence is included in the factors that affect SWB, this is evidenced by the correlation value of 0.9003 and p = 0.003. From some of the research results above, it was discovered that participants who had top results and correlated spiritual intelligence and SWB were supported by several factors, of which the most supportive factors were (1) Critical existential thinking, which means critical thinking. Participants who have high scores on spiritual intelligence will think critically about death and life and this will also impact the participants’ SWB scores, (2) Personal meaning production, participants who have high scores on spiritual intelligence will start looking for their goals in life, then look for meaning for their life goals, this also plays an important
role in influencing SWB, (3) Transcendental awareness, participants who have high scores on spiritual intelligence will always associate events that occur in nature, events they have encountered as entities related with God, (4) Conscious state expansion, participants who have high scores on spiritual intelligence will have awareness of themselves so that they can regulate their behavior. From some categories above, it can be concluded that participants who have high scores on spiritual intelligence will correlate with SWB scores. This is because people who have high spiritual intelligence are happy and have positive emotions.

4.2.3. Role of Academic Stress (X1) and Spiritual Intelligence (X2) on Subjective well-being (Y)

The examination of the second hypothesis is whether there is a relationship between academic stress and spiritual intelligence on subjective well-being in students at public universities in Malang City. Based on the results of calculations using the statistical formula F, the resulting significance of 0.000 < 0.05. The value of the adjusted R square is 0.386 or 38.6%. This shows that the subjective well-being variable can be explained through the two independent variables, namely academic stress and spiritual intelligence of 38.6%. While the rest, 61.4% is explained outside of analytical factors such as personality, self-esteem, and others.

It resulted consistent with a study conducted on 192 first-year university students in the UK that persistent stress is negatively associated with life satisfaction. Changes in the environment from school to campus are one factor that causes academic stress. Environmental changes are one stressor that can increase students’ academic stress scores and reduce SWB scores. The transition to university is stressful and a successful change is critical to well-being. Historically, research on academic stress has focused on ill-health. This is the first British study to apply a positive psychology approach to investigating change characteristics among freshmen. British scholars in the third week of their first semester and again six months later revealed that optimism mediates the relationship between stress and negative affect, while the SWB component over time shows a significant relationship with life satisfaction and positive affect.

On the researched conducted showed that there was a significant relationship between spiritual intelligence and psychological well-being and having a purpose in life In addition, there is a significant relationship between components of spiritual intelligence, including expansion of the conscious state, production of personal meaning, transcendental awareness, and critical existential thinking and psychological well-being.
Meanwhile, the research conducted stated that there was no relationship between SWB and academic stress [11]. Both studies show that although spiritual intelligence has a relationship with SWB, spiritual intelligence only has a weak correlation with SWB. This is because spiritual intelligence has a strong tendency to correlate with social activities and self-control [11].

The results show subjective well-being is correlated with academic stress and subjective well-being is correlated with spiritual intelligence, but there is still no research that examines the relationship between the three, therefore researchers want to examine the relationship between those three and categorized as the novelty of the study.

5. Conclusion

This conclusion refers to three research objectives, including testing the contribution of academic stress to subjective well-being, testing the contribution of spiritual intelligence to subjective well-being, and testing the role of academic stress and spiritual intelligence on subjective well-being. From the results above, it can be concluded that there is a role for academic stress on subjective well-being, this is evidenced by the significant result of 0.007 <0.05 and the T statistic value of 8.567. There is a role for spiritual intelligence on subjective well-being, this is evidenced by the results of a significance of 0.000 <0.05 and a T statistic of 3.677. There is a role of academic stress and spiritual intelligence on subjective well-being, based on the results of the F test with a significance of 0.000 <0.05 and an F value of 44.567, multiple linear regression calculations of 0.368 show a relationship between the variables of academic stress, spiritual intelligence, and subjective well-being. Which means it has a low linear relationship. The value of the adjusted R square is 0.386 or 38.6%. This shows that the subjective well-being variable can be explained through the two independent variables, namely academic stress and spiritual intelligence of 38.6%. While the rest, 61.4% is explained, excluding other factors. It was found that the level of subjective well-being of the taking part students was classified as low. This research was caused by high academic stress and low spiritual intelligence; therefore, universities are expected to provide some training that can improve students’ subjective well-being. For students, researchers suggest students who have low subjective well-being immediately consult the closest person or professional party to improve it again. The results were limited to 116 students at state campuses in Malang City. Future researchers are expected to add research participants so that the research can be generalized to a larger population. Other researchers can choose other independent variables in measuring the relationship between subjective
well-being, such as religiosity, self-esteem, happiness, optimism, which tend to be highly correlated. The next researcher can take more in-depth data through interviews, observation, and taking a questionnaire after the participants fill out the scale. Further researchers can also collect data on private students and students in Malang Regency who have a probability of research results that produces richer factors.

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References


